

ENGINEERING STATEMENT
IN SUPPORT OF
MINOR MODIFICATION OF A LICENSED DIGITAL TRANSLATOR FACILITY
K24KS-D
FLAGSTAFF, AZ

Background

Scripps Broadcasting Holdings LLC (Scripps) is the licensee of digital television translator station K24KS-D (BLDTT-20111201MML, Facility ID. 59433) near Flagstaff, AZ. The station currently operates on Ch. 24 with an ERP of 0.824 kW. Scripps, in the instant application, is seeking to move the transmit antenna for the station to a nearby tower on the same site.

Proposed Parameters

Scripps is proposing the following parameters for the K24KS-D digital operation on Ch. 24:

Coordinates:	35° 14' 25.0" N (NAD83) 111° 35' 51.8" W
ERP:	0.824 kW
RCAMSL:	2834.8m
RCAGL:	17.4m
Antenna:	RFS RD04A-470536L1S
Mask:	Simple

The proposed tower has an overall height of 30.5m AGL and it passes the TOWAIR program. Therefore, the tower does not require an ASR, nor notification to the FAA.

Interference

An interference study was conducted of the proposed facility parameters using the FCC TVStudy software (Version 2.2.5) with the default parameters. The results of the study (copy attached hereto) show that potential interference from the proposed facility is not predicted to exceed 0.49% to any full-service DTV or Class A stations or 1.99% to any low power stations as required by the Commission's Rules.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure already exists, such conditions should not be an issue requiring further consideration.

The location of the proposed facility is a multi-user site and it is assumed to currently be "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst-case ground level RFR contributed to the site by this proposal is calculated to be 0.010447 mW/cm² at 2m AGL, which is less than 5% of the MPE for public exposure (0.355333 mW/cm²) at Ch. 24. Per Section 1.1307(b) of the FCC Rules, the operation is categorically excluded from taking corrective action in areas with levels above the MPE limit since the contribution to the overall RFR from the facility is less than 5%.

Scripps agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information, and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.



Benjamin Pidek, P.E.
December 5, 2023

Attached:
TVStudy Interference Check Report

TVStudy TV Interference Check Report for K24KS-D on Ch. 24

Study created: 2023.12.05 21:03:55

Study build station data: LMS TV 2023-12-04

Proposal: K24KS-D D24 LD LIC FLAGSTAFF, AZ
File number: K24KS-AltTwr-0824k
Facility ID: 59433
Station data: User record
Record ID: 28
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K21GE-D	N21-	TX	LIC	CAMP VERDE, AZ	BLTT20040830AAI	89.2 km
No	K23FZ-D	D23	LD	LIC	CAMP VERDE, AZ	BLANK0000179591	89.2
No	K23FZ-D	N23+	TX	LIC	CAMP VERDE, AZ	BLTT20040927ABU	89.2
No	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLANK0000075039	216.4
No	K23NJ-D	D23	LD	LIC	PRESCOTT, ETC., AZ	BLANK0000058780	119.3
No	K23PL-D	D23	LD	LIC	SHONTO, AZ	BLANK0000121612	178.5
No	K24DK-D	D24	LD	LIC	BULLHEAD CITY, AZ	BLDTT20110328ABJ	253.1
No	K24NG-D	D24	LD	LIC	LAKE HAVASU CITY, AZ	BLANK0000071720	262.5
No	K24NG-D	D24	LD	CP	LAKE HAVASU CITY, AZ	BLANK0000218886	262.5
Yes	KTVK	D24	DT	LIC	PHOENIX, AZ	BLANK0000150263	216.2
No	K24NI-D	D24	LD	LIC	YUMA, AZ	BLANK0000064203	397.5
No	KNAT-TV	D24	DT	LIC	ALBUQUERQUE, NM	BLCDT20130710AAN	467.3
No	K24IV-D	D24	LD	LIC	FARMINGTON, NM	BLDTL20120522ABH	362.9
No	KVVU-TV	D24	DT	CP	HENDERSON, NV	BLANK0000185177	319.6
No	KEGS-LD	D24	LD	LIC	LAS VEGAS, NV	BLDTL20100104ABL	321.2
No	K24NE-D	D24	LD	LIC	OVERTON, NV	BLANK0000137688	308.1
No	K24MY-D	D24	LD	LIC	KANARRAVILLE, UT	BLANK0000091241	288.3
No	K24MQ-D	D24	LD	LIC	MARYSVALE, UT	BLANK0000080750	367.0
No	KTTA-LD	D24	LD	LIC	MONROE, UT	BLANK0000064401	379.5
No	K24LX-D	D24	LD	LIC	ORDERVILLE, UT	BLANK0000059976	244.1
No	K24CY-D	D24	LD	LIC	ST. GEORGE, UT	BLANK0000146926	269.2
No	K24CY-D	N24	TX	LIC	ST. GEORGE, UT	BLTT19930730JE	269.2
No	K25MK-D	D25	LD	LIC	CAMP VERDE, AZ	BLANK0000214659	89.2
Yes	K25MK-D	N25	TX	LIC	CAMP VERDE, AZ	BLTT20120316AAL	89.2
Yes	K25MG-D	D25	LD	LIC	FLAGSTAFF, AZ	BLDTT20111101AAX	0.0
No	KDVD-LD	D25	LD	CP	GLOBE, AZ	BLANK0000213831	216.4
No	K25OM-D	D25	LD	LIC	PRESCOTT, AZ	BLANK0000058628	119.7
No	DK31LZ	N31	TX	APP	CAMP VERDE, AZ	BLTTL20130125AAC	89.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D24
Mask: Simple
Latitude: 35 14 25.00 N (NAD83)
Longitude: 111 35 51.80 W
Height AMSL: 2834.8 m
HAAT: 0.0 m
Peak ERP: 0.824 kW
Antenna: RFS-RD04A-470536L1S (ID 94810) 180.0 deg
Elev Pattn: Generic

49.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.044 kW	461.6 m	29.6 km
45.0	0.139	743.1	42.0
90.0	0.744	838.3	54.2
135.0	0.713	787.0	53.1
180.0	0.824	751.1	53.4
225.0	0.713	694.3	51.4
270.0	0.744	582.9	49.8
315.0	0.139	109.5	21.1

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 621 m

Distance to Canadian border: 1529.0 km

Distance to Mexican border: 389.6 km

Conditions at FCC monitoring station: Douglas AZ

Bearing: 156.0 degrees Distance: 453.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 43.9 degrees Distance: 777.7 km

Study cell size: 1.00 km

Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

No IX check failures found.