TABLE I

TABLE FOR USE OF COILS IN 30J TRANSMITTER

OPERATING FREQUENCY KC.	CRYSTAL FREQUENCY KC.	POSITION #1 OSCILLATOR COIL SOCKET	POSITION #2 BUFFER COIL SOCKET	POSITION OF GREEN PLATE LEAD	POSITION OF YELLOW PLATE LEAD	GRID TANK UNIT	OUTPUT COIL UNIT
1715 to 2000	1715 to 2000	7000B-8	7000B-7 1700 KC.	On Insulated Post	On 802 Osc. Tube	131C-15 1700 KC.	130BA-3
3500 to 4000	1750 to 2000	7000B-7 1700 KC.	7000B-4 3500 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-11 3500 KC.	130BA-2
3500 to 4000	3500 to 4000	7000B-8	7000B-7 3500 KC.	On Insulated Post	On 802 Osc. Tube	131C-11 3500 KC.	130BA-2
7000 to 7300	3500 to 3650	7000B-7 3500 KC.	7000B-4 7000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-12 7000 KC.	130BA-1
14000 to 14400	3500 to 3600	7000B-7 7000KC.	7000B-4 14000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-12 14000 KC.	130BA-1
28000 to 30000	3500 to 3750	7000B-4 7000 KC.	7000B-4 14000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-9 28000 KC.	130EC-2
56000 to 60000	4667 to 5000	7000B-4 10,000 KC.	7000B-4 20,000KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-14 56,000 KC.	130EC-1

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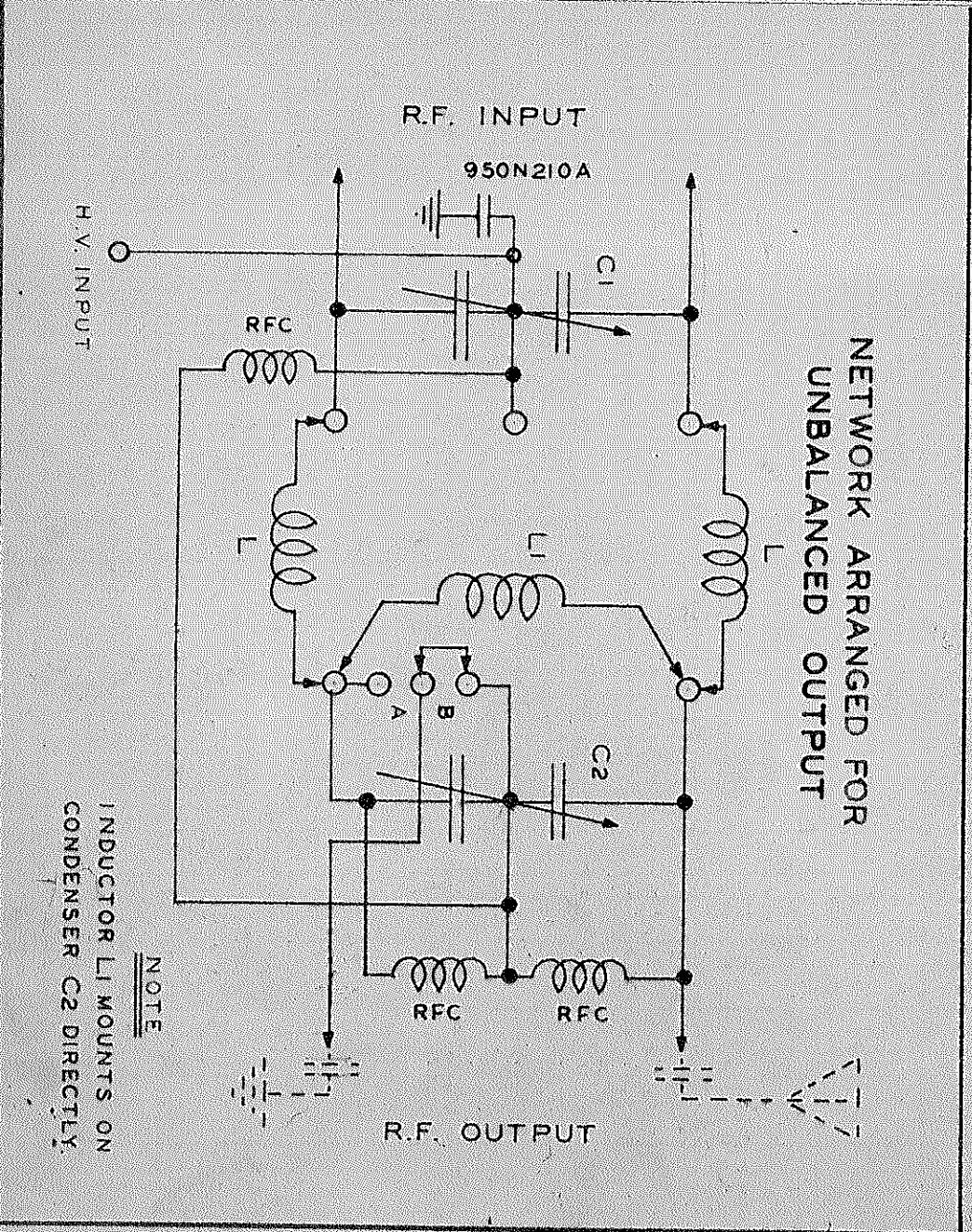
1715 to 2000	1715 to 2000	7000B-8	7000B-7 1700 KC.	On Insulated Post	On 802 Osc. Tube	131C-11 1700 KC.	130BA-3
3500 to 4000	1750 to 2000	7000B-7 1700 KC.	7000B-4 3500 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-11 3500 KC.	130BA-2
3500 to 4000	3500 to 4000	7000B-8	7000B-7 3500 KC.	On Insulated Post	On 802 Osc. Tube	131C-11 3500 KC.	130BA-2
7000 to 7300	3500 to 3650	7000B-7 3500 KC.	7000B-4 7000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-12 7000 KC.	130BA-1
14000 to 14400	3500 to 3600	7000B-7 7000KC.	7000B-4 14000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-12 14000 KC.	130BA-1
28000 to 30000	3500 to 3750	7000B-4 7000 KC.	7000B-4 14000 KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-9 28000 KC.	130BC-2
56000 to 60000	4667 to 5000	7000B-4 10,000 KC.	7000B-4 20,000KC.	On 802 Osc. Tube	On 807 Buff. Tube	131C-14 56,000 KC.	130BC-1

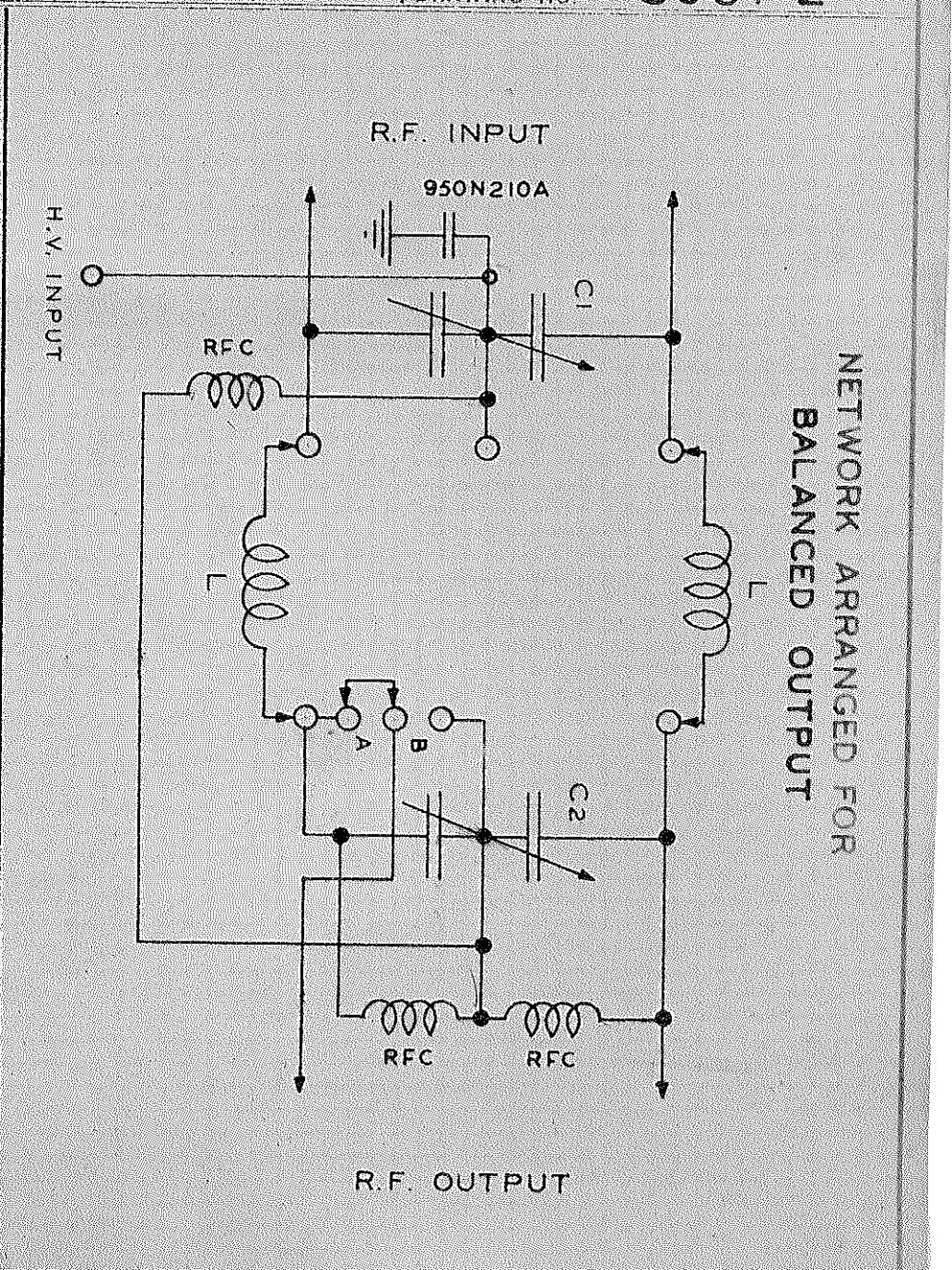
BAND IN KILO CYCLES	XTAL USED KILO CYCLES	TYPE COIL POSITION #1 FREQ. IN KC.	TYPE COIL POSITION #2 FREQ. IN KC.	813 INPUT ASSEMBLY FREQUENCY IN KC.	BALANCED NETWORK 2 COILS REQUIRED	UNBALANCED NETWORK PHASING COILS REQUIRED
1500 / 2100	1500 / 2100	7000 B-8 190 NC P-4	7000 B-7 1500 - 2100 KC. 93T T.B.W. 24 DS C.T. 190 NC P3	131C-11 PLT. 98T. D.B.W. GRID 80T. D.B.W. 24DS CT 3T LINK 10000 W. 190NC02	130BA-3 54T #14BB S.L.W. 190NC04	192B-12 54T 14BB S.L.W. 190NC04 USE PLUG IN CONDENSERS.
2100 / 3000	2100 / 3000	7000 B-8 190 NC P4	7000 B-7 2100 - 3000 K.C. 66T D.B.W. 24DS C.T. 190NC P3	131C-11 PLT. 53T. D.B.W. GRID 47T. D.B.W. 24DS. C.T. 2T. LINK 10000 W. 190NC02	130BA3	
3000 / 4200	3000 / 4200	7000 B-8 190 NC P4	7000 B-7 3000 - 4200 KC 38T D.B.W. 24DS C.T. 190 NC P3	131C-11 PLT. 43T. S.L.W. GRID 40T. S.L.W. 24DS. CT. 2T. LINK 10000 W. 190NC02	130BA-2 29T #10 BB S.L.W. 190NC03	
4200 / 5700	2100 / 2850	7000 B-10 2100 - 2850 K.C. 47T - D.B.W. 24 DS C.T. 190 NC P3	7000 B-7 4200 - 5700 KC 34T S.L.W. 24 DS C.T. 190 NC P3	131C-11 PLT 25T. S.L.W. GRID 23T. S.L.W. 24DS CT. 2T. LINK. 15000 W. 190NC02	130BA-2	
5700 / 8000	2850 / 4000	7000 B-10 2850 - 4000 KC 32T D.B.W. 24 DS C.T. 190 NC P3	7000 B-7 5700 - 8000 KC 20T S.L.W. 24DS C.T. 190 NC P3	131C-12 PLT. 23T SLW GRID. 21T SLW #16E CT 2T. LINK 15000 W. 190NC01	130BA-2	
8000 / 11000	2000 / 2750	7000 B-10 4000 - 5500 KC. 30T S.L.W. 24 DS C.T. 190 NC P3	7000 B-4 8000 - 11000 K.C. 12T S.L.W. 24DS C.T. 190 NC P3	131C-12 PLT 13T SLW GRID 13T SLW #16E CT 1T. LINK 15000 W. 190NC01	130BA-1 15T #10 BB S.S.W. 190NC03	
11000 / 14500	2750 / 3625	7000 B-10 5500 - 7250 K.C. 17T S.L.W. 24 DS C.T.	7000 B-4 11000 - 14500 K.C. 11T S.S. 18BB C.T. 190 NC P3	131C-12 PLT. 8T. SLW GRID. 8T. SLW #16E CT 1T. LINK 15000 W. 190NC01	130 BA-1	
14500 / 20000	3625 / 3300	7000 B-10 7250 - 10000 KC 14T S.L.W. 24 DS. C.T. 190 NC P3	7000 B-4 10000 - 20000 KC 7T 18BB - END TURNS ARE D.S. REST = S.S. C.T. 190 NC P3	131C-12 PLT & GRID 6T EACH #16E - C.T. ~~S.W.~~ - END TURNS DSW - REST S.S.W. 20,000 W. 190NC01	130BA-1	

130E PHASING COILS
NO 1 = 12T SS
3 = 16T SS
4 = 9T SS
9 = 25T CLSE
10 = 12T CLSE
12 = 34T CLSE
NO 13 = 15T CLSE
18 = 6T SS

192B-12 PADS
2 OF EACH REQUIRED
.001 MMFD. } TYPE 906
.0015 "
.002 "
.005 "

MAT.:	GRADE:	DRAWN BY: M. S. S. DATE: 5-16-1938 TRACED BY: R. G. A. DATE: 5-18-1938 CHECKED BY: M. S. DATE: 6-3-38	COLLINS RADIO COMPANY CEDAR RAPIDS, IOWA
FINISH:			
UNIT:	122C SCHEMATIC DIAGRAM	SCALE	DRAWING NO. 5067-2





TRANSMITTER METER READING RECORD

	Ph	CW			
Frequency/Power	2400 KC				
Oscillator					
Fil. Voltage					
Plate Voltage					
Plate Current					
~~1st Doubler~~/Amp.	802	802			
Fil. Voltage	6.1	6.1			
Bias Voltage	-90	-90			
Screen Voltage	200	200			
Plate Voltage	340	340			
Grid Current	.75	.75			
Plate Current Cathode	16	15			
2nd Doubler/Amp.					
Fil. Voltage					
Bias Voltage					
Screen Voltage					
Plate Voltage					
Grid Current					
Plate Current					
3rd Doubler/Amp.					
Fil. Voltage					
Bias Voltage					
Screen Voltage					
Plate Voltage					
Grid Current					
Plate Current					
4th Int/Amp.	2-807	2-807			
Fil. Voltage	6.3	6.3			
Bias Voltage	-140	-140			
Screen Voltage	120	120			
Plate Voltage	370	370			
Grid Current	.7	.7			
Plate Current Cathode	30	30			
Final Amplifier	2-813	2-813			
Fil. Voltage	10.0	10.0			
Plate Voltage	1200	1230			
CW Bias Voltage		-155			
Ph. Bias Voltage	-150				
R.F. Grid Voltage Ph.	360	360			
C.W. Grid Current		16			
Ph. Grid Current	16				
C.W. Plate Current		300			
Ph. Plate Current Total	385				
Ant. or Line Current	2.4	2.5			
Lead	300 ma Lamp				
Power Output					
C.W.					

TRANSMITTER TUNING DATA

FREQUENCY/POWER	2170KC	2170 KC			
Oscillator	802	802			
Condenser		—			
Coil		B-B			
Dial Reading					
Dial Reading A		—			
1st Doubler/Amp.					
Condenser					
Coil					
Dial Reading					
Dial Reading					
2nd Doubler/Amp.					
Condenser					
Coil					
Dial Reading					
Dial Reading					
3rd Doubler/Amp.					
Condenser					
Coil					
Dial Reading					
Dial Reading					
4th/Int. Amplifier	2-807	2-807			
Condenser		140-140			
Coil GRID		B7			
Dial Reading B		31			
Dial Reading D		75			
Final Amplifier	2-813	2-813			
Condenser GRID		140-140			
Coil GRID		131-11			
Dial Reading E		42			
Dial Reading					
Antenna Network	Balanced	Unbalanced			
Coil TURNS		37-37			
Padding Cond. Pos.	ANT	ANT			
Value	5	.001-.001			
Load	2	300W Lamp			
Dial Reading Plate	5	56			
Condenser ANT	2	72	.005 Blocking condensers		
Inductor or ~~Cond.~~ Phasing	2	15 TURNS			