



Interference Study Experimental Station Proposal

Information Station Specialists

September 23, 2025

We have been asked to determine if a new experimental AM transmitter located at Zeeland, Michigan, may cause interference as defined by the Federal Communications Commission's AM radio broadcast rules and regulations.

Geographic Coordinates: (NAD 83)

Latitude: **42-49-46.6 N** Longitude: **85-59-55.4 W**. Power: 1.0 kW. Frequency: 1550 kHz

Subject Transmitter: This transmitter is 245 km from the US border with Canada.

Antenna efficiency: Measured at 267 mV/m @ 1 km by the applicant's field measurements.

Antenna resonator: 10m, Height to tip 15.24 m A.G. Ground System: Thirty two 15.24 m radials.

Our completed study shows no interference will be caused to any other station. The closest stations, within a distance and frequency relationship, are 2nd adjacent WFUR in Grand Rapids, MI at a distance of 28.3 km and 2nd adjacent WYGR in Wyoming, MI at 23.2 km. There are no other relevant relationships. (See Attachment A)

Attachment B is an M3 groundwave daytime allocation study map showing that there are no stations that receive or cause contour overlap interference from the proposed facility. The black colored field strength margin contours indicate that the required U/D ratios exist to prevent outgoing interference and incoming interference.¹

Attachment C is a coverage map that documents the location of relevant ground-wave signal contours produced by the instant proposal.

Attachment D is a statement of the qualifications of the preparer.

Our study shows that the proposed experimental facility will not cause or receive interfering contour overlaps to or from other stations, construction permits or allocations.

¹ These studies were performed using the V-Soft Communications' AM-Pro 3, professional software program that is in daily use at the FCC for vetting AM applications. Our company authored this software program and continues to provide ongoing support to the FCC.

AM Daytime Study

Attachment A

Reference Station:

Call: NEW-EX

Freq: 1550 kHz

Location: MI, US

Lat: 42-49-46.60 N

Power: 1.0 kW

Lng: 085-59-55.40 W

Theo RMS: 267.00 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
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1	1.000	0.0	0.0	0.0	18.613	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
WFUR	1570	GRAND RAPIDS	MI	28.2	60.8	7.14	7.14
WYGR	1530	WYOMING	MI	23.2	62.3	7.34	7.34
CBE	1550	WINDSOR	ON	261.9	106.1	5.86	12.41
KTGG	1540	OKEMOS	MI	121.6	96.2	39.07	38.45
WAUR	1550	SOMONAUK	IL	248.2	237.8	0.74	45.24
WGLB	1560	ELM GROVE	WI	167.4	276.1	51.45	58.32
WAUR	1550	SOMONAUK	IL	248.2	237.8	93.04	81.13
WLOI	1540	LA PORTE	IN	146.9	205.0	92.07	89.07
WRCI	1520	THREE RIVERS	MI	104.4	163.6	98.56	98.56
WWSJ	1580	ST. JOHNS	MI	119.4	83.0	110.23	110.23
WHIT	1550	MADISON	WI	277.3	272.8	148.38	113.84
WPTT	1540	HARTFORD	WI	200.7	283.6	117.63	115.88
WHLY	1580	SOUTH BEND	IN	127.8	186.1	121.22	121.22
WRIN	1560	RENSSELAER	IN	228.5	204.4	146.59	152.53
WWYC	1560	TOLEDO	OH	238.1	125.3	152.22	154.89
WGLL	1570	AUBURN	IN	183.7	155.1	158.40	158.40
WBGX	1570	HARVEY	IL	194.4	225.0	161.58	161.58
WKVI	1520	KNOX	IN	174.9	196.5	162.87	162.87
WWCK	1570	FLINT	MI	192.8	84.8	168.77	168.77
WCKG	1530	ELMHURST	IL	191.6	235.3	172.47	172.47
WCVL	1550	CRAWFORDSVI	IN	316.8	194.0	175.03	175.41
WLCO	1530	LAPEER	MI	222.7	85.3	192.67	192.67
WSCO	1570	APPLETON	WI	248.5	307.5	217.19	217.19
WBCO	1540	BUCYRUS	OH	342.7	133.0	224.85	234.62
WQCD	1550	DELAWARE	OH	373.7	139.7	239.83	237.33
WILO	1570	FRANKFORT	IN	286.3	188.0	267.66	267.66
WFRL	1570	FREEPORT	IL	300.7	257.8	275.92	275.92
WNDI	1550	SULLIVAN	IN	433.2	195.3	294.67	290.37
WPTW	1570	PIQUA	OH	331.8	154.8	308.58	308.58
WMYJ	1540	MARTINSVILLE	IN	381.6	185.2	305.88	310.99
WJIL	1550	JACKSONVILLE	IL	492.5	224.2	316.30	311.52
WBYS	1560	CANTON	IL	420.1	231.5	347.97	345.57
KXEL	1540	WATERLOO	IA	523.7	260.0	343.71	362.85
WTNS	1560	COSHOCTON	OH	448.9	130.6	362.28	366.17
WOCC	1550	CORYDON	IN	515.3	181.2	388.59	397.03
WBTC	1540	UHRICHSVILLE	OH	469.6	126.2	400.54	398.47
CHIN	1540	TORONTO	ON	503.5	82.4	398.77	398.77
WYOH	1540	NILES	OH	473.1	115.2	409.49	404.34
WSMI	1540	LITCHFIELD	IL	505.1	215.3	394.37	404.40
CHIN	1540	TORONTO	ON	544.6	83.1	410.75	410.75
WSEZ	1560	PAOLI	IN	478.3	184.7	411.87	414.67
WEVR	1550	RIVER FALLS	WI	581.4	290.8	428.50	415.98
WZUM	1550	BRADDOCK	PA	578.0	119.7	413.22	416.19
WUCO	1550	MORGANFIELD	KY	596.2	195.4	458.60	453.20
WIRV	1550	IRVINE	KY	593.3	163.8	415.54	459.95
WBNL	1540	BOONVILLE	IN	539.9	191.2	471.31	474.66

Black Contour Lines Indicate 'no interference'

NEW-EX

Freq: 1550 kHz

Class:

Latitude: 42-49-46.60 N

Longitude: 085-59-55.40 W

Power: 1 kW

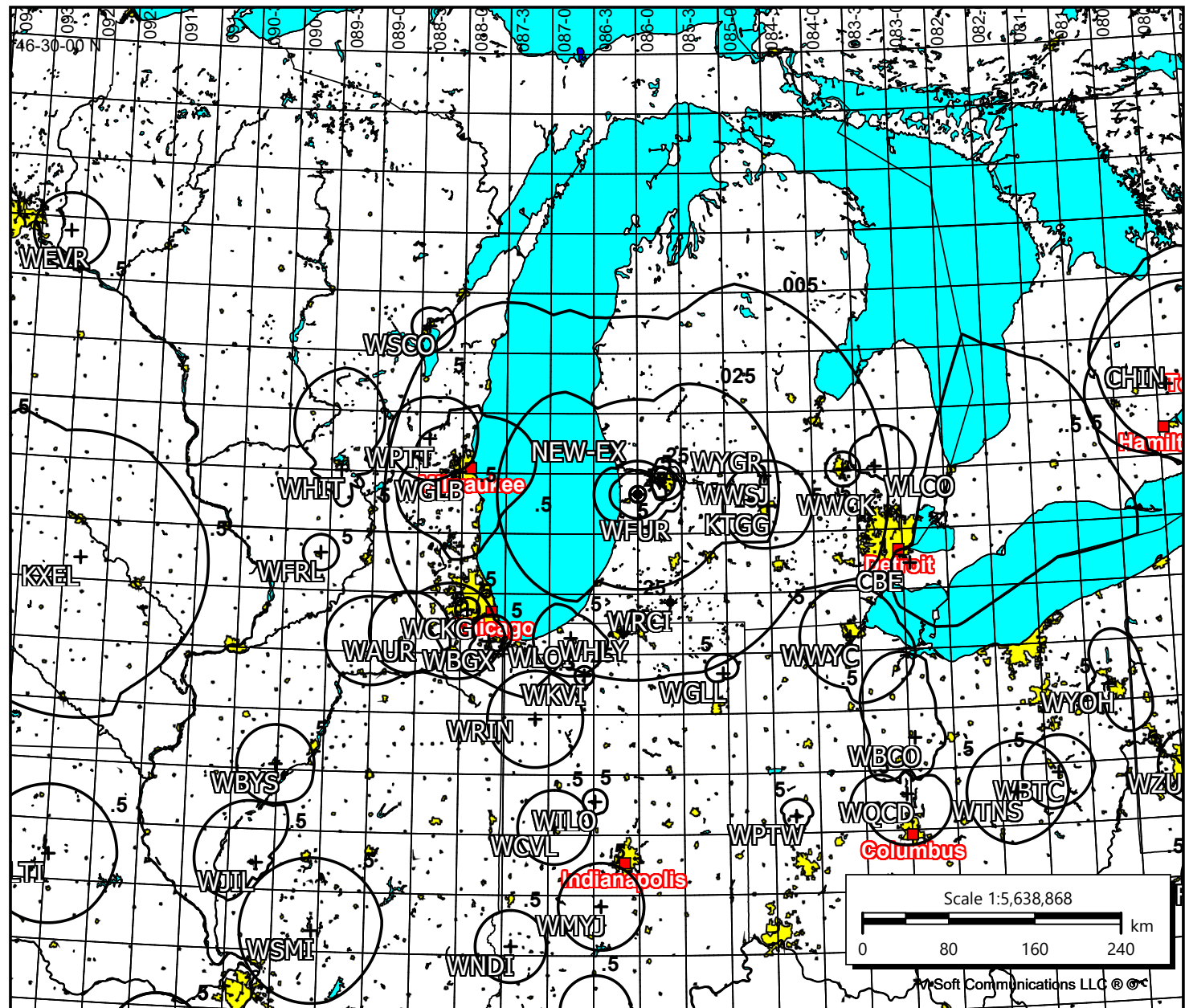
RMS: 267 mV/m @1km

Towers: 1

Augs: 0

- Causes
- Receives
- No Ix

Doug Vernier
 1600 Picturesque Drive
 Cedar Falls, Iowa 50613
 Telecommunication Consultants



NEW-EX

Freq: 1550 kHz

Class:

Latitude: 42-49-46.60 N

Longitude: 085-59-55.40 W

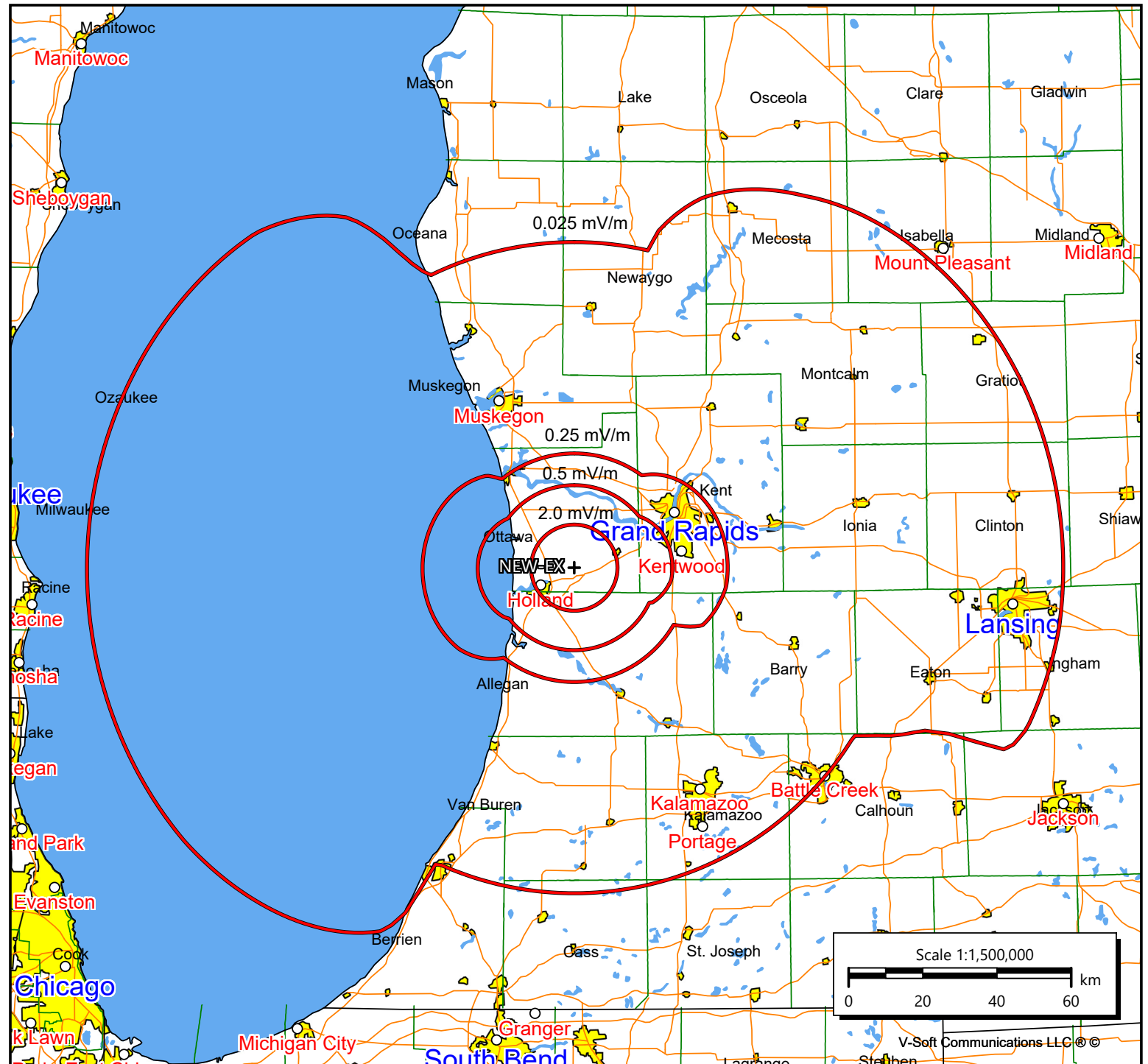
Power: 1 kW

RMS: 267 mV/m @1km

Towers: 1

Augs: 0

V Doug Vernier
Cedar Falls, Iowa 50613
Telecommunication Consultants



Declaration:

I, Douglas L. Vernier, declare that I have received training as an engineer from the University of Michigan School Of Engineering. That, I have received degrees from the University in the field of Broadcast Telecommunications. That, I have been active in broadcast consulting for over 40 years;

That, I have held a Federal Communications Commission First Class Radiotelephone License continually since 1964. In 1985, this license was reissued by the Commission as a lifetime General Radiotelephone license no. PG-16-16464;

That, I am certified as a Professional Broadcast Engineer (#50258) by the Society of Broadcast Engineers, Indianapolis, Indiana. (Life-time Certification received in 2010);

That, my qualifications are a matter of record with the Federal Communications Commission;

That, I have been retained by Information Station Specialists Inc. to prepare the engineering showings appended hereto;

That, I alone have prepared this broadcast engineering showing, the technical information contained in same and the facts stated within are true of my knowledge;

That, under penalty of perjury, I declare that the foregoing is correct.

Douglas L. Vernier

A handwritten signature in blue ink, appearing to read "Doug Vernier", with a large, stylized loop at the beginning and end.

Executed on September 23, 2025