

TECHNICAL EXHIBIT
DIGITAL FLASH-CUT APPLICATION FOR
TV TRANSLATOR STATION K44HJ (FACILITY ID 125946)
SOCORRO, NEW MEXICO
CH 44 0.058 KW (MAX-DA)

Technical Narrative

This Technical Exhibit supports a flash-cut application for TV translator station K44HJ. Station K44HJ is licensed (BLTT-20041021AEX) to operate on analog channel 44 with a Scala PR-450U directional maximum (visual) effective radiated power (ERP) of 0.288 kW and an antenna height above mean sea level (RCAMSL) of 2217 meters.

Proposed Facilities

This application proposes digital operation on the current channel (44), at the current transmitter site and with the same antenna. The transmitter site coordinates remain (NAD27): 34-04-18 N, 106-57-45 W. A Scala PR-450U antenna, with a maximum ERP of 0.058 kW and antenna RCAMSL of 2217 meters is proposed.

Figure 1 is a map showing the licensed 74 dBu (analog) and proposed 51 dBu (digital) coverage contours. As shown on the map the licensed analog contour is completely encompassed by the proposed digital contour.

Results of the FCC's TOWAIR Program indicate that the existing 12 meter (39 foot) structure does not require registration as it passes the slope test with respect to the Socorro Municipal Airport. Figure 2 shows the results of the FCC's TOWAIR Program.

Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations. Using the procedures outlined in the FCC's OET-69 Bulletin, a 1 kilometer cell size resolution and 1990 U.S. Census, the proposal complies

with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent assignments). If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin to the remaining LPTV/translator stations.

The applicant recognizes the proposal is secondary to authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The K44HJ facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields adopted by the Commission in 1996.¹

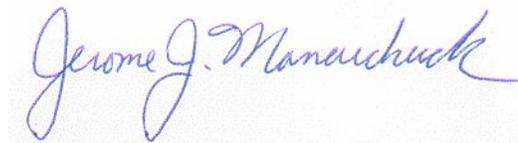
The calculated power density at 2 meters above ground level at the base of the tower was calculated using the appropriate equation contained in the Bulletin. As shown on Figure 3 (antenna vertical relative pattern), the maximum vertical relative field for depression angles towards the tower base (-60° to -90°) is less than 0.1. Therefore, using a vertical relative field value of 0.1, a maximum ERP of 0.058 kilowatts, and an antenna center of radiation height above ground level of 9 meters, the calculated power density at two meters above ground level at the base of the tower is 0.0004 milliwatt per square centimeter (mW/cm^2), or 0.09 percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas ($0.44 \text{ mW}/\text{cm}^2$ for TV channel 44). Therefore, the facility complies with the FCC's RF emission rules.

¹ See *Report and Order* in ET Docket 93-62, FCC 96-326, adopted August 1, 1996, 11 FCC Rcd 15123 (1997). See also *First Memorandum Opinion and Order*, ET Docket 93-62, FCC 96-487, adopted December 23, 1996, 11 FCC Rcd 17512 (1997), and *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, ET Docket 93-62, FCC 97-303, adopted August 25, 1997.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect to control access to the site. In the event that workers or other authorized personnel enter the restricted area appropriate measures shall be taken to limit RF energy exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

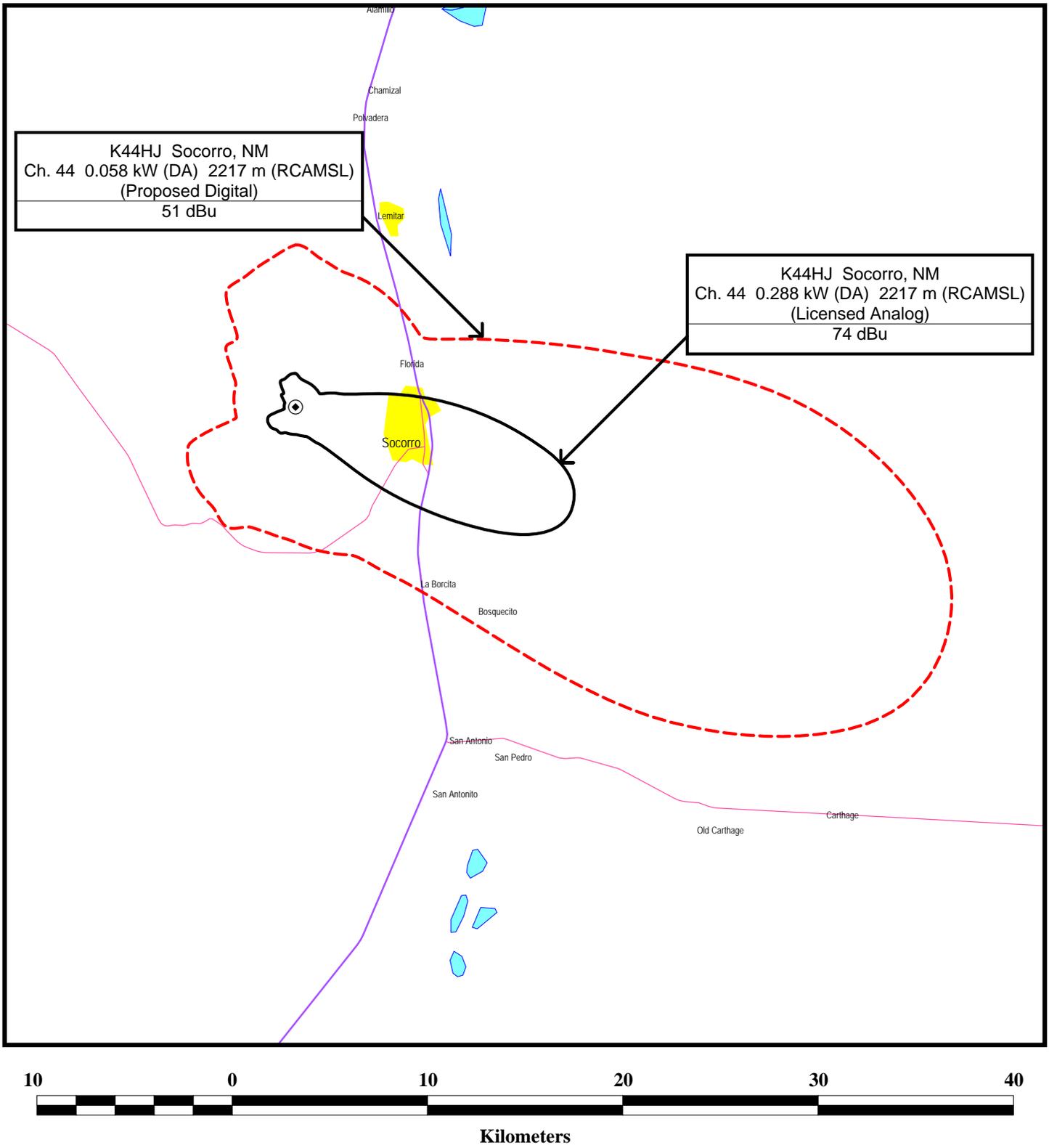
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been addressed by the tower owner.

If there are questions concerning the technical portion of this application, please contact the office of the undersigned.



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201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

December 18, 2008



FCC PREDICTED COVERAGE CONTOURS

TV TRANSLATOR STATION K44HJ
SOCORRO, NEW MEXICO

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

**PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7133.84 MTRS
(7.13379 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	34-01-18.00N	106-54-52.00W	SOCORRO MUNI	SOCORRO SOCORRO, NM	1446.0	1780.3

**PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7272.83 MTRS
(7.27280 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	34-01-46.00N	106-54-10.00W	SOCORRO MUNI	SOCORRO SOCORRO, NM	1446.0	1780.3

Your Specifications

NAD83 Coordinates

Latitude	34-04-18.0 north
Longitude	106-57-47.0 west

Measurements (Meters)

Overall Structure Height (AGL)	12
Support Structure Height (AGL)	11
Site Elevation (AMSL)	2208

Structure Type

TOWER - Free standing or Guyed Structure used for Communications Purposes

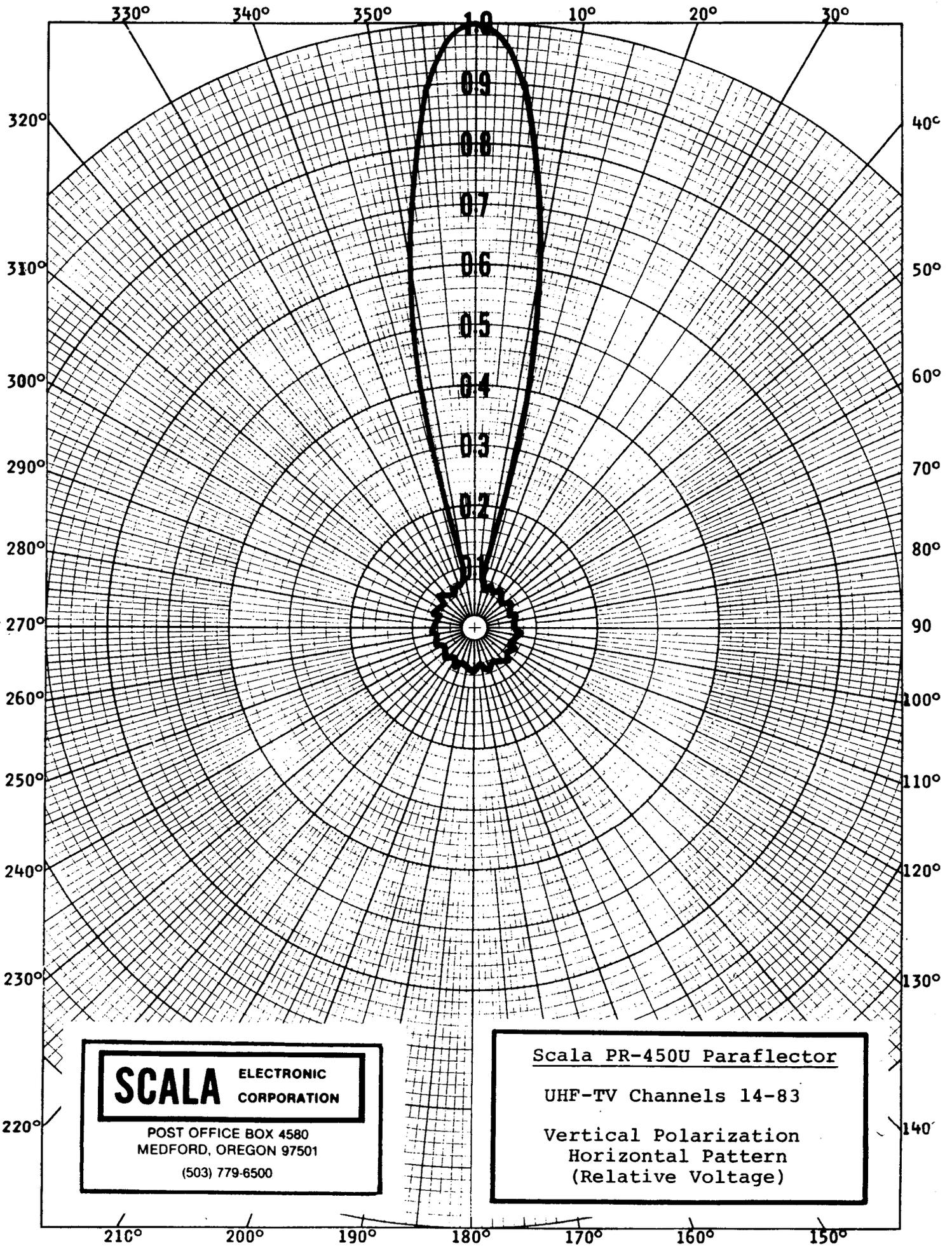
[Tower Construction Notification](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

Note: Notification does NOT replace [Section 106 Consultation](#).

CLOSE WINDOW

Figure 3



SCALA ELECTRONIC CORPORATION
POST OFFICE BOX 4580
MEDFORD, OREGON 97501
(503) 779-6500

Scala PR-450U Paraflector
UHF-TV Channels 14-83
Vertical Polarization
Horizontal Pattern
(Relative Voltage)

TV Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Station Type:	DT	Station Coordinates:	034-04-18.00 106-57-45.00 (NAD 27)		
Station Channel:	44	Station Zone:	II	Equivalent Canadian Class: C	
Buffer Distance:	50 km	Comment:	Comment:		

Callsign	Status	Channel	Service	Zone	City	State	Latitude	Dist. (km)	Min. (km)	Spacing (km)		
Facility ID	ARN	Class	DA	Ant ID	ERP (kW)	HAAT (m)	Rec Type	Longitude	Bear. (deg)	Max. (km)	Comment	
KYNM-LP	LIC	30 +	CA		ALBUQUERQUE	NM	035-12-44	134.98	24.1	38.38		
60795	BLTTA	20050203ADT		C	44131	8.41	C	106-26-58	20.16	96.6	CLEAR	
KLUZ-TV	LIC	41 Z	TV	2	ALBUQUERQUE	NM	035-12-41	134.92	24.1	38.32		
35084	BLCT	19980714KE		D	17506	1200	1256	C	106-26-56	20.2	96.6	CLEAR
		44 Z	TA	2	CIUDAD JUAREZ	CH	031-41-13	267.87	244	23.87		
98776	BPFS			N		5000	610	C	106-30-26	170.77	244	CLEAR
	MEXTAB	44	TV		CD. JUAREZ	CH	031-41-13	267.87	244	23.87		
0					0	0	0	C	106-30-26	170.77	244	CLEAR
KASY-DR	GRANT	45	DR	2	ALBUQUERQUE	NM	035-12-48	135.08	24	25.08		
135813	BPRM	20010502ABL		N		245	1287	C	106-27-00	20.13	110	CLEAR
KASY-TV	LIC	45	DT	2	ALBUQUERQUE	NM	035-12-48	135.08	24	25.08		
55049	BLCDT	20030429ABF		D	41944	245	1287	C	106-27-00	20.13	110	CLEAR
KTEL-LP	CP	47 -	CA		ALBUQUERQUE	NM	035-12-51	135.15	24.1	38.55		
55056	BPTTL	20031229ABO		D	17628	50		C	106-27-02	20.09	96.6	CLEAR