

TECHNICAL EXHIBIT
DIGITAL FLASH-CUT APPLICATION FOR
TV TRANSLATOR STATION K25DI (FACILITY ID 32323)
SILVER CITY, NEW MEXICO
CH 25 0.228 KW

Technical Narrative

This Technical Exhibit supports a flash-cut application for TV translator station K25DI. Station K25DI is licensed (BLTT-19910325JS) to operate on analog channel 25 with a Scala SL-8 non-directional maximum (visual) effective radiated power (ERP) of 1.14 kW and an antenna height above mean sea level (RCAMSL) of 2317 meters.

Proposed Facilities

This application proposes digital operation on the current channel (25), at the current transmitter site and with the same antenna. The transmitter site coordinates remain (NAD27): 32-50-40 N, 108-14-18 W. A Scala SL-8 non-directional antenna, with a maximum ERP of 0.228 kW and antenna RCAMSL of 2317 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 18 meter (59 foot) structure does not require registration as it does not exceed 200 feet and it passes the FCC's TOWAIR slope test with respect to Whiskey Creek Airport at Grant Silver City, New Mexico. 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.

Mexican Allocation

Figure 4 is a TV separation study from the K25DI site. As shown, the proposed site is fully spaced with respect to all pertinent Mexican NTSC and DTV stations and allotments. However, the proposed site is located 118 kilometers from the U.S.\Mexican border, and therefore will still require coordination with Mexico.

Radiofrequency Electromagnetic Field Exposure

The K25DI facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST 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

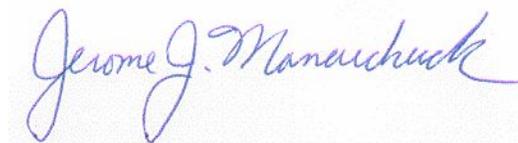
¹ See *Report and Order* in ET Docket 93-62, FCC 96-326, adopted August 1, 1996, 11 FCC Rcd 15123 (1997). See also *First Memorandum Opinion and Order*, ET Docket 93-62, FCC 96-487, adopted December 23, 1996, 11 FCC Rcd 17512 (1997), and *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*,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

angles towards the tower base (-60° to -90°) is less than 0.25. Therefore, using a vertical relative field value of 0.25, a maximum ERP of 0.228 kilowatts, and an antenna center of radiation height above ground level of 16 meters, the calculated power density at two meters above ground level at the base of the tower is 0.0024 milliwatt per square centimeter (mW/cm^2), or 0.67 percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas ($0.36 \text{ mW}/\text{cm}^2$ for TV channel 25). Therefore, the facility complies with the FCC's RF emission rules.

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.

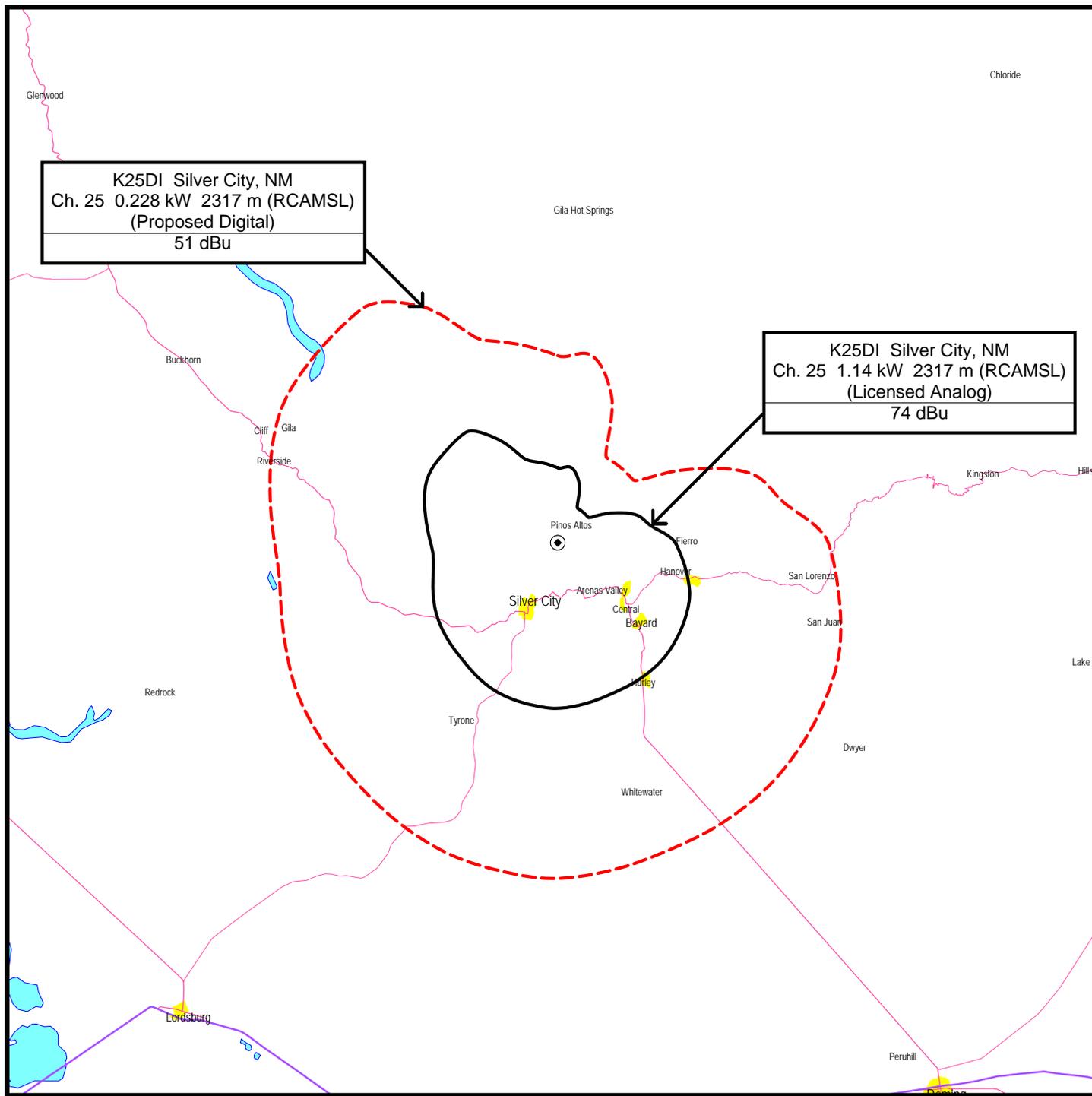
If there are questions concerning the technical portion of this application, please contact the office of the undersigned.



Jerome J. Manarchuck

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

December 17, 2008



K25DI Silver City, NM
Ch. 25 0.228 kW 2317 m (RCAMSL)
(Proposed Digital)
51 dBu

K25DI Silver City, NM
Ch. 25 1.14 kW 2317 m (RCAMSL)
(Licensed Analog)
74 dBu



COVERAGE COMPARISON

TV TRANSLATOR STATION K25DI
SILVER CITY, NEW MEXICO

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 & 7938.82 MTRS (7.93879 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	C	32-45-43.00N	108-12-30.00W	WHISKEY CREEK	GRANT SILVER CITY, NM	1867.2	1645.9000000000001

Your Specifications

NAD83 Coordinates

Latitude 32-50-40.0 north
Longitude 108-14-20.0 west

Measurements (Meters)

Overall Structure Height (AGL) 18
Support Structure Height (AGL) 17
Site Elevation (AMSL) 2301

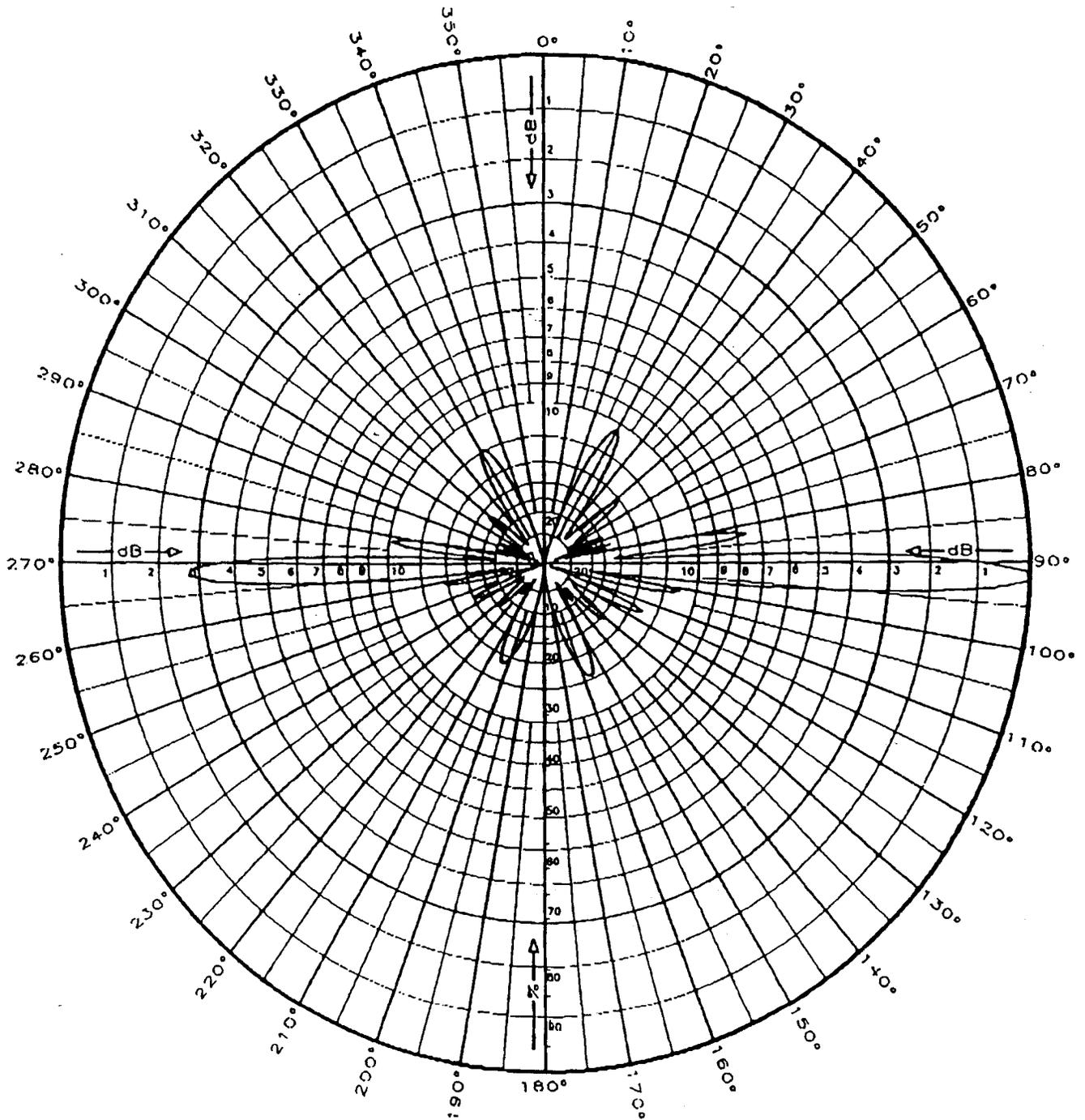
Structure Type

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



ONE SCALA SL-8 PARASLOT
 WITH 1.75 DEGREE DOWNTILT
 ANY SPECIFIED UHF-TV CHANNEL
 GAIN: 11.4 dBd.
 POWER GAIN: 13.8
 HORIZONTAL POLARIZATION
 VERTICAL PLANE PATTERN

SCALA
 ELECTRONIC CORPORATION
 MENLO PARK, OREGON (USA)
 (503) 778-6500
 FAX: (503) 778-3991

TV Study

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



Station Type:	DT	Station Coordinates:	032-50-40.00 108-14-18.00 (NAD 27)		
Station Channel:	25	Station Zone:	II	Equivalent Canadian Class: C	
Buffer Distance:	100 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	
KRWG-TV	LIC	22 -	TV	2	LAS CRUCES	NM	032-15-33	135.25	24.1	38.65		
55516	BLET	20031223AAG		N	34265	1550	125	C	106-58-30	118.45	96.6	CLEAR
		23 +	TA	2	SAFFORD	AZ	032-50-00	138.34	24.1	41.74		
97800				N				C	109-42-57	269.89	96.6	CLEAR
DKINTTV	DTVALT	25	DT	2	EL PASO	TX	31-47-46	202.12	223.7	-21.58		
0					19232	71	457	C	106-28-57	124.77	223.7	SHORT
KINT-TV	CP	25	DT	2	EL PASO	TX	031-47-46	202.12	223.7	-21.58		
51708	BPCDT	19991029AGI		D	36510	1000	439.1	C	106-28-57	124.77	223.7	SHORT
KMSB-TV	LIC	25	DT	2	TUCSON	AZ	032-24-56	237.13	223.7	13.43		
44052	BLCDT	20050623ABE		D	64314	480	1123	C	110-42-50	259.04	223.7	CLEAR
D	DTVALT	25	DT	2	TUCSON	AZ	32-24-54	237.38	223.7	13.68		
0						666.3	507	C	110-42-59	259.04	223.7	CLEAR
		25 -	TA	2	VILLA AHUMADA	CH	030-37-18	295.4	244	51.4		
97259				N				C	106-31-12	146.22	244	CLEAR
	MEXDTV	25	DT		CANANEA	SO	30-58-57	283.76	223	60.76		
0					0	0	0	C	110-17-48	223.73	223	CLEAR
	MEXTAB	25	DT		CANANEA	SO	030-58-37	284.84	223	61.84		
0					0	0	0	C	110-18-22	223.78	223	CLEAR
NEW-DT	APP	25 Z	DT	2	CANANEA	SO	030-58-37	284.84	223	61.84		
164486	BPFS	20041216ACI		N				C	110-18-22	223.78	223	CLEAR
		25 Z	TA	2	NACUZARI	SO	030-22-25	306.69	244	62.69		
97927				N				C	109-41-28	206.98	244	CLEAR
KTEL-TV	APP	25 -	NM	2	MORIARTY	NM	034-33-23	309.79	244.6	65.19		
159477	BPRM	20030818AFN		N		5000	600	C	105-35-53	51.34	244.6	CLEAR
	MEXTAB	25	DT		NOGALES	SO	031-18-06	307.21	223	84.21		
0					0	0	0	C	110-56-27	236.76	223	CLEAR

TV Study

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



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Station Channel:	25	Station Zone:	II	Equivalent Canadian Class: C	
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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
NEW-DT	APP	25 Z	DT	2	NOGALES	SO	031-18-06	307.21	223	84.21			
164497	BPFS	20041216ACW			N	C	110-56-27	236.76	223	CLEAR			
DKNMETV	DTVALT	25	DT	2	ALBUQUERQUE	NM	35-12-44	310.29	223.7	86.59			
0						C	106-26-57	31.56	223.7	CLEAR			
KINT-TV	LIC	26 +	TV	2	EL PASO	TX	031-47-46	202.12	12	96.12			
51708	BLCT	19840517KF			D	19232	2240	457	C	106-28-57	124.77	106	CLEAR