CITY OF WASHINGTON)
) SS
DISTRICT OF COLUMBIA)

ELIZABETH L. DAHLBERG, being duly sworn upon her oath, deposes and says:

1. That she is a qualified and experienced radio engineer and is associated with the firm of McINTOSH & INGLIS, Consulting Radio Engineers, with offices at 710 Fourteenth Street, N. W., Washington, D. C.

2. That her qualifications are a matter of record with the Federal Communications Commission.

3. That the firm of McINTOSH & INGLIS has been retained by the applicant, the Rossmoyne Corporation, Lemoyne, Pennsylvania, for certain engineering duties.

4. That the attached Engineering Report in connection with the application of Radio Station WCMB, Rossmoyne Corporation, operating on 960 kilocycles, 1,000 watts, daytime only, to change frequency to 1460 kilocycles with 5,000 watts full time was prepared by her or under her direct supervision.

5. That all representations of fact contained in this affidavit are based upon affiant's information and belief and she believes all such statements therein made or contained to be true and correct.

McINTOSH & INGLIS

_____
Elizabeth L. Dahlberg.

Subscribed and sworn to before me,
a Notary Public at Washington, D. C.,
on this 15th day of December, 1949.

_____
Notary Public, D. C.

My Commission expires:_____

ENGINEERING REPORT

This engineering report is part of the amendment to the application of the Rossmoyne Corporation in order to specify the use of a directional antenna system during daytime hours (DA-2). The application on file requests 1460 kilocycles, 5,000 watts, DAN in Lemoyne, Pennsylvania, for Station WCMB. WCMB is presently operating on 960 kilocycles, 1,000 watts daytime only.

In order to determine the interference conditions which would prevail with WCMB operating on 1460 kilocycles and WGEY in Gettysburg on 1450 kilocycles, measurements were made on a radial from the site of Station WCMB towards Gettysburg. These measurements show that the average conductivity over the path varying from 3 to 5 x 10^{-14} emu is somewhat better than that shown on the FCC conductivity map. On the basis of these measurements, WCMB proposes to operate with a directional antenna daytime in order to protect WGEY.

The measurements are listed in Table I. Figure 1 is a map showing the 210° radial from Lemoyne with the points where measurements were taken. Figure 2 is a plot of these measurements on log-log paper.

FEDERAL COMMUNICATIONS COMMISSION

Application

STANDARD BROADCAST ENGINEERING DATA

Name of Applicant: Rosembyne Corporation

1. Purpose of authorization applied for: (Indicate by check mark)
(If application is for a new station or for any of the changes numbered B through F, complete all paragraphs of this form; if change G is of a character which will change coverage or increase the overall height of the antenna structure more than 15 feet, answer all paragraphs, otherwise complete only paragraphs 2 and 3 and the appropriate other paragraphs; for changes H through M, complete only paragraph 2 and the appropriate other paragraphs; for change N complete only paragraphs 2 and 13.)

- A. ☐ Construct a new station
- B. ☐ Change power
- C. ☐ Change transmitter location
- D. ☐ Change frequency
- E. ☐ Approval of site and antenna
- F. ☐ Special Service Authorization
- G. ☒ Change in antenna system (including addition of FM and TV antennas)
- H. ☐ Change frequency control equipment
- I. ☐ Change tubes in last radio stage
- J. ☐ Change system of modulation
- K. ☐ Change transmitter
- L. ☐ Install auxiliary or alternate main transmitter
- M. ☐ Other changes (specify)
- N. ☐ Change studio location

If this application is not for a new station, summarize briefly the nature of the changes proposed.
Amendment to application (File No. BP 7296) to specify directional antenna for daytime (DA-2 instead of DAN)

2. Facilities requested

Frequency	Power in kilowatts	
	Night	Day
1460	5	5

Hours of operation

		Sharing with (specify stations)	Other (specify)
Unlimited	☒		
Daytime only	☐		
Limited	☐		

3. Antenna system, including ground or counterpoise

Non-Directional Antenna:
- Day ☐
- Night ☐

Directional Antenna:
- Day only (DA-D) ☐
- Night only (DA-N) ☐
- Same constants and power day and night (DA-1) ☐
- Different constants or power day and night (DA-2) ☒

(If a directional antenna is proposed submit complete engineering data. Show clearly whether directional operation is for day or night or both. If day and night patterns are different give full information on each pattern. This information is in addition to the information in Paragraph 3 and is submitted as Exhibit No. * and signed by the engineer who designed the antenna system.)

Height in feet of complete radiator above base insulator, or above base if grounded	If antenna is either top loaded or sectionalized describe fully as Exhibit No.
150'	

Describe method of exciting antenna Series Fed

If shunt excited give:
Length of slant wire feed in feet _____
Height of connection to tower above earth in feet _____
Distance from coupling apparatus to tower in feet _____

If unconventional feed, describe fully as Exhibit No. _____

If the antenna system is not fully described above, give further details and dimensions including information on high frequency antennas mounted on the towers, as well as on the associated isolation circuits as Exhibit No. (See Sections 3 and 5 of the Standards of Good Engineering Practice Concerning Standard Broadcast Stations.) On File

Submit as Exhibit No. * a plat of the transmitter site showing boundary lines, and roads, railroads, or other obstructions; and also layout of the ground system or counterpoise. Show number and dimensions of ground radials or if a counterpoise is used, show height and dimensions.

4. Transmitter

Make	Type No.	Rated Power
Collins	21 B	5 KW

(If the above transmitter is composite or a type not having received approval by the F.C.C., attach as Exhibit No. a complete showing of transmitter details in accordance with Sections 12, 13, and 14 of the Standards of Good Engineering Practice for Standard Broadcast Stations. Showing should include schematic diagram and full details of frequency control. If changes are to be made in licensed transmitter include schematic diagram and give full details of change.)

5. Modulation monitor

Make	Type No.
General Radio	1931 A

6. Frequency monitor

Make	Type No.
General Radio	1181 A

7. Attach as Exhibit No. map or maps having reasonable scales clearly showing the following:

(a) Proposed antenna location On File

(b) General character of the city or metropolitan district, particularly the retail business, wholesale business, manufacturing, residential, and unpopulated areas (by symbols, cross-hatching, colored crayons, or other means)

(c) Heights of buildings or other structures and terrain elevations in the vicinity of the antenna, indicating the location thereof

(d) Transmitter location and call letters of all radio stations (except amateur) and the location of established commercial and government receiving stations within 2 miles of the proposed transmitter location. Call letters and locations of broadcast stations, including FM and television, within 5 miles must be shown.

(e) Terrain and types of so On File

8. Attach as Exhibit No. a sufficient number of aerial photographs taken in clear weather at appropriate altitudes and angles to permit identification of all structures in the vicinity. The photographs must be marked so as to show compass directions, exact boundary lines of the proposed site, and locations of the proposed 250 and 500 mv/m contours for both day and night operation. Photographs taken in eight different directions from an elevated position on the ground will be acceptable in lieu of the aerial photographs if the data referred to can be clearly shown.

9. Attach as Exhibit No. map or maps (same map or maps supplied for Paragraph 7 may be used) having reasonable scales showing the following: (NOTE: See Standards of Good Engineering Practice Concerning Standard Broadcast Stations and where involved, metropolitan districts according to the latest Census of the Commerce Department shall be outlined on the maps.)
(a) The 500, 250, 25, 5 and 2 mv/m contours, both existing and as proposed by the application for both day and night operation. (NOTE: The 2 mv/m nighttime contour need not be supplied if service is not rendered thereto.);