

FULL TIME  
1000 WATTS



ATTLEBORO RADIO ASSOCIATION, INC.

BRANSON BUILDING

ATTLEBORO MASS.

January 8, 1951

Ernest R. Cooper, Editor  
National Radio Club  
438 East 21st Street  
Brooklyn 26, New York

Dear Mr. Cooper:

Please pardon the delay in answering your letter of October 30th.

You may consider your report verified as it checks with our station log. You mention that at 5:13 p.m., W A R A overrode W A T R. This was probably due to changing the pattern for night radiation.

You were correct in assuming that we operate directionally with a null in the direction of W A T R in Waterbury.

W A R A does not have an early morning frequency check as we are checked by Cambridge Thermionic Corporation, in Cambridge, Mass., while we are on the air with programs.

Details of our directional antenna system as follows: We have a two tower array on a line bearing  $100^{\circ}$  true. The West tower is 275 feet in height; the East tower, 215. By using towers of unequal height, we are achieving vertical null using two towers instead of three.

The pattern is essentially a cardioid pattern. With the large load in a Westerly direction, a very small load in a general Westerly direction and nulls in the direction of Waterbury, and Worcester, Massachusetts.

If you wish any further information, we will be glad to supply it at your request.

Very truly yours,

Stanley S. Emery  
Chief Engineer

SSE:fd