

Response to the trial issue of the newsletter has been quite good. I appreciate all the comments I received many of which appear later in this issue. Henceforth the newsletter will be known as S/1 NEWS...suggested by Jan, W8SWN.

I receive many letters describing problems of one kind or another and in many cases I do not have an answer or know where to get one. Starting with this issue, I will include a section called INFORMATION WANTED. In this way someone might see the item who has had the same problem and solved it. In this case, I would hope he would write to me for publication of the item.

It seems that most prefer a net on 80 meters. Considering the present state of the higher bands (closed after local sunset), I tend to agree. I suggest 3815 at 0200Z. (I guess I better get an antenna up for 80 myself!). For starters I suggest Thursdays and Sunday evening.

There is one point I would like to make very clear to all readers: Although I will frequently provide information concerning where to purchase parts; where to have CX7's repaired; where to have modifications made, etc., this in no way should be considered an endorsement of the company or individual concerned by myself or by the person who provided the news item.

Based on all the letters I have received to date one item appears to come up frequently: It is better to try and repair your CX7 yourself rather than send it to someone. I have received many reports of unsatisfactory results; long waits, etc. I agree with this .. it is a rare ham that cannot 'do it himself' or find someone to help him. (With these rigs try and make friends with someone who has a frequency counter!!)

Please write me at POB 6216, Arlington, Va., 22206 or Rob, WB4RSK, 2334 Regal Court, Lawrenceville, Ga., 30245 with any information you think might be of interest to other owners.

#### GENERAL INFORMATION

Let's try to compile a listing of serial numbers so that it will be possible for others to know when and where their unit was manufactured. This might make it easier when providing repair information. Let me know the serial number of your unit, where purchased, when, etc.

W2LL indicates that he understands a 40823 makes an excellent substitute for the mixers.

How about a Worked All States/Signal-One award? This might be fun for the certificate hunters. I do not have the time to take this on .. would anyone like to volunteer to run such a program? Let me know.

FEB-75

When you are trouble-shooting your rig for whatever problem you have, keep a sheet of voltage/resistance readings..both normal and abnormal. Send them to me and I will make up tables for publication for the use of others.

A common complaint is the paint rubbing off the front panel pushbuttons. The best cure for this is to have the buttons re-engraved at a local engraver (not very expensive) and have him refill the lettering.

If anyone is looking for a Signal/One item or has such an item to sell, write me and I will include it in a future issue of S/1 NEWS. Signal/One related ONLY please!

WØNVE informs me that KØHHP builds LED readouts and will make the modification. Although WØNVE did not so indicate, I assume further details are available from KØHHP.

#### MODIFICATIONS AND REPAIR INFORMATION

WØNVE advises that the ECG222 is equal to or better than the 40673. He also recommends fusing the 15v and 34v supplies since the primary fuse will not protect the low-voltage transformer windings. (This is a GOOD idea since power transformers are expensive and getting hard to come by..ed)

WB4RSK writes that Johnson & Associates at 211 South Ewing, Clearwater, Fla., 33156 still has "B" type power supply boards available for \$95.00 but the supply is running low. Rob wired in one of these new boards and relates the following problems (and solutions):

Problem: Screen current shows 10ma in receive.

Solution: R3 wrong value as received. Replace R3 from the old board. Screen current will now read 0 in receive as it should.

Problem: Plate current meter not accurate.

Solution: R2 wrong value as received. Replace R2 from the old board.

Problem: Where to connect wires #123 and #124 (not noted on instructions).

Solution: #123 to #53 and #124 to #54.

Problem: Instructions say use 5K/2-watt resistor across C2 but 2200/2-watt is provided.

Solution: Use the 2200-ohm unit. (Confirmed by Johnson in Florida. The new value reduces the reset time of SCR Q2)

more...

A final word of caution before wiring in the new board: CAREFULLY inspect the board before installing for solder bridges and other mechanical problems. (A solder bridge on WB4RSK's unit caused loss of audio).

Also from WB4RSK: The description of checking MOSFETS was a bit unclear and should be corrected as follows:

Carefully measure the voltage at G1 or G2 and make certain they are positive, (or ground). With a zero or positive voltage at G2 and G2, connect G2 to -15 VDC through a 1K resistor and measure the voltage at S. S should be zero. Now do the same with G1. If there is a small positive voltage at S with both gates positive or ground, the MOSFET will be good. In essence, a zero voltage (ground) enables the MOSFET and a -15 VDC potential at either gate inhibits the MOSFET.

W2LL indicates that increased audio output is available by bypassing the audio output transformer and connecting output directly to speaker via the coupling capacitor. (I believe a coupling capacitor would have to be added - ed)

See TROUBLE GUIDE, under MODIFICATIONS #1 for those of you who are burning up RF amplifier Q1. (Install back to back diodes)

WBØLGY suggests a Workman WEP801 as a direct replacement for Q7 on RF driver board, A5. (If this transistor shorts the result is a continuous side tone).

The next issue of S/1 NEWS will describe a neat way of adjusting the carrier oscillators (R46) using a BC221 frequency meter (suggested by W7IV)

INFORMATION WANTED

Has anyone had experience repairing the PTO's? Info is required with respect to correcting backlash problems and drift.

A cure for frequency pulling when selecting SPOT?

Has anyone made receiver frontend modifications to improve cross modulation and/or noise level?

WANTED: One or two narrow CW filters. Write Bob, WØYVA/4

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FEB-75

P. O. Box 127, Franklin Lakes, New Jersey 07417  
201-891-0459

Thank you for your interest in SIGNAL/ONE. Listed below are prices effective October, 1974, for parts and modifications.

NEW CX-7B INTEGRATED POWER SUPPLY BOARD, owner installed - \$150.00. (Factory installed - see below.)

NEW LED 4-DIGIT COUNTER, owner installed - ~~\$225.00~~; factory installed - \$250.00. Advantage: Low voltage operation with 1/2" Hewlett-Packard LED readout (amber or red). Also has improved IC input circuitry for non-loading of PTO's for improved frequency shift reduction. Last digit is stable, no flickering. Circuit includes a new keyer with adjustable sensitivity on dot memory, plus independent speed and weight control.

NOTE: THE NEW LED COUNTER BOARD MUST BE USED WITH THE NEW CX-7B INTEGRATED POWER SUPPLY BOARD. The old power supply board will not furnish the correct voltages.

Information on modification of CX-7, CX-7A to CX-7B is as follows:

Mandatory Modifications - total cost \$465.00

CX-7B INTEGRATED POWER SUPPLY BOARD. Advantages: Uses 50% fewer components. All gold-plated pins and sockets - new key line switching circuit RTTR for true 0 to -15 v. switching. This eliminates frequency shift problems (200 cycle shift A to B and B to A on CX-7, CX-7A counter). 3 terminal IC regulators provide thermal and current protection. Also new audio output IC amplifier thermally and current protected.

Electrical Modifications. Final tube screen protection (fuses), IF, Front End, Audio, AGC, Driver and TB-1 Board Modifications.

Mechanical Modifications. Stainless steel inserts on all holes (replaces self-tapping screws with machined screws).

As standard procedure, upon completion of these modifications your radio is then trouble-shot, the nature of any further problems is determined and final corrections are made at the following labor charges:

Labor (technician time) - \$15.00/hr.

Engineering time (tracing and troubleshooting) - \$25.00/hr.

Burn-in time, - \$8.00/hr.

Shipping and handling charges are extra.

The cost of modification is between \$550.00 and \$850.00,\* depending upon the condition of the radio. Under no circumstances will the bill exceed \$850.00. NO RADIO WILL BE ACCEPTED FOR REPAIR WITHOUT PRIOR AUTHORIZATION FROM SIGNAL/ONE.

For information on the new CX-11, please contact: PAYNE RADIO

Box 525

Springfield, Tennessee 37172

615-384-5573

\*Excluding new LED readout.