

Technical Report In Support of a 47 C.F.R. Section 73.3555 Based Interim Contour Method Multiple Ownership Study

for

Saga Communications of Iowa, LLC
"Interim Method Market A & BIA Market - Des Moines, IA (71)"

*KAZR(FM) - PELLA, IA (Facility ID: 28882)
KICD(AM) - SPENCER, IA (Facility ID: 29078)
KICD-FM - SPENCER, IA (Facility ID: 29079)
KIOA(FM) - DES MOINES, IA (Facility ID: 58547)
KMRR(FM) - SPENCER, IA (Facility ID: 29080)
KOEZ(FM) - AMES, IA (Facility ID: 7823)
KPSZ(AM) - DES MOINES, IA (Facility ID: 58533)
KRNT(AM) - DES MOINES, IA (Facility ID: 58534)
KSTZ(FM) - DES MOINES, IA (Facility ID: 58541)*

EXPLANATION OF REPORT: This Technical Report has been prepared to determine the number of commercial and non-commercial principal community contours associated with the Transfer/Assignment applications for the below Saga Communications of Iowa, LLC stations. These stations comprise the entirety of the Saga Communications of Iowa, LLC holdings. Ownership studies for other parent company Saga Communications, Inc. holdings have been prepared separately. These Interim Contour-Overlap Methodology Studies have been prepared to address the unrated market portion for each filing. Compliance within the BIA Market - Des Moines, IA (71) has been addressed herein, but also included in a separate showing.

Saga Communications of Iowa, LLC, presently holds a broadcast interest in nine (9) total aural services relevant to these Transfer/Assignment filings. Co-owned holdings not overlapping these stations need not be discussed herein. Concerning these relevant holdings, there will be one (1) unique and distinct interim method market within this affected ownership group and one (1) BIA market within this affected ownership group. "Market A" is comprised of three (3) stations. Six (6) stations will also be held within the BIA Market - Des Moines, IA (71). Each market is defined as follows:

"Market A"

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
KICD (AM)	1240	SPENCER	IA	BL19991216ABI
KICD-FM	299C1	Spencer	IA	BLH20170407AAS
KMRR (FM)	285C3	Spencer	IA	BLH19970508KE

BIA Market - Des Moines, IA (71)

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
KPSZ (AM)	940	DES MOINES	IA	BL19821209AA
KRNT (AM)	1350	DES MOINES	IA	BL19860530AF
KAZR (FM)	277C1	Pella	IA	BMLH20120925AAO
KIOA (FM)	227C1	Des Moines	IA	BLH20000207ABQ
KOEZ (FM)	281C1	Ames	IA	0000177355
KSTZ (FM)	273C	Des Moines	IA	BLHRB1104ZZ

EXPLANATION OF METHODOLOGY: The facilities and results reported herein were taken from current copies of AM and FM computer databases as prepared by the FCC and supplied by V-Soft Communications, LLC. The facilities listed above serve as the basis for the respective principal community contours studied. The accuracy of the results of these studies is understood to be limited to the accuracy of these databases. The FCC databases give no indication of licensed facilities that may be inoperative, construction permit facilities that may now be operating under program test authority (but have not yet been issued a license) or facilities which may have been licensed since the last update. Therefore, some stations may have been included or excluded erroneously. However, unless otherwise indicated, all licensed facilities known to be inoperative and all known applications and construction permit facilities, have been eliminated from consideration in this study.

For AM stations, Map M3 soil conductivity values and the authorized licensed transmitting facilities served as the basis for the computation of the predicted 5.0 mV/m groundwave contour in accordance with 47 C.F.R. Section 73.183 of the FCC Rules. The distance to the contour was computed for seventy-two (72) equally spaced azimuths beginning with 0° True. For FM stations, the authorized Center of Radiation and ERP values were utilized to compute the predicted 3.16 mV/m (70 dBμ) contour as provided in 47 C.F.R. Section 73.313 of the Rules. The predicted FM contours shown in this report are based on seventy-two (72) equally spaced terrain radials beginning with 0° True and assume NED 03 Second Terrain data.

As stated before, there will be one (1) unique and distinct interim method market within this affected ownership group and one (1) BIA market within this affected ownership group. The interim market has been defined, in accordance with 47 C.F.R. Section 73.3555 of the FCC Rules, as the area within the total perimeter formed by the combined principal community contours of each relevant interim market as noted above.

EXPLANATION OF RESULTS: The nine (9) stations, under common control and relevant for these ownership groupings, have been noted in **Exhibit 1.0**. As stated before, no other Saga Communications of Iowa, LLC holdings, or any other holdings of parent company Saga Communications, Inc, are affected by these stations. To aid in identifying the respective contours, currently controlled AM contours have been shown with solid light red lines. Currently controlled FM contours have been shown with varying-colored solid lines. The "Market A" common overlap area has been designated as well.

"Market A"				
CALL SIGN	CH/FREQ	CITY	STATE	FILE NUMBER
KICD (AM)	1240	SPENCER	IA	BL19991216ABI
KICD-FM	299C1	Spencer	IA	BLH20170407AAS
KMRR (FM)	285C3	Spencer	IA	BLH19970508KE

For "Market A", the market defining contours have been shown in **Exhibit 2.0** of this report along with a total number of principal community contours entering the market. The defining contours have been shown with yellow lines on this map. AM contours entering the market have been denoted in blue lines. FM contour entering the market have been shown in red lines. As stated before, the contours shown represent the total number of stations entering or defining the market. Co-owned stations entering the market, but not defining the market have been omitted. Under the current rules, the market falls within the minimum limitations set forth in §73.3555 (a)(1)(iii): *In a radio market with between 15 and 29 (inclusive) full-power, commercial and noncommercial radio stations, not more than 6 commercial radio stations in total and not more than 4 commercial stations in the same service (AM or FM) may be owned.* The principal community contours of twenty-one (21) other stations entering the market are shown in **Exhibit 2.0**. Including the one (1) AM and two (2) FM station(s) which define the market, there are twenty-four (24) aural services in this market. **Exhibit 2.1** lists the facilities of the individual stations used in this report.

BIA Market - Des Moines, IA (71)

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
KPSZ (AM)	940	DES MOINES	IA	BL19821209AA
KRNT (AM)	1350	DES MOINES	IA	BL19860530AF
KAZR (FM)	277C1	Pella	IA	BMLH20120925AAO
KIOA (FM)	227C1	Des Moines	IA	BLH20000207ABQ
KOEZ (FM)	281C1	Ames	IA	0000177355
KSTZ (FM)	273C	Des Moines	IA	BLHRB1104ZZ

A separate BIA Market - Des Moines, IA (71) count has been provided independent from this report. Under the current rules, the BIA Market - Des Moines, IA (71) falls within the minimum limitations set forth in §73.3555 (a)(1)(i): *In a radio market with 45 or more full-power, commercial and noncommercial radio stations, not more than 8 commercial radio stations in total and not more than 5 commercial stations in the same service (AM or FM) may be owned. Including the two (2) AM and four (4) FM station(s) which are co-owned, there are fifty-three (53) aural services in the BIA Market - Des Moines, IA (71).* As stated before, a separate BIA Market - Des Moines, IA (71) count has been provided independent from this report

CERTIFICATION OF TECHNICAL CONSULTANT: *I declare, under penalty of perjury, that the contents of this report are true and accurate to the best of my knowledge and belief. I further certify I have over twenty-four years of experience as a broadcast technical consultant before the Federal Communications Commission ("the FCC"); and am familiar with the Code of Federal Regulations Title 47 ("the Rules") as pertaining to this report and its contents herein. The underlying data utilized in this report was taken directly from FCC databases or indirectly through third party software vendors securing data directly from FCC databases. This firm cannot be held liable for errors or omissions resulting from the underlying data. The information contained herein is believed accurate to the date reported below.*



Justin W. Asher
Technical Consultant
July 5, 2023

BIA Market - Sioux Falls, SD (180)

Exhibit 1.0 Map of Commonly Owned Stations

"Market A" Defining Contours

KICD(AM) - SPENCER, IA
KICD-FM - SPENCER, IA
KMRR(FM) - SPENCER, IA

AM Contours: Daytime 5.0 mV/m
Map M3 Ground Conductivity
NAD 1983 Coordinate Datum

FM Contours: 70 dBμ F(50:50)
NED 03 sec Terrain Database
NAD 1983 Coordinate Datum

BIA Market - Sioux City, IA (244)

BIA Market - Waterloo-Cedar Falls, IA (230)

BIA Market - Cedar Rapids, IA (200)

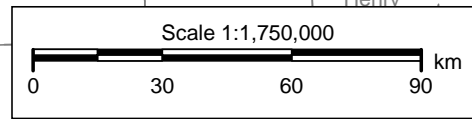
BIA Market - Des Moines, IA (71)

BIA Market - Omaha-Council Bluffs, NE-IA (75)

Des Moines, IA - BIA Market (71)

KPSZ(AM) - DES MOINES, IA
KRNT(AM) - DES MOINES, IA
KAZR(FM) - PELLA, IA
KIOA(FM) - DES MOINES, IA
KOEZ(FM) - AMES, IA
KSTZ(FM) - DES MOINES, IA

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- FM Station(s) Entering "Market A"
- AM Station(s) Entering "Market A"
- "Market A" Defining Contours

Exhibit 2.0 Map of Stations Entering "Market A"

AM Contours: Daytime 5.0 mV/m
Map M3 Ground Conductivity
NAD 1983 Coordinate Datum

FM Contours: 70 dBμ F(50:50)
NED 03 sec Terrain Database
NAD 1983 Coordinate Datum

"Market A" Defining Contours
KICD(AM) - SPENCER, IA
KICD-FM - SPENCER, IA
KMRR(FM) - SPENCER, IA

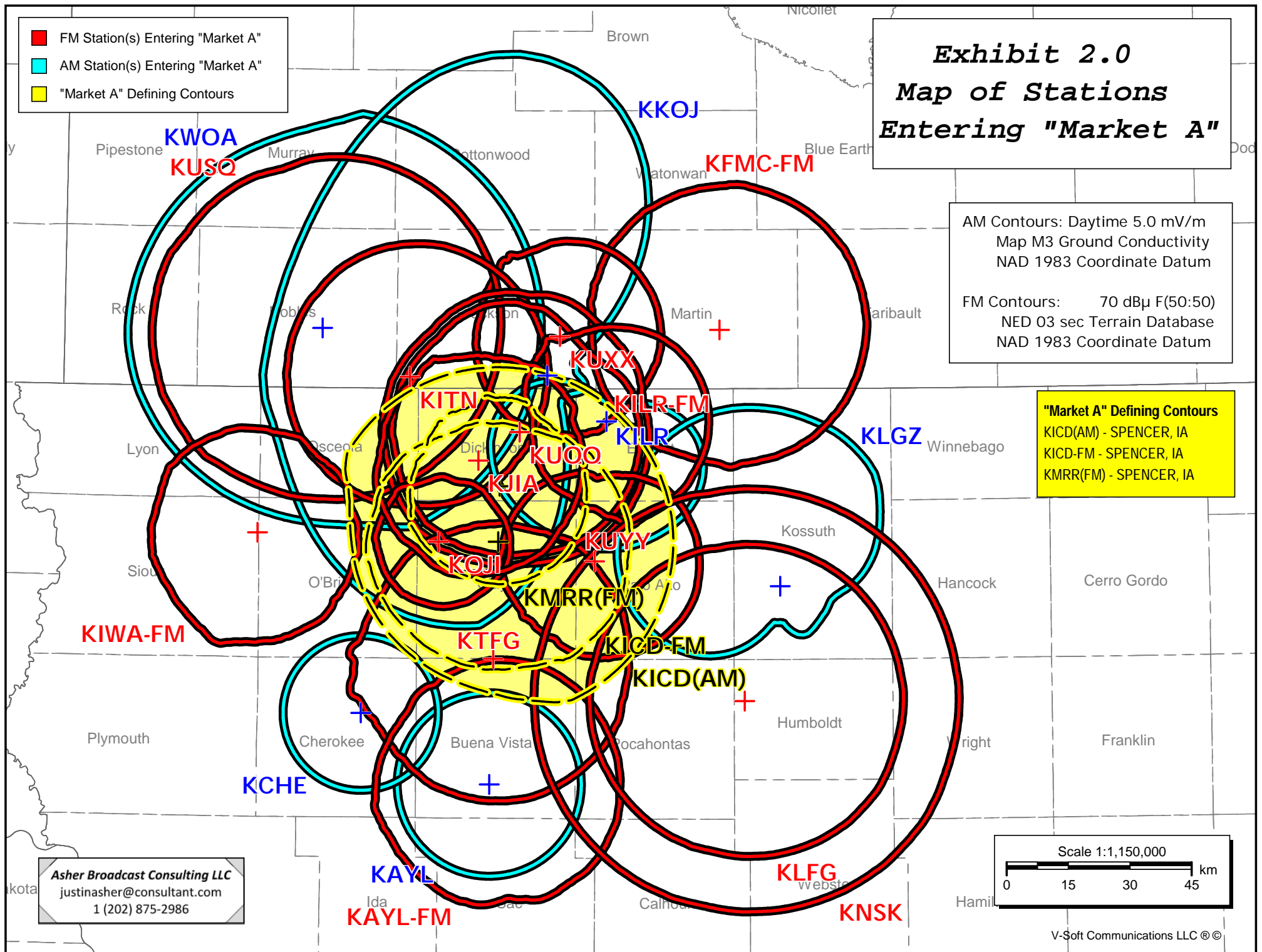


Exhibit 2.1

Tabulation of Select Stations Entering “Market A”

Total number of overlapping contours: 24

Reference:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
KICD(AM)	AM	1240	SPENCER	IA	BL19991216ABI	0.0	0.0
KICD-FM	FM	299C1	Spencer	IA	BLH20170407AAS	0.0	262.2
KMRR(FM)	FM	285C3	Spencer	IA	BLH19970508KE	13.5	1.1

Overlapping Contours:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
KJIA	FM	205C2	Spirit Lake	IA	BLED20020828AAS	20.3	345.9
KLFG	FM	208C1	Fort Dodge	IA	BLED20180706AAE	71.3	122.6
KOJI	FM	214A	Okobojo	IA	BLED20020814AAZ	14.5	269.6
KNSK	FM	216C	Fort Dodge	IA	BLED20070911ABL	71.3	122.6
KILR-FM	FM	240C3	Estherville	IA	BMLH20101008ABN	39.3	41.7
KUYV	FM	261C3	Emmetsburg	IA	BLH20030819AAJ	23.9	101.3
KAYL-FM	FM	269C2	Storm Lake	IA	BLH20011011AAR	59.0	181.9
KUQQ	FM	271C2	Milford	IA	BLH19960920KA	27.1	10.7
KTFG	FM	275C2	Sioux Rapids	IA	BLED20091116AEB	28.5	182.2
KUOO	FM	280C2	Spirit Lake	IA	BLH19900927KA	27.1	10.7
KIWA-FM	FM	287C2	Sheldon	IA	BLH20140430ACH	58.5	271.9
KITN	FM	228C2	Worthington	MN	BLH19941121KC	45.4	331.6
KUSQ	FM	236C1	Worthington	MN	BLH20140702ABW	67.2	320.3
KUXX	FM	289C3	Jackson	MN	BLH19940502KE	52.0	16.4
KFMC-FM	FM	293C1	Fairmont	MN	BLH19850225LM	74.4	46.0
KCHE	AM	1440	CHEROKEE	IA	BL20061229ABQ	53.4	218.5
KAYL	AM	990	STORM LAKE	IA	BL19950927AA	59.0	181.9
KLZG	AM	1600	ALGONA	IA	BL19990226DC	69.4	98.7
KILR	AM	1070	ESTHERVILLE	IA	BL20040519AFH	39.3	41.8
KKOJ	AM	1190	JACKSON	MN	BL19940418AD	42.0	16.2
KWOA	AM	730	WORTHINGTON	MN	BL20140821AGL	67.2	320.3

Distance and bearing calculations from coordinates: 43-09-57 N, 095-08-46 W

Duopoly Options:

TV: Not Included

FM: 3.16 mV/m (70 dBu); Include NCE

AM: 5.0 mV/m

Stations more than 92 km from the common area were excluded.

*** Co-owned stations entering, but not defining the market, have been excluded.**

*** Stations more than 92 km from the common area have been excluded.**