

***AMENDMENT TO
APPLICATION FOR CONSTRUCTION PERMIT***

NEW - LIBERAL, KANSAS
BNPFT-20180430AAL
FACILITY ID: 202881
106.3 MHz / 250 W ERP ND

STECKLINE COMMUNICATIONS, INC.

APRIL, 2018

AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT

The following engineering statement and attached exhibits have been prepared for **Steckline Communications, Inc.** ("Steckline"), applicant for a new FM translator station to serve Liberal, Kansas, and are in support of their amendment to application for construction permit.¹ This amendment to the original application proposes a relocation of the facility to another tower site in the vicinity. This application seeks to amend the original long-form application for the facility, which has been assigned FCC File No. BNPFT-20180430AAL. That application was filed as part of Auction 100.

The proposed technical parameters for the translator, as amended, propose operation on FM channel 292 with an effective radiated power of 250 Watts at a center of radiation of 1016.2 meters above mean sea level. This elevation corresponds to a center of radiation of 155.4 meters above ground level at the proposed tower location. The site proposed under this amendment is located 2.7 kilometers from the long-form site. The amended technical parameters represent a minor change to the original long-form due to overlap between the two 60 dBu service contours, which is depicted in the contour map in Exhibit E-1.

The primary facility for the proposed translator facility is AM broadcast station KGYN at Guymon, Oklahoma,² Exhibit E-2 provides a comparison between the proposed 60 dBu service contour for the translator, a twenty-five mile radius centered on the KGYN transmitter site, and the 2 mV/m daytime service contours for both the KGYN license, and outstanding construction permit.

¹ The Facility ID for the proposed translator at Liberal, Kansas is 202811.

² The Facility ID for KGYN at Guymon, Oklahoma is 65152.

JEREMY RUCK & ASSOCIATES, INC.

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As is demonstrated by this map, the translator 60 dBu contour is wholly contained within the daytime 2 mV/m service contours of both the licensed and authorized KGYN facilities.

The proposed facility complies with the provisions of Section 74.1204 of the Commission's Rules. Due to the channel of operation, Section 74.1205 is not applicable. Exhibit E-3 is a tabular interference study for the proposed facility. This study demonstrates that the Section 74.1204 contour overlap provisions would be met to all relevant authorizations and applications.³ This tabular interference study is graphically depicted in the contour map that is Exhibit E-4.

The proposed facility would not constitute a significant environmental impact, and is exempt from environmental processing. The translator would utilize a tower that is registered with the Commission. The addition of the translator antenna to this tower would not increase the existing environmental impact already present from the tower.

Additionally, the proposed facility would not constitute a radiofrequency radiation hazard to persons at the site. The Commission's online *FM Model* utility returns a calculated maximum power density of 0.195 $\mu\text{W}/\text{cm}^2$ at a distance of 157 meters from the tower. This value complies with the uncontrolled environment of the Commission's safety standard. The Nicom model BKG77/1 model antenna is considered a "type-2" antenna, and was analyzed as such. The antenna is comprised of a single bay, and is nominally non-directional.

³ Exhibit E-3 indicates a 74.1204 contour overlap violation to application 1777347. That application is the original short-form engineering proposal for the proposed facility.

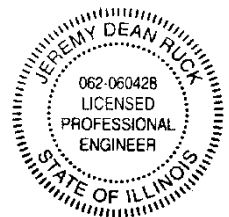
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Steckline certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2019

Jeremy D. Ruck, PE
June 21, 2018

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6.21.2018



1783136.A

BNPFT20180430AAL
Latitude: 37-03-40 N
Longitude: 100-54-17 W
ERP: 0.25 kW
Channel: 292
Frequency: 106.3 MHz
AMSL Height: 960.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

1783136.X

BNPFT20180430AAL
Latitude: 37-02-12 N
Longitude: 100-54-33 W
ERP: 0.25 kW
Channel: 292
Frequency: 106.3 MHz
AMSL Height: 1016.2 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Jeremy Ruck & Associates, Inc.

-  Original Application 60 dBu Service Contour
-  Amendment Application 60 dBu Service Contour

Original Long-Form
Transmitter Site

101-10-00 W

101-00-00 W

100-50-00 W

100-40-00 W

37-10-00 N

37-00-00 N

36-50-00 N

Seward

Kismet

1783136.A

1783136.X

83

Tyrone

54

Hooker

64

Long-Form Amendment
Transmitter Site

Forgan

270

Exhibit E-1
60 dBu Contour Comparison
NEW - Liberal, Kansas
Steckline Communications, Inc.
June, 2018

Scale 1:300,000

0 4 8 12 km

1783136.X

BNPFT20180430AAL

Latitude: 37-02-12 N

Longitude: 100-54-33 W

ERP: 0.25 kW

Channel: 292

Frequency: 106.3 MHz

AMSL Height: 1016.2 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: None

Jeremy Ruck & Associates, Inc.

- Translator 60 dBu Service Contour
- KGYN Licensed Daytime 2 mV/m Contour
- KGYN CP Daytime 2 mV/m Contour
- KGYN 25 Mile Site Radius

Exhibit E-2

Service Contour Comparison

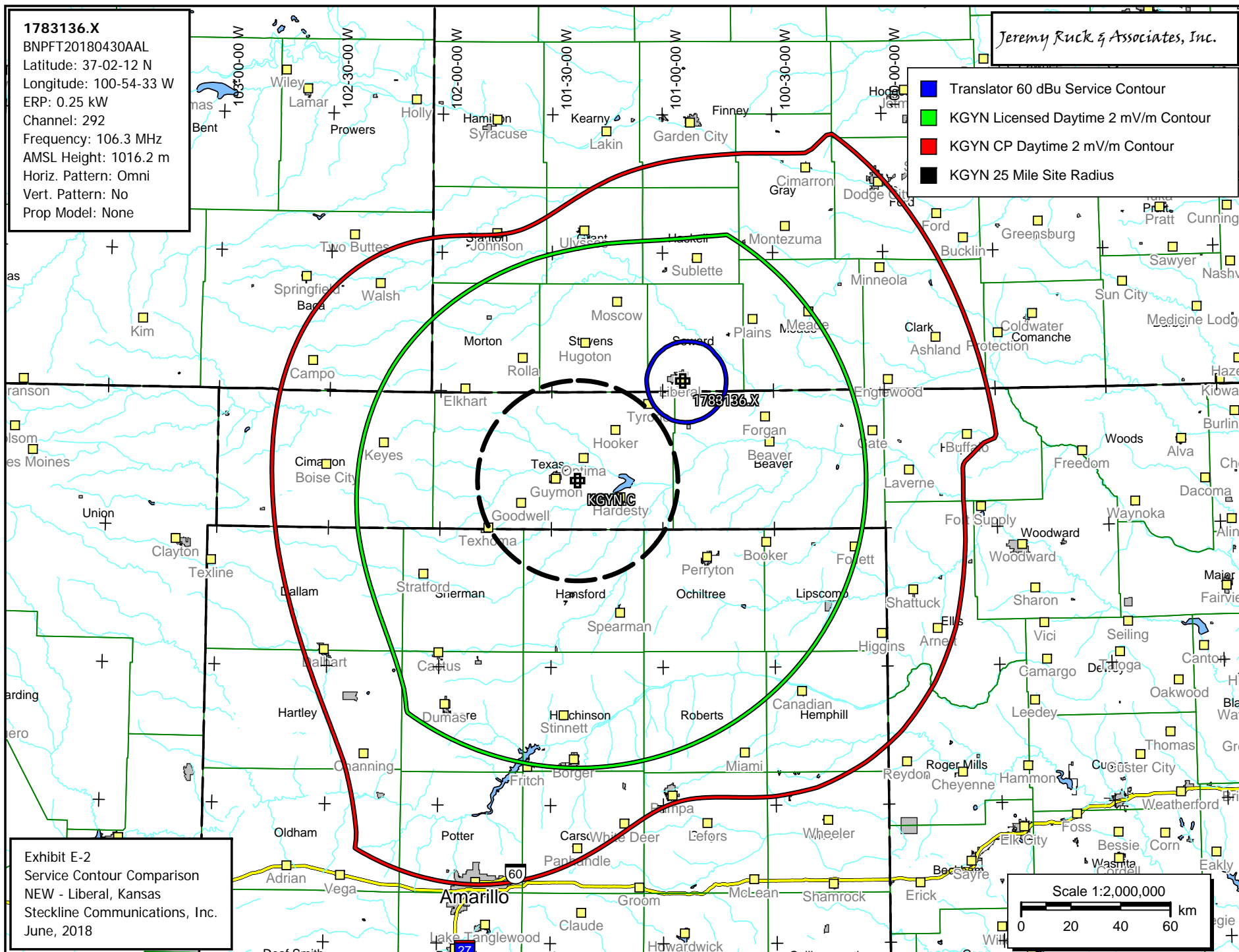
NEW - Liberal, Kansas

Steckline Communications, Inc.

June, 2018

Scale 1:2,000,000

0 20 40 60 km



Jeremy Ruck & Associates, Inc.
Consulting Engineers - Canton, Illinois

Exhibit E-3 - Tabular Interference Study
NEW - Liberal, Kansas
CH# 292D - 106.3 MHz, Pwr= 0.25 kW, HAAT= 153.5 M, COR= 1016.2 M
Average Protected F(50-50)= 16.12 km
Omni-directional

REFERENCE
37 02 12.0 N.
100 54 33.0 W.

DISPLAY DATES
DATA 06-21-18
SEARCH 06-21-18

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
292D Liberal	1783136	APP _C_ KS		8.2 188.3	2.74 BNPFT20180430AAL	37 03 40.0 100 54 17.0	0.250		---Reference---		
292D Liberal	1777347	APP _C_ KS		8.2 188.3	2.74 BNPFT20180130AAI	37 03 40.0 100 54 17.0	0.250	44.0 960	12.8	-57.3*	-62.1*
294C1 Hugoton	KULY-FM	LIC NCX KS		309.4 129.1	49.04 BLH20110714AAR	37 18 57.0 101 20 16.0	55.000 78	4.6 1022	42.4	29.9	5.5
290C1 Ingalls	KSSA	LIC _CX KS		25.5 205.8	91.67 BMLH20110621ABR	37 46 48.0 100 27 36.0	100.000 203	8.1 1034	63.4	66.5	27.2
293C2 Arnett	AL9686	VAC ____ OK		141.5 322.1	140.13 RMinv-39	36 02 45.0 99 56 22.0	50.000 150	73.4 876	47.9	49.5	66.5

Terrain database is FCC 30 meter, R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

1783136.X

BNPFT20180430AAL

Latitude: 37-02-12 N

Longitude: 100-54-33 W

ERP: 0.25 kW

Channel: 292

Frequency: 106.3 MHz

AMSL Height: 1016.2 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: None

Jeremy Ruck & Associates, Inc.

60 dBu F(50,50) Service Contour

40 dBu F(50,10) Interference Contour

54 dBu F(50,10) Interference Contour

100 dBu F(50,10) Interference Contour

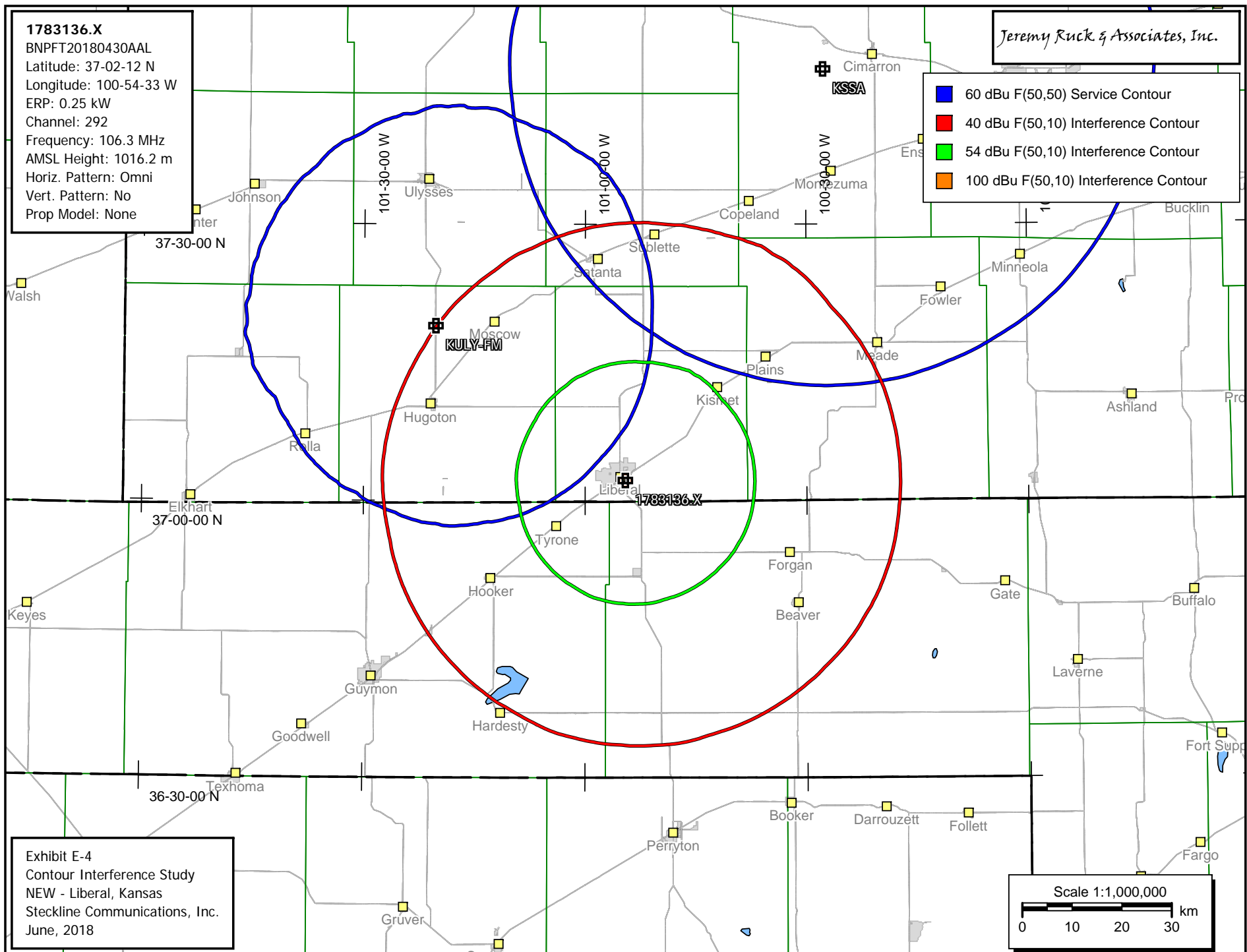


Exhibit E-4

Contour Interference Study

NEW - Liberal, Kansas

Steckline Communications, Inc.

June, 2018

