

## Experimental Solid State Replacement for 1L6

By W. E. (Bill) Wetzner

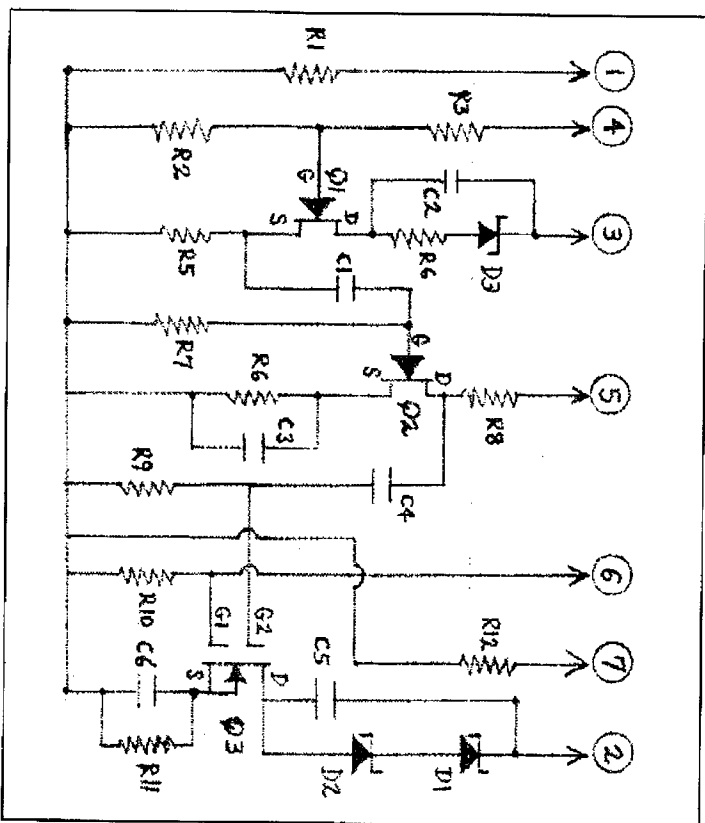
As anyone who is familiar with servicing certain models of Zenith Transoceanics is aware, the 1L6 converter tube is now a rare commodity. Current prices (if you're lucky enough to find one) range from \$30.00 on up and seem to increase exponentially with each passing year. I have read that with some minor rewiring, the more common and much cheaper 1R5, will substitute; but higher band short wave reception is sacrificed. A couple of years ago, someone passed this schematic on to me via the internet and stated that it out performed the 1L6 tube. Perhaps someone who is willing to experiment could build this circuit and give it a try in a working Transoceanic. If you decide to give it a try, please contact me and let me know if, or how well it worked.

### Parts

C1	120 pF	D1	56 V, 7e	R1, R12	15 ohms
C2	0.001uF	D2	90 V, 7e	R2	2.2 Mohms
C3	0.001 uF			R3	130 ohms
C4	0.001 uF			R4	(remove)
C5	0.015 uF			R5	2 Kohms
C6	270 uF			R6	22 Kohms
				R7	470 Kohms
				R8, R9	10 Kohms
Q1, Q2	ECG312			R10	1.0 Mohms
Q3	ECG222			H11	560 ohms

Capacitors may be rated at 500 V or higher.

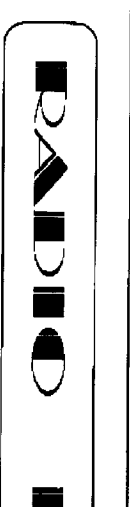
All resistors are 1/2 watt except for R1 and R12 which should be 1 watt.



Schematic

Numbered circles at top of diagram indicate tube pin numbers (1&7 are filament)

For additional information reference the internet site:  
[www.freyvald.org/~pudgeit/1l6solid.htm](http://www.freyvald.org/~pudgeit/1l6solid.htm)



Stag

Live radio performances of Old Time Radio, featuring the "The Bickersons" and other radio favorites! The hour long show contains live music and a performance of your favorite old radio programs of the 1940's and 50's.

Sundays at 2 PM  
 Jan. 31 - Mar. 14  
 call 713-527-8243  
 Cost \$ 5