



**NOTES**

THE CONTENTS OF THIS DRAWING ARE THE EXCLUSIVE PROPERTY OF THE TECHNICAL MATERIEL CORP. ITS UNAUTHORIZED USE OR REPRODUCTION IN WHOLE OR IN PART IS STRICTLY FORBIDDEN.

QTY./UNIT		VRA-12		ASS'Y. NO.
SCALE		MODEL USED ON		
NONE		CODE		

ID347

REVISIONS					
SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD
Ø	ORIGINAL RELEASE FOR PRODUCTION	8/27/65	Ø	RVV	
A	FREQUENCY RESPONSE WAS 100 kc/s - 25 mc/s. SYSTEM RESPONSE NOTE CHANGED.	3-16-67	17982	L.A.K.	<i>[Signature]</i>

**WIDEBAND RECEIVING WHIP ANTENNA SYSTEM**

THE ANTENNA SYSTEM IS TO CONSIST OF A 35 FOOT FIBERGLASS WHIP WITH A COUPLING TRANSFORMER SO DESIGNED AS TO MATCH THE CHARACTERISTIC IMPEDANCE OF THE WHIP ANTENNA.

- FREQUENCY RANGE - 15 kc/s - 300 KCS
- PATTERN - OMNI-DIRECTIONAL
- SYSTEM RESPONSE - OVER THE FREQUENCY RANGE THE MATCHING TRANSFORMER WHEN TERMINATED IN A 70 OHM LOAD SHALL PROVIDE A GAIN OF 6 db OVER THE SAME WHIP WHEN CONNECTED DIRECTLY TO A 70 OHM LOAD.

- OUTPUT TERMINATION - 70 OHMS NOMINAL
- POWER RATING - NOT LESS THAN 30 WATTS
- WIND AND ICE LOADING - CAPABLE OF WITHSTANDING 85 m.p.h. WITH 1/2" RADIAL ICE LOADING.
- WEATHERPROOFING - SEALED AGAINST ENTRY OF SNOW, RAIN, OR INSECTS.

WHIP ANTENNA CONSTRUCTION - SELF SUPPORTING VERTICAL, 35 FOOT FIBERGLASS TWO SECTION.

LIGHTNING PROTECTION - A DC PATH TO GROUND FOR ANTENNA STATIC DISCHARGE PLUS GAS FILLED LIGHTNING ARRESTORS.

MATERIALS - ALL MATERIALS TO BE GUARANTEED AGAINST CORROSIVE DETERIORATION UNDER SEA-COAST CLIMATE CONDITIONS FOR A PERIOD OF 5 YRS.

WEIGHT OF FIBERGLASS WHIP - NOT TO EXCEED 65 LBS.

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
<b>LIST OF MATERIAL</b>				
MATERIAL		SEE NOTES		
FINISH		SEE NOTES		
		<b>THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK</b>		
		<b>TITLE</b> 35' WIDEBAND RECEIVING WHIP ANTENNA SYSTEM		
		DRAWN: CANZA	DATE: 8-26-65	FINAL APPROVAL: <i>[Signature]</i>
		CHECKED: <i>[Signature]</i>	DATE: 8/26/65	DATE: 8/27/65
		ELECT. DES.	DATE	<b>ID347</b>
		MECH. DES.	DATE	
				<b>A</b>
				SHEET
				REV. LTR.