Engineering Exhibit #6

In support of an application to construct a UHF Television Translator to serve The community and surrounding area of Myton, UT

Prepared by Rick Ervin, ACME Television, LLC

This engineering exhibit has been prepared to support the application for a new translator facility to be located on Tabby mountain which will serve the viewers living in and surrounding the community of Myton, UT. Myton, UT is part of the Salt Lake DMA and much of the area is terrain shielded by mountainous terrain from the main transmitting facility of KUWB-TV, Ogden, UT.

ACME Television Licenses of Utah, LLC has been working closely with the Utah State Master Plan for television translators and it's coordinator Mr. Kent Parsons on the relocation of displacement channels and to search for channels to bring KUWB's programming to rural Utah television viewers.

A spacing study was completed utilizing the TV Broadcast Study Module of TVSR™ version 5.0.1, a computer software program produced by EDX Engineering, Inc. of Eugene, OR and using the FCC dated 010301 obtained from and converted to a flat field format by Dataworld©. For verification purposes the study was repeated using the FCC engineering database dated 991230 and 010301 which was downloaded from the FCC website.

The spacing study showed that the new facility would be short spaced to KJZZ-TV channel 14 by 2.1 km. The resulting spacing study has been included at the conclusion of this text.

KJZZ-TV

A terrain path profile was made using Topo USA 2.0, topographical mapping software manufactured by Delorme Inc. shows that Myton, UT and the surrounding area is terrain shielded from the KJZZ-TV channel 14 transmitter site.

Engineering exhibit #1 shows the terrain profile, and demonstrates that the Wasatch Mountain range terrain blocks the signal from KJZZ-TV from reaching the proposed translator site and the proposed community of license. Engineering exhibit #2 is a topographic map with the proposed city of license, the proposed translator site and the KJZZ-TV transmitter site marked for reference purposes.

Presently located on this site there is a translator retransmitting KJZZ-TV's signal. This translator is being fed via microwave from Ford Ridge where KJZZ-TV's signal is being received. The Ford Ridge receive site will be protected from this proposed translator site, due to the distance between the sites and the directionality of the transmit antenna.

Conclusion

It is ACME's opinion that the construction of the proposed facility will not effect the existing short spaced facility, due to the terrain shielding and that a construction permit should be granted for the proposed facility.

Spacing Study

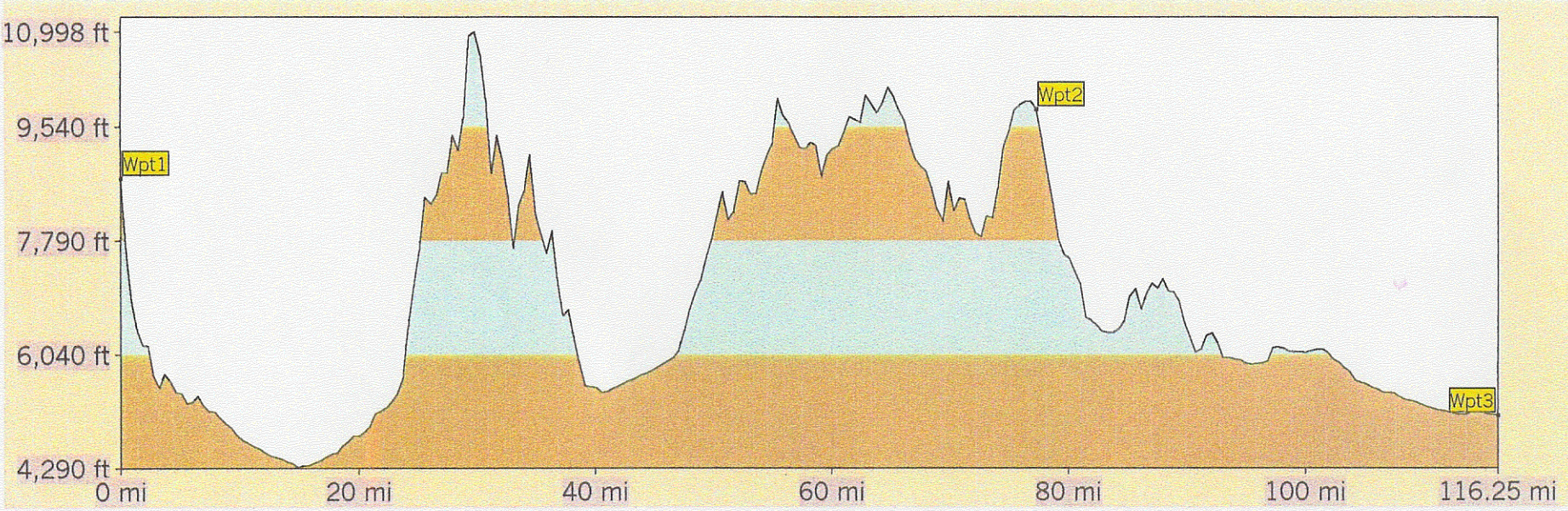
Proposed channel: 14

CH	Call	Record	City	ST	Z	Status	Bear.	Dist.	Reqd. Dist.	Result
16+	ALLOTM	11411	CRAIG	CO	2		85.4	275.8	0.0	
14+	ALLOTM	11937	MOAB	UT	2		151.4	225.4	0.0	
15	K15DI	11947	VERNAL	UT	0	LIC	89.2	141.0	41.4	
Prop F(50,10) 89 dBu 13.2 km + K15DI				F(50,50) 74 dBu 23.7 km = 36.9						
Prop F(50,50) 74 dBu 34.0 km + K15DI				F(50,50) 89 dBu 7.4 km = 41.4						
17+	ALLOTM	11949	VERNAL	UT	2		84.0	107.6	0.0	
17+	NEW	11950	VERNAL	UT	2	APP	86.3	101.9	32.0	
32 km distance separation requirement from Part 74.705(b)(5)										
15o	ALLOTM	12198	PRICE	UT	2		181.0	84.7	0.0	
15o	NEW	12199	PRICE	UT	2	APP	181.3	83.7	12.6	
Prop F(50,10) 79 dBu 0.0 km + NEW				F(50,50) 64 dBu 12.6 km = 12.6						
Prop F(50,50) 74 dBu 2.8 km + NEW				F(50,50) 89 dBu 3.1 km = 5.9						
15	K40DL	12648	HEBER CITY	UT	0	APP	291.4	62.2	17.7	
Prop F(50,10) 89 dBu 0.0 km + K40DL				F(50,50) 74 dBu 17.7 km = 17.7						
Prop F(50,50) 74 dBu 0.0 km + K40DL				F(50,50) 89 dBu 5.3 km = 5.3						
15	K47AJ	12649	PARK CITY, ECT.	UT	0	APP	300.3	71.6	8.1	
Prop F(50,10) 89 dBu 0.0 km + K47AJ				F(50,50) 74 dBu 8.1 km = 8.1						
Prop F(50,50) 74 dBu 0.0 km + K47AJ				F(50,50) 89 dBu 2.7 km = 2.7						
16o	KUPX	12650	PROVO	UT	2	LIC	265.0	97.6	32.0	
32 km distance separation requirement from Part 74.705(b)(5)										
18-	NEW	12653	OGDEN	UT	2	APP	307.7	108.1	32.0	
32 km distance separation requirement from Part 74.705(b)(5)										
18-	ALLOTM	12748	OGDEN	UT	2		314.3	138.3	0.0	
14-	KJZZTV	13225	SALT LAKE CITY	UT	2	LIC	285.7	123.9	126.0	-2.1
Prop F(50,10) 36 dBu 16.1 km + KJZZTV				F(50,50) 64 dBu 110.0 km = 126.0						
Prop F(50,50) 74 dBu 0.0 km + KJZZTV				F(50,10) 46 dBu 241.1 km = 241.1						

****** End of channel 14 study ******

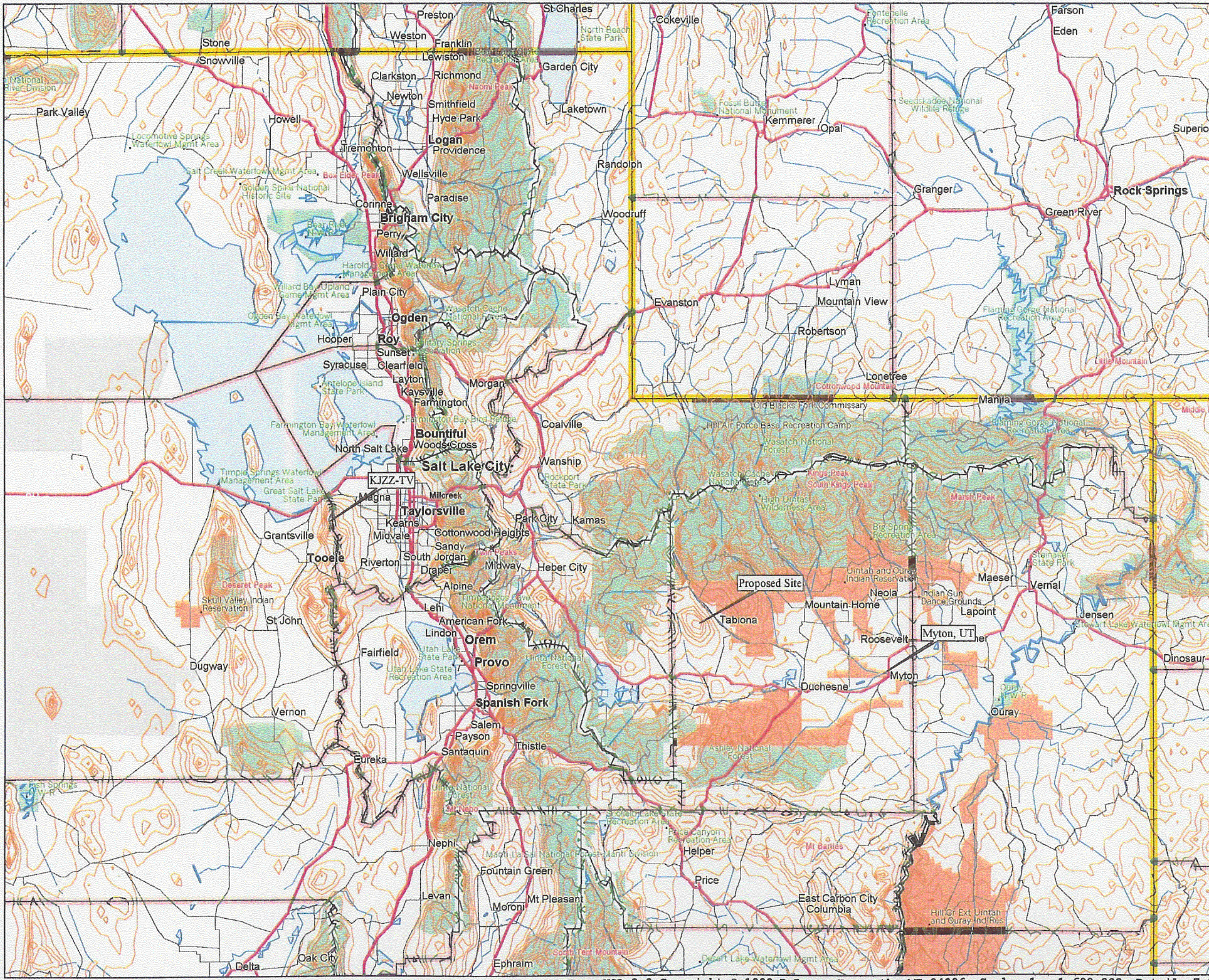
Engineering Figure #1

Myton, UT Application



Wpt1 - KJZZ-TV 14
Wpt2 - Proposed Translator Site
Wpt3 - Community of License

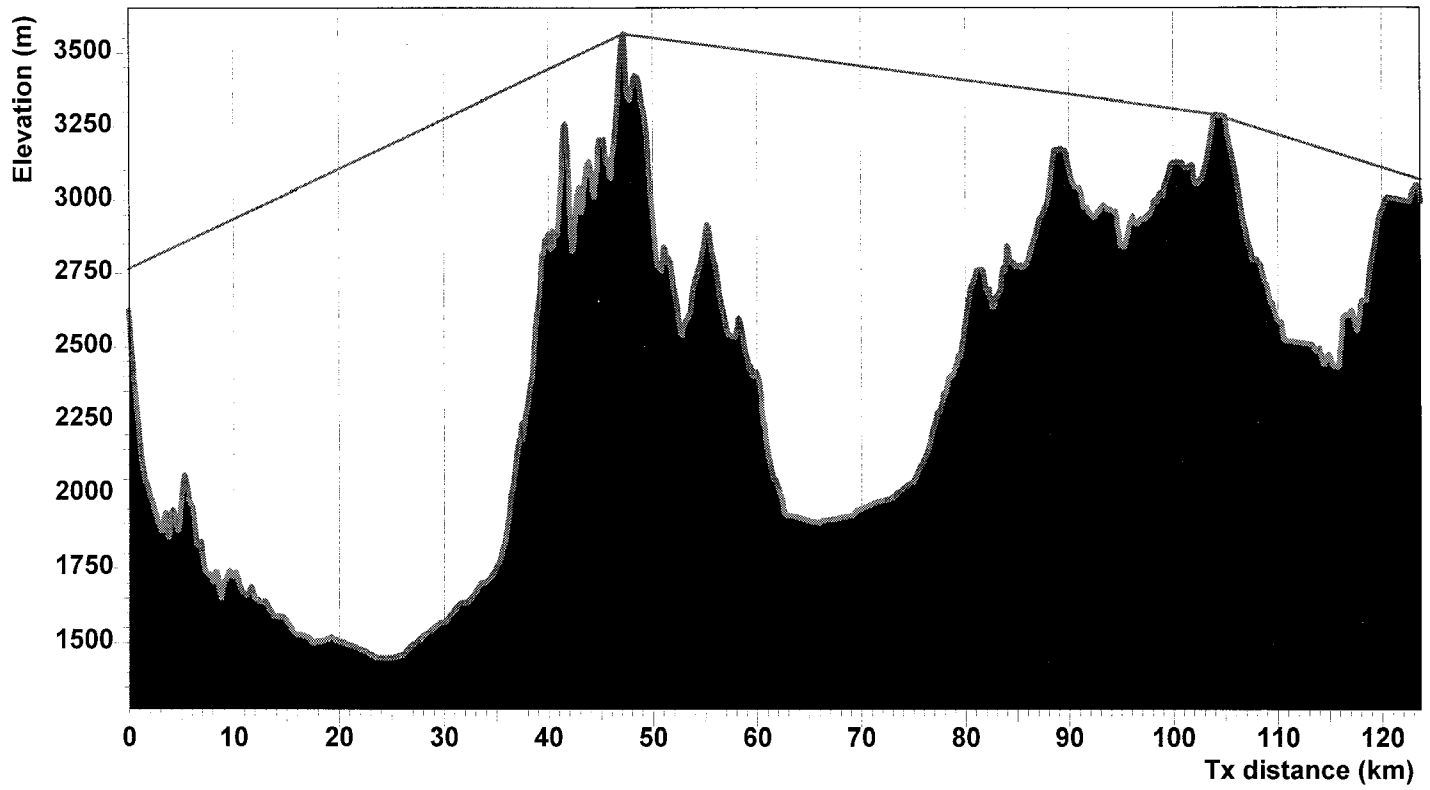
Engineering Figure #2 Myton, UT Application



25 mi

Topo USA 2.0 Copyright © 1999 DeLorme Yarmouth, ME 04096 Scale: 1 : 1,600,000 Detail: 7-0

Link Study: trn/KJZZ-Proposed.trn



TPATH™

Prop. model: Free Space + RMD
Time: 50.00 % Loc.: 50.00 %
Margin: 3.00 dB
Climate: Continental Temperate
Atm. factor: none
K factors: 1.333, 1.000, 1.000

Reliability Analysis
Fade outage method: Vigants-Barnett
C param. for Vigants-Barnett:
average prop. conditions: C=1
ITU-R terrain type: flat or low hills
ITU-R refract. grad.: 10.0 %
Adj. chan. interf.: -100.0 dBmW
External interf.: -100.0 dBmW
Dispersive fade margin: 50.0 dB
Diversity Type: unprotected
Ant. spacing (diversity): 10.0 m
Rain outage method: Crane
Rain region: A

Transmitter Site: KJZZ
Name:
Location:
N40°39'12.00" W112°12'06.00"
Site elevation: 2624.0 m
Antenna height: 142.0 m
Pointing azimuth: 104.8 °
Transmitter power: 35.00 dBm
Trans. line loss: 0.00 dB
Other losses: 0.00 dB
Antenna gain: 35.00 dB
Antenna file:
Total ERP: 70.00 dBm

Name: KJZZ -> Proposed
Frequency: 500.0000 MHz
Polarization: vertical
Length: 123.73 km
Number of obstacles: 2
Excess path loss: 46.87 dB
Atm. absorption loss: 0.00 dB
Path loss for stats: 175.14 dB
Flat fade margin: 7.80 dB
Total fade margin: 0.00 dB
Annual fade outage: 644603.12 s
Annual rain outage: 0.00 s
Link availability: 91.8239 %

Receiver Site: Proposed
Name:
Location:
N40°21'40.80" W110°47'20.80"
Site elevation: 2991.4 m
Antenna height: 77.0 m
Pointing azimuth: 284.8 °
Receiver threshold: -78.00 dBm
Trans. line loss: 0.00 dB
Other losses: 0.00 dB
Antenna gain: 35.00 dB
Antenna file:
Received signal level: -70.14 dBm

Notes

KJZZ

Proposed Tabby MT

Engineering Exhibit 1

FYI Myton Application