

DATE <u>2/21/55</u>	TMC SPECIFICATION NO. S-250	
SH. <u>1</u> OF <u>1</u>		
COMPILED BY A.R.B.	TITLE: <u>15- 50 KC. Matching Transformer</u>	JOB
APPROVED <i>QMB</i>		

SUBJECT: LOW FREQUENCY ANTENNA MATCHING TRANSFORMER.

A transformer had been requested which would effectively match an impedance of (1 to 50) - J (100 to 16000) ohms to three (3) 50 ohm terminations. The operating frequency range to be 15 to 550 Kc.

TR-110 has been designed to provide an effective match over the frequency range requested. The usual approach would provide a transformer which has been optimized at the geometric mean frequency, (90 Kc.). The extreme ends therefore would be an extreme compromise. In TR-110 the output marked 50-150 Kc. is representative of this condition. The Two additional outputs:

- 15 - 50 Kc.
- 150 - 550 Kc.

have been designed to the geometric mean of each range specified.

It is expected that the customer (the R.C.N.) will test this transformer under operating conditions and perhaps suggest other configurations of outputs more suitable to their requirements.

