

## TYPE TAJ

## SUMMARY OF DATA

## PURPOSE

A general purpose medium power (500 watts C.W. 250 watts M.C.W.) M.F. A.M. transmitter for communication between ship/ship, ship/shore, ship/air. It is fitted as one of the main transmitters in certain ships but is being superseded by Type 604.

## TYPE OF TRANSMISSION

C.W. and M.C.W.

## FREQUENCY RANGE

175 to 6000 kc/s.

## MAJOR UNITS

Type TAJ is an American set with several different type numbers which are generally similar but differ in detail.

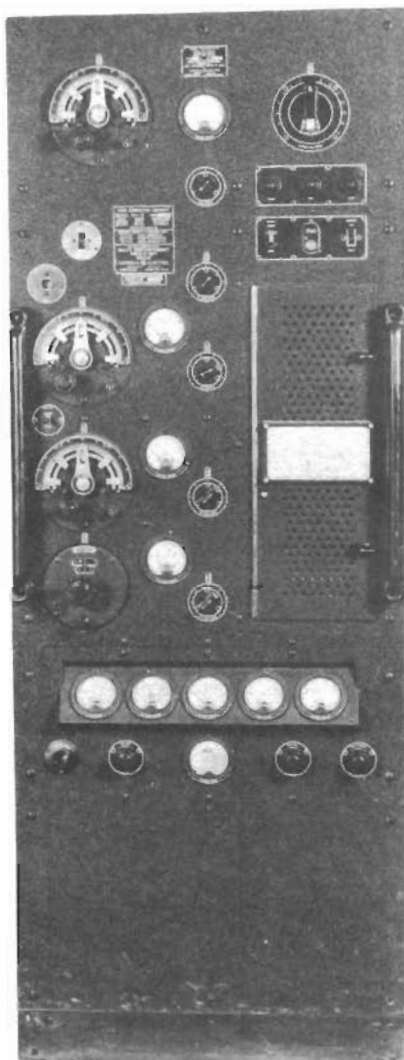
U.S. Navy Ref. No.	Description	No. off							
		TAJ 8	TAJ 8	TAJ 10	TAJ 11	TAJ 11	TAJ 11	TAJ 14, 15, 16, 18, 19	TAJ 14, 15, 16, 18, 19
		115V	230V	115V	230V	115V	230V	115V	230V
CRR52142	Radio Transmitter	1	1	-	-	-	-	-	-
CG52167	Radio Transmitter	-	-	1	1	-	-	-	-
CG52240	Radio Transmitter	-	-	-	-	1	1	1	1
CG21466	Motor Generator Set	1	-	-	-	-	-	-	-
CG21467	Motor Generator Set	-	1	-	-	-	-	-	-
CG21569	Motor Generator Set	-	-	1	-	-	-	-	-
CG21570	Motor Generator Set	-	-	-	1	-	-	-	-
CG21756	Motor Generator Set	-	-	-	-	1	-	-	-
CG21757	Motor Generator Set	-	-	-	-	-	1	-	-
CG21759A	Motor Generator Set	-	-	-	-	-	-	1	-
CG21760A	Motor Generator Set	-	-	-	-	-	-	-	1
CG21457	Magnetic Controller	1	-	-	-	-	-	-	-
CG21458	Magnetic Controller	-	1	-	-	-	-	-	-
CA021567	Magnetic Controller	-	-	1	-	-	-	-	-
CA021568	Magnetic Controller	-	-	-	1	-	-	-	-
CA021752	Magnetic Controller	-	-	-	-	1	-	-	-
CA021753	Magnetic Controller	-	-	-	-	-	1	-	-
CA021752A	Magnetic Controller	-	-	-	-	-	-	1	-
CA021753A	Magnetic Controller	-	-	-	-	-	-	-	1

## PHYSICAL DATA

		Height	Width	Depth	Weight
Transmitter	CG52240	6' 1 1/2"	2' 3"	2' 0 1/2"	580 lb
Motor Generator Set	CG21759A	23 1/2"	6' 4 1/2"	18 1/2"	950 lb
Motor Generator Set	CG21760A	23 1/2"	6' 4 1/2"	18 1/2"	960 lb
Magnetic Controller	CA021752A	25"	14 1/2"	13 1/2"	75 lb
Magnetic Controller	CA021753A	23"	14 1/2"	13 1/2"	75 lb

7' 4 1/2" with Aerial Trunk and resilient mounts.

The above data is typical only and is for Type TAJ14.



TYPE TAJ 10

## BRIEF TECHNICAL DESCRIPTION

Frequency	175 - 600 kc/s.
Frequency Control	Master Oscillator.
Output	450 watts C.W. 250 watts M.C.W.
Keying	100 words per minute on C.W. 50 words per minute on M.C.W.

The circuit consists of a master oscillator intermediate amplifier and power amplifier. For M.C.W. an oscillator provides 800 c/s tone which is used to modulate the intermediate stage in the anode circuit. The motor generator set supplied provides the necessary voltages for the transmitter. The magnetic controller contains the starter for the motor generator.

## CONTROL CIRCUITS

Type TAJ may be adapted to work with Control Outfits KHA or KCH series.

## POWER REQUIREMENTS AND CONSUMPTION

220V D.C. at 3 kW  
or 110V D.C. at 3 kW

Sets with nominal voltage ratings of 230V and 115V are used in 220V and 110V ships respectively.

## AERIAL SYSTEM

Ships main roof aerial.

## REMARKS

The associated Wavemeter Outfit is GJ or GN.

HANDBOOK

U.S. Navy

ESTABLISHMENT LIST

E.638

INSTALLATION SPECIFICATION

B.468