

Training Equipment AN/APN-T1 is a bench trainer designed to train students in the operation of Radio Set SCR-729. It is intended to present realistically to the student as many as possible of the situations which may arise under actual flight conditions in connection with the performance of SCR-729.

Training Equipment AN/APN-T1 comprises various components of SCR-729, slightly modified. The training unit consists of two chassis, mounted one above the other, and assembled in a double-deck cabinet. The upper chassis contains Code Selector KY-2/APN-T1, while the lower contains RF Generator O-6/APN-T1. Either chassis may be removed through the front of the cabinet by disconnecting the interconnecting cable and removing the proper rack panel screws.

Synchronizing pulses from Radio Receiver and Transmitter BC-800-A are applied to the input circuit of the generator and enter two parallel channels. One channel generates a signal which simulates ground reflections. The other channel generates signals which simulate responses from various beacons and IFF equipment. The code selector works in conjunction with the generator, providing mechanical switching to simulate coding; and also provides a means of switching for the selection of the desired signals. Each of the two generator channels contains an RF oscillator which is modulated by the video signals generated in that channel. The resulting RF pulses from both oscillators are coupled into a common RF output cable and applied to the receiver antenna input of Radio Receiver and Transmitter BC-800-A. These RF pulses are detected and

the video pulses applied in the normal manner to Indicator BC-929-A. Thus, so far as the student is concerned, the indications on the indicator are similar to those occurring under flight conditions. The selection of the video signal, range, azimuth, etc., are at the discretion of the instructor. The instructor can, by suitable manipulation of the controls of the unit, require the student to make any adjustments or observations on SCR-729 which would normally be required of the student under flight conditions.

Two indicators may be connected in parallel in order to provide separate indications for instructor and student. The BC-800-A and BC-929-A are wired so that they can be operated from the 80-volt supply. This permits all units of the equipment to be operated from a common power supply.

No special test equipment is necessary for maintenance of this trainer.

There were no AAF requirements as of 1 February 1945.

POWER INPUT	28 AMPS 24 V. DC
TYPE OF SIGNAL	PULSE

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	6AC7	2	6SN7GT
1	6J5	1	5Y3GT/G
2	955		



Indicator BC-929-A



Visor



Radio Frequency Generator

O-6/APN-T1



Visor



Indicator BC-929-A



Inverter Unit PE-115-A



Radio Receiver and Transmitter



Control Panel BC-703-A



Control Box BC-1145-A

TRAINING EQUIPMENT AN/APN-T1

TOTAL WEIGHT 196 LBS.

Component	Nomenclature	Size	Weight
Radio Receiver and Transmitter	BC-800-A	13" x 13" x 9"	34 Lbs.
Mounting	FT-416-A	12" x 10" x 3"	3 Lbs.
Indicator	BC-929-A (2 each)	9" x 9" x 16" (ea)	26 Lbs.
Mounting	FT-409-A (2 each)	15" x 9" x 2"	3 Lbs.
Radio Control Box	BC-1145-A	3" x 4" x 8"	2 Lbs.
Mounting	FT-406-A	7" x 4" x 2"	3 Lbs.
Radio Frequency Generator	O-6/APN-T1	9" x 19" x 15"	18 Lbs.
Code Selector	KY-2/APN-T1	9" x 19" x 15"	36 Lbs.
Double Deck Cabinet		18" x 19" x 15"	36 Lbs.
Inverter Unit	PE-115-A	12" x 8" x 12"	33 Lbs.
Control Panel	BC-703-A	9" x 10" x 12"	20 Lbs.

and includes plugs, adapters, wire and misc. cable.

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