



ABERDEEN, SOUTH DAKOTA  
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FEB 25 1977

# KKAA RADIO

1560 KHZ

TO S. R. MORSS ----- IN RECEIPT OF RECEPTION OF KKAA RADIO,

ABERDEEN, SOUTH DAKOTA . . . . 1560 KHZ. HEARD DURING THE HOURS OF 0123-0200 CST

ON THE DAY OF 1-18 ----- 1976 .

## MODERN COUNTRY MUSIC 24 HOURS A DAY

### MAINTAINANCE PERIOD: 0015-0500 A.M. MONDAY MORNINGS

EQUIPMENT EMPLOYED: STATION COMPLETELY SOLID STATE WITH THE EXCEPTION OF THE TWO FINALS IN THE TRANSMITTER. (EIMAC 4CX10,000D'S)

TRANSMITTER IS A CONTINENTAL 315F UTILIZING LOW LEVEL MODULATION. THE MODULATION TECHNIQUE IS SIMILAR TO PLATE MODULATION OF VACUUM TUBE AMPLIFIERS IN THAT A CLASS B MODULATOR IS USED TO MODULATE THE COLLECTOR VOLTAGE OF THE RF OUTPUT STAGE. THE RF STAGE DRIVING THE 40 WATT MODULATED AMPLIFIER IS ALSO COLLECTOR MODULATED TO IMPROVE LINEARITY. THE TRANSMITTER USES ONLY TWO TUBES OF A SINGLE TYPE AND ARE ARRANGED IN A HIGH EFFICIENCY LINEAR AMPLIFIER CIRCUIT IN WHICH ONE TUBE, CALLED THE CARRIER AMPLIFIER, SUPPLIES ESSENTIALLY ALL OF THE TRANSMITTER OUTPUT POWER IN THE ABSENCE OF MODULATION. AS MODULATION IS APPLIED, THE OTHER TUBE, CALLED THE PEAK AMPLIFIER, BEGINS TO CONTRIBUTE POWER UNTIL AT 100% MODULATION, EACH TUBE IS SUPPLYING ONE-HALF THE PEAK POWER OUTPUT OF THE TRANSMITTER.

WE OPERATE AS A DA-2, REGIONAL AM BROADCASTING STATION UTILIZING SIX TOWERS, THREE DURING THE DAY AND SIX AT NIGHT.

ENGINEERING DEPARTMENT

JOHN R. BIBLE  
CHIEF ENGINEER  
KKAA