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BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Amendment of Section 73.202(b) )  
Table of Allotments ) MM Docket No. 00-31  
FM Broadcast Stations ) RM - 9815  
(Nogales and Vail, AZ)

To: Chief, Allocations Branch  
Policy and Rules Division  
Mass Media Bureau

**COMMENTS**

Desert West Air Ranchers Corporation ("DWAR"), licensee of Station KZNO(FM), Nogales, Arizona, by its counsel, hereby submits its Comments in response to the Notice of Proposed Rule Making ("NPRM"), 15 FCC Rcd \_\_\_\_\_, (DA 00-369), released Feb. 25, 2000). DWAR will demonstrate that the public interest will be served by allotting Channel 253A in place of 252A and changing the community of license from Nogales to Vail, Arizona and modifying the license of Station KZNO accordingly. In support hereof DWAR states as follows:

**INTRODUCTION**

1. In its Petition DWAR indicated that no white or grey area would be created from the relocation of KZNO from Nogales and that the proposed 60 dBu coverage area at Vail would extend 43 kilometers. Both of these assertions were rejected by the Commission staff in its NPRM.

2. At Paragraph 6, the staff stated that DWAR should not have premised its engineering calculation on the effect of terrain factors in calculating the predicted KZNO 60 dBu contour at Vail and the existing 60 dBu contour at Nogales. Instead, the Commission staff uses an omnidirectional signal which extends 28.3 kilometers as a maximum Class A facility.

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3. In addition, in determining the number of signals in the loss area, the staff asserts that Station KOFH, Nogales is off the air and its permit may have expired. Furthermore, the 12 stations licensed to Nogales, Mexico which is contiguous to Nogales, AZ should not be considered as service to KZNO's listeners in its potential loss area, according to the Commission staff.

4. The staff's own calculations credit the proposed gain area at Vail with providing service to 7,626 people in an area of 2,135 square kilometers and the loss area at Nogales will affect 27,480 people in an area of 1,562 square kilometers creating a net loss in population but a net gain in service area. As for the loss area, the staff asserts that a white area of 32 kilometers and 5 people and a grey area of 255 square kilometers and 50 people will be created.

**I. The Commission's Standard for Calculating Loss Area is Erroneous.**

5. First, the Commission stated in its Memorandum Opinion and Order in Community of License, 5 FCC Rcd 7094, 7097 at ¶ 19 that "the Public has a legitimate expectation that existing service will continue, and that this expectation is a factor we must weigh independently against the service benefits that may result from reallocating of a channel from one community to another, regardless of whether the service removed constitutes a transmission service, a reception service or both" (Emphasis added.)

6. In numerous cases, the Commission staff has interpreted this paragraph to permit the removal of an unbuilt station from a community even though the community would be left with no local service. See Mount Olive and Staunton, Illinois (DA 99-2035, released 10/1/99), citing Bagdad and Chino Valley, Arizona, 61 FR 60043 (1996); Sanibel and San Carlos, Florida, 10 FCC Rcd 7215 (1995); Pawley's Island and Atlantic Beach, South Carolina, 8 FCC Rcd 8657 (1993); Glencoe and LeSeuer, Minnesota, 7 FCC Rcd 7651 (1992). Recently in Littlefield, Wolfforth and

Tahoka, TX, (DA OO-602) released 3/20/00) at para. 8, the Commission staff stated that the loss area resulting from a proposed change in community of license for an unbuilt station “is theoretical and does not represent an actual loss of service”.

7. DWAR is faced with the exact same situation. Station KZNO is licensed to operate at 215 watts at 70 meters.<sup>1</sup> The loss of its existing facility will not create white or grey area. Only a potential Class A 6 kW facility for KZNO by its removal will result in the creation of white and grey areas according to the staff’s method of determining such service. However, it is clear that the Commission did not contemplate that the loss area showing should include a station’s potential any more than the Commission was concerned with the potential local service that an unbuilt station would provide. The potential for 6 kW facilities is unbuilt and those potential listeners are not losing an existing reception service because no such service exists. The rationale used in Mount Olive, Illinois, supra and cases cited therein and Littlefield, TX cases are indistinguishable from the situation here. Both state the Commission’s concern with existing reception service not potential service. The Community of License decision was issued after the case of Greenup, Kentucky and Athens, Ohio, 2 FCC Rcd 4319 (1987), recons. granted, 4 FCC Rcd 3843 (1989) was decided. The Commission could have relied on the Greenup standard which uses maximum facilities within a station class (except for Class C) when evaluating proposed gain areas. In such situations, the staff is always dealing with proposed service which is potential service. But the Greenup standard is not

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1. Under the US/Mexican Treaty, Channel 252A at Nogales is described as an “A” allotment (a 3 kW facility) rather than an “AA” allotment (a 6 kW facility). The Commission has not sought concurrence from Mexico in making Channel 252A a 6 kW facility. Perhaps such a designation could be achieved. However unlike other Class A allotments which could increase to 6 kW without prior approval (Form 302), this station’s classification is different and would require prior approval (Form 301) and negotiation with Mexico.

needed where the station is actually providing service because the existing service can be measured. Indeed, except in the case of change in community of license cases, the Commission does not even require a loss area analysis in the allocations context.

8. Using the proper standard which is loss of existing service, the affected area for KZNO is fully covered by Station KOFH-FM and KNOG-FM, Nogales, Arizona. Thus the Vail relocation would not create any unserved or underserved areas. The validity of Station KOFH's authorization was questioned by the NPRM. However, the Commission's blanket extension to all permittees for a three year period (plus tolling periods) applies to this permit. See MM Docket 98-43 (Non-Technical Streamlining). Thus this authorization is still valid and the permit does not expire until December 21, 2000. It appears that the Commission staff relied on the expiration of KOFH's permit when it determined that a small white area would be created. With the permit still valid, there is no white area created.

9. In its petition, DWAR also relied on the existence of 12 radio stations licensed to the Mexican city of Nogales. These stations completely cover the KZNO loss area whether existing or potential. However, the NPRM rejects any consideration of these foreign stations. DWAR would like to point out that the Commission does consider foreign stations for purposes of counting the number of stations operating in a market under its multiple ownership rule, Section 73.3555. See Implementation of Sections 202(a) and 202(b)(1) of the Telecommunications Act of 1996 (Broadcast Radio Ownership) 11 FCC Rcd 12368 (1996) at para. 4. - - "We will continue to define the relevant radio market as the area encompassed by the principal community contours....The stations that will be included within the market will continue to be operating commercial full-power stations, including daytimers and foreign stations" (Emphasis added). See also Revision of Rules and

Policies, MO&O and FNPRM, 7 FCC Rcd 6387 (1992). Clearly, the Commission considers foreign stations as competing for listeners. As such, foreign stations provide reception service to all of its listeners including U.S. residents. The Commission does not question the fact that the residents of this area (92% are Spanish speaking) actually do listen to the 12 Mexican stations. In fact these 12 stations make it very difficult for KZNO to compete in the Nogales market which is the reason its desires to relocate to another market area.

10. The burden should be on the Commission to distinguish why foreign stations should not be counted as providing service in the allocations context where they are counted as serving a market for ownership purposes particularly where the service is provided to a 92% Spanish speaking U.S. audience. Nevertheless, if the Commission staff insists on using potential loss area as the standard of evaluation and if the staff will not consider the services provided to the population in the potential loss area by the 12 Nogales, Mexico stations, then DWAR offers the following solutions. The Commission could consider the 5 people in the potential white area as de minimis or as stated earlier, no white area is created due to the KOFH authorization. In evaluating the grey area of 50 people, the Commission could apply the allotment priorities set forth in Revision of FM Allotment Policies and Procedures 90 FCC 2d 88 (1982) and favor a first local service to Vail (1990 census population - - 550 or Vail zip code population of 3,124) over the 50 people in the grey area. A first local service and a grey area have the same priority and are generally decided by the affected population figures. Should the Commission still have concern with the potential loss area, DWAR proposes the allotment of a new Class A channel to Patagonia, Arizona to “fill-in” the underserved/unserved areas. See e.g., Refugio and Taft, Texas, DA 00-494 released March 3, 2000;

Pauls Valley and Healdton, Oklahoma, 14 FCC Rcd 3932 (1999); and Llano and Marble Falls, Texas, 12 FCC Rcd 809 (1997).

11. The attached Engineering Statement demonstrates that Channel 251A can be allotted to Patagonia as a first local service consistent with the Commission's spacing rules and provide 70 dBu coverage over the community. See Exhibits 7, 7A and 7B. Patagonia is listed in the 1990 U.S. Census with a population of 888 persons. Community information is provided in Exhibit A. The proposed 60 dBu coverage from the reference point will provide coverage to a white area of 100 sq. kms and a grey area of 20 sq. kms. The provision of white and grey area service from the Patagonia channel outweighs the creation of any new underserved area. See Silverton and Bayfield, Colorado, DA 99-3004 released 12/23/99. Channel 251A is only available for allotment to Patagonia as a new station if KZNO relocates to Vail. DWAR hereby states that it will apply for Channel 251A at Patagonia if the channel is allotted and construct the facilities.<sup>2</sup>

## **II. The Commission Should Consider the Proposed Gain Area Under the Woodstock exception**

12. In the NPRM, the Commission refused to credit DWAR's predicted gain area and population due to its reliance on terrain factors. However, under the Woodstock, Virginia, case 3 FCC Rcd 6398 (1988), an existing station can demonstrate that it has reasonable assurance for a new transmitter site and the site will not violate local zoning laws or constitute a hazard to air navigation. DWAR has found a site for which it has obtained reasonable assurance. DWAR provides a

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2. Under this scenario, should the Commission require that DWAR delay the commencement of program tests at Vail until the new allotment is activated with program tests, DWAR will comply with such a requirement. But see Pauls Valley, Oklahoma and Healdton, Oklahoma where no such requirement was imposed on activating a new Healdton station prior to the removal of Healdton's only local service.

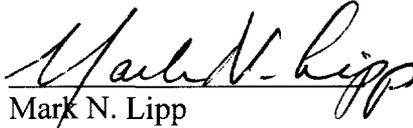
certification statement in which DWAR certifies to the site availability and provides the name and phone number of the person who is responsible for providing the assurance of site availability. See Exhibit 1. Furthermore, DWAR has investigated local zoning requirements and certifies that zoning will not be an impediment to the proposed construction of a 16 meter antenna structure. See Exhibit 1. An FAA determination will not be required since the structure will only be 16 meters. Finally, if for some reason the Commission does not agree that the Woodstock exception has been satisfied, DWAR makes the following argument - - that consideration of secondary gain/loss comparisons are relevant to a Priority 4 comparison and should not outweigh the provision of a first local service to Vail under Priority 3. Here, the grey area consists of 50 people while a first local service to Vail will be provided to 550 persons (1990) or 3,128 updated estimate. In addition the allotment of Channel 251A to Patagonia that results from this proposal will provide service to white and grey areas and another first local service.

13. Utilizing this proposed site at Vail which complies with the spacing requirements (See Exhibit 2) and remains mutually exclusive with the existing KZNO site, the predicted coverage will provide a gain area of 2,734 sq. km and serve 255,908 persons. See Exhibit 5.

14. Thus the public interest will be served by providing a first local service to Vail, a net gain of 1,172 sq. km and 227,428 persons and white and grey area coverage from the new Patagonia channel, if needed.

Respectfully Submitted,

DESERT WEST AIR RANCHERS CORPORATION

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Its Counsel

April 17, 2000

**SUPPLEMENTAL TECHNICAL ANALYSIS**  
**KZNO COMMUNITY OF LICENSE CHANGE**  
**VAIL, ARIZONA**

Desert West Air Ranchers Corporation (“Desert”), licensee of FM Station KZNO, Nogales, Arizona, has proposed to change the Community of License of FM Station KZNO from Nogales, Arizona to Vail, Arizona. KZNO, changing from its current channel 252 to its first adjacent channel 253, would remain a Class A Station domestically and increase to a Class AA with respect to Mexico.

The proposed transmitter site for KZNO Channel 253A at Vail is fully spaced to all domestic allocations and facilities except the mutual exclusivity with the current facilities of KZNO. With regards to the allocations and facilities in Mexico, the proposed facility is short spaced with Channel 253 at Agua Prieta, Sonora, Mexico; however, contour protection is provided to that facility in accordance with the 1992 FM Broadcasting Treaty between the United Mexican States and the United States (the “US/Mexican Treaty”).

The Commission has proposed to accept Desert’s proposal and issued its Notice of Proposed Rulemaking MM Docket 00-31 (the “NPRM”). In the NPRM, the Commission has expressed concerns regarding the area and population gain/loss that the proposal would create. This Supplemental Technical Analysis will address such concerns.

**1. KZNO AT VAIL, ARIZONA**

In its Comments, Desert is now proposing to use an actual transmitter site for KZNO at Vail, Arizona to be located at coordinates: **31-55-39 N 110-37-57 W**. This site is only 0.8 km from the previously proposed coordinates. Attached hereto as EXHIBIT E1 is a certification of the president of Desert certifying as to its reasonable assurance of the site availability regarding the site owner the site owner and local zoning ordinances. Furthermore, notification of the Federal Aviation Administration is not required as the Commission’s rules clearly demonstrates that Desert’s proposed 16 meter tower is not a hazard to air navigation which would require notification or approval of the Federal Aviation Administration. Additionally, the rural nature of the proposed site together with the proposed tower height of only 16 meters presents little, if any, potential for zoning problems.

Attached as EXHIBIT E2 is a channel spacing study showing the proposed KZNO transmitter site for KZNO as a Class A FM at Vail, Arizona. Other than mutual exclusivity with the current KZNO facilities, the study shows that the proposal is fully spaced to all existing and proposed domestic allocations and facilities. With respect to international treaties, the proposal is short spaced with the Mexican FM station XHSAPF and its associated allocation 253B, Agua Prieta, Sonora, Mexico. The US/Mexican Treaty allows for such short spaced proposals as long as equivalent protection is afforded. EXHIBIT E3 , prepared pursuant to the procedures in the US/Mexican Treaty, demonstrates that contour protection is provided to the Mexican facility and allocation by the limitation of the proposed facilities of KZNO towards the Mexican facility. The

facility would operate with the facility set forth in EXHIBIT E4. Using a directional antenna (see EXHIBIT E4A, the facility would limit its radiation towards the Mexican facility at Agua Prieta to 0.875 kw at 30 meters (0.185 kw at 100 meters HAAT equivalent).

EXHIBIT E5 clearly demonstrates that the proposed facility places a city grade contour (70 dBu) over Vail and that it has line of sight over the entire community using the standard prediction method. Using the Commission's uniform terrain circular contour method, the facility also places a 70 dBu contour over Vail.

EXHIBIT E6 demonstrates that the 60 dBu contour of Desert's proposed transmitter site as proposed herein does not overlap any of the currently authorized or theoretical 60 dBu coverage area of KZNO at Nogales, Arizona; therefore, the entire area within the 60 dBu contour of Desert's proposed transmitter site is gain area. Under the provisions of Woodstock, Desert's 60 dBu coverage area from its actual transmitter site may be used to calculate this gain area. The 1990 population within this gain area of 2,774 square kilometers is 255,908 persons.

## **2. NEW ALLOTMENT FOR PATAGONIA, ARIZONA**

If the Commission feels that the loss area created by Desert's move of KZNO to Vail creates underserved areas, Desert herein proposes that Channel 251A could be allotted to Patagonia, Arizona ("Patagonia Channel") as its First Local Service. The new service would fill in the loss area, if any, created by the loss of KZNO to Vail. Channel 251A can only be allotted to Patagonia if the KZNO authorization in Nogales is moved to Vail. Desert hereby states that it will apply for the Patagonia Channel, if allotted by the Commission and, if required by the Commission, will delay the program test authority of KZNO at Vail until the Patagonia Channel is activated. Channel 251A could be allotted to Patagonia at a site restricted location 2.7 km east of Patagonia, thus, city grade coverage can easily be accomplished.

Attached as EXHIBIT E7 is a channel spacing study showing the proposed Patagonia Channel reference site as a Class A FM. Other than mutual exclusivity with the current KZNO facilities, the study shows that the proposal is fully spaced to all existing and proposed domestic allocations and facilities. With respect to international treaties, the proposal is short spaced with the Mexican FM Class A allocation 251A at Naco, Sonora, Mexico. The US/Mexican Treaty allows for such short spaced proposals as long as equivalent protection is afforded. EXHIBIT E7A, prepared pursuant to the procedures in the US/Mexican Treaty, demonstrates that contour protection is provided to the Mexican allocation by the limitation of the proposed facilities of the Patagonia Channel towards the Mexican facility by use of a directional antenna (see EXHIBIT E7B). The facility would limit its radiation towards the Mexican allocation at Naco to 1.5 kw at 41 meters (0.355 kw at 100 meters HAAT equivalent). EXHIBIT E7C shows the circular service contour of the proposal.

## **3. KZNO LOSS AREA WITH EXISTING AUTHORIZATION**

The 1990 population within the currently authorized KZNO 60 dBu U.S. coverage area of 291

square kilometers at Nogales, Arizona is 24,715 persons. The Commission, in its NPRM, has pointed out the “The public has a legitimate expectation that existing service will continue”. Desert argues that this existing service is the actual service provided by the authorized facility of KZNO as it is being provided **currently and** as it has been for the last 20 years. Such loss of service should not be considered a perfect circle of what the station could potentially be.

EXHIBIT E8 is a map showing the currently authorized 60 dBu coverage area of KZNO at Nogales, Arizona and the remaining signals servicing the area. The remaining signals were calculated in accordance with the procedures outlined in Greenup, Kentucky. The exhibit shows that 60 dBu circular contours of the two FM Stations (KNOG, Nogales, Arizona, and KOFH, Nogales, Arizona, completely cover the lost service area of KZNO; therefore, no white or grey area is created even without the addition of the Patagonia Channel. All authorizations are domestic Class A stations and are internationally Class AA or 6kw at 100 meters with a 28 km service area. Section 6 describes additional services to the area.

With regards to KOFH, the Commission stated in its NPRM that it would consider the KOFH authorization if KOFH seeks an extension for its expired construction permit during the pendency of this proceeding. According to the Commission’s staff, the KOFH authorization has been extended to December 21, 2000 and therefore can be counted.

#### **4. KZNO LOSS AREA WITH UNIFORM TERRAIN CLASS A**

It should be noted that, according to both the Commission’s database and the International Branch, KZNO’s international status under the US/Mexican Treaty is **Class A and not Class AA**. Section 73.207(b)(3)(i) of the Commission’s rules specifically states “U.S. or Mexican assignments or allotments which have been notified internationally as Class A are limited to a maximum of 3.0 kw ERP at 100 meters HAAT, or the equivalent”. Therefore, KZNO does not currently have the authority to operate as a international Class AA with 6 kw at 100 meters and must be evaluated with maximum facilities of 3.0 kW at 100 meters HAAT producing a 60 dBu class contour distance of 24 kilometers using the uniform terrain method.

EXHIBIT E9 is a map showing the uniform terrain circular 60 dBu coverage area of KZNO at Nogales, Arizona as a 3 kw/100 meters international Class A and the remaining signals servicing the area as in Section 3 above. The loss area is comprised of 1856 square kilometers (approximately 40% of which is in Mexico) and 26,625 persons within the United States. The remaining signals were calculated in accordance with the procedures outlined in Greenup, Kentucky. The exhibit shows that the 60 dBu circular contours of FM Stations KNOG, Nogales, Arizona and KOFH, Nogales, Arizona completely cover the lost service area of KZNO; therefore, no white or grey area is created even without the addition of the Patagonia Channel. All remaining authorizations are domestic Class A stations and are internationally Class AA or 6kw at 100 meters with a 28 km service area. Section 6 describes additional services to the area.

#### **5. KZNO LOSS AREA WITH UNIFORM TERRAIN CLASS AA**

In case the Commission insists on evaluating the existing authorization for KZNO in excess of its international authorization under the US/Mexican Treaty, then Desert has calculated the KZNO

loss area as an international Class AA with 6 kw at 100 meters with a 28 km uniform terrain circular 60 dBu contour.

EXHIBIT E10 is a map showing the uniform terrain circular 60 dBu coverage area of KZNO at Nogales, Arizona as a 6 kw/100 meters international Class AA and the remaining signals servicing the area. The loss area is comprised of 2463 square kilometers (40% of which is in Mexico) and 26,625 persons within the United States. The exhibit shows that 60 dBu circular contours of the three FM Stations (KNOG, Nogales, Arizona, KOFH, Nogales, Arizona, and the Patagonia Channel) almost completely cover the lost service area of KZNO; therefore, while no white is created, only approximately 40 square kilometers (less than 2 percent of the Class AA potential) of gray area is created. However; the Patagonia Channel provides new service to approximately 100 square kilometers of white area and 20 square kilometers of gray area. This more than offsets the lost gray area created by the loss of KZNO.

Furthermore; KZNO, KNOG and KOFH are all the same domestic class of station with similar coverage areas and the same community of license. Only the slight variations in transmitter sites cause insignificant amounts of white or gray area to be created or removed. Both remaining authorizations and the Patagonia Channel are domestic Class A stations and are internationally Class AA or 6kw at 100 meters with a 28 km service area. Section 6 describes additional services to the area.

**6. LOSS AREA REMAINING SERVICES**

**A. DOMESTIC AURAL SERVICES**

The current and proposed domestic allocations and facilities for Nogales, Arizona and Patagonia, Arizona are as follows:

	<u>BEFORE</u>		<u>AFTER</u>	
<b>NOGALES</b>				
	KNOG FM	CLASS A 6KW	KNOG FM	CLASS A 6KW
	KOFH FM	CLASS A 6KW	KOFH FM	CLASS A 6KW
	KZNO FM	CLASS A 3KW		
	NEW AM	1020 KHZ	NEW AM	1020 KHZ
<b>PATAGONIA</b>				
	NONE		CHANNEL 251A	CLASS A 6KW

In addition to the remaining FM stations in Nogales and the Patagonia Channel), there are five Class C FM Stations (see EXHIBIT E11) whose service contours cover more than one third of the KZNO domestic loss area. Additionally, according to the International Branch and the Commission's database, 1020 kHz AM is also allotted and reserved for use at Nogales, Arizona.

**B. NOGALES, SONORA AURAL SERVICES**

There are twelve (12) aural signals licensed to Nogales, Sonora, Mexico which also cover the community of Nogales, Arizona (see EXHIBIT E11). Seven FM stations and five AM stations are licensed to an adjoining city of the same name. According to a U.S. Army web page which advises newcomers to the area near Fort Huachuca, Arizona: “Nogales, Arizona and Nogales, Sonora, Mexico, are twin cities separated only by a fence”. The page estimates Nogales, Sonora population at about 250,000 people with approximately 20,000 on the US side. Thus, Nogales is really one city and one big radio market with 270,000 people and a fence running through it. The Commission is well aware that foreign stations provide service to U.S. communities. In fact, the Commission requires that foreign stations be counted in US radio markets in duopoly showings. Furthermore, the Commission requires that US broadcasters protect the service contours of Mexican stations. Therefore, since the Commission requires broadcasters to both count and protect Mexican signals, these signal should also count in this proceeding.

Accordingly, not only do these signals not stop at the border, they are a big part of the nearly 90 percent Hispanic listening population of 19,489 persons in Nogales, Arizona. The Spanish language is so prevalent in Nogales, Arizona that the 1990 U.S. Census shows that less than ten percent of the population speak English only in the home.

*Note: All exhibits, contours, spacing studies and population estimates were prepared in accordance with FCC rules and regulations using RadioSoft FMR software and SoftWright Terrain Analysis Package software.*

## **ENGINEER CERTIFICATION**

I, Ted Tucker, do hereby certify that I personally prepared the foregoing technical analysis for KZNO and that I am qualified to do so.

My qualification as an FM engineer are a matter of record with the Commission. I have personally prepared and submitted nearly 100 applications, amendments, petitions, rulemaking proceedings, comments, replies, Special Temporary Authorizations, and other filings including domestic and international short spacing studies. I have personally installed and constructed numerous FM Stations, FM Translator Stations, Studio Transmitter Links, Low Power Televisions Stations and auxiliary transmitters. Many of these installations involved directional antenna systems.

I hold a valid General Class Radio Telephone License (formerly First Class) and have a Bachelor of Science degree from the University of Arizona.

Date: April 17, 2000

By: Ted Tucker  
Ted Tucker

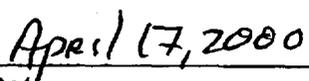
**EXHIBIT E1**  
**TRANSMITTER SITE**  
**CERTIFICATION**  
**VAIL, ARIZONA**  
**APRIL 17, 2000**

## **AFFIDAVIT**

**I, Ted Tucker, president of Desert West Air Ranchers Corporation, hereby state that I have reasonable assurance of the transmitter site referenced in this proposal at coordinates: 31-55-39 N 10-37-57 W. I have contacted Linda R. Beals, Lease Administrator of the Arizona State Land Department. She has given me the reasonable assurance to construct a 16 meter tower on this parcel of land. She can be reached at 602-542-3642.**

**I have also investigated the local zoning laws for this parcel of land. To the best of my knowledge, this proposed use will comply with the applicable zoning laws. I hereby certify that the statements made hereinabove are true, complete, correct to the best of knowledge and belief and are made in good faith.**

  
\_\_\_\_\_  
**Ted Tucker**  
**President**  
**Desert West Air Ranchers Corporation**

  
\_\_\_\_\_  
**Date**

Jane Dee Hull  
Governor

Michael E. Anable  
State Land  
Commissioner

Arizona  
State Land Department



1616 West Adams Street Phoenix, AZ 85007 www.land.state.az.us

March 13, 2000

Mr. Ted Tucker  
Desert West Air Ranchers Corporation  
P.O. Box 36717  
Tucson, AZ 85740

Re: Commercial Lease Application for a new FM Broadcast Site

Dear Mr. Tucker:

This letter is in response to your proposed commercial lease application for a broadcast communications tower to be located on State Trust Land. You specifically inquired about a 0.01 acre parcel of land, south of Vail, Arizona located on a hilltop in the NW quarter of T17S, R17E, Section 29.

Such a use is generally permitted on State Trust Land and a title search of the land in question reveals no obvious impediments to your proposed use. However, a formal application must be submitted and during the review and processing of your application such an impediment may arise, including zoning and right of way issues.

Enclosed is a copy of the required lease application form. It must be submitted together with the non-refundable application fee.

Please call me at 602-542-2642 if you have any questions or require further assistance.

Sincerely,

Linda R. Beals  
Lease Administrator  
Commercial Leasing Section  
Real Estate Division

**EXHIBIT E2**  
**CHANNEL STUDY**  
**CHANNEL 253A**  
**VAIL, ARIZONA**  
**APRIL 17, 2000**

ComStudy 2.2 search of channel 253 (98.5 MHz Class A) at:

**31-55-39 N, 110-37-57 W**

CALL	CITY	ST	CHN	CL	DIST	S	BRNG	CLEARANCE
ALC	CABORCA	SO	250	B	199.24	64	227.1	135.24
KQTN	LORDSBURG	NM	250	C	192.54	95	73.8	97.54
KUPD	TEMPE	AZ	250	C	205.77	95	319.7	110.77
KQTN	LORDSBURG	NM	250	C	220.36	95	70.1	125.36
KUPD	TEMPE	AZ	250	C	205.79	95	319.7	110.79
KOHT	MARANA	AZ	252	A	72.23	72	324.0	0.23
KQSS	MIAMI	AZ	252	A	165.00	72	354.5	93.00
KZNO	NOGALES	AZ	252	A	66.02	72	205.0	-5.98 SHORT
KQSS	MIAMI	AZ	252	A	165.00	72	354.5	93.00
KWCX-FM	WILLCOX	AZ	252	A	84.34	72	63.2	12.34
KOHT	MARANA	AZ	252	A	72.26	72	323.9	0.26
KZNO	VAIL	AZ	253	A	0.76	115	111.4	-114.24 SHORT
XHSAPFM	AGUA PRIETA	SO	253	B	122.84	178	123.9	-55.16 SHORT
KKLT	PHOENIX	AZ	254	C	205.75	165	319.8	40.75
KKLT	PHOENIX	AZ	254	C	205.71	165	319.8	40.71
ALC	SAN PEDRO	SO	255	A	87.81	25	151.0	62.81
K255AC	TUCSON	AZ	255	D	58.63	0	346.5	58.63
KFMM	THATCHER	AZ	256	C	162.95	95	48.6	67.95
KOFH	NOGALES	AZ	256	A	70.46	31	202.4	39.46
KOFH	NOGALES	AZ	256	A	66.62	31	206.2	35.62
NEW	PATAGONIA	AZ	251	A	44.00	31	191.7	13.00

**EXHIBIT E3**  
**TRANSMITTER SITE**  
**CONTOUR PROTECTION WITH MEXICO**  
**KZNO CHANNEL 253A**  
**VAIL, ARIZONA**  
**APRIL 17, 2000**

PROPOSED FACILITY

COMMUNITY : VAIL, ARIZONA  
CHANNEL : 253  
CALL : KZNO  
CLASS : A  
INTERNATIONAL : AA  
COORDINATES : 31-55-39 110-37-57  
RADIATING CENTER : 1375.0 METERS  
AZIMUTH TO PROTECTED FACILITY: 124 DEGREES (123.9 ROUNDED)  
RADIALS STANDARD : 90.0 HAAT: 111.5 M  
: 135.0 HAAT: 0.3 M  
INTERPOLATED : 124.0 HAAT: 27.7 M (30 M USED)  
RESTRICTED POWER : 0.875 KW AT 30 METERS (124 RADIAL)  
RESTRICTED POWER : 0.185 KW AT 100 METERS (STANDARDIZED)  
INTERFERING CONTOUR : 34 DBU (50,10)  
DISTANCE TO INTERFERING CONTOUR: 56.6 KM

PROTECTED ALLOCATION AT AGUA PRIETA, SONORA, MEXICO

COMMUNITY : AGUA PRIETA, SONORA  
CHANNEL : 253  
CALL : XHSAPF  
CLASS : B  
COORDINATES : 31-18-24 109-33-37  
RADIATING CENTER : 1423 M  
MAXIMUM ERP : 50 KW  
RELATIONSHIP : CO-CHANNEL  
PROTECTED CONTOUR: 54 DBU (50,50)  
DISTANCE TO PROTECTED CONTOUR : 65.0 KM (MAXIMUM)

SUMMARY

DISTANCE TO PROTECTED CONTOUR (XHSAPF) : 65.0 KM  
DISTANCE TO RESTRICTED CONTOUR (KZNO VAIL): 56.6 KM  
TOTAL DISTANCE RESTRICTED PLUS PROTECTED : 121.6 KM  
ACTUAL SPACING : 122.8 KM

**CLEARANCE 1.2 KM**

**NO OVERLAP OF PROTECTED AND INTERFERING CONTOUR**

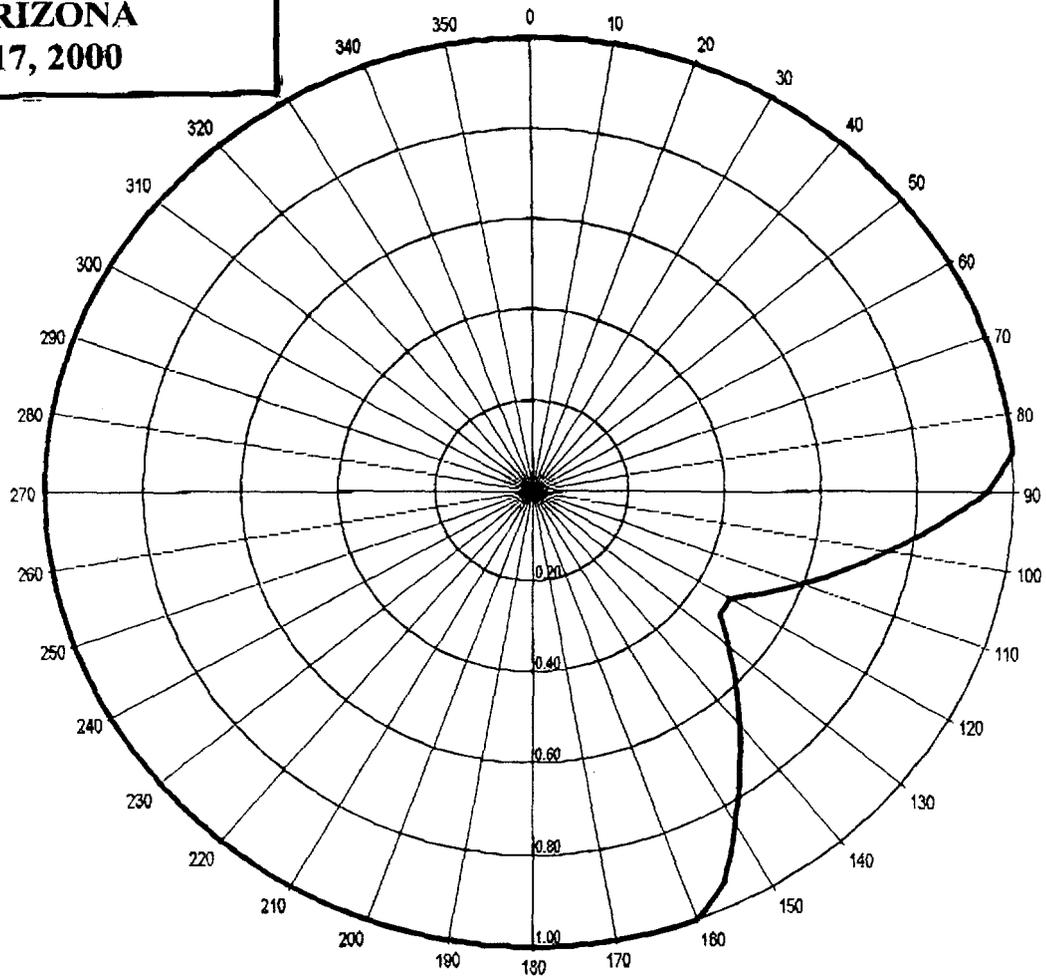
**EXHIBIT E4  
KZNO ENGINEERING DATA  
CHANNEL 253A  
VAIL, ARIZONA  
APRIL 17, 2000**

**KZNO AT VAIL, ARIZONA**

<b>CHANNEL</b>	<b>: 253</b>
<b>CLASS DOMESTIC</b>	<b>: A</b>
<b>CLASS INTERNATIONAL</b>	<b>: AA</b>
<b>COORDINATES</b>	<b>: 31-55-39 N 110-37-57 W</b>
<b>ERP (H&amp;V)</b>	<b>: 3.9 KW AT 125 METERS HAAT</b>
<b>DIRECTIONAL ANTENNA</b>	<b>: SHIVELY 6810 (SEE EXHIBIT E4A)</b>
<b>ERP ON 124 DEGREE RADIAL</b>	<b>: 0.875 KW AT 30 METERS HAAT</b>
<b>RCAMSL (H&amp;V)</b>	<b>: 1375 METERS</b>
<b>RC AGL (H&amp;V)</b>	<b>: 12 METERS</b>
<b>TOWER HEIGHT AGL</b>	<b>: 16 METERS</b>

**EXHIBIT E4A**  
**KZNO ENGINEERING DATA**  
**CHANNEL 253A**  
**VAIL, ARIZONA**  
**APRIL 17, 2000**

*Horizontal Pattern*



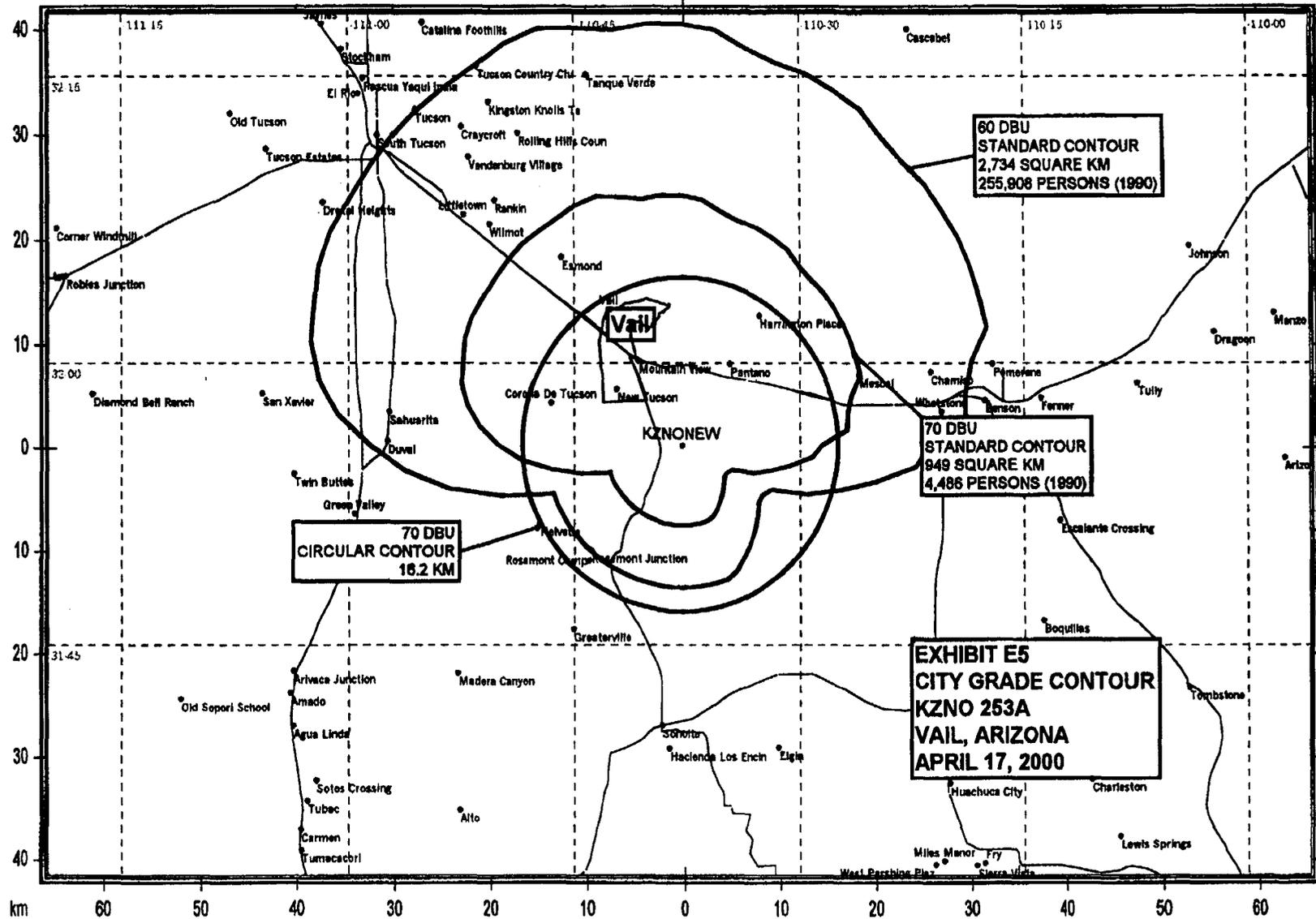
Azim	Rel.FS	ERP [kW]	dBk
0.0	1.000	3900.000	5.911
5.0	1.000	3900.000	5.911
10.0	1.000	3900.000	5.911
15.0	1.000	3900.000	5.911
20.0	1.000	3900.000	5.911
25.0	1.000	3900.000	5.911
30.0	1.000	3900.000	5.911
35.0	1.000	3900.000	5.911
40.0	1.000	3900.000	5.911
45.0	1.000	3900.000	5.911
50.0	1.000	3900.000	5.911
55.0	1.000	3900.000	5.911
60.0	1.000	3900.000	5.911
65.0	1.000	3900.000	5.911
70.0	1.000	3900.000	5.911
75.0	1.000	3900.000	5.911
80.0	1.000	3900.000	5.911
85.0	1.000	3900.000	5.911

Azim	Rel.FS	ERP [kW]	dBk
90.0	0.999	3975.930	5.910
95.0	0.992	2769.969	4.917
100.0	0.750	2193.750	3.932
105.0	0.667	1795.666	2.939
110.0	0.591	1385.392	1.936
115.0	0.531	1099.646	0.933
120.0	0.479	876.236	-0.579
125.0	0.479	876.236	-0.579
130.0	0.531	1099.646	0.933
135.0	0.591	1385.392	1.936
140.0	0.667	1795.666	2.939
145.0	0.750	2193.750	3.932
150.0	0.992	2769.969	4.917
155.0	0.999	3975.930	5.910
160.0	1.000	3900.000	5.911
165.0	1.000	3900.000	5.911
170.0	1.000	3900.000	5.911
175.0	1.000	3900.000	5.911

Azim	Rel.FS	ERP [kW]	dBk
180.0	1.000	3900.000	5.911
185.0	1.000	3900.000	5.911
190.0	1.000	3900.000	5.911
195.0	1.000	3900.000	5.911
200.0	1.000	3900.000	5.911
205.0	1.000	3900.000	5.911
210.0	1.000	3900.000	5.911
215.0	1.000	3900.000	5.911
220.0	1.000	3900.000	5.911
225.0	1.000	3900.000	5.911
230.0	1.000	3900.000	5.911
235.0	1.000	3900.000	5.911
240.0	1.000	3900.000	5.911
245.0	1.000	3900.000	5.911
250.0	1.000	3900.000	5.911
255.0	1.000	3900.000	5.911
260.0	1.000	3900.000	5.911
265.0	1.000	3900.000	5.911

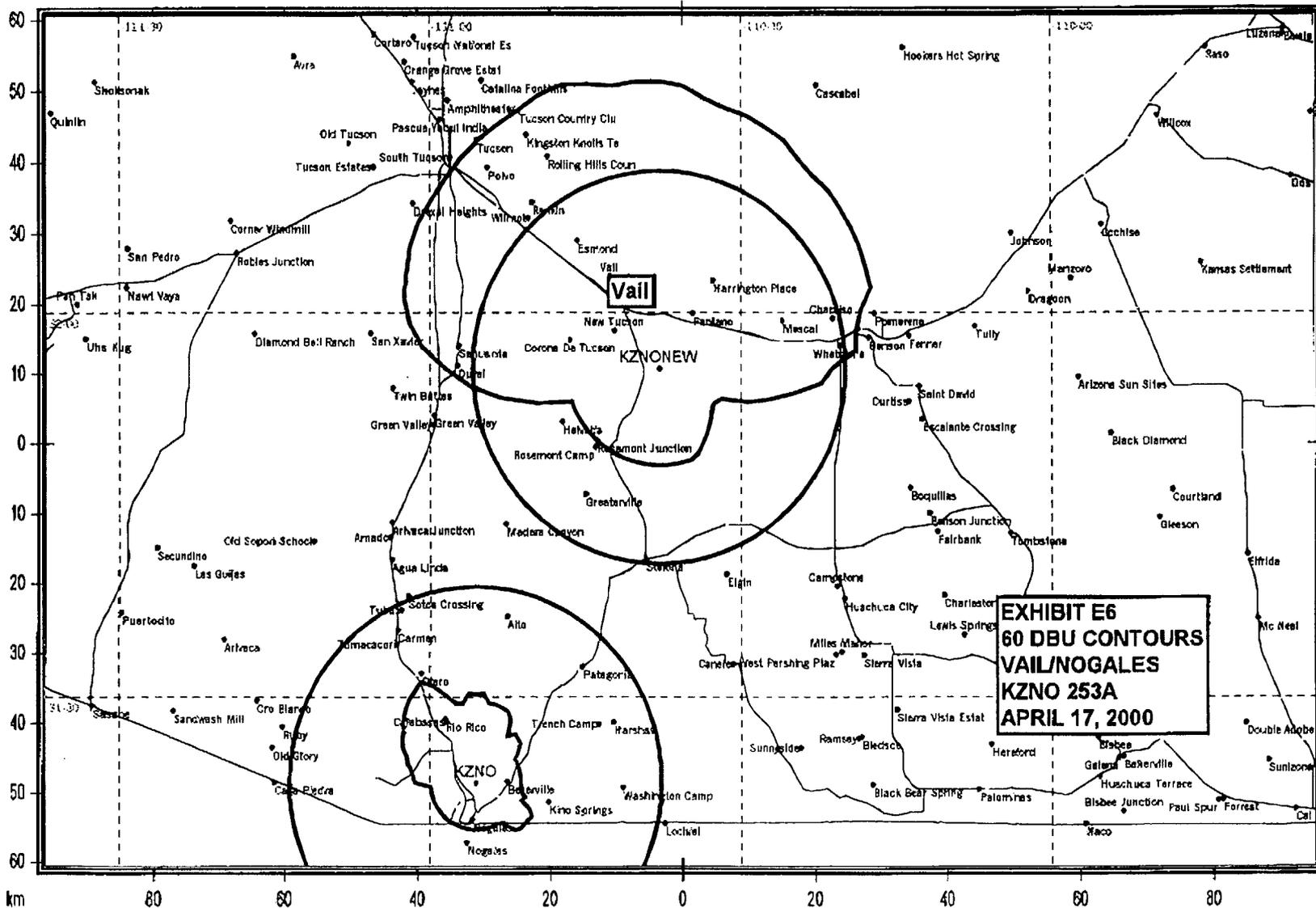
Azim	Rel.FS	ERP [kW]	dBk
270.0	1.000	3900.000	5.911
275.0	1.000	3900.000	5.911
280.0	1.000	3900.000	5.911
285.0	1.000	3900.000	5.911
290.0	1.000	3900.000	5.911
295.0	1.000	3900.000	5.911
300.0	1.000	3900.000	5.911
305.0	1.000	3900.000	5.911
310.0	1.000	3900.000	5.911
315.0	1.000	3900.000	5.911
320.0	1.000	3900.000	5.911
325.0	1.000	3900.000	5.911
330.0	1.000	3900.000	5.911
335.0	1.000	3900.000	5.911
340.0	1.000	3900.000	5.911
345.0	1.000	3900.000	5.911
350.0	1.000	3900.000	5.911

Map Header



Map Footer

Map Header



Map Footer

**EXHIBIT E7**  
**CHANNEL STUDY**  
**CHANNEL 251A**  
**PATAGONIA, ARIZONA**  
**APRIL 17, 2000**

MAPFM search of channel 251A6 (98.1 MHz), at:

31 32 21 N    110 43 35 W

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
ALC	Nogales	SO	248	A		31.1	31.0	221.8°	0.1
KOAZ	Oro Valley	AZ	248	A	L	93.1	31.0	340.1°	62.1
KOAZ	Oro Valley	AZ	248	A	A	93.1	31.0	340.1°	62.1
KOAZ	Oro Valley	AZ	248	A	C	93.1	31.0	340.1°	62.1
XHNOSF	Nogales	SO	248	A		31.1	31.0	221.8°	0.1 CLOSE
ALC	Oro Valley	AZ	248	A	U	96.3	31.0	346.5°	65.3
XHSEAF	Cananea	SO	249	A		74.2	31.0	145.9°	43.2
ALC	Benson	AZ	249	A	U	48.2	31.0	32.6°	17.2
KAVV	Benson	AZ	249	A	L	48.2	31.0	32.6°	17.2
ALC	Cananea	SO	249	A		75.1	31.0	147.2°	44.1
KAVV	Benson	AZ	249	A	C	72.6	31.0	46.3°	41.6
KAVV-1	Tucson	AZ	249	D	L	61.8	0.0	41.0°	61.8
ALC	Lordsburg	NM	250	C	U	216.6	165.0	64.0°	51.6
KUPD	Tempe	AZ	250	C	L	235.4	165.0	327.7°	70.4
ALC	Tempe	AZ	250	C	U	235.3	165.0	327.7°	70.3
ALC	Caborca	SO	250	B		165.3	125.0	235.9°	40.3
ALC	Naco	SO	251	A		77.1	111.0	107.2°	-33.9 SHORT
ALC	San Francisquito	SO	251	A		151.5	111.0	272.6°	40.5
KWCXFM	Willcox	AZ	252	A	L	116.8	72.0	46.3°	44.8
KZNO	Nogales	AZ	252	A	L	25.4	72.0	228.7°	-46.6 SHORT
KOHT	Marana	AZ	252	A	L	106.8	72.0	341.4°	34.8
ALC	Nogales	AZ	252	A	U	25.4	72.0	228.7°	-46.6 SHORT
ALC	Marana	AZ	252	A	U	106.8	72.0	341.5°	34.8
ALC	Agua Prieta	SO	253	B		113.6	69.0	102.8°	44.6
KZNO	Vail	AZ	253	A	A	43.8	31.0	12.7°	12.8
XHSAPF	Agua Prieta	SO	253	B		113.6	69.0	102.8°	44.6
KZNO	Vail (NEW)	AZ	253	A	A	44.0	31.0	11.7°	13.0

