

Radar Set AN/CPT-2 is a lightweight, air transportable, sea rescue beacon intended for use by a fighter pilot forced down on over-water flight. Used in one-man life rafts, this set enables searching aircraft, equipped with radar sets such as SCR-521, SCR-729 and AN/APA-12, to locate the raft. No special skill is required for operation.

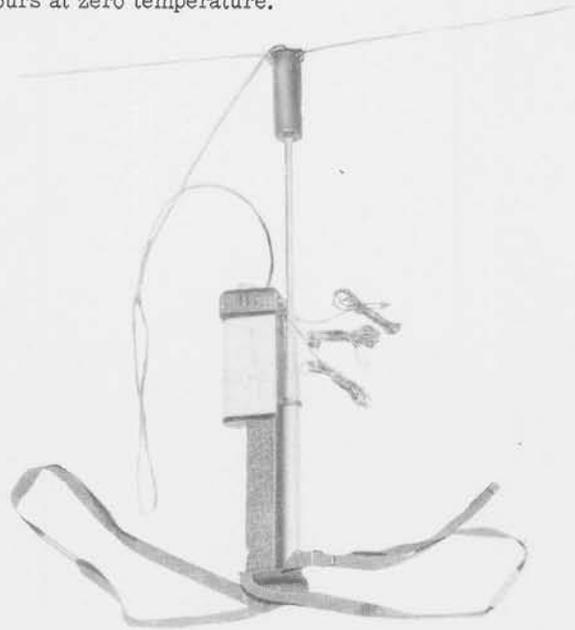
The above oscilloscope pattern illustrates how a typical signal from AN/CPT-2 will appear on the radar receiver-indicator located in the searching aircraft.

An improved higher-powered version of this sea rescue beacon for single or multiple rafts is now under development. It will operate on the crossband principle and contain such additional features as monitoring facilities and coded output signals. See AN/CPN-16 for further information.

AN/CPT-2 will transmit continuously at 176 mc. with a range of approximately 12 to 18 miles, permitting direction finding (DF) bearings to be taken on the equipment. Range of the aircraft from the beacon cannot be determined directly although a rough idea of range is indicated by the signal intensity.

Frequency stability is achieved by careful construction of the transmitter circuits and by choosing the batteries so the plate voltage does not vary appreciably during the life of the beacon. Pulse rate is 45 kc, plus or minus 5kc. Frequency is adjustable from 166 to 186 mcs.

Continuous operating life of the beacon is at least 30 hours at normal temperatures, decreasing to about 12 hours at zero temperature.



Radar Set AN/CPT-2 (XA-3)

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Component	Nomenclature	Size	Weight
Beacon and Antenna		2' x 15' x 5'	3 Lbs.
Battery (2 ea.)	BA-30		*
Battery	BA-38-R		*

* Weight less than one pound.
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Radio Set AN/CPT-2 is installed in life raft after being forced down and operates automatically.

After the signal is picked up, the searching aircraft is turned to give equal strength on both sides of the screen. A sudden decrease in signal strength indicates passing directly over the raft.

Power source for Radar Set AN/CPT-2 is two 1-1/2 volt "A" batteries and one 93-1/2 volt "B" battery.

This set is similar in purpose to the British T-3180 (Walter) but is improved mechanically and is designed for American production techniques.

Test equipment required for use in maintenance and operation of the equipment includes Test Equipment IE-56-A and Signal Generator BC-906-C or D.

AAF requirements as of 1 February 1945 were 5,000 for the calendar year 1945.

POWER SOURCE	BATTERY
POWER OUTPUT	100 MILLI WATTS
FREQUENCY	176 MC
TYPE OF SIGNAL	PULSE
ANTENNA	2 QUARTER-WAVE DIPOLES
RANGE	12-18 MILES

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	3A5		

TOTAL WEIGHT 4 LBS.