



Basic CBS
5000 WATTS · 580 KILOCYCLES

WTAG
WTAG·FM

Affiliated with
WORCESTER TELEGRAM AND GAZETTE

WORCESTER 1, MASSACHUSETTS

August 25, 1954

Mr. David F. Thomas
Longwave Listening Post
Radio W.U.M.S.
Proctorville, Ohio

Dear Mr. Thomas:

We wish to thank you for your excellent report of reception of this station. Yours is the only report of daytime reception at such a distance that I have received during my fifteen years with WTAG.

We were pleased to receive the information on your studies during the eclipse. I told Dr. Hobart H. Newell of Worcester Tech. about it. We both found it very interesting.

Inclosed is our daytime coverage map. It will give you an idea of what 5000 watts does in this area at 580 Kc. You will note the elongation of the pattern in the south west direction. This is due to the lower attenuation in the Connecticut River Valley area. The antenna producing this pattern is a three element array with the towers running in line East-West. You will note the pattern is not symmetrical with the array.

Our night pattern uses one of the above towers plus two others, arranged in a triangle. The pattern might be visualized as a figure 8; the maximum signal going North and South. Superimpose upon this a circular pattern where the two loops of the "8" meet. This results in four nulls of incomplete cancellation. I am sorry we do not have a copy of this pattern to forward.

Let me again express our appreciation for your courtesy. I hope you will forgive us for the delay in acknowledgement.

Very truly yours,

Elliot A. Browning
Elliot A. Browning
Chief Engineer

eab/jan
enc.