

January 4, 1940

Dr. R. M. Bowie
Hygrade Sylvania Corp.
Emporium, Pa.

Dear Dr. Bowie:

You will remember that when you were in Ames last summer I told you that I was about to start the construction of a rather complicated computing machine. Mr. Berry, an electrical engineering graduate who has been helping me, has proved to be a very able assistant and since September 15 we have been able to get one of the computing elements into actual operation. The methods that we are employing seem more satisfactory as time passes and I am rather sure of ultimate success.

Now we are through with the preliminary work, or we hope most of it, and are ready to begin construction on the full-sized machine. As I told you this machine will have 20 or more computing elements each capable of handling numbers to 15 base-10 places. According to our present plan this machine will require about 200 vacuum tubes, a large part of which will be double triodes. At present the following tubes seem to be most satisfactory: 6C8G, 6F8G, and 6K6G.

I am wondering if your company would care to invest in our enterprise to the extent of giving us better prices on these tubes than we can secure in the open wholesale market. I have no hesitancy in writing you about this matter because I feel that we are so well acquainted that if you can do nothing for me you will frankly say so.

Be sure and drop in to see us every time you get West. I suspect that I will be obliged to go to New York before the year is out and it may be possible for me to pay you a visit.

Please give my regards to Mrs. Bowie.

Very sincerely yours,

John V. Atanasoff
Associate Professor
Mathematics & Physics

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