

THOMAS M. ECKELS, PE
STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE
ERIK C. SWANSON, PE

THOMAS S. GORTON, PE

JAMES B. HATFIELD, PE
BENJAMIN F. DAWSON III, PE
CONSULTANTS

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151
FACSIMILE (206) 789-9834
E-MAIL hatdaw@hatdaw.com

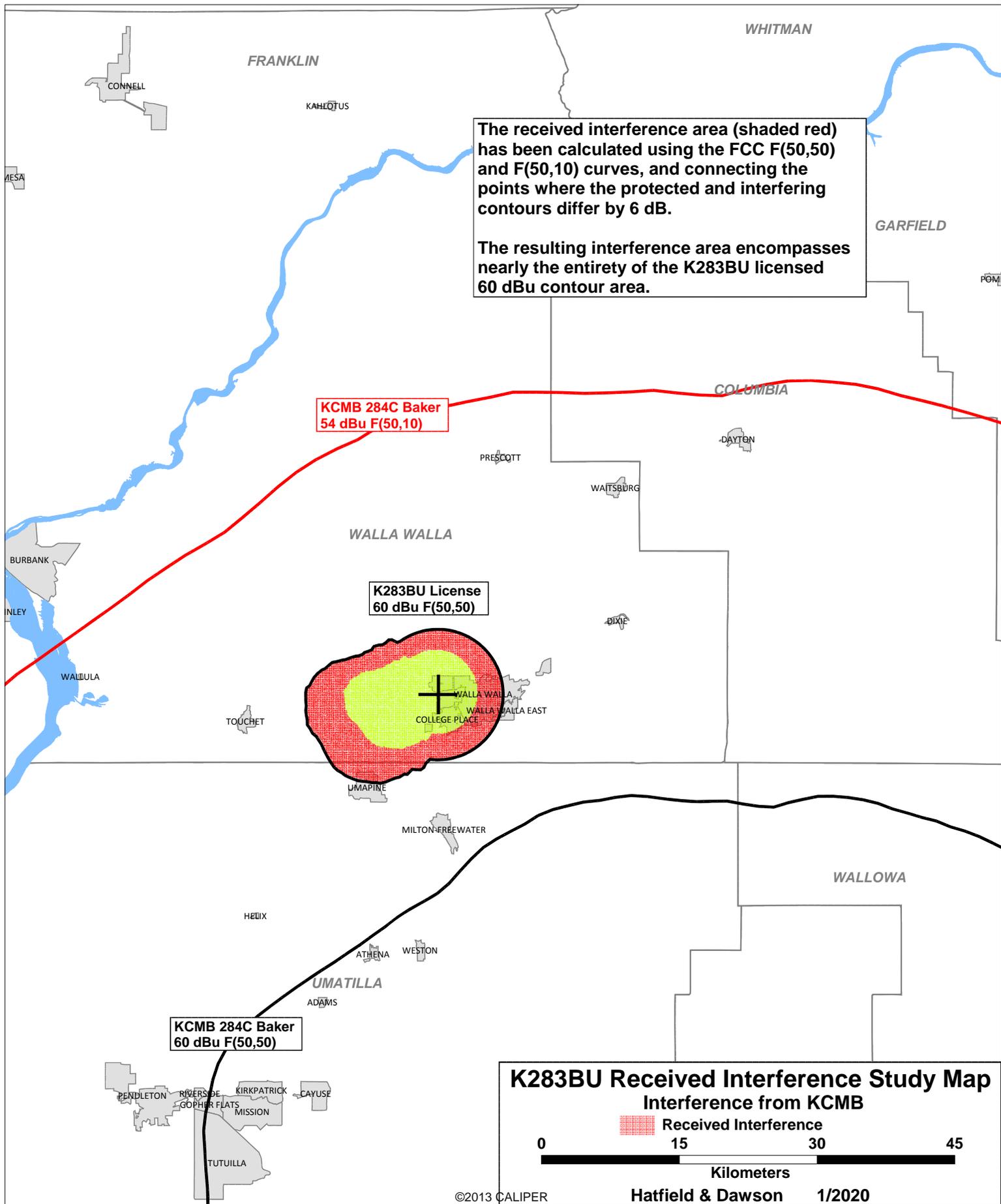
MAURY L. HATFIELD, PE
(1942-2009)
PAUL W. LEONARD, PE
(1925-2011)

**FM Translator K283BU
Channel 290D at Walla Walla, WA
To Rebroadcast KZIU-FM 270C2 Weston, OR (HD3)
September 2019**

Non-Adjacent Channel Change for Interference Reduction

The instant application proposes modification of the licensed facility of FM translator K283BU, to operate on Channel 290D with a change of transmitter site. K283BU presently operates on Channel 283D and receives significant interference from first-adjacent-channel FM station KCMB, which operates on Channel 284C at Baker, Oregon.

The attached Received Interference Study Map has been prepared by calculating the K283BU F(50,50) contours and the KCMB F(50,10) contours at 1 dB increments, and drawing a line between the intersecting contour locations where the resulting U/D ratio exceeds -6 dB. The resulting Interference Area is shaded red on the attached map, and encompasses a significant portion of the K283BU 60 dBu contour area. The interference received from KCMB will be completely eliminated by modifying K283BU to non-adjacent Channel 290D.



Allocation Study

The attached spacing study shows the spacing between the proposed translator site and the location of cochannel and adjacent channel stations and proposals. This study was made with the Commission's Class A spacing requirements, and individual situations were examined to determine the lack of prohibited contour overlap per the requirements of §74.1204 of the Rules. The attached allocation study maps demonstrate compliance with the Commission's Rules for protection of FM broadcast stations and FM translators as outlined in §74.1204.

The spacing study demonstrates compliance with §73.207 of the Commission's Rules regarding spacing restrictions to stations which are 53 or 54 channels removed from the proposed operation.

KEGX 293C0 Richland

The proposed translator transmitter site is located within the 60 dBu protected contour of third-adjacent channel station KEGX 293C0 Richland. The following calculation, performed using the *Living Way* methodology, demonstrates interference protection to that station.

Protected Station	Distance & Bearing to Proposal	Station ERP and HAAT on that azimuth	Station Field Strength at Proposal	Corresponding Translator Interfering Contour	Distance to Translator Interfering Contour
KEGX 293C0	74.31 km 100 deg True	100 kW 448 meters	63.7 dBu F(50,50)	103.7 dBu	324 meters Free Space

The attached map of the proposed transmitter site depicts the 103.7 dBu contour from the proposed facility (shown as an omnidirectional circle of 324 meter radius for convenience, despite the fact that the translator will operate with a directional antenna). There is no population within this contour. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KEGX.

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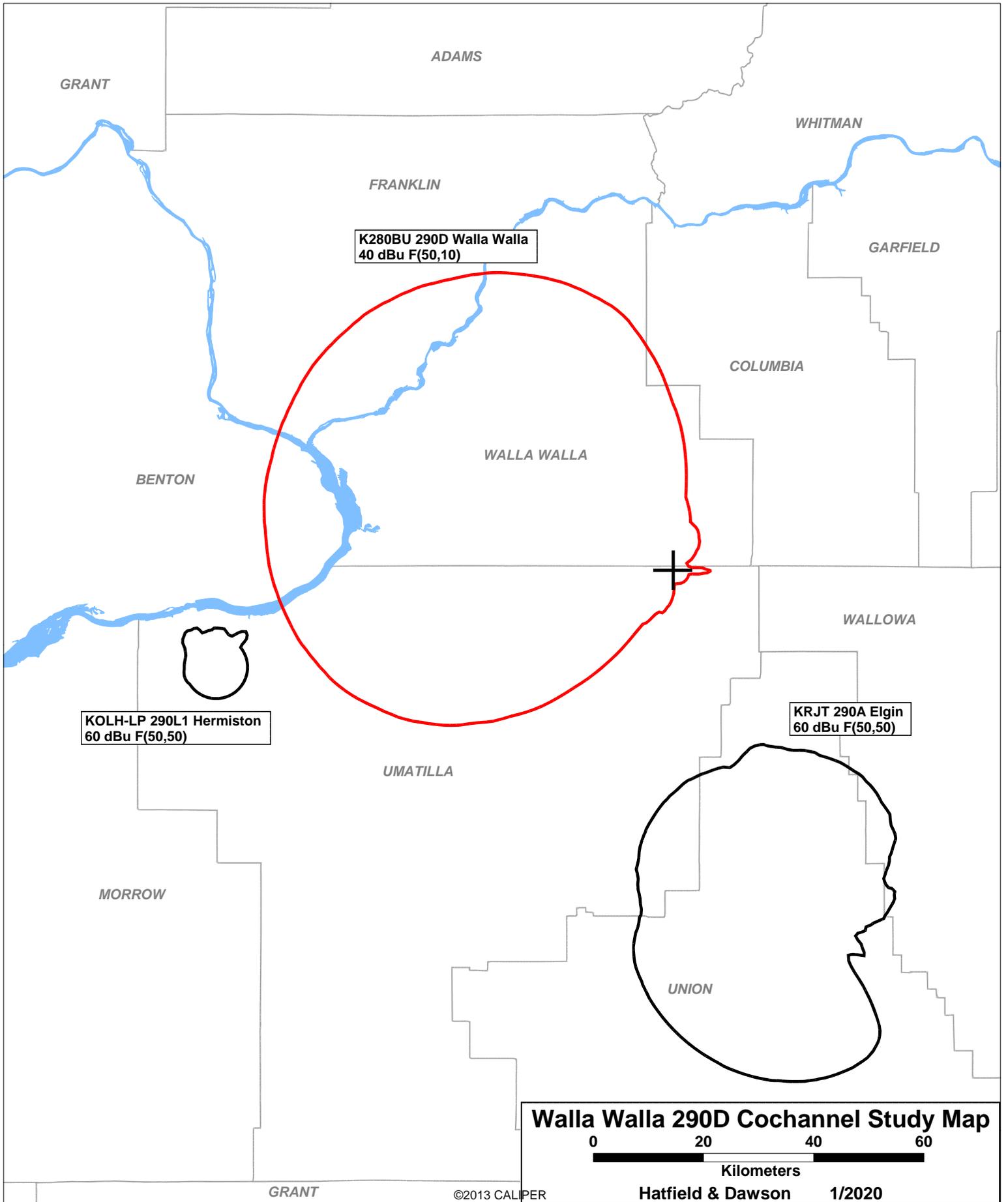
SEARCH PARAMETERS

Channel: 290A 105.9 MHz
 Latitude: 45 59 38
 Longitude: 118 10 47
 Safety Zone: 50 km
 Job Title: PIKES PEAK 290

Page 1

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
K237DM LIC	WALLA WALLA WA	BLFT-80317AID	237D 95.3	0.115 163.0	46-00-33 118-16-59	282.1	8.18 0.00	0 TRANS
KONA-FM LIC	KENNEWICK WA	BLH-940525KA	287C 105.3	100.000 347.0	46-05-51 119-11-30	278.8	79.17 -15.83	95 SHORT
KDIL-LP LIC	KENNEWICK WA	BLL-70110AAN	289L1 105.7	0.008 105.0	46-09-44 119-09-13	284.3	77.63 21.63	56 CLEAR
KZBD LIC	SPOKANE WA	BMLH-91013ABK	289C 105.7	100.000 582.0	47-34-44 117-17-46	20.6	188.68 23.68	165 CLEAR
KRJT LIC	ELGIN OR	BLH-51006ABI	290A 105.9	0.115 584.0	45-26-26 117-53-31	159.9	65.45 -49.55	115 SHORT
KOLH-LP LIC	HERMISTON OR	BLL-50701AFI	290L1 105.9	0.100 23.3	45-50-07 119-15-02	258.4	84.93 17.93	67 CLEAR
KZFN LIC	MOSCOW ID	BLH-890213KA	291C1 106.1	63.000 281.0	46-40-51 116-58-26	50.0	120.21 -12.79	133 SHORT
K291BS LIC	RICHLAND WA	BLFT-60422AAE	291D 106.1	0.250 DA 0.0	46-14-08 119-19-13	287.4	92.17 0.00	0 TRANS
KEGX LIC	RICHLAND WA	BLH-60804AFO	293C0 106.5	100.000 424.4	46-05-58 119-07-40	279.5	74.31 -11.69	86 SHORT

===== END OF FM SPACING STUDY FOR CHANNEL 290 =====



K280BU 290D Walla Walla
40 dBu F(50,10)

KOLH-LP 290L1 Hermiston
60 dBu F(50,50)

KRJT 290A Elgin
60 dBu F(50,50)

Walla Walla 290D Cochannel Study Map

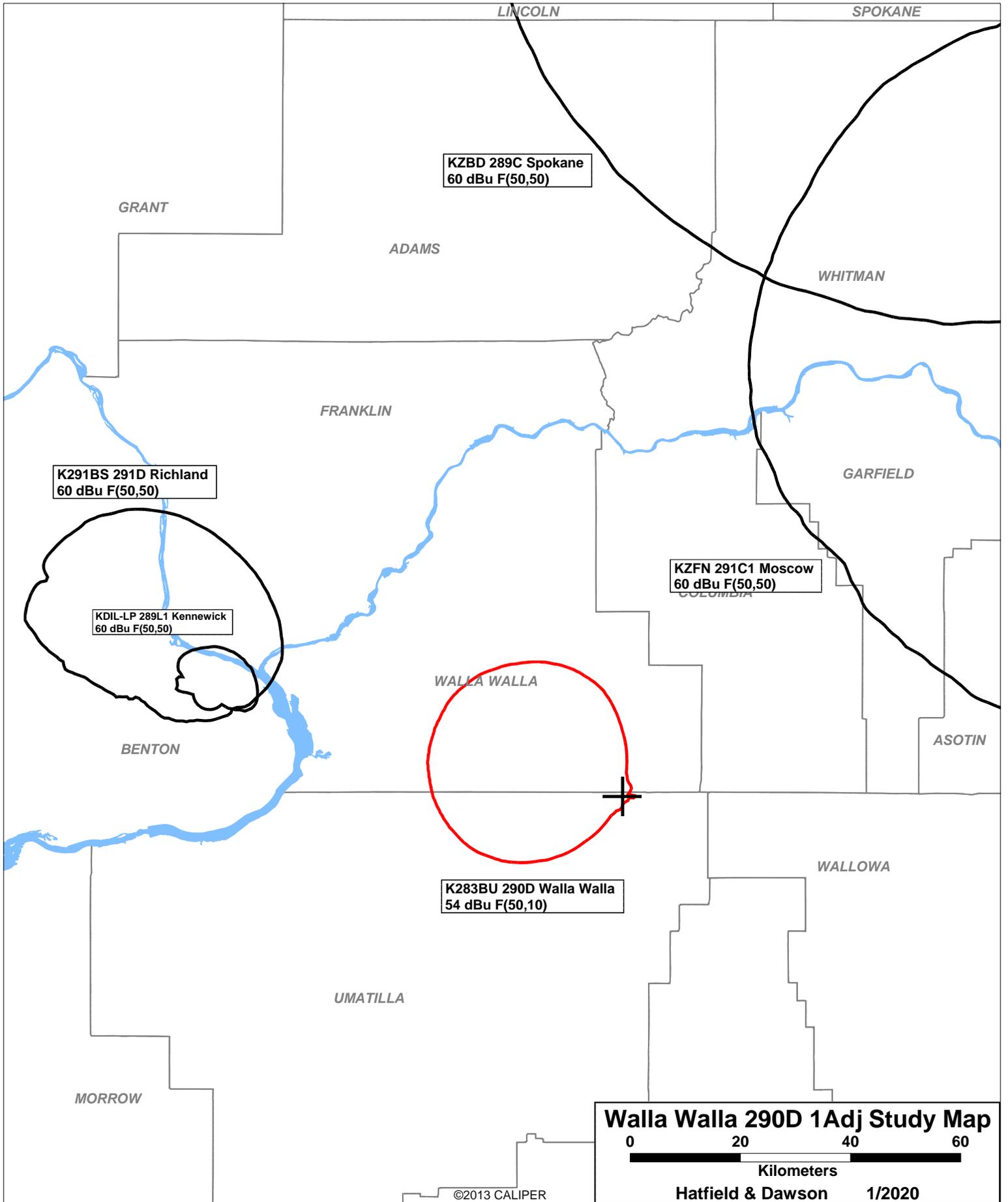
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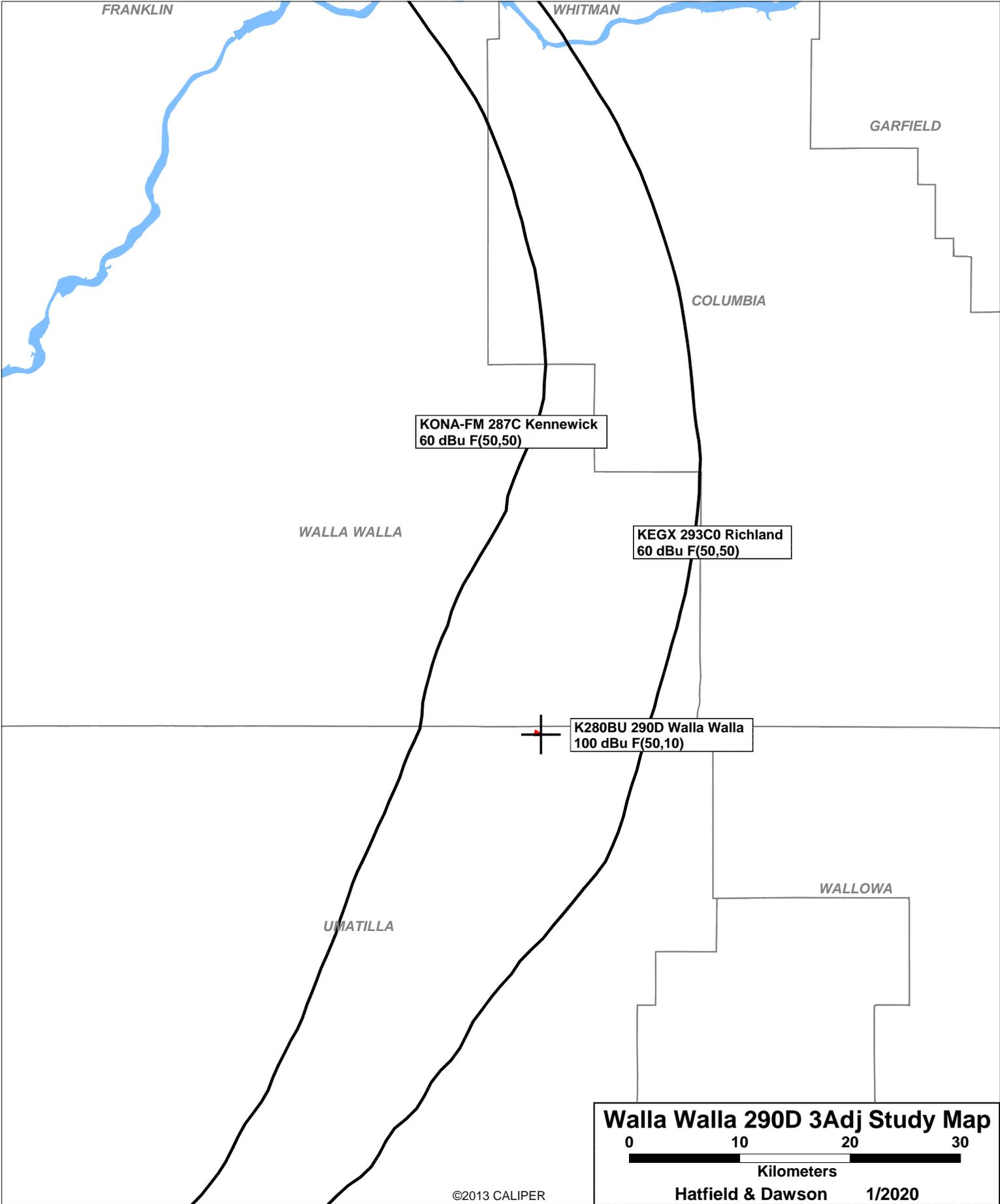


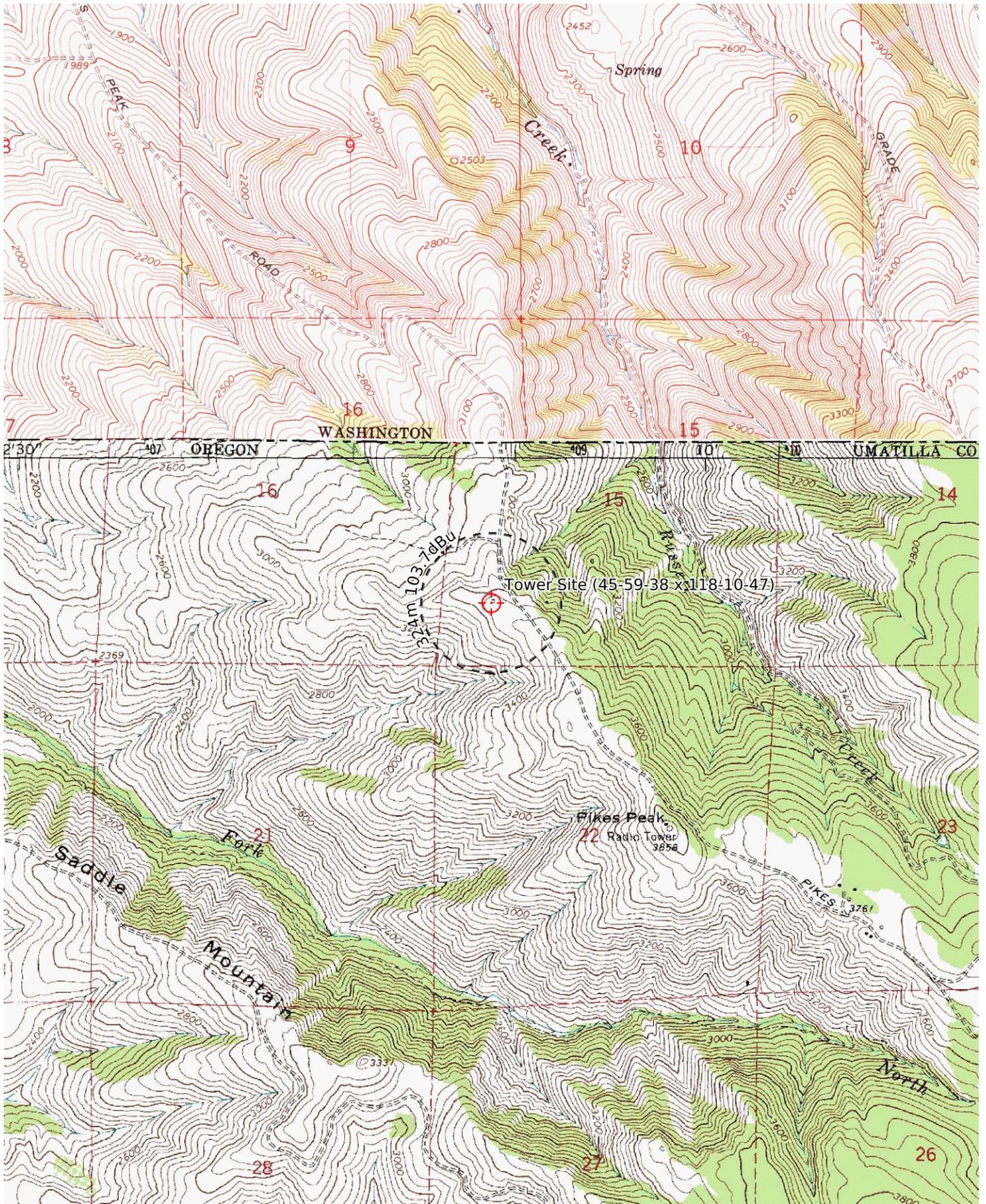
Kilometers

Hatfield & Dawson

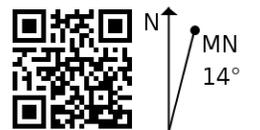
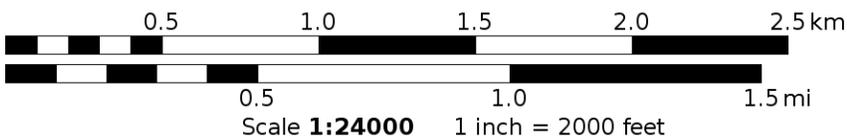
1/2020







Mercator Projection
 NAD27 Conus
 USNG Zone 11TML
 CalTopo



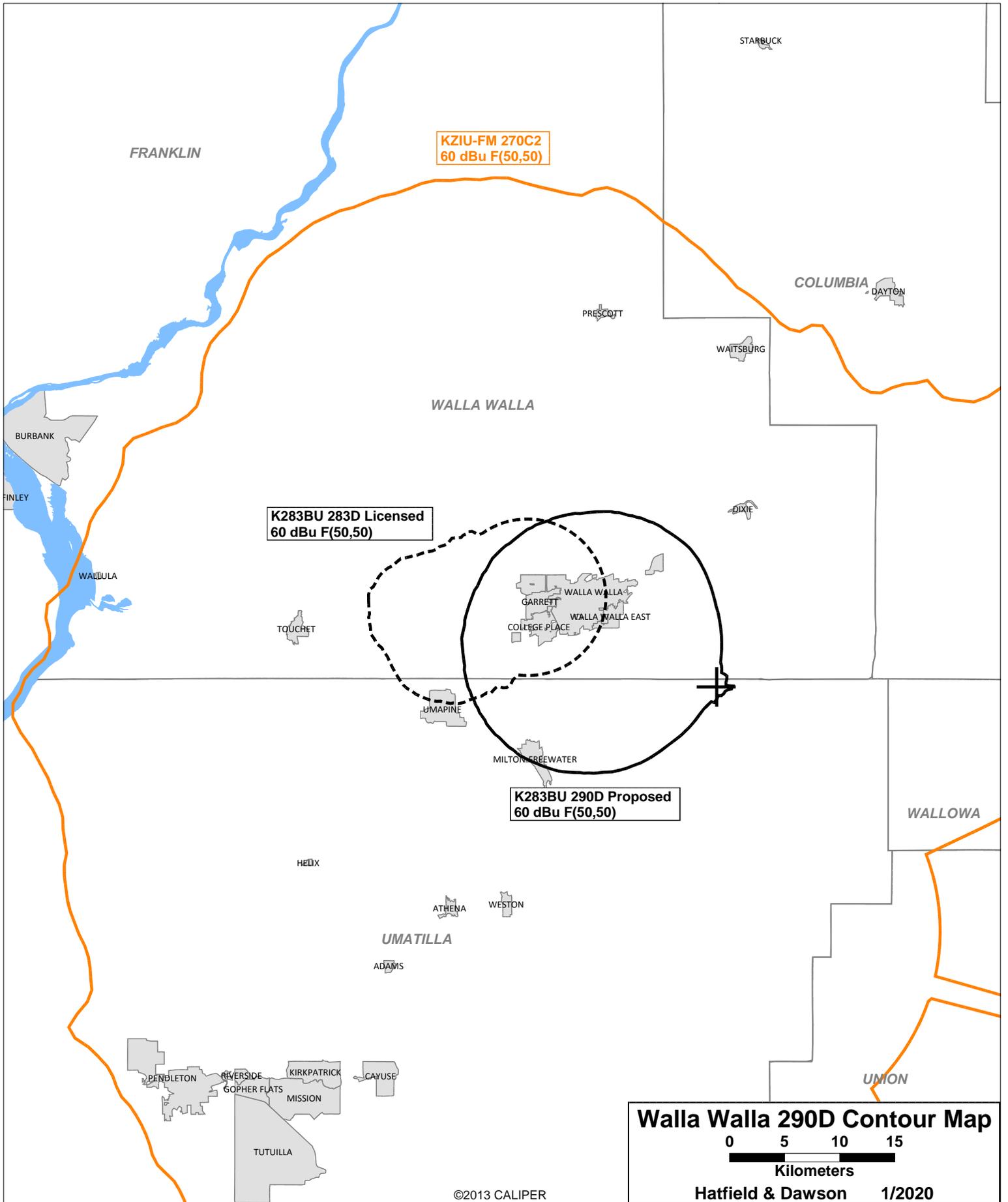
Facilities Proposed

The proposed operation will be on Channel 290D (105.9 MHz) with a maximum lobe effective radiated power of 0.050 kilowatts. The translator will operate with separate vertically-polarized and horizontally-polarized antennas.

The proposed antenna support structure does not exceed 60.96 meters (200 feet) above ground and does not require notification to the Federal Aviation Administration. Therefore, this structure does not require an Antenna Structure Registration Number.

RF Exposure Calculations

Section 1.1307(b)(1) of the Commission's Rules exempts FM translators and boosters operating with an effective radiated power of 100 watts or less from the requirement to submit an Environmental Assessment to determine compliance with FCC specified guidelines for human exposure to radiofrequency electromagnetic fields. The applicant proposes operation with a maximum lobe effective radiated power of 100 watts (50 watts H + 50 watts V) and therefore no calculations have been submitted. Nonetheless, public access to the site is restricted and all station personnel and contractors are required to follow appropriate safety procedures, including turning off the transmitter if necessary, prior to commencing work on the antenna tower.



FRANKLIN

KZIU-FM 270C2
60 dBu F(50,50)

STARBUCK

COLUMBIA DAYTON

PRESCOTT

WAITSBURG

WALLA WALLA

DIXIE

K283BU 283D Licensed
60 dBu F(50,50)

TOUCHET

WALLA WALLA
GARRETT
COLLEGE PLACE
WALLA WALLA EAST

UMAPINE

MILTON FREEWATER

K283BU 290D Proposed
60 dBu F(50,50)

WALLOWA

HEUX

ATHENA

WESTON

UMATILLA

ADAMS

PENDLETON

RIVERSIDE

KIRKPATRICK

CAVUSE

GOPHER FLATS

MISSION

TUTUILLA

UNION

Walla Walla 290D Contour Map

0 5 10 15

Kilometers

Hatfield & Dawson 1/2020

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