

DO NOT SEPERATE !!!

①

western union

Telegram

277 4483

DMA008(0833)(1-002510C318006)PD 11/14/73 08.12
NBR TO
TELE WU RB BCH WSH 54
ZCZC 013 NL (COLLECT) RBWASHINGTON DC 1 BY 10 459P EST
FMS ALLIED BROADCASTING CO
RADIO STATION KCBC (PHONE AND MAIL) BOX 1404
DESMOINES IA

ATTEMPTS
TO BE READ

REFERENCE 8840-H. AUTHORITY GRANTED OMIT LIGHTING MARKING REQUIREMENTS TOWERS 2 AND 3. NEXT INSTRUMENT OF AUTHORIZATION ISSUED WILL REQUIRE NE(#2) AND SE(#3) TOWERS TO BE MARKED IN ACCORDANCE WITH PARAGRAPH 1 OF FCC FORM 7-15. NW(#1) AND SW(#4) TOWERS IN ACCORDANCE WITH PARAGRAPHS 1, 3, 12 AND 21. POST THIS AS AUTHORITY TO SO OPERATE
WALLACE E JOHNSON CHIEF BROADCAST BUREAU FCC

8840-H 2 3 NE(#2) SE(#3) 1 7-15 NW(#1) SW(#4) 1 3 12 21

STEPS TO JUSTIFY THE NO LIGHTS/PAINT ON KKSO TOWER.

- ① TELEGRAM 11/73 - etc to be reflected next license
- ② NEXT LICENSE - NOT REFLECTED
- ③ REQUEST ALL LIGHT/PAINT OFF (10-78)
- ④ TELEGRAM - OK etc to be reflected next license
- ⑤ NEXT LICENSE - NOT REFLECTED.
- ⑥ CURRENT LICENSE - NOT REFLECTED BUT WE HAVE NO RECORD THAT THE ④ TELEGRAM IS NOT IN FULL EFFECT. THEREFORE TOWER ARE NEITHER PAINTED OR LIGHTED

Blk & Blk 7/24

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
RENEWAL AND MODIFICATION
STANDARD BROADCAST STATION LICENSE
MAIN AND AUXILIARY TRANSMITTERS

Subject to the provisions of the Communications Act of 1934, subsequent Acts, and Treaties, and Commission made thereunder, and further subject to conditions set forth in this license, ^{1/}the LICENSEE

ALLIED BROADCASTING COMPANY

is hereby authorized to use and operate the radio transmitting apparatus hereinafter described for the purpose of broadcast for the term ending 3 a.m. Local Time **FEBRUARY 1, 1977**

The licensee shall use and operate said apparatus only in accordance with the following terms:

1. On a frequency of **1390 kHz.**
2. With nominal power of **1 kilo watts** nighttime and **1 kilo watts** daytime,
with antenna input power of **1.08 kilo watts** --- directional
antenna nighttime
and antenna input power of **1.08 kilo watts** --- directional
antenna daytime

[Common Point	current	4.0
	Common Point	resistance	67.5
[Common Point	current	4.0
	Common Point	resistance	67.5
3. Hours of operation:

Transmitters may be operated control from 6967 University Des Moines, Iowa.

Unlimited Time.

4. With the station located at: **Des Moines, Iowa**
5. With the main studio located at:
**6967 University
Des Moines, Iowa**
6. The apparatus herein authorized to be used and operated is located at: **City Limits and Dean Avenue
Des Moines, Iowa**

North Latitude:	41°	35'	1"
West Longitude:	93°	31'	3"
7. Transmitter(s): **RCA, BTA-1R2 (Main)
RAYTHEON, RA-1000 (Auxiliary)**
(or other transmitter currently listed in the Commission's "Radio Equipment List, Part B, Aural Broadcast Equipment power herein authorized).
8. Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: **1, 3, 11**
9. Conditions: -- 2

The Commission reserves the right during said license period of terminating this license or making effective any change of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, under this license, render such broadcasting service as will serve public interest, convenience, or necessity to the full extent of the herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use of Government of the United States conferred by Section 606 of the Communications Act of 1934.

^{1/}This license consists of this page and pages 2 & 3.

Dated: **MAY 8, 1975**

FEDERAL
COMMUNICATIONS
COMMISSION



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CENTRAL REGION
601 EAST 12TH STREET
KANSAS CITY, MISSOURI 64186



October 27, 1978

Mr. Edward M. Tink
Executive Vice President Engineering
Black Hawk Broadcasting Company
E. 4th & Franklin
Waterloo, Iowa 50703

Dear Mr. Tink:

This is in response to your three letters dated October 19, 1978, requesting a determination on continued requirements to mark and light your antenna towers. We have conducted an aeronautical study on your request and the antenna towers with our determinations are listed below.

1. KWVL, Waterloo, Iowa
Latitude 42°28'1"N; Longitude 92°15'59"W
Site elevation 840' MSL; tower height 193' AGL; 1033' AMSL

Marking and lighting are no longer necessary since this tower does not exceed an FAA obstruction standard and does not exceed 200 feet above ground.

2. KLWW, Cedar Rapids, Iowa
Latitude 42°00'25"N; Longitude 91°42'29"W
Site elevation 720' MSL; 183' AGL; 903' AMSL

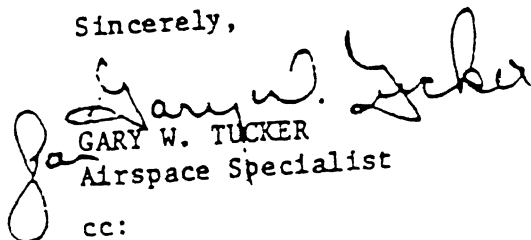
Marking and lighting are no longer necessary because this tower does not exceed an FAA obstruction standard and does not exceed 200 feet above the ground.

3. KCBC, Des Moines, Iowa
Latitude 41°35'18"N; Longitude 93°31'38"W
Site elevation 800' MSL; 209' AGL; 1009 AMSL

This tower exceeds the basic criteria for marking and lighting, i.e., any structure which exceeds 200 feet above the ground; however, an aeronautical study was conducted under Case No. 78-ACE-796-OE and the tower was found not to exceed FAA obstruction standards and to be shielded by taller structures nearby that are marked and lighted. Therefore, it is determined that marking and lighting are no longer necessary.

The FCC will be notified by a copy of this letter.

Sincerely,


GARY W. TUCKER
Airspace Specialist

cc:
FCC



Telegr

DMAI (101713) (CI=023147A053006) PD 02/22/80 1703

ICS IPMWAWC WSH

03100 NL COLLECT RBWASHINGTON DC 02-22 0429P EST

PMS MINNESOTA IOWA TELEVISION CO

RADIO STATION KCBC-AM, FONE AND MAIL

6967 University
DES MOINES IA 50311

REF 8910-GT RELET SCHLENKER 1-28-80 PURSUANT TO YOUR REQUEST
IN WHICH FAA CONCURS OBSTRUCTION MARKING AND LIGHTING
REQUIREMENTS FOR THE ANTENNA STRUCTURE OF KCBC-AM ARE HEREBY
DELETED. THIS CORRECTION WILL APPEAR ON YOUR NEXT AUTHORIZATIO
LARRY OLSON BRANCH CHIEF GARY THAYER ENGR BROADCAST BUR FCC

NNNN

ACK by KBCG 2/25/80
L. G. H. T. - Gary Thayer
L. G. H. T. - Gary Thayer
L. G. H. T. - Gary Thayer

WATS ADISE AGCY	
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E CALLS	

SF-1201 (R5-69)

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UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: BR-790925UN

Call Sign: K C B C

STANDARD BROADCAST STATION LICENSE
MODIFIED

Subject to the provisions of the Communications Act of 1934, subsequent Acts, and Treaties, and Commission Rules made thereunder, and further subject to conditions set forth in this license, ^{1/}the LICENSEE

MINNESOTA-IOWA TELEVISION CO.

is hereby authorized to use and operate the radio transmitting apparatus hereinafter described for the purpose of broadcasting for the term ending 3 a.m. Local Time February 1, 1983

The licensee shall use and operate said apparatus only in accordance with the following terms:

1. On a frequency of 1390 kHz.
2. With nominal power of 1 kilo watts nighttime and 1 kilo watts daytime,
with antenna input power of 1.08 kilowatts - directional Common Point current 4.0 amperes
antenna nighttime Common Point resistance 67.5 ohms,
and antenna input power of 1.08 kilo watts directional Common Point current 4.0 amperes
antenna daytime Common Point resistance 67.5 ohms
3. Hours of operation:

Unlimited Time.

4. With the station located at: Des Moines, Iowa
5. With the main studio located at: 6967 University
Des Moines, Iowa
6. Remote control point: 6967 University
Des Moines, Iowa

7. Transmitter location: City limits and Dean Avenue
Des Moines, Iowa

North Latitude:	41	°	35'	18"
West Longitude:	93		31	38

8. Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: 1, 3, 12 & 21
9. Transmitter(s): TYPE ACCEPTED
10. Conditions: -

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The Commission reserves the right during said license period of terminating this license or making effective any changes or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

^{1/}This license consists of this page and pages 2 & 3

Dated: January 31, 1980
tme

FEDERAL
COMMUNICATIONS
COMMISSION



me

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

File No. : BS-93
Call Sign : KKSO

LICENSEE:

FULLER-JEFFREY BROADCASTING CORPORATION

1. Community of License _____: Des Moines, IA
2. Transmitter location _____: City limits and Dean Avenue
Des Moines, IA
North latitude _____: 41° 35' 18"
West longitude _____: 93° 31' 38"
6. Antenna and ground system: Attached.

3. Transmitter(s): Type Accepted. (See Sections 73.1605 and 73.1670 of the Commission's rules)
4. Main Studio location: (See Section 73.1125)
5161 Maple Drive
Des Moines, IA
5. Remote control location:
5161 Maple Drive
Des Moines, IA

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7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: 1, 3, 12 & 21.

8. Frequency _____: 1390 kHz

9. Nominal power (kW) _____: 1.0 Day 1.0 Night

Antenna input power (kW):

1.08 Day Non-directional antenna: current 4.0 amperes; resistance 67.5

Directional antenna

1.08 Night Non-directional antenna: current 4.0 amperes; resistance 67.5

Directional antenna

10. Hours of operation: Specified in BR-1812

11. Conditions _____:

BS-930927: This is to reflect a change in both the Main Studio and Remote Control

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission made thereunder, and further subject to conditions set forth in this license, the LICENSEE is hereby authorized to operate the radio transmitting apparatus herein described for the purpose of broadcasting for the term ending 3 A.M. Local

February 1, 1993

The Commission reserves the right during said license period of terminating this license or making effective any change, or modification license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rule: Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been de but not held, prior to the commencement of this license period.

The license is issued on the licensee's representation that the statements contained in the licensee's application are true and undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privilege: conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be ass otherwise transferred in violation of the Communications Act of 1934, as amended. This license is subject to the right of use or contro Government of the United States conferred by Section 806 of the Communications Act of 1934, as amended.

¹ This license consists of this page and pages 2 & 3.

Dated: FEB 28 1994

FEDERAL
COMMUNICATIONS
COMMISSION



File NO. BS-930927

Call Sign: K K S O

1. **DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM**
No. and Type of Elements: Four (4), uniform cross section, guyed, series-excited, vertical, steel radiators. Theo RMS: 289.68 mV/m, Day & Night. Q = 10.0 Day & Night. Aug RMS: 305.70 mV/m, Day & Night. (ALL VALUES @ 1 km).

Height above Insulators: 60.96 m (101.7°)

Overall Height: 63.70 m

Spacing and Orientation: Towers arranged as a parallelogram with the short sides spaced 53.95 m (90°) on a line bearing 112° True and the long sides spaced 151.64 m (253°) on a line bearing 152° True.

Non-Directional Antenna: None used.

Ground System consists of 120 - 91.44m equally spaced, buried, copper radials about each tower, plus interspaced radials 15.24m about each tower.

2. **THEORETICAL SPECIFICATIONS**

Tower	NW(#1)	NE(#2)	SE(#3)	SW(#4)
Phasing	0°	109°	182°	73°
Field Ratio:	1.0	1.0	1.0	1.0

3. **OPERATING SPECIFICATIONS**

Phase Indication*:	0°	99°	172°	71.5°
Antenna Base Current Ratio:	1.00	1.142	1.086	1.015
Antenna Monitor Sample Current Ratio:	1.00	1.135	1.085	1.00

* As indicated by Potomac Instruments AM-19D (210) Antenna Monitor.

Antenna sampling system approved under Section 73.68(b) rules

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 88° True North. From transmitter proceed east on Dean Avenue 0.64 mile to Oakwood Drive. Proceed northeast then east on Rising Sun Drive 3.0 miles to 72nd Street. Turn south on 72nd Street a distance of 0.1 mile to the second knoll. The measuring location is in the center of the road on the approach to the second knoll. Distance from antenna is 3.45 miles. The field intensity measured at this point should not exceed 6.0 mV/m.

Direction of 147° True North. From the transmitter proceed east on Dean Avenue 0.4 mile to Pleasant Hill Blvd. Turn south and proceed south 0.6 mile to a drive to the east on the southeast corner of the intersection of Pleasant Hill Blvd and Parkridge Avenue. The measuring location is 75 feet east of the end of the drive, east of the fence along the south side of the dwelling. Distance from antenna is 0.9 mile. The field intensity measured at this point should not exceed 30 mV/m.

Direction of 212.5° True North. From the transmitter proceed east on Dean Avenue 0.4 mile to Pleasant Hill Blvd. Turn south and proceed south 1.5 miles to Vandalia Road. Proceed 1.72 miles west to a rural road to the south which crosses the railroad tracks and immediately turns southeast. Proceed southeast along this road 0.25 mile to an abandoned railroad bed to the east which points to a factory spur track farther east. The measuring location is opposite this railroad bed, 100 feet into the field on the west. Distance from antenna is 2.0 miles. The field intensity measured at this point should not exceed 19.5 mV/m.

Direction of 323.5° True North. From the transmitter proceed west on Dean Avenue to 30th Street. Turn north and proceed for 1.13 miles to University Avenue. Proceed east 0.36 mile to 33rd Street. Proceed north 1.13 miles to Grandview Park Drive to the west. Proceed 0.08 mile to west on Grandview Park Drive. The measuring location is at a tree stump along the south curb of the drive. Distance from antenna is 2.07 miles. The field intensity measured at this point should not exceed 5.4 mV/m.