

#### (REFERENCE COPY - Not for submission)

# **DTV Engineering STA Application**

 File Number:
 0000059695
 Submit Date:
 09/19/2018
 Call Sign:
 KBYU-TV
 Facility ID:
 6823
 FRN:
 0001607407
 State:

 Utah
 City:
 PROVO
 Service:
 DTV
 Purpose:
 Engineering STA
 Status:
 Granted
 Status Date:
 09/25/2018
 Expiration Date:
 Filing Status:
 InActive

General Information	Section	Question	Response	
Fees, Waivers,	Section	Question	Response	
and Exemptions	Waivers	Does this filing request a waiver of the Commission's rule(s)?	No	
		Total number of rule sections involved in this waiver request:		

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
BRIGHAM YOUNG UNIVERSITY Applicant Doing Business As: BRIGHAM YOUNG UNIVERSITY	Scott Halvorsen A-357 ASB PROVO, UT 84602 United States	+1 (801) 422- 8450	scott.halvorsen@byu. edu	Other

#### **Authorization Holder Name**

Check box if the Authorization Holder name is being updated because of the sale (or transfer of control) of the Authorization(s) to another party and for which proper Commission approval has not been received or proper notification provided.

Contact Representatives (3)	Contact Name	Address	Phone	Email	Contact Type
	<b>Patricia M. Chuh M. Chuh</b> Wilkinson Barker Knauer, LLP	1800 M Street, NW Suite 800N Washington, DC 20036 United States	+1 (202) 783- 4141	pchuh@wbklaw.com	Legal Representative
	William Meintel Grover Meintel, Sgrignoli & Wallace, LLC	Warrenton, VA 20188 United States	+1 (540) 428- 2308	test@fcc.gov	Technical Representative
	William Meintel Meintel Meintel, Sgrignoli & Wallace, LLC	Bill Meintel PO Box 907 Warrenton, VA 20188 United States	+1 (540) 428- 2308	william.meintel@mswdtv. com	Technical Representative

Channel and Facility Information	Section	QuestionResponseFacility ID6823StateUtahCityPROVODTV Channel17Designated Market AreaSALT LAKE CITY			
	Proposed Community of	Facility ID	6823		
	License	State	Utah		
		City	PROVO		
		DTV Channel	17		
		Designated Market Area	SALT LAKE CITY		
	Facility Type	Facility Type	Noncommercial Educational		
		Station Type	Main		
	Zone	Zone	2		

Antenna Location Data	Section	Question	Response		
	Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes		
		eDo you have an FCC Antenna Structure Registration (ASR) Number?YesASR Number1237796D83)Latitude40° 39' 35Longitude112° 12' 0Structure TypeTOWER-A guyed structure Support Structure Height86.0 meterSupport Structure Height86.0 meterGround Elevation (AMSL)2755.0 meterHeight of Radiation Center Above Ground Level64.3 meterHeight of Radiation Center Above Average Terrain1257 meter			
	Coordinates (NAD83)	Latitude	40° 39' 35.0" N+		
		Longitude	112° 12' 07.5" W-		
		Structure Type	TOWER-A free standing or guyed struct		
		Overall Structure Height	86.0 meters		
		Support Structure Height	86.0 meters		
		Do you have an FCC Antenna Structure Registration (ASR) Number?YesASR Number1237796Latitude40° 39' 35.0" N+Longitude112° 12' 07.5" WStructure TypeTOWER-A free s guyed structOverall Structure Height86.0 metersSupport Structure Height86.0 metersGround Elevation (AMSL)2755.0 metersHeight of Radiation Center Above Average Terrain1257 metersHeight of Radiation Center Above Mean Sea Level2819.3 meters			
	Antenna Data	Height of Radiation Center Above Ground Level	64.3 meters		
		Height of Radiation Center Above Average Terrain	1257 meters		
		Height of Radiation Center Above Mean Sea Level	2819.3 meters		
		Effective Radiated Power	169.0 kW		

Antenna	Section	Question	Response
Technical Data	Antenna Type	Antenna Type	Directional Custom
		Do you have an Antenna ID?	No
		Antenna Type       Directional Custom         Do you have an Antenna ID?       No         Antenna ID       1004133	
	Antenna Manufacturer and	Manufacturer:	KATHREIN
	Model	Model	773941
		Rotation	352.0 degrees
		Electrical Beam Tilt	1.5
		Mechanical Beam Tilt	Not Applicable
		toward azimuth	
		Polarization	Horizontal
	DTV and DTS: Elevation Pattern	patterns that vary with azimuth for reasons other than the	No

## Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.705	90	0.421	180	0.720	270	0.994
10	0.870	100	0.413	190	0.540	280	0.964
20	0.956	110	0.471	200	0.478	290	0.852
30	0.966	120	0.657	210	0.496	300	0.671
40	0.924	130	0.832	220	0.476	310	0.524
50	0.816	140	0.916	230	0.463	320	0.539
60	0.619	150	0.946	240	0.607	330	0.579
70	0.443	160	0.940	250	0.813	340	0.542
80	0.407	170	0.877	260	0.945	350	0.555

#### **Additional Azimuths**

Degree	V <sub>A</sub>
272.0	1.000

Certification	Section	Question	Response
	General Certification Statements	The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by authorization or otherwise, and requests an Authorization in accordance with this application (See Section 304 of the Communications Act of 1934, as amended.).	
		The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR . See §1. 2002(b) of the rules, 47 CFR §1.2002(b), for the definition of "party to the application" as used in this certification §1.2002 (c). The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.	
	Authorized Party to Sign	FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID Upon grant of this application, the Authorization Holder may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in automatic cancellation of the Authorization. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of Authorization requested in this application. WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).	
		I certify that this application includes all required and relevant attachments.	Yes
		I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Matthew O. Richardson O. Richardson Advancement Vice President
			09/19/2018

Attachments

File Name	Uploaded By	Attachment Type	Description
0000059695 KBYU Antenna Relocation. doc	Internal	All Purpose	Processed STA Letter
Kathrein 773941AUX ANTENNA CH 17. pdf	Applicant	All Purpose	Antenna Data
KBYU_CH_17_AUX_169_KW_tvixstudy.txt	Applicant	All Purpose	TVStudy Interference Analysis Results
RF Exposure Statement.pdf	Applicant	General Information	RF Exposure Statement
STA Justification and Engineering Statement.pdf	Applicant	General Information	STA Justification and Engineering Statement