



**CBS-HYTRON**

*Danvers, Massachusetts*

Telephone DANVERS 2360

**Plants:**

DANVERS, LOWELL, NEWBURYPORT  
AND SALEM, MASSACHUSETTS

Manufacturers of Receiving Tubes Since 1921

A DIVISION OF COLUMBIA BROADCASTING SYSTEM, INC.

# TubeSound

June 25, 1954

Miss S. Siniakin  
Max Fischman Company, Inc.  
1141 Penn Avenue  
Pittsburgh 22, Pennsylvania

Dear Miss Siniakin:

Thank you for your letter of May 28.

We have conducted a comparison test between the Hickock 533A tube checker and the CBS-Hytron production test for Sm on the CBS-Hytron 12BH7. We checked for Sm and not emission since the Hickock 533A tester does not measure emission.

Fifty 12BH7's were tested on the Hickock 533A and on the factory test kit. All fifty passed the factory test; 68% failed the Hickock tester. From the results of this comparison it is evident that the present limits given for the Hickock tester are not valid. In other words, their limit of 2380 micromhos is essentially the same as the CBS-Hytron customer limit, but the Hickock test operating point is not the same. At the Hickock operating point the limit should be substantially lower than it is, for a valid check of 12BH7 transconductance.

The "English" scale of the Hickock tester is more representative of the true merit of the 12BH7.

It is to be noted that the same comparison was made using competitive tubes. In that comparison, a much larger percentage failed the present Hickock test.

We have called this matter to the attention of the Hickock Company, and it is hoped that appropriate action will be taken. Either the limit of acceptable transconductance must be lowered, or the operating point of the test changed.

In short, it is our opinion that the present Hickock test does not measure the true value of the 12BH7, and will reject tubes that are acceptable by time-proven industry standards.

JUN 28 1954

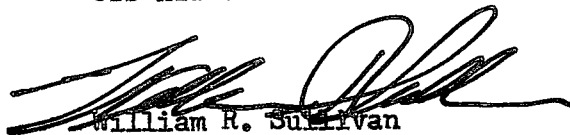


June 25, 1954

Thank you for this opportunity to be of service. If we can be of further assistance, please do not hesitate to contact us.

Cordially yours,

CBS-HYTRON

A handwritten signature in dark ink, appearing to read 'William R. Sullivan', written over a horizontal line.

William R. Sullivan  
Technical Information Service