

S/1 NEWS

Here are some possible transistor substitutions based on Universal General Electric replacements which are generally available:

| | |
|---------|----------|
| 40235 | GE-17 |
| 2N2222A | GE-20 |
| 2N5187 | GE-20 |
| MPS3702 | GE-221 |
| 2N5184 | GE-222 |
| 2N5183 | GE-47 |
| TIP29A | GE-28 |
| 2N3866 | GE-60 |
| 2N5485 | GE-FET-2 |
| 2N3391 | GE-212 |

Arcing sometimes occurs between the diodes in the 1500-volt supply and the board foil. This can be cured by removing the power supply board, and scraping off the foil on the board near the arcing locations. (This problem was described by W101U)

Has anyone built up a small counter from an old Nixie type readout board?

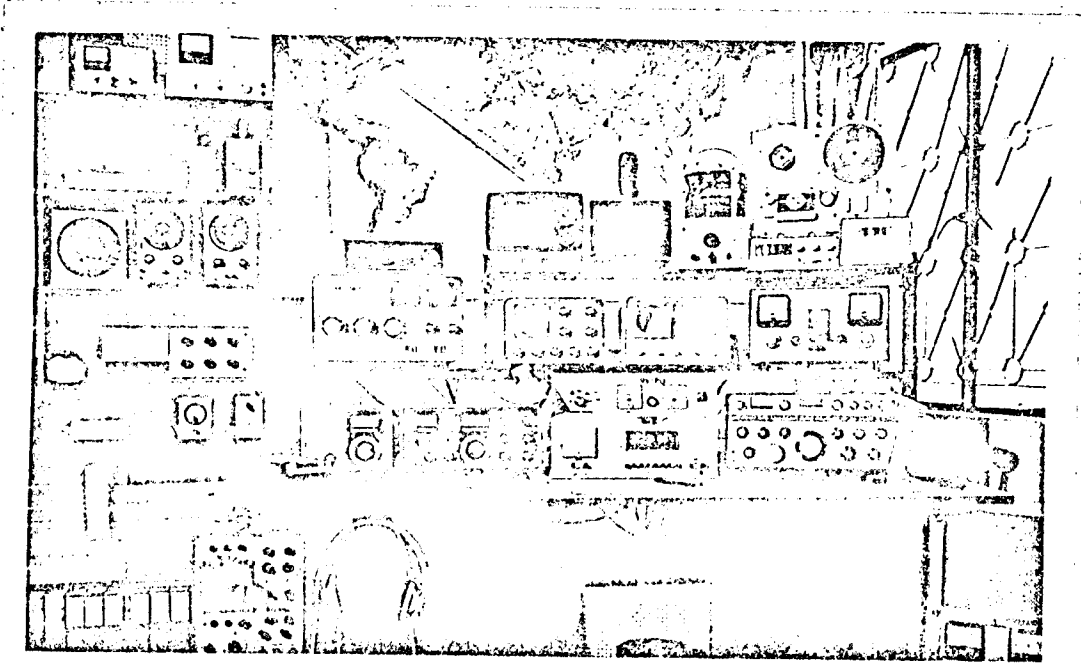
Keith, W7FS, writes to describe how he cured feedback resulting with the Autek QF-1 filter used with his CX7. Keith found that the front panel phone jack on the CX7 is not well grounded in some cases due to the fact that the lock washer does not completely penetrate the paint on the panel. Tightening this jack cured his problems with the QF-1. Keith also notes that he cured his feedback problems on 10 and 15 meters by changing his microphone cord to a high quality woven-braid type rather than the inexpensive wrapped type of mike cable. (There is little doubt the CX7 is very susceptible to all kinds of feedback problems - grounding is important)

The following subscriptions are due:

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OCT-76

Here is another interesting photograph. The shack belongs to former 9V1PQ. The photo was not taken during or after a contest .. it is just too neat! Please send a black & white photograph of your station .. it is always interesting to see what the other guy has. I will be glad to return your photo if desired.



Received a note from Joe, W4SXX, concerning the mounting of driver transistors. During replacement of the two TRW units (Q3 and Q4 on the driver board), Joe noted that one of the emitters on each transistor was left unconnected. It is generally accepted practice to connect both emitter leads. During testing with new TRW units installed and with only one emitter lead connected, the CX7 would oscillate - high plate current with the GAIN control advanced only a few degrees. This oscillation was completely cured by connecting both emitters (to each other) on Q3 and Q4. With the emitters connected, the CX7 will not oscillate on any band even out of its case and adjacent to an antenna tuner. (Thanks for taking time to write, Joe .. hints concerning oscillations with the CX7 are always useful .. ed)

If anyone is interested in selling a SIGNAL/ONE or parts of any kind, please write so we may advertise. I am asked from time to time where to find used CX7's .. both working and for parts. ed.

Does anyone object to me publishing a listing of calls and serial numbers?

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Information concerning repairs by K6BE (Now K6BE/5, 2200 Corley Dr. #7E, Las Cruces, New Mexico, 88001 - 505 522 3705): His repair rate is \$25 per hour and has available the following:

RIT modification; This operates on VFO A, functions on both SSB and CW, also with transmitter offset in use. Uses FSK knob. For RTTY, FSK circuit is still useable with external control connected in fsk line. Tuning range adjusted to order. \$40, including installation and alignment.

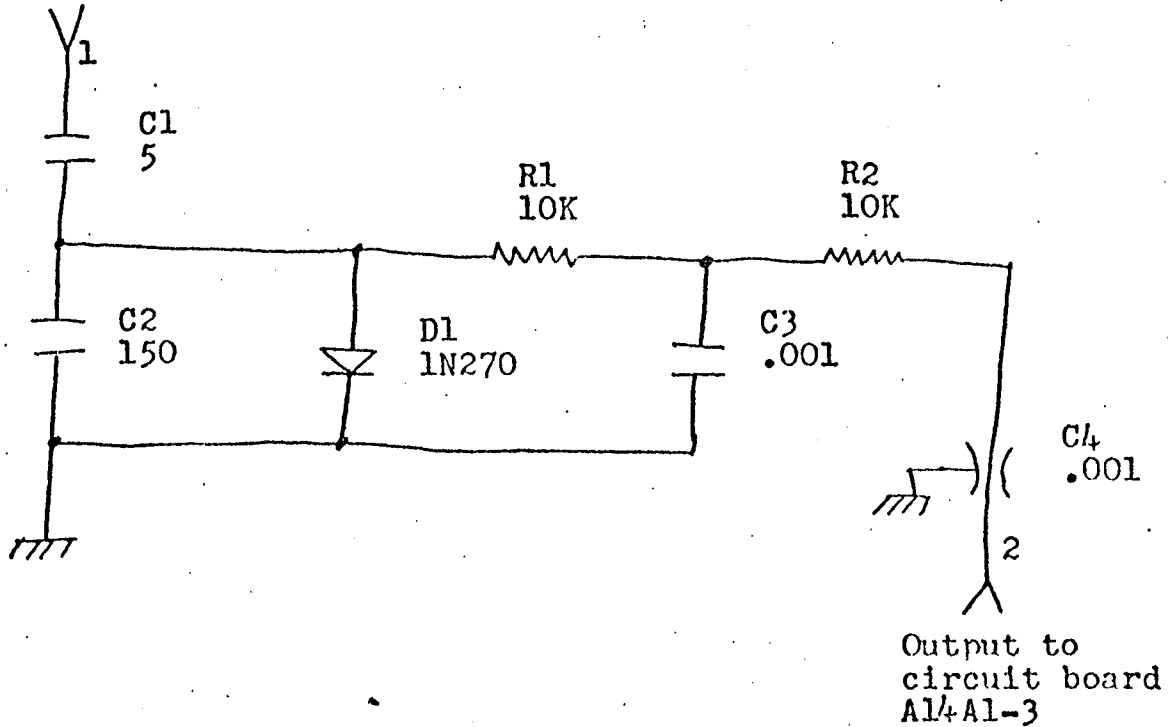
High Power Protection; Use any antenna, or even no antenna! No damage will occur to radio. Allows operation at high SWR with automatically reduced input power. Eliminates spike in RF output. Eliminates arcing in bandswitch and broadband switch. Includes amplified screen ALC, limits screen to 15 ma. with no distortion, protects 8072, and permits easy manual tuning. Operates in all modes, both in broadband and manual. \$175 including installation and alignment.

Attached to this issue are schematics of the above described High Power Protection modification by K6BE/5. Our thanks to K6BE for this information .. ed.

PA Protection Assembly A14

 Loading Capacitor R.F. Detector A14A3

R.F. Input
 from A10-E32



- C1. 5 pf., 1 kv, NPO disc. Sprague 10TCC-V50
- C2. silver mica
- C3. 1 kv disc
- C4. feed-thru. See note
- R1, R2. 1/4 w.

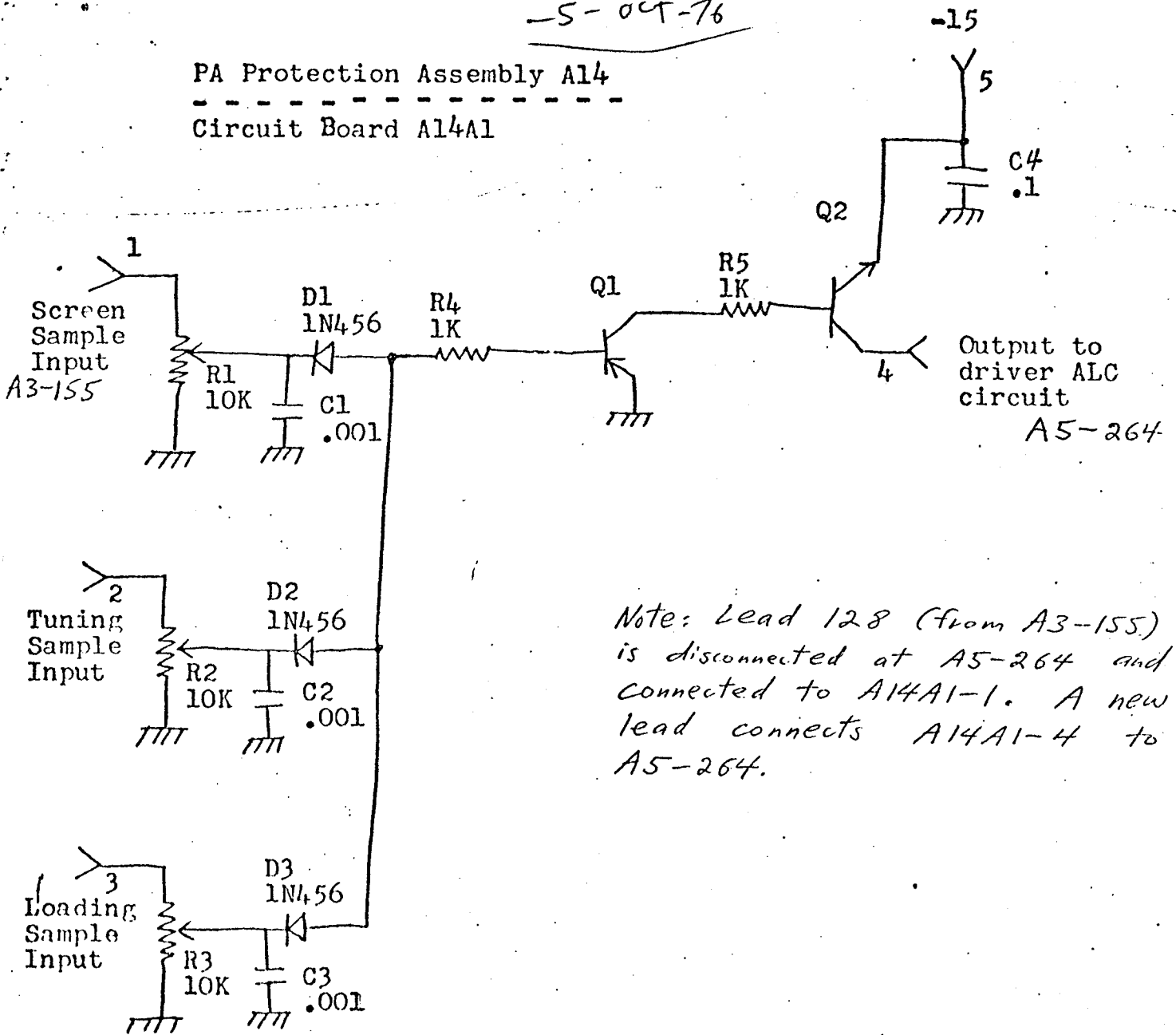
Notes:

1. C2, D1, R1, C3. mounted on miniature terminal strip at front bottom of lower PA box, near insulator for E32
2. C4 is existing feedthru, A10A2C15, terminal A10-4. L2 is removed and K1-13 is tied to ground inside lower PA. This prevents access to the ground side of the external PA relay contacts thru the accessory connector P5, which is not needed by modern amplifiers. Leads to A10-4 are removed, tied together, and insulated.
3. C1. between E32 and terminal strip.
4. R2. attached to C4.

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PA Protection Assembly A14

Circuit Board A14A1



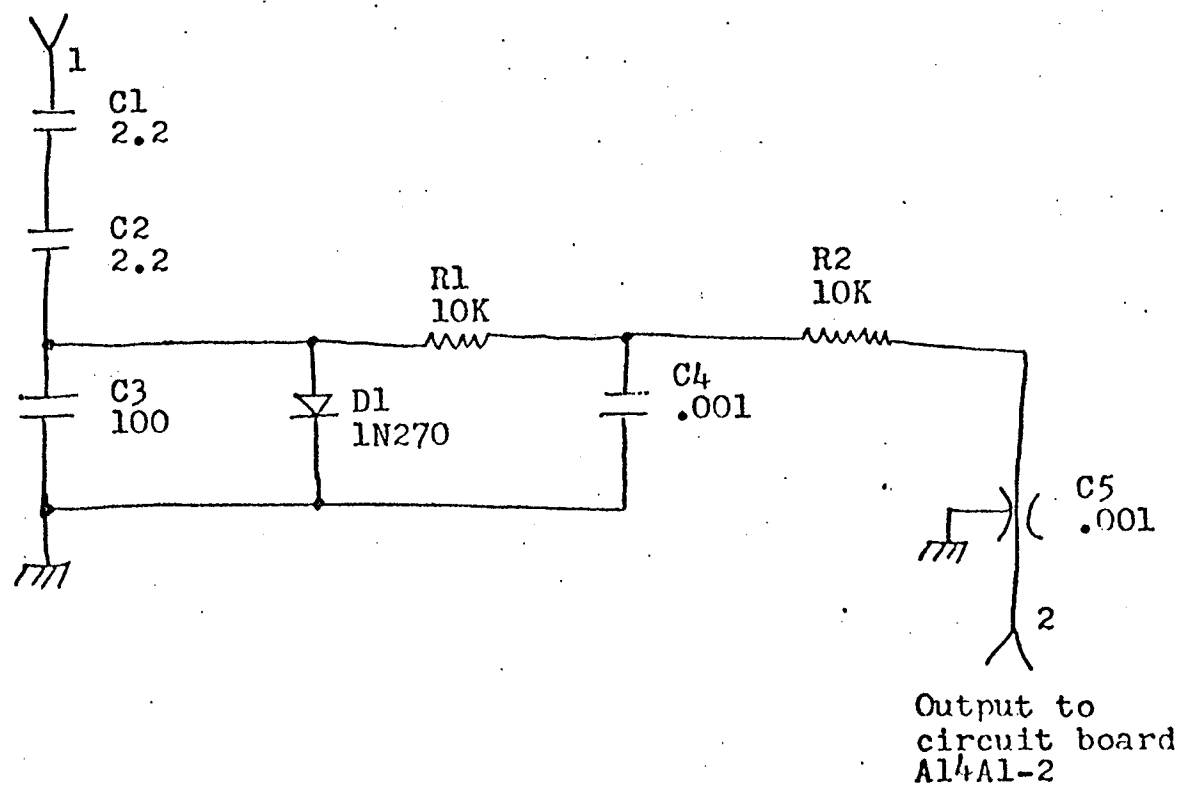
Note: Lead 128 (from A3-155) is disconnected at A5-264 and connected to A14A1-1. A new lead connects A14A1-4 to A5-264.

- R1, R2, R3: miniature trimmer, CTS X-201-R103B.
- C1, C2, C3: 1 kv disc.
- C4: 100 v. disc.
- R4, R5: $\frac{1}{4}$ W.
- Q1: 2N5226
- Q2: 2N5225

PA Protection Assembly A14

 Tuning Capacitor R.F. Detector A14A2

R.F. Input
 from A10-E29



- C1, C2: 2.2 pf., 1 kv, NPO disc. Sprague 10TCC-V22
- C3: silver mica
- R1, R2: 1/4 w.
- C5: feed-thru.
- C4: 1 kv disc

- Notes:
1. C3, D1, R1, C4. mounted on miniature terminal strip fastened to left side of upper PA box above insulator for E29.
 2. C1, C2. between E29 and terminal strip.
 3. R2. attached to C5.
 4. C5. mounted at center top on front of upper PA box.