

29/9/56

Overall Performance R.F. System.

1 LNS into 1A7G, Input 10mo with 80+52Ω parallel dummy
 100KΩ resistor across 1LNS, 330KΩ resistor across 1A7G
 1/2 meg grid return 1LNS, 2 meg grid return 1A7G.

1 LNS $E_p=98V$, $E_{gg}=80V$, $R_{SG}=33KΩ$, $I_{SG}=.55ma$
 $I_{K}=2.2ma$, $I_p=1.65ma$

Freq	200	170	140
Dial	91.5, 100.0	37.0, 52.0	3.0, 2.0
Peaks	KC	204, 197	174, 167
	Band	7	7
	Volts	25.6	22.0
	Gain	68.2 DB	66.8 DB
Dip	KC	200	170
	Volts	24.8	19.2
	DB	0.26	1.16
3DB	KC	205.5, 194.5	175, 165
	Band	9 KC	10 KC
20DB	KC	210, 190	178, 162
	Band	20 KC	16 KC



antenna dial set for 0.0 on mark with condenser
 Most Don't Know fuff pipe

KC	Dial	Dial. Output	3DB	10DB	Gain
200	92	100			
190	68	82			
180	51	68			
170	36	52			
160	22.5	36			
150	12	20			
140	2	2			

additional earlier dial calibration

29/9/56

Performance of R.F. Stage only.
 Input 77mc thru 0.1 mfd to grid 1LN5

Freq	200	170	140	
Dev	100.0	52.0	2.0	
Peaks	KC	204, 196	174, 166	143.5 136.5
	Band	8KC	8KC	7KC
	Volts	11.8	11.1	9.5
	Gain	43.7 DB	43.2 DB	41.8 DB
Dip	KC	200	170	140
	Volts	11.0	8.8	6.3
	DB	0.60	2.0	3.6
3DB	KC	206, 194	175.5, 164.5	145, 135
	Band	12KC	11KC	10KC
10DB	KC	210 190.5	177.5, 162.5	146, 134
	Band	19.5KC	15.0KC	12KC
20DB	KC	213 186	180.5, 159.5	150.0, 131
	Band	27KC	21KC	19KC



WEST POINT KINGS HOTEL

29/9/56

Input System Performance

Coupling such that distance from inside edge of black bakelite panel to outside of aluminium box $2\frac{9}{16}$ "

Antenna dummy $80\Omega + 52\Omega$ in parallel

Output of signal generator Max output (500 mw?)

Diode load (1st grid) $\frac{1}{2}$ meg.

Secondary shunted by $275 K\Omega$

Freq. KC	ant Dial	R.F. Dial	Output Volts	3dB Band	10dB Band	Gain
140	3.5	1.0	1.20	10KC	14KC	+7
150	14.0	18.9	1.25	10KC	18KC	+9
160	25.0	34.6	1.25	11KC	19KC	+9
170	39.0	51.0	1.30	12KC	20KC	+11
180	54.0	66.1	1.30	14KC	23KC	+13
190	74.0	80.3	1.35	16KC	27KC	+17
200	100.0	100.0	1.35	?	?	-10

With 10mw input, output 0.35V

Ventouse potential

0.25V

Net output $(1.35^2 - 25^2) / 2 = .25$ volts

Antenna gain = $\frac{.25}{101} = 25$ times

.1225
.0625
.060

26/9/56

Tubes, voltage, input, coils same.
 Coupling capacity 2.16 pf. Trimmer 2 1/2 turns
 450K- Ω 1A7 grid to grid, from end.
 adjusted for equal peaks at 170 KC

Dial	100	51	0
	209.0 KC	173.5 KC	143.0 KC
Peak	12.6 V	11.4 V	9.5 V
	196.0 KC	166.0 KC	136.0 KC
	11.6 V	11.4 V	10.1 V
band	8.0 KC	7.5 KC	7.0 KC
Dip	200.0 KC	170.0 KC	139.5 KC
	11.4 V	9.1 V	6.7 V
	0.52 DB	1.95 DB	3.30 DB
3DB Freq	206.0 KC	175.0 KC	144.0 KC
	194.0 KC	165.0 KC	138.0 KC
Band	12.0 KC	10.0 KC	9.0 KC
20 DB Freq	186.0 KC	180.0 KC	149.0 KC
	213.0	159.0 KC	131.0 KC
Band	27.0 KC	21.0 KC	18.0 KC
Gain	157 turns	148 turns	127 turns

over -

Freq	Dial	Δ div
140	1.0	17.9
150	18.9	15.7
160	34.6	
170	51.0	16.4
180	66.1	15.1
190	80.3	14.2
200	100.0	19.7

WEST POINT RIVIERA HOTEL
 PROPRIETORS:
 AUSTRALIAN NATIONAL HOTELS LTD.
 SANDY BAY, HOBART

TELEPHONE:
 9516 (4 LINES)



1 6N5 tube with 1A7 tube.
 97V plate + screen

Coils 1 1/4" spacing 70mw input
 Coupling capacitor 3.8 pf, 40 ohm
 3 3/8 T from end

Dial 100 51 0

$I_k = I_{sg} + I_p = 2.7 \text{ ma}$
 Probe 203.5KC 173.0KC 143.0KC
 output 14.2V 15.3V 13.2V

196.5KC 166.0KC 136.5KC
 14.2V 16.0V 14.0V

Band 7.0KC 7.0KC 6.5KC

Dip 200KC 170.0KC 139.5KC
 11.9 11.4V 8.1V

1.53 DB 2.77 DB 4.5 DB

3DB freq 205.0KC 165.0KC 144.0KC
 " 195.0KC 174.5KC 135.0KC

3DB band 10.0KC 9.5KC 9.0KC

20DB freq 210.5KC 179.0KC 147.0KC
 189.0KC 161.0KC 132.0KC

20DB band 21.5KC 18.0KC 15.0KC
 Gain 185 turns 205 turns 176 turns

No filter load.
 Imag divide load in grid 1A7 tube

22/9/56

Dip	100	45	0
Center	200KC	168KC	140KC
Peak	203	169	143
	196	163	137
Width	6KC	6KC	6KC
Dip	147/141	160/135	139/104
	0.36 DB	1.47 DB	2.51 DB
3DB	205.5	171	144.5
Band	194.5	161	135.5
Width	18.0KC	10KC	9KC

With 10mw into grid from
80 Ω or 50 Ω , Output is

~~or gain 65 times~~
20DB with 32KC 26KC 22KC

1 1/2" coil spacing
Peak Top capacitors about 2 pf.

Output with 10mw input 2.7volts 2.9volts 3.1volts

No resistor across secondary.
1meg diode load.

Gain 270X 290X 310X
3E6 tube into pair 1N5 tubes
cathode current.
77volts Ept 55



TELEPHONE:
9516 (4 LINES)

WREST POINT RIVIERA HOTEL

PROPRIETORS:
AUSTRALIAN NATIONAL HOTELS LTD.
SANDY BAY, HOBART

*Trial Calibration on auto
of Trip*

<i>Freq</i>	<i>Trials</i>	<i>Dist</i>
140	0.0	19.2
150	19.2	17.3
160	36.5	14.7
170	51.2	15.0
180	66.2	15.3
190	81.5	18.5
200	100.0	