CITY OF WASHINGTON }
DISTRICT OF COLUMBIA } ss

FRANK H. McINTOSH, being first duly sworn on his oath, deposes and says:

1. That he is a qualified and experienced radio engineer with offices at 710 Fourteenth Street N. W., Washington, D. C.

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

3. That he has been retained by the applicant, ROSEMOYNE CORPORATION, Lemoyne, Pennsylvania, for the performance of certain engineering duties in connection with their application for a construction permit for a new standard broadcast station to operate on a frequency of 940 kilocycles, as a Class II daytime station, with a power of 1000 watts, daytime only, at Lemoyne, Pennsylvania.

4. That the preparation of this engineering report of said company's application for a construction permit has been done either by him or under his supervision.

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

Frank H. McIntosh.

Subscribed and sworn to before me, a Notary Public, on this 5th day of February 1947.

Notary Public, D.C.

My commission expires: 9/30/51

EXHIBIT ___

This engineering report is part of an application for a new standard broadcasting station to be operated as a Class II daytime station, on 940 kilocycles, with a power of 1000 watts, daytime only, at Lemoyne, Pennsylvania.

The Cumberland County area is at present served by no other local outlet. The Harrisburg stations serve Cumberland County, but do not provide for "local expression".

The exact site of the transmitter is yet to be chosen. However, the location will be such as to cover the business section of the town satisfactorily. The 500 mv/m and 250 mv/m contours are not shown since a definite site has not been chosen. The contours shown on Figure 1 are the 25, 5, 2 and 0.5 mv/m.

Figure 2 shows the interference conditions if the proposed station is granted at Lemoyne. In computing the distances to the WPEN 0.5 mv/m contour it was assumed that WPEN has an effective field of 400 mv/m at one mile and a conductivity of 6×10^{-14} emu was used. A slightly lower value of conductivity was used in computing the distances to the WPEN 0.25 mv/m contour. These values of conductivity are higher than the average value shown on the FCC conductivity map and it is doubtful if the conductivity over this path is as high as shown. However, Figure 2 shows the worst condition that will exist.

It can be seen from Figure 2 that no adjacent channel interference will be caused to Station WPEN.

In computing the distances to the various contours of the proposed station, an effective field of 175 mv/m at one mile was assumed and a conductivity of 1.5×10^{-14} emu was used.