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AN/CPN-16

(AND AN/CPN-16X)

Radar Beacons AN/CPN-16 and AN/CPN-16X are lightweight, airtransportable sea rescue transponders designed to facilitate the location of life rafts by radar equipped searching aircraft. AN/CPN-16 is designed for multiplace rafts while AN/CPN-16X is designed for single-place-raft installation. It operates in conjunction with and provides range and azimuth information to such radars as SCR-521-A, SCR-729-A and AN/APN-12. No special skill is required for the operation of the unit.

In operation this equipment may be automatically interrogated by a searching aircraft, or it may be operated in morse code fashion by the life raft occupant. A monitoring circuit is provided whereby the pilot may search for aircraft in his vicinity and monitor the units transponder action. A continuous operating life of at least 30 hours is expected under most conditions.

The collapsible antenna mast is approximately 59 inches high when extended and is vertically polarized. It is so constructed that it mounts into the life raft socket normally provided for a corner reflector target.

Although the pulse transmitted by AN/CPN-16 is four miles long an experienced scope operator encounters very little difficulty in tracking to a point directly over the raft. The expected range for this beacon is 50 miles against the above radars.

This unit is similar to AN/CPT-2 in application only. It will eventually replace it.

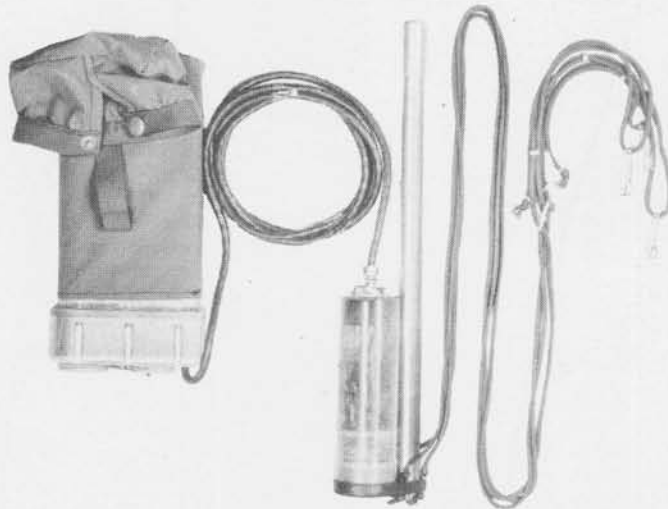
Test Equipment IE-45 is used for the maintenance of AN/CPN-16 and AN/CPN-16X.



Sea Rescue Beacon Transmitter AN/CPN-16, 16X for use in one-man life rafts.

POWER INPUT	"A" BATTERY; 1.5 VOLTS 200 MA "B" BATTERY; 135 VOLTS
POWER OUTPUT	0.5 WATTS (PEAK)
FREQUENCY	176 MCS.
TYPE OF SIGNAL	PULSE
RANGE	50 MILES
PULSE LENGTH	10 MICROSECONDS (APPROX.)

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	455A	1	1D8GT



Components of Radar Beacon AN/CPN-16

**RADAR BEACON AN/CPN-16**

**TOTAL WEIGHT 6 LBS.**

Component	Nomenclature	Size	Weight
Receiver Transmitter	RT-103(XA)CPN	2" x 3" x 15"	1 Lb.
Battery Case	CY-439(XA-3)/CPN-16(XA-2)	10" x 5" x 3"	5 Lbs.

**RADAR BEACON AN/CPN-16X**

**TOTAL WEIGHT 5 LBS.**

Component	Nomenclature	Size	Weight
Receiver Transmitter	RT-103(XA)CPN	2" x 3" x 15"	1 Lb.
Battery Case	CY-440(XA-1)/CPN-16(XA-1)	10" x 5" x 3"	4 Lbs.

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