



## **ENGINEERING STATEMENT**

**IN SUPPORT OF**

**APPLICATION FOR DISPLACEMENT OF DIGITAL TRANSLATOR**

**K16EO-D**

**TUCSON, AZ**

### **Background**

Scripps Broadcasting Holdings LLC (Scripps) is the licensee of digital television translator station K16EO-D (LMS File#000005585, Facility ID. 36915) near Tucson, AZ. The station currently operates on Ch. 16. The station is filing an instant application to displace K16EO-D from Ch. 16 to Ch. 27 in the Special Displacement Window (Per FCC Public Notice DA-17-422 and DA 18-124).

K16EO-D is eligible to file in the Special Displacement Window under the following criteria:

1. The current facility on Ch. 16 is predicted by the FCC TVStudy interference software to cause 44.2% interference to the post-repack full-service facility KHRR (at Tucson, AR) which has been assigned Ch. 16 (LMS File #0000034596).
2. The station was licensed for operation prior to April 13, 2017

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## **Displacement Parameters**

Scripps is proposing the following parameters for the K16EO-D operation on Ch. 27:

Coordinates:	32° 12' 51.5" N (NAD83) 111° 00' 20.5.0" W
ERP:	9.0 kW
RCAMSL:	962m
RCAGL:	11m
Antenna:	ERI ALP12L6-HSER-27
Mask:	Stringent

Note, during the process of preparing the displacement application, it was discovered that the original construction permit application for the K16EO-D digital low power facility contained typographical errors in the tower coordinates which were listed as:

32° 12' 51.2" N (NAD83)  
111° 00' 21.3" W

The actual coordinates of the tower are:

32° 12' 51.5" N (NAD83)  
111° 00' 20.5" W

This discrepancy has been corrected on the displacement application.

## **Interference**

An interference study was conducted of the proposed facility parameters using the FCC TVStudy software (Version 2.2.5). The results of the study (copy attached hereto) show that

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potential interference 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.

The location of the proposed post-incentive auction facility 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 in public areas is calculated to be 0.179671 mW/cm<sup>2</sup>, which is less than the MPE for public exposure (0.367333 mW/cm<sup>2</sup>) at Ch. 27 (548-554 MHz). The contribution to the overall RFR from the proposed facility is negligible and, therefore, the site will remain "in compliance" with FCC guidelines.

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. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure.

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**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.

A handwritten signature in black ink, appearing to read "Ben Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.  
May 15, 2018

Attached:  
TVStudy Interference Check Report

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## TVStudy TV Interference Check Report for K16EO-D on Ch. 27

Study created: 2018.05.15 20:31:39

Study build station data: LMS TV 2018-05-14

Proposal: K16EO-D D27 LD LIC ORO VALLEY/TUCSON, AZ  
 File number: K16EO-C27-TM-10k  
 Facility ID: 36915  
 Station data: User record  
 Record ID: 1125  
 Country: U.S.

Build options:  
 Protect pre-transition records not on baseline channel

Search options:  
 Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K20FO	N20z	TX	LIC	SIERRA VISTA, AZ	BLANK000021597	128.0 km
No	NEW	D26	LD	APP	BOWIE, AZ	BNPDTL20100504AMP	143.1
Yes	KUTP	D26	DT	LIC	PHOENIX, AZ	BLCDT20130625AAK	158.9
No	KTVW-CD	D27	DC	LIC	FLAGSTAFF/DONEY PARK, AZ	BLDTA20140421ACI	309.6
Yes	K27KS-D	D27	LD	LIC	GLOBE/MIAMI, AZ	BLDTT20130312ACC	126.0
Yes	KASW	D27	DT	CP	PHOENIX, AZ	BLANK000048389	158.9
Yes	KDFQ-LP	D27z	LD	APP	PRESCOTT, AZ	BLANK000052540	293.5
No	KYPO-LP	N27	TX	LIC	TACNA, AZ	BLTTL20080818AAL	301.9
No	K33MD-D	D27	LD	APP	YUMA, AZ	BLANK000051953	316.7
No	K27BN	N27	TX	LIC	TRUTH OR CONSEQUENCE, NM	BLTT19871106IB	363.1
No	K26KJ-D	D27	LD	APP	EL PASO, TX	BLANK000052583	428.6
No	K28MO-D	D28	LD	CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APJ	172.3
No	KCOS-LP	N28-	TX	LIC	PHOENIX, AZ	BLTTL19990325JD	154.2
No	K28MN-D	D28	LD	CP	SAN SIMON, AZ	BNPDTL20100504AMT	166.5
Yes	KUAS-TV	D28	DT	LIC	TUCSON, AZ	BLEDT20030115ABS	0.1
No	KPCE-LP	N29-	TX	LIC	TUCSON, AZ	BLTTL20080605AAT	11.1
No	CADENATRES	D26	DT	LIC	AGUA PRIETA, SO	BLANKBPFS20160525ACB	171.3
No	XHNON	D26	DT	LIC	NOGALES, SO	BLANKBPFS20160315ABG	98.7
No	XHNGC	D27	DT	LIC	NUEVO CASAS GRANDES, CH	BLANKBPFS20160304AAJ	357.0
No	XHOPHA	D27	DT	LIC	HERMOSILLO, SO	BLANKBPFS20160315AAW	350.5

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:  
 KXEW 1600 L DAN D SOUTH TUCSON, AZ BL20070214ACR  
 KXEW 1600 L DAN N SOUTH TUCSON, AZ BL20070214ACR  
 KGMS 940 L DA2 D TUCSON, AZ BMML20101013AEB  
 KGMS 940 L DA2 N TUCSON, AZ BMML20101013AEB

Record parameters as studied:

Channel: D27  
 Mask: Stringent  
 Latitude: 32 12 51.20 N (NAD83)  
 Longitude: 111 0 21.30 W

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Height AMSL: 962.0 m  
HAAT: 0.0 m  
Peak ERP: 10.0 kW  
Antenna: ERI-ALP12L6-HSER-27 20.0 deg  
Elev Pattn: Generic  
Elec Tilt: 1.50

50.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	10.0 kW	250.2 m	51.7 km
45.0	10.0	205.3	49.2
90.0	7.85	194.4	47.3
135.0	2.29	180.7	40.1
180.0	0.072	202.3	23.6
225.0	0.058	177.5	21.2
270.0	2.80	102.9	35.8
315.0	8.39	195.0	47.7

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 189 m

Distance to Canadian border: 1865.5 km

\*\*Proposal is within coordination distance of Mexican border  
Distance to Mexican border: 94.0 km

Conditions at FCC monitoring station: Douglas AZ  
Bearing: 121.5 degrees Distance: 150.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 28.8 degrees Distance: 1018.3 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.**

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