

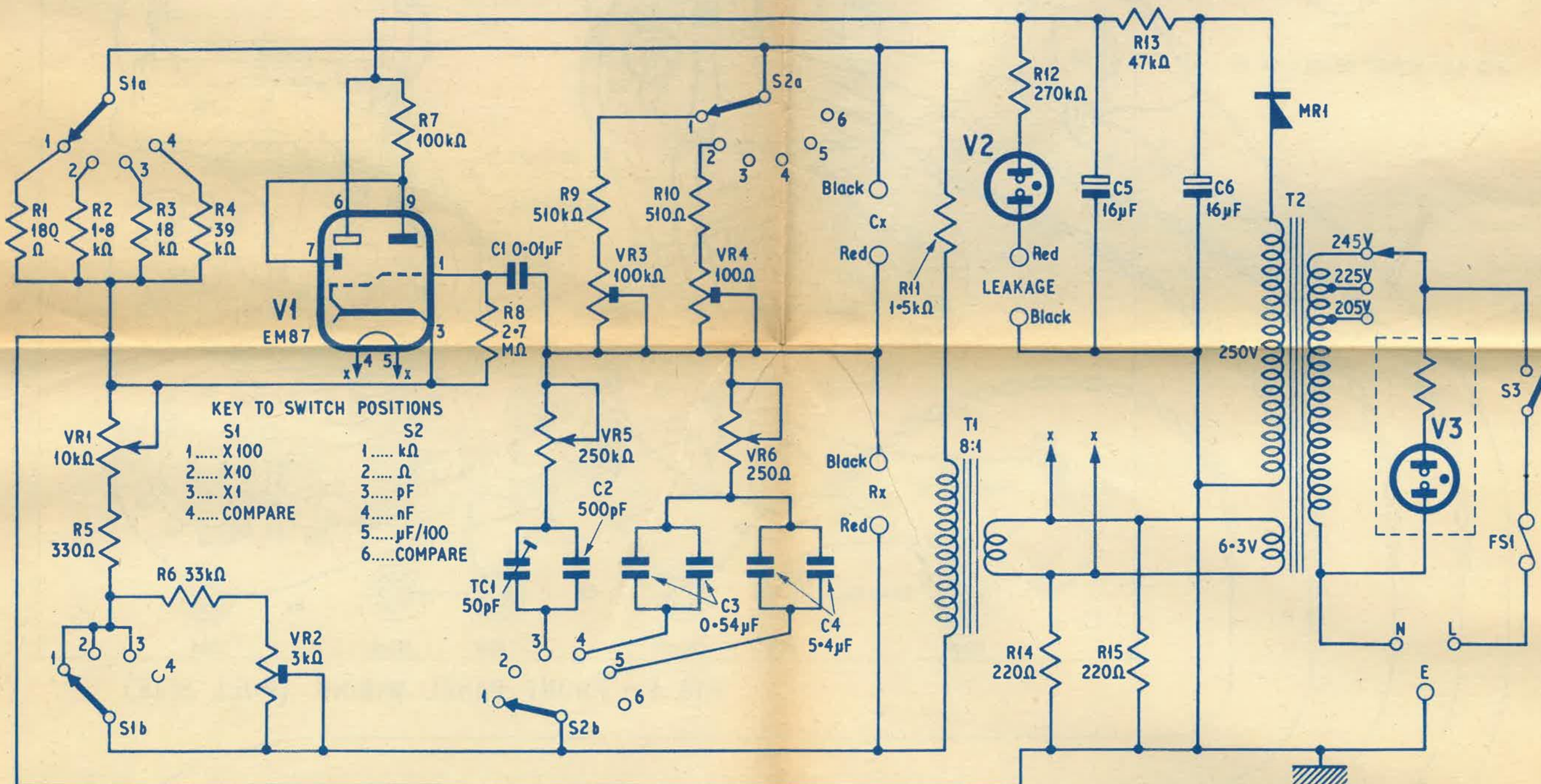


FIG. 1 - THE CIRCUIT DIAGRAM

COMPONENTS LIST

Resistors							
R1	180Ω	2%	R6	33kΩ	2%	R11	1.5kΩ 5W wire wound
R2	1.8kΩ	2%	R7	100kΩ	10%	R12	270kΩ 10%
R3	18kΩ	2%	R8	2.7MΩ	10%	R13	47kΩ 2W
R4	39kΩ	2%	R9	510kΩ	2%	R14	220Ω 10%
R5	330Ω	2%	R10	510kΩ	2%	R15	220Ω 10%

All the 2% resistors are Radiospares "Oxide 1W" type, but closer tolerance types may of course be used.

Potentiometers				
VR1	10k Ω	precision—see text.	VR4	100 Ω wire wound, pre-set
VR2	3k Ω	wire wound, pre-set	VR5	250k Ω carbon, linear
VR3	100k Ω	carbon, linear, pre-set	VR6	250 Ω wire wound, linear

Capacitors					
C1	0.01 μ F	paper	C4	5.4 μ F	paper (see text)
C2	500pF	silver mica 1%	C5	16 μ F	electrolytic 350V
C3	0.54 μ F	paper (see text)	C6	16 μ F	electrolytic 350V

} dual unit

TC1 50pF compression type trimmer

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Transformers	
T1	"Standard" output transformer (Radiospares)
T2	"Midget" mains transformer (Radiospares)

Valves	
V1	EM87 "magic eye" indicator
V2	Neon bulb (M.E.S. base)
V3	Neon mains indicator (Radiospares "Panel Neon") with self-contained resistor

Switches	
S1	3 pole, 4 way (Radiospares "Maka-Switch")
S2	2 pole, 6 way (Radiospares "Maka-Switch")
S3	S.P.S.T. toggle type, 1A 250V

Rectifier	
MR1	Half wave, contact-cooled, 250V 50mA (Siemens E250C50)

Miscellaneous
FS1 1A miniature cartridge fuse and holder
Three red terminals, three black terminals. 360 protractor. One large knob. Two small knobs. Two pointer knobs. One B9A valveholder. Four feet for case. Aluminium chassis 10in x 7in x 2½in approximately. Aluminium sheet (20 s.w.g.) for front panel and brackets. Mains connecting cable (2A 3-core). Carrying handle. Tag strips.

MATERIAL.....20 S.W.G. ALUMINIUM

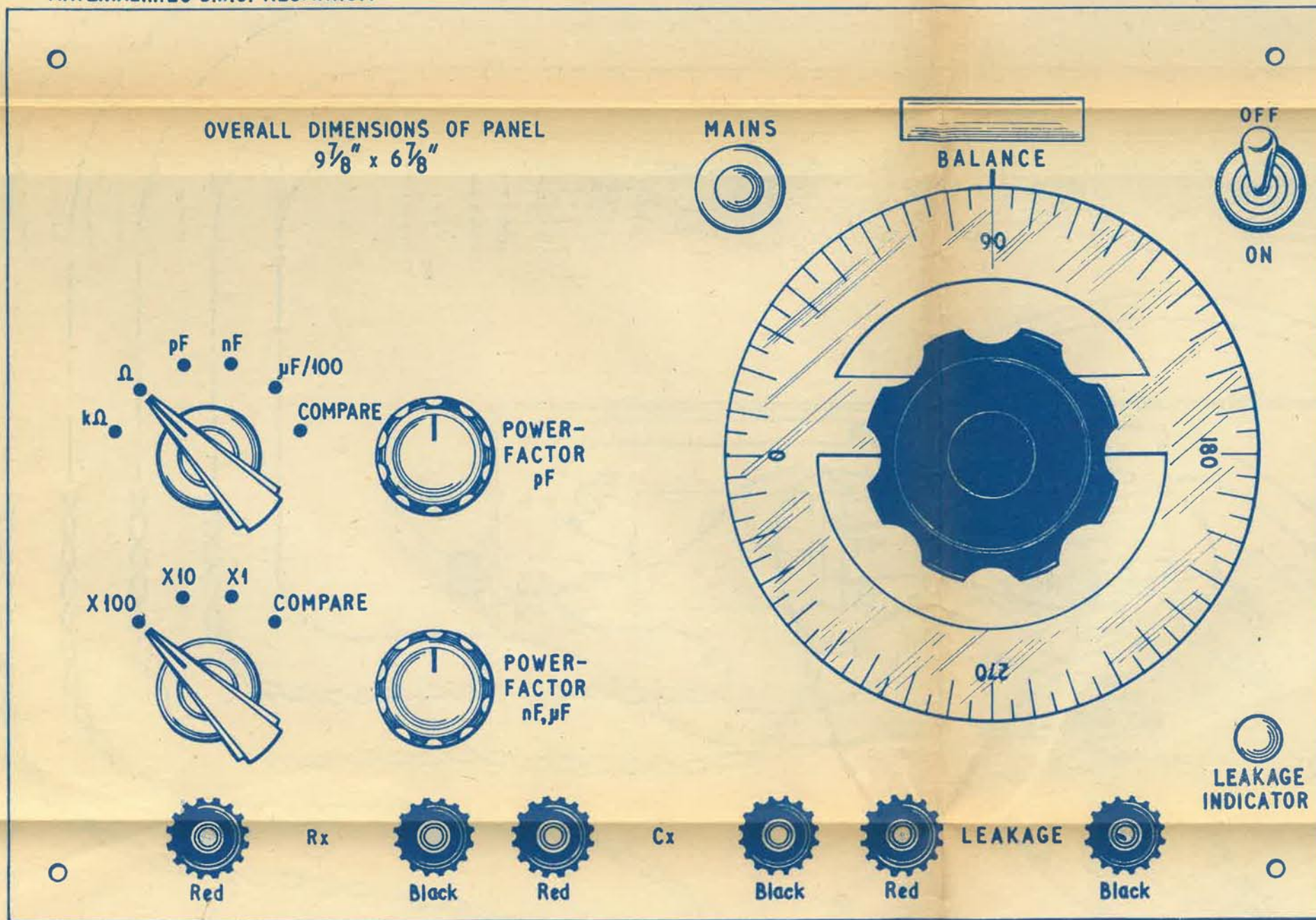


FIG. 2 - CONTROL PANEL LAYOUT (FULL SIZE)

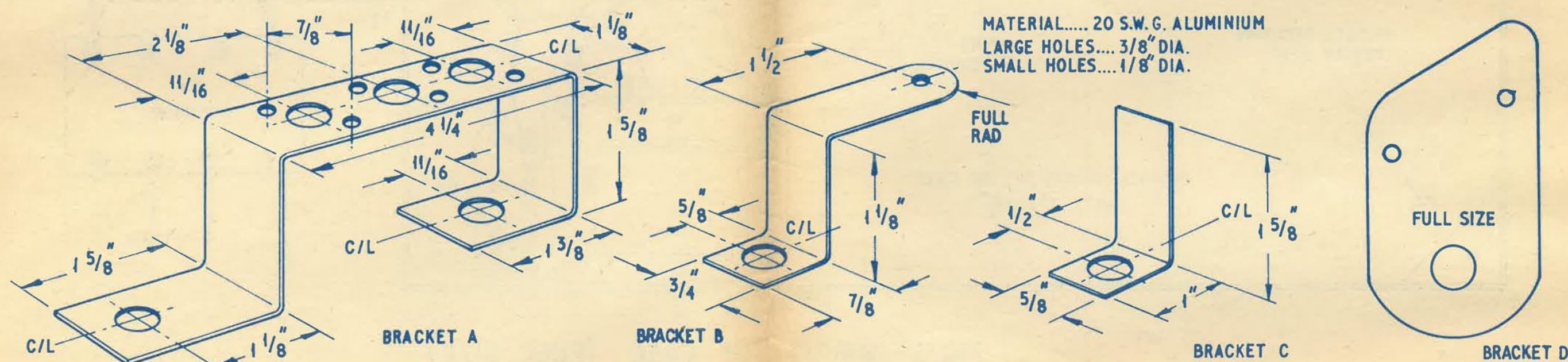


FIG. 3 - DETAILS OF BRACKETS