25 TIME-TESTED

TRANSMITTING TUBES

_			
	Type		Price
9308	303A.	*130 Watts	\$15.00
J.,	304A.	*350 Watts	
CTO	310.	* 25 Watts	5.75
a A	311.	*130 Watts	17.50
	311C.	*130 Watts	
	312D.	*250 Watts	75.00
111	361A.	*130 Watts	17.50
nan	376A.	*130 Watts	17.50
	930.	* 40 Watts	8.75
	930B.	* 60 Watts	10.00
	938.	*130 Watts	18.00
	941.	* 25 Watts	5.75
	942.	Audio	5.75
	945.	Audio	
	949.	*500 Watts	160.00
	951.	*1250 Watts	350.00
	952.	*165 Watts	16.40
44202	911CH.	*150 Watts	
Capital Has	317C.	Vacuum Rectifier	
	966.	Mercury Rectifier	2.25
A THE PLANE	966A.	Mercury Rectifier	
The second of	972.	Mercury Rectifier	15.00
	972A.	Mercury Rectifier	
	967.	Mercury Rectifier	14.00
	973.	Mercury Rectifier	25.00
	* Nom	inal RF Power Output.	
		a property of the same and the	

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28 Mc.

(Continued from page 30)

Sunday thereafter, a special program will be broadcast over W8XAI which will be of exceptional interest to amateurs and short-wave listeners. The broadcast will be on the air from 1:30 to 2:00 p.m., and will deal with 10-meter activities, technical information and interesting data on advancements in the high-frequency field. This broadcast will in no way interfere with the regular schedule of W8XAI. It will continue to operate daily from 7:30 a.m. till 12:08 p.m. EST.

Noise-Silencing I.F. Circuit

(Continued from page 92)

tion of the maximum half-cycle of i.f. noise, which is likely to be unsymmetrical at the rectifier input.

CONSTRUCTION AND OPERATION

No unusual constructional features have been found necessary in the several applications of this silencer system to conventional superhet receivers. A photograph shows the layout of the silencer section and second detector of one receiver in which it is used. (Complete constructional details of this receiver are given in the 1936 A.R.R.L. Handbook, Chapter Seven.) The only extra shielding beneath the base is a baffle separating the noise amplifier-rectifier from the i.f. amplifiersilencer and second detector sockets and wiring. Precautions should be taken, of course, to prevent c.w. beat oscillator r.f. output from getting into the noise silencer circuit. Usual good design will take care of this.

After the circuit connections have been proved by ohmmeter and voltage tests, and with the other receiver circuits in normal alignment, the silencer section is ready for adjustment. The secondary of the input transformer T_2 will be tuned to i.f. resonance using second detector output or tuning meter peak indication. The remaining tuning adjustment is that of the noise rectifier coupling transformer T_4 . Resonance of this transformer will be indicated by peak reading of a d.c. voltmeter connected across the diode load resistor R_{29} on a test signal tuned in with the noise threshold adjustment (R_{24}) set at minimum resistance. Operation of the silencer circuit will then be indicated by complete blocking of the output when a moderate-strength signal is tuned in with R_{24} at this same setting. Backing off on R_{24} will allow the signal to come through in normal fashion. The adjustment of T_4 should be made precisely. If no d.c. voltmeter is available. this transformer can be tuned for minimum noise output from the receiver, using a buzzer, spark coil or similar noise source.

In operation it will be found that the most effective setting of the threshold adjustment R_{24} will vary with different settings of the manual r.f. gain control. For c.w. reception (a.v.c. off), it has been found desirable to set R_{24} for a com-