

August 17, 1954

T-3

TRIP REPORT TO CORNING ON
Wednesday, August 11, 1954

The following people went to Corning to discuss the color tube bulb situation:

V. C. Campbell
H. J. Evans

B. Kafka
C. G. Lob

L. C. Maier
J. C. Nonnekens

The purpose of this visit was to discuss with Corning their plans to date, our future requirements (primarily in connection with the Post Acceleration Tube) and the timing involved in fulfilling our requirements. As for the present Corning plans in terms of bulb sizes and shapes the data is as follows; by September 15th they will have the 21" round color bulb in two sizes. The tube manufacturer can then choose either the large 21" or the small 21" depending upon RCA's next move. The 22" rectangular will be ready for sampling November 1st. We, however, requested several modifications in the 22" bulb and were told this may delay the sampling date which now stands between November 1st and December 1st.

As for the 21" rectangular which we are presently using we were told that production quantities could be available by the first of next year.

Aside from discussing the 22" rectangular (spherical) bulb our main interest at this meeting in connection with the Post Acceleration Tube was to agree on a bulb suitable for printing phosphor on the face. The tentative conclusion reached was that Corning will make for us a 22" rectangular bulb with a cylindrical inner face and which will give over 250 square inches. This bulb will utilize the same metal bands as the 22" spherical.

Corning is making drawings of both the modified 22" spherical and 22" cylindrical and will bring them to Syracuse, Thursday 8/19 for our approval. Samples of the 22" cylindrical will be available between 12/1 and 1/1/55. The

bulb time table then is:

<u>Type</u>	<u>Sample Availability</u>	<u>Prod. Quan.</u>
19" Round	Now	Now
21" Round	Oct. 15	1st quarter
21" Rect - spherical	Now	"Fall '54"
22" Rect - spherical	Nov. 1 - Dec. 1	1st quarter '55
22" Rect - cylindrical	Dec. 1 - Jan. 1	1st quarter '55

We saw a preliminary version of their "inexpensive" color bulb. It is made with a thin metal band sealed to the funnel and then coated with low melting glass frit. The panel is precisely the same as a monochrome panel, the closure between funnel and panel being made in the in-line exhaust machine when the temperature reaches the required value for melting the frit (about 420°C). Salvage should be extremely difficult with this technique.

We then discussed "ultimate tubes" and in order to obtain Corning's aid divulged our idea of supporting the wires in the panel to funnel seal without the use of metal frames. Sheldon (head of their development group) thought the idea entirely feasible. He anticipated little difficulty in making the panel with it's curved skirt but thought the funnel would require some development. He said his group would seriously consider this idea.



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