

## R-390 Reflector April '02 Edited

From pha@pdq.com Mon Apr 1 13:45:2902  
Subject: [R-390] 390-A alignment

Howdy Folks, I was aligning an EAC 390-A last night, and ran into two things I want to ask the list about.

Firstly - the calibration osc reads about 20dB on my carrier meter across many bands pretty consistently. In the 3MC band, it reads 0 dB. I can use the BFO to determine that the signal is still there, but it is weak. 2MC and 4MC are strong. Also, the bands above about 19 are similarly weak. What gives here? Is this a sign of mechanical misalignment?

Secondly, when I attempt to peak the trimmer on Z503, the diode load voltage doesn't change at all. I think I'm following the manual correctly - is something busted, or is it just real flat? Thanks in advance!  
Paul

From rlruszkowski@raytheon.com Mon Apr 1 16:14:4202  
Subject: [R-390] Skyhighgain Coaxial Cable Consumer Safety Alert

Does this coax actually require a transmitter? Barry

In the fiber optic world, there is some fiber that gets feed with plain light and modulated light.

The modulated light carries the data. At long intervals (where amplifier use to be installed) the fiber has special doped fiber.

The plain light pumps the special dopped area and the modulated siganl gains strength.

I do not know how many hops can be operated and thus amplifiers skipped.

The stuff is manufactured all inline in one continous process. when ever the special stuff is supose to be placed in line, a control valve swaps the glass source and the right stuff goes in at the right time.

If you trim up both ends and get a amps section, you can in fact get more out than you put in.

I do not know how this would work with copper or aluminum oxides to get a gain in wire. Roger.

From rlruszkowski@raytheon.com Mon Apr 1 17:03:2902  
Subject: [R-390] General R390 Help

Leroy, If you have to part with a 100.00 or so AUS or US for a tube tester for your R390. why not hack an old 5 tube AM radio and a meter into a tube tester? If you can find a 12 volt filament transformer with a center tap (6.3) and a 100 - 300 volt B+ winding you can build a tester.

As you only need to test a select number of tubes, you can wire one socket for each type. A couple switches for the dual triodes can be keep it simple.

Testers are relative. You can look at the tube manual (on line some where) and find the expected current for a grid voltage.

Most testers tie the tube up as a triode (for short tests) and vary the grid voltage to get a mid scale meter reading.

The real test for R390 or A tubes come from use in circuit and judging the noise. These are all relative test. This one is better than that one. And you use the best of what you can get. The exact value is not known. Most tube testers just weeds out the shorts and real dead emitters. Roger.

From rlruszkowski@raytheon.com Mon Apr 1 18:08:0802  
Subject: [R-390] Alignment

I did the alignment, before my latest escapade, and it went well. However, I estimated the 150uV needed to obtain the 7volts diode load.

The signal generator is a Heathkit that has no meter, so the output is not calibrated. I measure the frequency with an HP freq counter, so I have accurate frequencies. I know that a calibrated output is not needed for any of the alignment, except to set the 7volts at 150uV.

Can the 150uV output be accurately measured with a VOM?? I think the output to be measured is RF voltage, so would a small RF detector, such as what is in the ARRL handbook be suitable and accurate enough for the purpose. Jim.

Jim,

Go read Chuck Ripples page on how to set the IF gain.

Chuck Rippel, WA4HHG A "must see" collection of R-390A information <http://www.r390a.com/>  
A lot of owners do not have calibrated test equipment to set up the -7 volts.

This procedure provides the best setting that really works in real life with your receiver at your Qth and your antenna. Roger.

P.S.

If you want to meter the Sig Gen. Then use a good tight metal box with high impedance detector (active amp) and meter. Put your own attenuator into the box. Measure the sig gen at full (near full) output in the meter box and then use your step attenuator to reduce the output to the level you need. Consider it easier to meter a big voltage than a small voltage. There is also the load impedance to consider in the metering.

A scope that will get you down to mill volts (AN/URM 25 is only .2 volts max) and some math would let you measure the sig gen full voltage into a fixed load resistance. You may want to meter the signal gen one time at specific frequencies and then judge where to set the knob to get about what you need.

From jetemp@insightbb.com Mon Apr 1 19:43:3502

Subject: [R-390] Alignment

Hi Roger, Thanks for the pointers. I'll holler if I run into any glitches. I appreciate your and the list's help in getting my receiver in shape. Regards, Jim 73, KF4ICZ

From cbscott@ingr.com Mon Apr 1 19:53:2502  
Subject: [R-390] Bad solder joints in other projects (long)

Warning: Do not proceed if sand hurts your eyes...

I had an interesting experience this past weekend. I built a Super CMOS III keyer a few years ago. I originally housed it in a plastic enclosure and was having problems with it going bananas when I tried to use it with the transmitter at full output. Apparently it was a problem with some small amount of stray RF getting to the keyer's components. The designers suggested I move it to a metal enclosure which I did. It solved the problem of the keyer losing its mind, but I created another problem.

The keyer has the capability to drive a small speaker for side-tone purposes. It uses a 2N2222 in a configuration where the collector is at supply potential, a square wave is supplied directly to the base, and the emitter is connected through a 100-ohm resistor to the speaker to ground.

When I first powered it up, the internal side-tone did not work. Hmm. It worked before. What could have gone wrong? If I applied a solid stream of dits or dahs, the speaker would sometimes start to work. If I switched it off and back on again, it would not work again until it was good an ready. Something was wrong.

I looked at the circuit on the scope. The collector had a constand 4.6VDC which was good. The base was seeing a 4.6VDC square wave. Fine. The signal on the emitter, though, looked really strange. The positive half of the square wave was okay, but the "zero" half, did not look right. It would drop off rapidly from 4.6VDC, but would then slowly drop all the way back to zero. It would do this until the side-tone began working and then it was a nice square wave once again.

Thinking the 2N2222 was going bad, I replaced it. The symptoms remained. What could be wrong? My wife suggested it was a bad connection. Ha! How could she possibly know what was wrong. In my infinite wisdom, I discounted that theory and kept looking for the answer. As I continued to work on it, suddenly I found that if I moved the circuit board a certain way, the speaker would work and if I moved it back, it would stop. That was it! A bad connection somewhere. She was right!!

But where was the problem? The connections all "looked" okay. I finally found that the wire going to a switch I installed to cut the speaker off could be moved one way and back and the problem would appear and disappear. I had found it. Freshening that solder joint fixed the problem.

All that over a cold solder joint! Oddly, I think the strange "square-ish" wave I was seeing was the result of the signal "discharging" through the capacitance of the cold solder joint. Don't know. At any rate, it was one of the few times I have ever seen the effect of a cold solder joint. I never suspected it would manifest itself in such a way in a digital circuit.

Just thought I would toss this in the mix as Jim's problem seemed to stem from a bad solder joint as well. Is this a fun hobby or what?! 73, Barry(III) - N4BUQ

From billsmith@ispwest.com Tue Apr 2 01:50:2302  
Subject: [R-390] Alignment

>> I did the alignment, before my latest escapade, and it went well. purpose. >> Jim.

Hi, Jim,

A couple of observations. 150uV is .000150 volts, which could be difficult to observe on a VOM, at least on an analog meter type. Typically a one volt signal is fed through a switched attenuator to obtain a calibrated signal.

Regarding the Heathkit, is it a SG-8? I used one for years and used it to tune up all sorts of equipment, from AC-DC radios to 450MHz two-way radio. For a general purpose signal source, or a local AM transmitter (play music through your radio) they are great. However, they really aren't calibrated. Here are a couple of things to consider. First, the oscillator is a modified multivibrator, with a pulse-shaped output. Much of the output energy is at harmonics of the fundamental, so even if you were able to measure the voltage, the reading will probably be misleading because much of the energy is at frequencies other than the fundamental. To be meaningful, the generator should produce a low-distortion sine-wave. Remember that a diode detector is a peak reading device, that is the detector rectifies the waveshape, and a following capacitor stores the resultant voltage. With little or no load, the voltage will probably represent the peak voltage of the waveshape (less 0.7 or 0.2 volts lost in the diode). Actually there are a number of variables in a RF diode detector, but that is another story.

Another issue is shielding. Although you need a relatively strong signal (150uV), the SG-8 and similar generators leak signal through the cabinet, out through the line cord and through the mounting feet. :-)  
Just moving around can affect the signal pickup in the receiver.

Also, although probably not an issue here, the output impedance of the SG-8 is a total unknown, which manifests itself in SWR (radiation) on the output cable as well as generating an unknown match to whatever you connect the cable to. The attenuator (switch and pot) are for all purposes useless, as they are not shielded, and are not an effective design to attenuate RF signals.

In short, the generator is fine for applications where you can place the unit next to the device you are working on, and tune with whatever signal the equipment picks up, but it is a difficult device with which to make any sort of measurements. Any attempt to modify it or overcome the SG-8's serious weaknesses make me reflect, today on April 1, of all the times I have embarked on a modification project to make a pearl out of a rock. I ended up with a broken, bruised rock every time. :-)  
73 de Bill,  
AB6MT billsmith@ispwest.com

From jetemp@insightbb.com Tue Apr 2 02:37:1202  
Subject: [R-390] Alignment

Hi Bill, The signal generator is a Heathkit IG-102, the next generation from the SG-8.

My main concern was how critical setting the -7 volts @150uV, IF Gain was in completing the alignment. It now occurs to me that I only have the test equipment that I have..... and I must estimate to the best of my ability with what I have. In the future, perhaps I can accumulate calibrated test equipment. I recently received a good suggestion, in response to an observation by me that my generator would not attenuate enough when directly attached, to not directly couple the generator to the antenna input, which would attenuate the signal through AIR SPACE. A good compromise for a calibrated, small signal

generator. (My signal generator would not attenuate enough without reducing the RF GAIN control).

So, the bottom line is to use what I have to the best of my ability and align with the best guesses I can, while reviewing some of the excellent web pages available. And this lists' opinions. Thanks for all the help. Jim

writes: << My main concern was how critical setting the -7 volts @150uV, IF Gain was in completing the alignment. >>

Read the following.....

Setting IF Gain for Optimum Performance The most common single item responsible for holding an R390A back is not lack of sensitivity. Rather it is internally generated IF deck noise. In an otherwise properly operating R390A, the cause of this excessive noise is IF gain control being set to high. Even the mfg spec of setting the IF deck gain such that -7vdc at the diode load when fed by 150uv @455kc into J-513 is far too hot. Here is a recently refined procedure to set the IF deck gain control. Anyone can perform the procedure whether they have access to a signal generator or not:

Procedure to set R390A IF Gain:

Once the receiver has been fully mechanically and electrically aligned, the final procedure to perform before "buttoning it up" is to set the IF gain control. Many otherwise very sensitive R390A's are thought not to be due to weak signals being covered by noise generated by excess IF deck gain.

A0 Allow the receiver to warm up for at least 1 hour then:

A01- Terminate the antenna input

A02- Set receiver for 15.2 MHz

A03- Set the "FUNCTION" control to MGC

A04- Select the 4kc filter with the "BANDWIDTH"

A05- Set "RF GAIN" control to 10 or maximum

A06- Peak the "ANTENNA TRIM" for maximum noise as indicated on the "LINE LEVEL" meter

A07- Set "Line Meter" switch to -10db scale

A08- Set "Line Gain" control to full CW or "10."

A09- Adjust IF gain control, R-519 to cause "Line Level" meter to indicate between -4 to -7 VU.

10- Re-zero the carrier meter control, R-523

11- Set controls above for normal operation and reconnect antenna

Discussion:

This will yield the best compromise on all bands. I usually "poll" those bands which I normally spec out. Then, using an HP signal generator set for internal modulation of 800 hz @ 30%, "massage" the gain setting and even specific signal path tube selections for the best overall performance.

This came from Chuck Rippels web site.....<http://www.r390a.com/> Les Locklear Gulfport, MS.

From bruceussery@hotmail.com Tue Apr 2 03:10:1102  
Subject: [R-390] Bad solder joints in other projects (long)

Barry,

I had a similar RF induced problem with my "store-bought" keyer- an MFJ model which has the electronics in a metal box mounted to a Bencher paddle. No problem when using the internal 9V battery, but it would "lock up" on some bands when using the wall wart for power, which apparently makes a nice receiving antenna. This was fixed by wrapping the wall wart cable about 5 turns through a randomly selected ferrite core- a little donut about an inch in diameter- just where it plugs into the keyer. An aggravating factor is probably that my antenna, a 52 ft. long G5RV dipole, is in the attic, only about ft. away.

Moving back to R390 stuff- I followed Jim Temple's saga and hopefully learned a few more troubleshooting tips. Thanks to all who helped. I feel inspired now to get the bench cleared off (yikes- it's scary) and resume debugging the R390. 73, Bruce WA4ZLK

From cbscott@ingr.com Tue Apr 2 14:35:1802  
Subject: [R-390] Bad solder joints in other projects (long)

Bruce, I originally had an external supply for this keyer as well and I think it was helping to introduce RF into the mix. When I rebuilt it, I used an internal-only supply of three AA cells. The only connections I have now are the paddle and output. I also have an attic antenna at about the same distance. I think that's probably my biggest problem. Oh for an outside antenna... sigh... 73, Barry - N4BUQ

From richardlo@devax.admin.athabasca.ca Tue Apr 2 17:59:5602  
Subject: [R-390] General R390 Help

wrote: > If you have to part with a 100.00 or so AUS or US for a tube tester for your R390. why not hack an old 5 tube AM radio and a meter into a tube tester?

Welll.... In02 that should read "100.00 or so AUS or 59.00 US". The Australian dollar make the Canadian dollar look robust. I think that I would rather pay US\$59.00 for a tube tester, its a lot less work. Richard Loken

From amcdonald@toyodatrw.com Wed Apr 3 22:01:1802  
Subject: [R-390] Schematic needed

Does anyone have a schematic of an RCA Victor model 118 that you can scan for me? My 390A is nearly done, except for cosmetics, and I'd like to begin on this old family heirloom.

From cbscott@ingr.com Wed Apr 3 22:09:2002  
Subject: [R-390] Schematic needed

Have you looked on <http://www.nostalgiaair.org/> ? They have a lot of schematics for antique radios.

Barry(III) - N4BUQ

From fraserbonnett@adelphia.net Wed Apr 3 22:24:0202  
Subject: [R-390] Schematic needed

Get you one tonight. Fraser, W3UTD

From wewilson@knology.net Thu Apr 4 11:19:2602  
Subject: [R-390] Best receiver article on eham.net

Interesting article and followup opinions at <http://www.eham.net/articles/3181>

The R-390A with TMC 591A SSB converter is at the top of the list. Walter Wilson - KK4DF

From pha@pdq.com Thu Apr 4 12:02:0102  
Subject: [R-390] Fair Radio - holy smokes

Hi folks, I went to Fair Radio yesterday with a radio buddy who got me interested in R-390's. I was worried that the move from the interesting old building to the new(er) lumberyard arrangement would somehow make it a less interesting experience. Boy, was I wrong.

The space and lighting at the new building makes it possible for a normal customer to see far, far more of their stuff. The difference is night and day. While things are not yet fully organized (by a long shot), and of course may never be, it is simply amazing to be able to walk among many dozens of long aisles of parts, equipment, tubes, and stuff - sometimes stacked 12 or 15 feet high.

They have a lot of stuff that they can't advertise, because they don't have enough of the items to sell, it is easy to wander across many interesting, unique items.

I also talked with Dave (and others) a bit - he appears to be fully recovered from his ills awhile ago, and is cruising away working on R-390A's.

The move is ongoing and still gets in the way, but they have so so much more stuff out it is worth a trip. I could have spent two days there and not seen everything. Still need a good flashlight for the back warehouses. Bring one. No affiliation with Fair, just another satisfied customer... Paul

From John H. Gindlesberger" <jhgindle@wcnnet.org Thu Apr 4 15:19:3102  
Subject: [R-390] Wiring question

I just replaced the original Carrier Level adjustment pot with a 10 turn pot and was interrupted. As a result, I forgot where the three wires were placed. There is a white wire which comes from the IF gain control, a blue and orange striped wire and a green and blue striped wire. I know two wires attach to the center pin, but I'm not sure which two. Memory fade is a terrible thing! Can someone help?  
Thanks John

From Barry Hauser <barry@hausernet.com> Thu Apr 4 12:35:1002  
Subject: [R-390] Fair Radio - holy smokes

Hi Paul:

Holy Smokes!????!!! Sounds like I'll have to make a pilgrimage soon.

> recovered from his ills awhile ago, and is cruising away working on R-390A's.

Dave's back?! Great news!

> The move is ongoing and still gets in the way, but they have so so much more stuff out it is worth a trip. I could have spent two days there and not seen everything.

I guess I better plan on staying a full week Y'know what, forget that. I'm gonna call Phil and see if he'll hire me as night watchman. (panel refinisher?, module-swapper, swabbie?) I'll work out cheaper in the long run. Wonder what I'll have to pay him per week? Barry

From pha@pdq.com Thu Apr 4 12:59:0302  
Subject: [R-390] Fair Radio - holy smokes

On Thu, 4 Apr02, Barry Hauser wrote:

> How do you get to see the high up stuff? Do they provide fork lift service?

If you call ahead with specific needs, they can probably make sure it is more accessible. Joe said if he'd known I was coming (and had asked), he'd have dug out more of the R-390 stuff. Not sure how much good that would have done, as they are mostly carcasses, as are the R-648's, the R-389's, and others. The pile of 648 parts would give you a nearly complete 648, but minus some major parts, like the IF deck. They are incredibly busy, so there will probably be some variation in what they are able to do for different people at different times.

Right now, they have a lot of stuff on pallets, and it is hard to get at. They're hard at work building shelves and "cubed pallets" that make it easier to store and get at stuff.

> Uh-oh. I'm allergic to "interesting, unique items". They follow me home.

uh, me too... found three spare tube boxes for the R-392 and T-195, along with several odd U-77 (R-392 audio) adapter cables.

> Dave's back?! Great news!

And in very good spiritis, to boot!

> I guess I better plan on staying a full week Y'know what, forget that. I'm gonna call Phil and see if he'll hire me as night watchman. (panel refinisher?, module-swapper, swabbie?) I'll work out cheaper in the long run. Wonder what I'll have to pay him per week?

I'm sure he'd take you up on that...

I think they are running short on R-390A's - I saw only a few stacks of them - maybe a few dozen units (30-50?)? Some were still in pretty good shape - I don't think that all the good ones have been cherry picked.

Dave also has one very nice R-390 that he is finishing up for sale soon... it looks good! Paul

From hankarn@pacbell.net Thu Apr 4 13:28:0902  
Subject: [R-390] Best receiver article on eham.net

Walter, I have most of the receivers listed presently in my shack, plus others. The Rohde & Schwarz EK-07 beats them all hands down. This is not only my opinion but also from others that are currently using them. One of my non A and an A are very close but not close for tuning and overall reception.



Hank KN6DI

From Thu Apr 4 14:04:1502  
Subject: [R-390] Wiring question

Hi John, I can't solve this problem, but can offer sympathy & a tip. I am "memory impaired", and sometimes have trouble remembering the next day, what I did to a particular ckt. I've found that I must make notes & sketches of stuff, particularly in a case like yours, where I remove something for future replacement (even if the future is a only few hours later). I've gotten a digicam, which also finds use in this manner. If nobody solves your query quickly, I'll go take a color digipic of that area in a 390A for you. 73, Al, W8UT

From bill.riches@verizon.net Thu Apr 4 19:00:0102  
Subject: [R-390] Wiring question

White-orange-blue wire and white-green-blue to center terminal (which is connected to one of the end terminals) and the plain white wire goes to the other end terminal. 73, Bill Riches, WA2DVU

From hankarn@pacbell.net Thu Apr 4 23:14:4602  
Subject: [R-390] WTB: Plessey Power Plugs

Need 2 Plessey pin power plug for Murphy B40 to go with my Collins, R-39XX and the rest of my BA's. Need 2 plus my Friend Morris in AU needs 2 of them. Thanks, Hank KN6DI

From fstyron@nc.rr.com Thu Apr 4 23:20:4302  
Subject: [R-390] Wiring question

John, I took a picture knowing that I would be distracted before I completed the carrier adjust mod. Well, two days later, it came in handy ;-). If you would like to see the picture point your browser to: <http://home.nc.rr.com/fs/r390a/390a.htm> 73, Frank W4CWA

From w5kp@swbell.net Fri Apr 5 01:42:1102  
Subject: [R-390] Wiring question

Another good illustration why one should never own just one R-390! :-) Jerry W5KP

From ba.williams@charter.net Fri Apr 5 01:47:4402  
Subject: [R-390] Schematic needed

> Does anyone have a schematic of an RCA Victor model 118 that you can scan for me? My 390A is nearly done, except for cosmetics, and I'd like to begin on this old family heirloom.

Alex, I have the index to Photofacts 1-30-something, and a model 118 is not close to any of the RCA numbers. I did see a chassis RX-117, but that was the best I could find. I have a lot of radios that aren't in those indexes. Barry

From bsugarberg@core.com Fri Apr 5 02:26:3102  
Subject: [R-390] Re: Schematic Needed

Hello, That's because the RCA 118 is a 1934 model, and Sam's Photofacts doesn't start until the late 1940's. The schematic is in Rider's. 73, Bruce Sugarberg WA8TNC

From jonandvalerieoldenburg@worldnet.att.net Fri Apr 5 02:43:3002  
Subject: [R-390] Fair Radio - holy smokes

Come-on Guy's- All this talk has started me wanting to rent a car while I'm at Dayton for a side trip( Really would like a T-195 to go with the R-392's.....) 73's Jon AB9AH

From cthulhu@fhtagn.org Fri Apr 5 03:10:0802  
Subject: [R-390] Fair Radio - holy smokes

wrote: >Come-on Guy's- All this talk has started me wanting to rent a car while I'm >at Dayton for a side trip( Really would like a T-195 to go with the >R-392's.....) 73's Jon AB9AH

Nothing like staring a T-195 right in the face, its blowers howling like a rabid ShopVac, tuning up on a freq, letting the autotune work its magic. And even more fun is the fact it has memory -- now THAT is a sight to behold. Just set your presets ahead of time, lock your tuning knobs, and use the channel selector to go to the freq you want. THAT process is magic and is more than half the fun of the T-195.

I have a GRC-19 set with mount, also have its replacement the GRC-106, it works fairly well, still BA'ish, in that there are tubes in the front end and tubes in the PA. But the -106 is more difficult to use with its manually tuned amplifier. Yea, it puts out 400 watts, but dunno if it is worth it, cuz it only does it on one sideband, and it howls louder than a dozen T-195's to do it. At 400 watts, it uses a goodly amount of power at 24 volts, quite a bit more than the T-195, even the T-195B.

Now the newer member of the family is the third generation of this bunch -- yes, I have all three -- that would be the GRC-193. This set for those who have nver seen one is basically just a GRC-104 with an added amp, antenna tuner and audio section. Click a freq, select 100 or 400 watts, click PTT, let it gyrate, then it is tuned. It howls like a banshee too, not at all quieter than my GRC-106, but uses less power than even the T-195.

The good thing about all 3 of them is they will tune about any antenna you try to load them into. The receiver in the GRC-106 is only so-so, the GRC-193 is much better, but neither can come close to the R-392 by a mile, at least in my opinion. Tom KA4RKT Nahhhh, don't like green radios, not at all.... ( how could you tell???)

From John H. Gindlesberger" <jhgindle@wcnnet.org Fri Apr 5 16:05:0502  
Subject: [R-390] Re: Wiring question

Thanks for all the help regarding the wiring for the Carrier Level adj. pot. I should have been able to figure it out, but I tend to work in high anxiety mode--anticipating that I will do, or have done, something which can not be easily repaired. It affects one's clear thinking--as does the damn memory

fade.

Any way, I worked up the courage to replace the paper caps in hopes of curing an intermittent noise problem. The audio chassis went well, then the IF. It was much tighter work, but I got them all replaced--but the noise remained. Breathing deeply and refreshing my memory with the R-390A video, I removed the RF chassis. My heart is still pounding!! Will I ever get that beast back in? I see there are 3 Black Beauties in it, so today they will be replaced.

I also noticed that the small coaxial cables look a bit suspect--cracked insulation. Can those little BNC-like connectors be used again with new cable? Are the cables available from some enterprising soul? Well, that's down the road. I'm hopeful these last caps. will do the trick.

From ai2q@adelphia.net Fri Apr 5 14:46:2302  
Subject: [R-390] RF decks

John, if your heart is a-pounding about the R-390A's RF deck, try pulling and re-installing a completely out-of-sync RF deck from an R-390 (non-A). In actuality, it's easier than it sounds. It's all common sense when you get down to it, and Dave Medley and others offer loads of encouragement. I did mine, without the little green gear! Good luck! Vy 73, AI2Q, Alex in Maine

From jlap1939@yahoo.com Fri Apr 5 15:53:4102  
Subject: [R-390] BEST

Friends, Interesting list of best mentioned by W. Wilson.

Sorry, if you haven't owned a 390 NON A, you may not understand what a radio can do...except maybe Rohde and Sch. mentioned by HANKARN.. never had the chance to try, and prob. never will. I do think Mr Arney has the ex. to know...In any event I vote the non a tops, and the a juust right up there, except for the too sharp mech fil. for my use. Still, will have an "a" when I get caught up...My Non is out of comission right now..I am enjoying a 600....

Drake, almost always, and a good bit of Collins, but not all. 2B still great. Clns a and s line, well, you know how good...

Interesting someone mentioned NRD 545.....CAN'T TOUCH THE 515.....Truly one of the "great" in my op., (in sandy things)..

ICOM R71 series...maybe, if you put in mech. ssb filter(s).I re-filtered my R70, and it was quite good.. (still, these have that "sand" prob...)

Certainly some of the Hammarlund offerings.. I like the 180 and the 600

And the HRO series.

And last for me, the SB 3-- by Heath...Used both and still rate them up at top..(watch out, a lot of "sand", but the sound was great anyway...!??)

The "high dollar" items for certian use, but I will always believe them over rated...Never owned one, but have Neph. in CA. with a Harris, and I don't care for it a lot, 'tho it is a great unit in many ways..(can't

remember which mod.)

Wish there had been more giving credit to older TenTec gear...I tell you, some really great... And the TMC GPR90..

Why have I put this here? Because the other listing tends to be ham, and there are OTHER OPERATORS besides hams...a "feww" on this list..sorry to bore you..

In short, what is it you want the radio to do??

Thats the real diff. in comments, like "hey, it tunes too slow", or "it's too heavy", etc. etc. Again, why do you have it, and what do you want it to do?

Like: I know a guy in south Al. that has a Collins AM broadcast Tr. sitting in a shed (5kw) and it will go to ruin, but he keeps it because he likes it...

By the way.. I have owned several transcievers, just for the receiver...never fired up the 'mitters except on the Omni I had.(into a D.L. as I have no Li.).Havn't been "on the air" since army...not even (sorry for this) "C.B."... Oh well..To late to make this a short story.. John

From s-biddle@ti.com Fri Apr 5 18:24:0802  
Subject: [R-390] Wiring question

said: "Another good illustration why one should never own just one R-390! :-)"

I have enough spare parts less a chassis to make another R-390A. But then I would have to buy one more of everything for a spare. Then I would want to build the spares into another radio. But then I would have to buy one more of everything for a spare. Then I would want to build the spares into another radio. But then I would have to buy one more of everything for a spare. Then I would want to build the spares into another radio. But then I would have to buy one more of everything for a spare. Then I would want to build the spares into another radio. But then I would have to buy one more of everything for a spare. Then I would want to build the spares into another radio..... Whew! 73 de Richard, KB5WLH [Proud Contributor - qth.net02 Support Fund)

From jbrannig@optonline.net Fri Apr 5 18:58:5702  
Subject: [R-390] Fair Radio - holy smokes

I had a T-195 and would spend hours just watching it tune up. I called it my demented vacuum cleaner.... It would auto-tune a 15ft. whip on 160M The T-195 and 100amp 24V power supply put it in the "cruise ship" boatanchor category.... But alas, it bit the dust.....I still have parts and modules around here somewhere..... Jim

From jbrannig@optonline.net Fri Apr 5 19:04:1602  
Subject: [R-390] BEST

The R-390A is a nice radio at an 8 or 16kc. bandwidth. For serious radio work at 2.1 to 250kc. B/W the Collins 75S-3B is a great receiver. For really digging them out of the crud, a TenTec OMNI-VI+ with cascaded 250kc filters and DSP just can't be beat. Jim

From cbscott@ingr.com Fri Apr 5 19:15:3102  
Subject: [R-390] Wiring question

I have a chassis complete with front panel and power supply if you want to get started on this...  
Barry(III) - N4BUQ

From cbscott@ingr.com Fri Apr 5 19:18:3202  
Subject: [R-390] Wiring question

On second thought, I could just get the modules from you and do it myself! Barry(III) - N4BUQ

From cbscott@ingr.com Fri Apr 5 22:44:4402  
Subject: [R-390] Bargain

Guys, Just thought I would pass along something I found out today. I'm in the process of building a serial interface to my Kenwood TS440S/AT. The serial data port on the rig is a 6-pin DIN connector. There is a very convenient Radio Shack near my workplace and I stopped in during lunch to see if they had what I needed.

They did have it and, to my surprise, when I went pay for it, the guy said it was \$0.07. That's right, seven cents. Seems they are on a close-out or something. At any rate, I know some of you guys own other radios besides the beloved R390 and I thought you might benefit from this. Have a good weekend. Yeaaa, daylight savings time. Sunshine in the afternoon again! Barry(III) - N4BUQ

PS: Some have asked about purchasing the R930A frame I have. I haven't decided to sell it for sure, but if I do, I'll give the ones who have asked about it first choice.

From ba.williams@charter.net Sat Apr 6 01:43:0902  
Subject: [R-390] BEST

> Like: I know a guy in south Al. that has a Collins AM broadcast Tr. sitting in a shed (5kw) and it will go to ruin, but he keeps it because he likes it...

John, Where in south Alabama? Barry (Auburn and used to live in the Enterprise/Ft. Rucker area)

From wb7dyw@ev1.net Sat Apr 6 18:28:3602  
Subject: [R-390] R-390A for sale

I have an R-390A for sale or trade, would consider a good AM transmitter. The R-390A has been restored and repainted by a professional, looks & works great. Thanks & 73's Dutch

From DAVEINBHAM@aol.com Sat Apr 6 19:41:2202  
Subject: [R-390] A Few Recap Kits Left

I have 8 recap kits left. Three with under-the-chassis electrolytics and 5 with in-the-can electrolytics for those who like to play with the Dreaded Black Ukkumpucky. Regards, Dave

R390A capacitor kit. I have put together a ReCap kit for the R390A.  
It consists of:

(13) 0.1 ufd  
C256, C309, C504, C505, C517, C521, C528, C531, C536, C538, C543, C547, C548

(7) 0,033 ufd  
C275, C529, C533, C534, C541, C545, C602

(7) 0.01 ufd  
C549, C553, C601, C604, C605, C607, C608

( The above are Orange Drops or equivelent. )

(3) 30 ufd 300 v electrolytic C603A, C603B, C603C  
(2) 47 ufd 300 v electrolytic C606A, C606B

( The above electrolytics have axial leads. You can wire them under the chassis and leave the originals in place to retain stock apperance. Or you can order capacitors small enough to fit inside the cans of C603 & C606. Just remember you will have to deal with the Dreaded Black Ukkumpucky to get the guts out of the cans of C603 & C606. If you do not specify at time of your order, the under the chassis capacitors will be shipped.)

Finally, one each of :

0.047 ufd 100v C227  
8 ufd 30v tantalum electrolytic C609  
50 ufd 50 v electrolytic C103  
0.22 ufd 100 v C101

I cannot find a source for: 2 ufd 500v C551 oil filled paper

so, I will include a very high quality poly cap. I have installed one of these in one of my R390A's and I can say I cannot hear any difference. They work great. This is the AGC capacitor.

The price for this recap kit is \$80.00 US funds. Price includes UPS or US post delivery.

From fraserbonnett@adelphia.net Sat Apr 6:51:4502  
Subject: [R-390] R-390A for sale

What do you consider a "good" AM transmitter?

From redmenaced@yahoo.com Sat Apr 6 23:46:0502  
Subject: [R-390] R-390A for sale

A T-368, of course, what else is there? Same color as a R-390!

From courir26@yahoo.com Sun Apr 7 15:54:1402  
Subject: [R-390] 51J-3 PTO AGC Audio Fun

Gentlemen? I went back in to the 51J-3 PTO this weekend after setting it properly in 1996.

It was 4 kcs in the usual direction (I've been admonished for calling it "long" so I'll refer to it as the "usual direction" from now on to avoid confusion). This was on 120V supply.

One turn of the endpoint screw remedied the 4kcs endpoint problem exactly (I'll tell you tomorrow what the new endpoint error is after it drifts overnight).

This radio exhibits endpoint deltas with differing supply voltages. The OA2 regulator is regulating, so I'm not sure if this is just my radio, or a 51J-3 thing.

I also slowed down the AGC (thanks group for the tips) by jumping the .1 uF C205B with an additional .5 uF to ground. This slowed the AGC down, and the S meter no longer pegs upon switch-on (but when going from stand by to on, I get an alarming arc in the on/off switch!! Yikes, what is that? Charging of the new caps?).

Also did an audio mod by uping coupling caps C209 and C211 from .01 to .1 uF.

C209 is behind the front panel, which I had access to from the PTO work, but otherwise this would be a P.I.T.A. to change. Audio is a little better. In all, fun work on the 390's light weight brother. The 51J is a fine receiver IMHO. 73 Tom N5OFF

From pha@pdq.com Sun Apr 7 18:33:3402  
Subject: [R-390] r390/391 PS MOD 1

Anyone know what the difference between a no mod PS and a MOD 1 PS on the 390 is? Ground seems to be wired differently, at least. The latest manual I have is silent on the issue. Paul

From jetemp@insightbb.com Sun Apr 7 18:37:2702  
Subject: [R-390] R-390 (not A) green gear

Hello to the list, I'm on a roll. After completing the restoration of my '67 EAC R-390A, with the list's help, I traded a Kenwood TS-820S for a very good condition R-390. The receiver appears to only need an indepth cleaning, as it seems to receive on all bands. The 16-32 bands seem weak, but this may only be an alignment issue.

The only glitch to proceeding with the restoration is the lack of a "green gear". This is the gear on the front of the gear case that is turned to mesh with the gear train to lock the gears in place for removal of the RF deck. I understand that this gear, although not absolutely necessary, is very helpful in simplifying the work on the gear train timing.

If anyone has one of these without a home, I would be happy to provide a good home to it. A fair bounty will be paid for one. Thanks for all your past support and assistance. Sincerely, Jim Temple  
73, KF4ICZ

From pha@pdq.com Sun Apr 7 19:18:5102  
Subject: [R-390] R-390 (not A) green gear

When I aligned my R-391 I didn't find a need for the green gear (which I don't have, but would like, too!). I got the cams aligned with respect to each other, then install the RF deck without the crystal deck behind it (so I can still see the alignment of the cams), double check and tweak the counter and 10 turn stops to match the 2 +000 sweet spot.

The MC doesn't change because of the indent mechanism, and the KC will only change a little bit if you're careful. One of the cams turns quickly with respect to the KC knob, and is easy to see, so it is easy to check that it is in the right spot. The slight down side is I had a bit of trouble getting a balanced overtravel setting (-970 to +035, or whatever). I got it less than 5KC off, and quit while I was ahead, since I don't think it matters much. All in all, it didn't seem any harder than aligning an R-390A RF deck. Paul

From Sun Apr 7 19:20:5102  
Subject: [R-390] R-390 (not A) green gear

Hi Jim, I won't sell it, but I will loan you one from mine. But you'll have to provide sufficient security deposit ;- ) 73, Al, W8UT

From jetemp@insightbb.com Sun Apr 7 19:30:3502  
Subject: [R-390] R-390 (not A) green gear

Hi Al, There is still some trust in the world. Thanks for your kind offer. I want to exhaust all attempts to obtain one of my own before taking you up on your offer. I will contact you if I can not find one. What a list! Regards, Jim 73, KF4ICZ

From frledda@attbi.com Mon Apr 8 01:41:3102  
Subject: [R-390] R-392 Dubrow PTO endpoint

All, I am struggling with a Dubrow PTO for my 392. The endpoint is about 3 kHz off, and I am at the limit with the coil adjustment. Any suggestions? Best Regards, Francesco Ledda

From DAVEINBHAM@aol.com Mon Apr 8 06:04:3702  
Subject: [R-390] The ReCap kits are going fast

The ReCap kits are going fast. Two have sold since yesterday. I have 6 recap kits left. One with under-the-chassis electrolytics and 5 with in-the-can electrolytics for those who like to play with the Dreaded Black Ukkumpucky.

From courir26@yahoo.com Mon Apr 8 13:56:4302  
Subject: [R-390] R-392 Dubrow PTO endpoint



I've never worked on a Dubrow, but I think it is the same as a Collins.

This is a very common problem. One author wrote that this mod is not worth doing, but I can't disagree more.

What you'll need to do is remove the cover, find the PTO endpoint adjusting coil, and remove one turn from it, and then start over.

I find on some PTO's that it is easier to make a new coil than to trim the old (Cosmos in particular), but that will be your call.

This will keep you in business for the news 30 years or so. 73 Tom N5OFF

From rlruskowski@raytheon.com Mon Apr 8 16:41:1602  
Subject: [R-390] Need green gear info.

Folks, Will some one count the teeth and measure the dia of the green gear and post it here.

There is nothing special about the green gear. If we knew the tooth pitch and dia, we could find a generic gear from small parts and let every one know about it. Thanks Roger KC6TRU.

From tbigelow@pop.state.vt.us Mon Apr 8 17:01:4302  
Subject: [R-390] Need green gear info.

Gang -

Some of you might not have been here long enough to recall, but there was a guy on here a few years back by the name of Walt Quitt who was going to make these gears. He got some tools made for the backs of the receivers, but went no further. I had offered to send him my green gear as a model, but now I'm glad I didn't. He ended up hosing me for \$500 on a 75A-4 I sold him! Hope none of you sent him your gears.

I'd still be willing to make mine available for use, but I'd certainly be a lot more careful in the approach. I'm not sure it would be a simple task of finding a generic gear since this one is stamped from a thin steel(maybe even tin?) and is concave in the center, allowing you to mount it against the frame but still get contact with the teeth properly. I was pretty surprised actually to see my first one - not at all what you'd expect from the discussion. Seems like a gear with such an important job would just look more....substantial and important? The green paint does add a nice touch, though.

So, if anyone has a way to do this properly and securely, I'll still offer up my green gear as a model. And, if anyone out around the Carlsbad area would like a good deal on a Collins 75A-4, call your friend Guido and get in touch with me for details. 73 de Todd/'Boomer' KA1KAQ

From jlap1939@yahoo.com Mon Apr 8 17:01:1702  
Subject: [R-390] Yes, I like my 600

Friends, Yes... Am doing well w/600 I got some time ago from a really nice and generous person on this list...(He even included a T shirt..). Thanx for the encouragement from all who wrote...

Now that I am legal..off sub. question:

Anyone sug. a list for Cosmology. or Astronomy? (my secret interest...) I am an amateur. but taught astronomy in high school at one time...(based on my extra sub. areas in earth science from coll.) It was a ball..and I was careful to stay well abreast of the sub., so I did well. I want to work some more with a few kids in area who are interested in mil. comm. and radio astronomy...See if I can encourage them.  
Regards, John

From pha@pdq.com Mon Apr 8 17:23:2102  
Subject: [R-390] Need green gear info.

Gang, Here's what I can find in the Instruction book for the 390:

Paragraph 83, subsection c, item 6 describes gear EEE as being a locking gear shown in figure 59. In figure 59, it claims to have 70 teeth.

The parts list at the end of the manual lists a locking gear this way:

O309 - Gear: spur type; steel; locking; 23/64" OD x 1/8", ID x 1/4" lg o/a; mts on 1/8" shaft; Colins Rad part/dwg No. 506 1879 302. "Locking Gear" - Signal Corps stock # 2Z4878A-231.

I'd suggest trying a regular gear of that size, and using a brass tube silver soldered on to offset the gear appropriately. That's all I know for now... Paul

From rlruszkowski@raytheon.com Mon Apr 8 17:46:0302  
Subject: [R-390] R390 star gazing.

John, You need to find a copy of the CD "Where the stars Are" Loads up under Windows.

You can pick a time and date and view to see where every thing is or was or will be.

You can filter the stars to find the radio sources. You turn the constellations on and off for the Zodiac. You can set the date to time of birth and Lat and Long. and see the sky you were born under.

If your going gazing it is a nice tool. You tell it where on earth your going to look from and it will show you where the target is in relation to the horizon and among the other stars.

You can pick your target out of the star field and track it in time and view. If you work at it you can trace satellite tracks across the view field. A nice useful application Roger.

From buzz@softcom.net Mon Apr 8 17:51:1002  
Subject: [R-390] Mechanical filter postmortem

Fellow listers, I did a postmortem on some failed filters. For pics and info go to:  
<http://www.lanset.com/buzz/misc/filter/390Afilter.html> Regards, Buzz

From cbscott@ingr.com Mon Apr 8 18:01:0902  
Subject: [R-390] Mechanical filter postmortem

Kinda reminds me of the Area 54 "autopsy" pictures... Barry(III) - N4BUQ

From goode@tribeam.com Mon Apr 8 18:08:2802  
Subject: [R-390] Mechanical filter postmortem

Buzz, Is there a second page to the link as you say you got 3 bad filters and show two on the page?  
Were you able to fix these? Steve

From rlruszkowski@raytheon.com Mon Apr 8 18:12:5202  
Subject: [R-390] Mechanical filter postmortem Kudo's

Buzz, wonderfull pictures. Great job on the web. Roger.

From rlruszkowski@raytheon.com Mon Apr 8 18:13:5402  
Subject: [R-390] Mechanical filter postmortem

Scott, What have you been looking at? Roger.

From laffitte@prtc.net Mon Apr 8 17:21:1502  
Subject: [R-390] Tantalum or not Tantalum

Hi Gang, Just a simple question. Is it better to replace the famous 8uF cap in the audio section with a tantalun cap or just a normal electrolytic? Best 73s Guido Santacana KP4FAR

From David\_Wise@Phoenix.com Mon Apr 8 18:38:0502  
Subject: [R-390] R-392 Dubrow PTO endpoint

> What you'll need to do is remove the cover, find the PTO endpoint adjusting

Unlike most of the tuning slugs I've turned over the years, the R-390A's PTO slug seems to lose permeability over time. (Usually I see them gain.)

When you tune a PTO down in oscillator frequency, you are changing the coil from an air-core coil to an iron-core one. With a slug that's less permeable than it's supposed to be, this changes the coil inductance less than it should, giving you a smaller than expected frequency spread\*.

The spread is trimmed by the endpoint coil, which is in series with the main one. Their inductances add. The endpoint coil has the largest effect when its inductance is the largest-possible fraction of the total. When is this? At 3455 (i.e. dial 0), because the main coil is at minimum. (This is analogous to the more common capacitive tuning scheme, with a trimmer in parallel with the main cap.) The subnormal inductance spread of the main coil dictates a small endpoint inductance. That's why you remove a turn instead of adding one.

It might also be possible to restore the spread by changing the size of the tank capacitor. To get a 3.455:2.455 frequency spread, the inductance has to change over a 1.9806 ratio (3.455/2.455, squared). For any given frequency, a larger capacitance dictates a smaller inductance, which is achieved by translating the slug's 10-turn range in a direction away from the coil. With the inductance tending towards smaller values, the max/min ratio would be larger and you'd get a larger frequency spread, which is what you want.

I HAVE NOT TRIED THIS. The straight-line-frequency variable pitch of the R-390\* PTO coil may throw my reasoning out the window. But since you're already hacking, it's less intrusive to tack on a cap than to chop a coil. Note that with the main slug in a different relation to its coil, you will have to do the dreaded linearity calibration. But the slug has already changed (that's why you ran out of endpoint), so you might need to anyway. Take a linearity reading, add a cap, read again.

Note also that the Temperature Coefficient of the added cap is important, but don't freak out. My PTO turned out to pretty far off, which means that yours might be too. It's not surprising; if a slug changes permeability, why not TC? Experiment with different TCs until you get satisfactory overall stability.

\* It seems to be accepted jargon here to call this "long", but as I mentioned to Tom, it makes me flinch, because I've always compared the electrical spread to a 10-turn mechanical baseline. The electrical spread is "short". If instead you take 1000KC as the baseline, you have to turn the dial "long"er than 10 turns. Say what you like; I'm going to footnote my usage from now on. 73, Dave Wise

From David\_Wise@Phoenix.com Mon Apr 8 18:48:2302  
Subject: [R-390] Mechanical filter postmortem Kudo's

> Buzz, wonderfull pictures. Great job on the web.

What he said. Great job, Buzz. When C553 pops, we don't have to get out the hara-kiri knife anymore. Now, where're some bad filters for us to fix? 73, Dave Wise

From JamesMiller20@worldnet.att.net Mon Apr 8 18:42:5602  
Subject: [R-390] Mechanical filter postmortem

What say? Does this mean that it may be possible for some enteprising individual to actually repair bad filters and give them a new lease on life?

From jordana@nucleus.com Mon Apr 8 18:53:2102  
Subject: [R-390] Mechanical filter postmortem

I have repaired several Mechanical filters in Yaesu gear, but they open a lot easier than the Collins filters do... In the Yaesu filters, it is usually migration and decay of the 'foam' padding that causes an increase in loss through the filters... Yes I have had to resolder a couple of the pick-up coil leads also.. 73 de Jordan...

From rlruskowski@raytheon.com Mon Apr 8 18:49:1502  
Subject: [R-390] Tantalum or not Tantalum

Just a simple question. Is it better to replace the famous 8uF cap in the audio section with a tantalun

cap or just a normal electrolytic? - Guido,

Cap technology has come so far since the 1950's there are many wonderful new caps that will work. Today the question is how much cap can you get into the space? The replacement need not be a 8, a 10 - will work very nice. It need not be any magic kind. What ever you can find with Axial leads. Check this against the schematic. I think it is a cathode bypass cap. I was rated at 250 volt in case the tube shorted.

If the new cap is not going to splatter acid all over the place if it fails, it need not even be rated for the full voltage. If the tube does short a low voltage (50volt) cap will fail. If your going for exact historical replacement then you need the real time. If your going for functionality, then any 8 - 25 at 25 or more volts that fits in the space will work. Roger.

From rlruszkowski@raytheon.com Mon Apr 8 18:57:4802  
Subject: [R-390] Mechanical filter postmortem Kudo's

David, I think this is a real leap you took in logic here. When C553 pops and places full B+ on that titit bitti wire inside the filters, there is no assurance the point of opening will be repairable.

Buzz, just got lucky on a small sample and reported what he found. We can keep this in mine as a way to look for fixes.

As as morning after pill for not doing preventive C553 I think is a stretch. But we sure had better look before we toss the filters. Roger.

From David\_Wise@Phoenix.com Mon Apr 8 19:05:0002  
Subject: [R-390] Tantalum or not Tantalum

Electrically, it doesn't matter in the least. You can put in anything you want, tantalum, aluminum, whatever, as long as it's 8uF or larger, with a rated voltage of 6V or more. when I have to do one, I'll probably use a 22/16 axial-lead aluminum, since I have many of those. The temperature under the AF deck is fairly high, so best would be a cap rated for long life at 105 deg C. 73, dw

From David\_Wise@Phoenix.com Mon Apr 8 19:11:0502  
Subject: [R-390] Mechanical filter postmortem Kudo's

> As as morning after pill for not doing preventive C553 > I think is a stretch.

Oh no no no I didn't mean it that way! Yikes!

> But we sure had better look before we toss the filters.

THAT'S what I meant. I'm glad you clarified it. 73, dw

PS - on your tantalum reply, I think the original was 25V, not 250V. Not that they didn't make high-voltage tantalums; I have some 160s in my junkbox. But an 8/250 would be a pretty big can.

From cbscott@ingr.com Mon Apr 8 19:11:3102  
Subject: [R-390] Mechanical filter postmortem

Y'know. The pictures on the cover of the National Enquirer of the poor space alien they've performed a post-mortem on just after he crashed out there in NM. Barry(III) - N4BUQ Space Alien: The other white meat.

From Barry Hauser <barry@hausernet.com> Mon Apr 8 18:34:1902  
Subject: [R-390] Mechanical filter postmortem

> I have repaired several Mechanical filters in Yaesu gear, but they open a lot easier than the Collins filters do...

Did you replace the foam stuffing? If so, with what? Is it necessary?

Just a sec... YO! BACK THAT TRUCK FULL 'O FILTERS IN RIGHT HEEEEUH! THAT'S RIGHT, A LITTLE MORE, COME BACK .. COME BACK ... WHOOOAAAA! UNLOAD 'EM BOYS!.

You were saying...? ;- ) Actually, I'm serious about the question. Barry

From roy.morgan@nist.gov Mon Apr 8 19:44:0302  
Subject: [R-390] Need green gear info.

wrote: >Folks, Will some one count the teeth and measure the dia of the green gear and post it here. There is nothing special about the green gear.

Yes there is.

- 1) it has a double-D shaped center hole.
- 2) It is cup shaped - like a dinner plate with a flat rim.

Point 1 is important, I think.

Point 2 may not be depending on the mechanical arrangement of the place it mounts when installed.

>If we knew the tooth pitch and dia, we could find a >generic gear from small parts and let every one know about it.

I think this won't work. I wish it would. Not even Boston Gear has them apparently.  
<<http://www.bostgear.com/>> Roy

From David\_Wise@Phoenix.com Mon Apr 8:13:4602  
Subject: [R-390] 51J-3 PTO AGC Audio Fun

> From: > > I went back in to the 51J-3 PTO this weekend after setting it > properly in 1996. > > It was 4 kcs in the usual direction (I've been admonished for > calling it "long" > so I'll refer to it as the "usual direction" from now on to > avoid confusion). > This was on 120V supply.

I hope I didn't come across as the Endpoint Terminology Police. I only meant to express a preference,

and I understand that everyone's used to what they're used to. I chuckled at your coinage of "usual direction". If we had a FAQ, that would fit in just fine. Maybe it should be capitalized, like the Usual Suspects.

> This radio exhibits endpoint deltas with differing supply > voltages. The OA2 > regulator is regulating, so I'm not sure if this is just my > radio, or a 51J-3 > thing.

It's probably related to oscillator heater temperature. We all know that the freq can drift if the temperature changes. It never occurred to me that the \*spread\* could change, but it makes as much sense. That puts the last nail in the coffin of my attempt to linearize PTO warmup by controlling heater current. Speaking of which, I suppose you could rig a filament regulator a la R-390A Solid-State Ballast. 73, Dave Wise

From n4xy@arrl.net Mon Apr 8:38:5602  
Subject: [R-390] Tantalum or not Tantalum

I disagree... there is a significantly different (lower) ESR for tantalums from 'regular' electrolytics. This could affect the loading on whatever stage is driving through it. While it probably wouldn't matter, I feel the more conservative approach would be to use the same type as the designers intended-e.g. a 'regular' electrolytic. 73 Ed Tanton N4XY <n4xy@arrl.net>

From JamesMiller20@worldnet.att.net Mon Apr 8:49:5902  
Subject: [R-390] Mechanical filter postmortem

I guess there will be a surge of "damaged/repairable" filters on epay now!

From n4xy@arrl.net Mon Apr 8 21:12:1502  
Subject: [R-390] Tantalum or not Tantalum

Hi Guido... somehow I THOUGHT it was a coupling cap... as a BYPASS cap, a tantalum would probably do a better job-but I also never argue with success!!! So, if a 'regular' cap is working fine, that's fine by me! 73 Ed Tanton N4XY <n4xy@arrl.net>

From rlruszkowski@raytheon.com Mon Apr 8 21:30:1402  
Subject: [R-390] Need green gear info.

Roy, The double-D hole when properly set on the stud nut mounting point let the gear keep the whole gear train from being moved.

As I have not looked at a Real R390 (not a A) since Korea in 72, I do not remember if some of the R390 gear train stayed in the chassis when the RF deck comes out.

If we can find a gear, there is more than one way to mount it in place and keep it from rotating.

Paul provided the following from the parts TM.

The parts list at the end of the manual lists a locking gear this way: O309 - Gear: spur type; steel;

locking; 23/64" OD x 1/8", ID x 1/4" lg o/a; mts on 1/8" shaft; Colins Rad part/dwg No. 506 1879 302.  
"Locking Gear" - Signal Corps stock # 2Z4878A-231.

I do believe he did quote the TM exact here complete with 23/64 typo. I do not remember the green gear being .359" inch diameter.

I thought it was a 1.359 dia. At 70 teeth it would be about 16 pitch. Are the gears in the drive train 16 pitch gears in general? Is the hole in the center of the gear?

From jlkolb@cts.com Mon Apr 8 22:02:1802  
Subject: [R-390] Mechanical filter postmortem

> You wrote >> Did you replace the foam stuffing? If so, with what? Is it necessary?

When I repaired a couple of Kokusai filters, I used loose cotton from the filler in a medicine bottle. Someone recently (Barry?) reported using a sheet of closed cell foam, which sounds like a better idea to me.

Comments on Buzz's postmortum - GREAT!

That wire he pictures "sticking up in the middle" that's the magnetostrictive element - if that breaks off, writeoff the filter.

Judging from my experience with the Kokusai filters, yes the polyfoam in the Collins filter could get on the disk elements and cause them to become more lossy. If the filter bias permanent magnets became weaker, that could also be the cause of a weak filter.

I've repaired a small number of Collins filters with open coils - if the wire breaks at the terminals, it's an easy repair - once found a filter with a terminal that had never been soldered. With care, a wire broken halfway between the filter coil and the terminal can be spliced. If the wire breaks at the coil on the outside of the winding a little can be unwound and extension soldered on. If at the end of the body but coming from the coil pi winding from the other end of the coil, It can be losened from the glue blob and extended. If the broken lead is from the inside of the coil - the part next to the core, the coil is toast. I have, however, done a coil transplant from another filter.

After spending lots of time holding a 250 watt iron trying to unsolder the case on D/E case or the small V case filters, I gave up and just cut off the filter end with a mototool with cutoff wheel. Save the end piece and glue it back on with hotmelt glue.

> Just a sec... YO! BACK THAT TRUCK FULL 'O FILTERS IN RIGHT HEEEEUH! THAT'S >  
RIGHT, A LITTLE MORE, COME BACK .. COME BACK ... WHOOOAAAA! UNLOAD 'EM >  
BOYS!.

>

Actually I do have a box of bad filters waiting for the time I can get back to trying to repair more of them - have never been willing to sell them as I've afraid I might end up buying one of them back at the swap meet labeled good :) All the open coil ones have been worked on, sucessfully or not. Remaining 40 or so have more serious problems. No R390 filters among them however.

Commercial plug- e-mail me if you want a copy of my list of filters for sale. John



From jordana@nucleus.com Mon Apr 8 22:14:3202  
Subject: [R-390] Mechanical filter postmortem

Yes the foam sheet I have used is a form of closed cell foam...I don't know how well it would hold up if you were resoldering the filter case, the Yaesu filters are not soldered near as much as the Collins filters are, but then the foam was used when they were both originally soldered, so....? 73 de Jordan...

From frledda@attbi.com Tue Apr 9 00:20:3402  
Subject: [R-390] R-392 Dubrow PTO endpoint

I think I know what to do now. I appreciate for taking your time to address my question. Best Regards,  
Francesco Ledda Texas, USA

From fraserbonnett@adelphia.net Tue Apr 9 00:18:4402  
Subject: [R-390] Replacement Caps

OK, so I screwed up my courage (let's hope that's all I screw up!) and removed the IF deck from my R-390A, with the intention of replacing C553, C547 etc (basically the ones usually identified as problem caps)

The problem caps seem to be Sprague Vitamin Q's, which I intend replacing with Orangedrops. However, there are a bunch of other caps which look like brown versions of Black beauties. Do I assume correctly, that it would be wise to also replace those with Orangedrops? Fraser, W3UTD

From Llgpt@aol.com Tue Apr 9 00:40:1302  
Subject: [R-390] Replacement Caps

writes: << The problem caps seem to be Sprague Vitamin Q's, which I intend replacing with Orangedrops. However, there are a bunch of other caps which look like brown versions of Black beauties. Do I assume correctly, that it would be wise to also replace those with Orangedrops? Fraser, W3UTD >>

YES!!!!!! Les Locklear Gulfport, MS.

From w5kp@swbell.net Tue Apr 9 03:02:2402  
Subject: [R-390] Mechanical filter postmortem

Since we fearlessly get into molecules on this list, I'll throw this one in: Many types of foam many different chemicals in their makeup. Stick some in a small sealed container with several types of metal for a while, especially under heat, and no telling what chemical migration will or won't attack the metals inside. Maybe there's more to this than just grabbing some handy foam and putting it in. OTOH, if it's blown to start with, what the heck.... :-) 73, Jerry W5KP

From DAVEINBHAM@aol.com Tue Apr 9 02:40:0102  
Message-ID: <154.bf8b4d2.29e3a071@aol.com>

The response to the ReCap kit offer has been outstanding. I sold all the under-the-chassis kits and you guys wanted more of them. So I have reordered more capacitors. My supplier says they were shipped today on the Brown Truck and I should get them Wednesday. If everything goes according to plan, in 2 days time I should have several more under-the-chassis ReCap kits and 5 in-the-can kits for those who like to play with the Dreaded Black Ukkumpucky. Thank you for your patronage. Kindest Regards,  
Dave

From buzz@softcom.net Tue Apr 9 04:42:4002  
Subject: [R-390] Mechanical filter postmortem response

Listers,

I had many emails so I thought that I'd reply through the list rather than individually. I only opened two of the three filters because I figured that number three would be the same as one and two. I haven't yet attempted to rebuild the filter, but after reading the comments I think that I'll go with the closed cell foam. I was able to wash most of the foam goo off with brake cleaner, but would like to use the vapor degreaser where my neighbor works before I put it back together.

I started taking things apart when I was a kid. I'd drive my parents nuts. They would give me a toy for xmas or birthday and I'd play with it for a few days then take it apart. Sometimes I'd get it back together, but most times not. As I grew up I worked on motorcycles, then cars, then I started on electrical things. I day I took an old battery charger apart, then the transformer, then the selenium rectifier stack. I was dumbfounded when there were no moving parts inside? A few years later when I went in the Navy I signed up for avionics and, as the saying goes, the rest is history.

Thanks for all of your nice comments re: the pictures and the web page. If something else comes along I'll do it again. Now get busy and repair those filters!!!! Thanks, Buzz

From w7itc@hotmail.com Tue Apr 9 04:51:5602  
Subject: [R-390] Mechanical filter postmortem

RE: rebuilding

I was wondering the same thing. More and more parts for these radios will have parts which will have to be refurbished instead of replaced. It strikes me there maybe a market for refurbished Collins Mechanical filters to the best of My knowledge new ones are no longer manufactured for the any of the old stuff. Just think one of you techneers out there could become the Peter Dhal of Mechanical filters.  
Kenneth A. Crips W7ITC, Cheyenne, Wyoming

From n6py@QNET.COM Tue Apr 9 07:09:0002  
Subject: [R-390] LAST OF R390 CABINET SHIPPING SCHEDULE

Hi All, Wanted to let all of you know that the last of the R390 cabinets will be shipped by Mac this week. Those of you on the list for the second lot of cabinets should receive them in the next 2 to 3 weeks. They are being shipped by FedEx ground.

Just as a reminder be sure to look for the small bag of fasteners for mounting screws for the rails and shock mounts, they are easy to throw out with the packing material.

Additional, there looks like there will be around six cabinets left over. However, these do not have the shock mounts or rails but otherwise are perfect unused military gray R390 cabinets. Mac wants to sell these for \$295 each. He said for me to take a list of those wanting one but don't send any money at this time. After the spoken for cabinets are shipped and we know the exact number left over, I will contact those on the list that we have cabinets for and give you payment instructions. If you want one of these cabinets just send me a return email with your name and I'll put you on the list. Bill N6PY

From laffitte@prtc.net Tue Apr 9 10:46:2202  
Subject: [R-390] tantalums

Hi, Thanks to all who responded to my inquiry about tantalum vs common electrolytics to replace the 8uF cap in the audio module. It seems that electrolytics will do well and that is my perception from the list. My EAC is working so well that I have done only partial electronic restoration. Now I have to remember if I ever replaced the IF caps in this one specially after seeing the post mortem of the mechanical filters. Best 73s Guido KP4FAR

From kd9kc@elp.rr.com Tue Apr 9 12:49:0602  
Subject: [R-390] Mechanical filter postmortem

There is a difference. Peter does more than rebuild old transformers. There is also a market for -NEW- transformers out there. And believe me when I say that the amateur market is not Peter's biggest customer. And you would not believe the technology in building transformers.

We need to face the fact that R-390 owners are just a fraction, and a very small fraction, of a group (hams) that is also considered only a fraction of the electronics world.

Unless you are willing to pay what a business would think of as a reasonable cost, something we would consider too high, there just won't be a big market for this stuff. If there were, somebody would already be doing it. Mike. KD9KC El Paso, home of Peter Dahl Transformers. No, I do not work there.

From jetemp@insightbb.com Tue Apr 9 18:21:5702  
Subject: [R-390] R-390 (not A) green gear

Well, after several days of "arm twisting", I have finally got one of the list to drop a surplus "green gear" in my direction. \*This is hard to do over cyberspace\*. :-) I know, I know, the gear is not absolutely necessary, but I am like a Shaker in respect to work. Do it the simplest way possible. Thanks for your encouragement, guys. Jim

From vze2gmp4@verizon.net Tue Apr 9 19:25:4302  
Subject: [R-390] Tantalum or not Tantalum

Tantalum caps are a type of electrolytic. Replacement with a regular electrolytic is OK. Or as I did in my 390a I left it out. This produces a bit of local feedback and reduces distortion. The gain loss isn't noticable. Regards, Helm. WB2ADT

From jetemp@insightbb.com Tue Apr 9 19:28:3702  
Subject: [R-390] R-390 (non A) power plug.

My new r-390 acquisition came with a two wire power plug configuration. I have obtained a length of 3 wire and am installing it now.

Two questions:

1. Does it matter which lead, hot or common, is attached to F101? Would it be best to wire the hot (black) wire to post "D", which is attached to F101, for purposes of efficient fuse protection?
2. Would the power plug ground (green) best be utilized by attaching it to: a. Post "C"?  
b. The housing ground post? c. Both?

Yes, there is a ground post embedded in the interior of the connector housing. Sounds like a multiple choice test!?! Thanks for any views or insights. Jim

From cbscott@ingr.com Tue Apr 9 19:37:2702  
Subject: [R-390] R-390 (non A) power plug.

Jim, I don't have a non-A, but I'm pretty sure you want the hot lead connected to the fused side. When (if) the fuse blows, you don't have hot running all the way back through the radio to the other side of the fuse. Barry(III) - N4BUQ

From roy.morgan@nist.gov Tue Apr 9 9:30:4002  
Subject: [R-390] R-390 (non A) power plug.

wrote: >My new r-390 (NON-A) >>I have obtained a length of 3 wire and am installing it now. I assume you mean a three wire line cord with a grounded plug. >1. Does it matter which lead, hot or common, is attached to F101?

YES, it matters.

> Would it >be best to wire the hot (black) wire to post "D", which is attached to >F101, for purposes of efficient fuse protection?

SAFE is the word not "efficient". The hot wire (black in US Standard cables) goes directly to the REAR terminal of the fuse holder (through the line filter in the case of R-39x radios). This does two things:

- 1) Reduces to the minimum the amount of line voltage exposure inside the radio after the fuse blows.
  - 2) Protects you (to some degree) from contacting the line voltage as you replace the fuse.
- >2. Would the power plug ground (green) best be utilized by attaching it to: > a. Post "C"?

Yes, (I assume contact C is the one going to ground..) > b. The housing ground post?

Do you mean the threaded center mechanical clamping post? NO. Do not depend on that for grounding.. do not use it. Roy

From jetemp@insightbb.com Tue Apr 9 21:14:3502  
Subject: [R-390] R-390 (non A) power plug.

Thanks for the insights. The only unanswered question is the grounding. Within the cable housing that attaches to the radio are:

1. Post "C". This, according to the schematic, goes to the radio electrical ground.
2. Inside the connector housing, attached to the interior wall of the housing, is a post with nothing attached to it. I would assume that if this was attached to the outlet ground, it would provide a ground path to the radio frame.

I have a curious mind, so I began thinking.....(watch out!!).

The power outlet ground, on a R-390A, is attached directly to the radio frame. At least with mine this is so. On the R-390, it seems that there are two paths to ground the radio. 1. Post "C" of the power connector, and 2. The radio frame.

I would assume that both are, practically speaking, the same. So attaching to one or the other would accomplish the same purpose. On the other hand, attaching to both, at the same time (within the housing), would probably accomplish the same chore, or could there be possible ground loops associated to grounding to both the radio electrical ground (power plug post C) and the frame ground at the same time?? Also, within the attaching housing, the ground could be put in series or parallel (One ground wire attaching both points, or one wire branched to each post separately).

My experience says that multiple grounds can introduce unwanted feedback. Hence the importance of lead dress and routing. Am I being too persnikity here, or is this a valid question?? Jim

From glittle@awod.com Tue Apr 9 22:05:5602  
Subject: [R-390] R-390 (non A) power plug.

In shipboard electronics, there is a chassis ground which is grounded to the hull of the ship. The AC is distributed without reference to ground. You will measure about 65 Volts each leg to ground on a ship. The reason for this is for battle damage. If the ship suffers battle damage and one leg of the single phase AC distribution becomes grounded, there is no harm done. The electrician will recognize this with their ground isolation checks and repair the damaged distribution circuit. The chassis ground is a safety ground. In shore based electronics, you could connect the non fused side of the power to ground with out problem because neutral and ground are tied together at only one point (in the distribution panel). Again chassis ground is safety ground. Neutral and ground are two completely different legs at the equipment. You can cause some pretty dangerous situations by tying neutral and ground together at the equipment. I think that it is even against the electrical code.

I spent 22 years of my life in the submarine force protecting you from the evils of communism. 73  
Glenn WB4UIV

From Barry Hauser <barry@hausernet.com> Tue Apr 9 21:28:0802  
Subject: [R-390] R-390 (non A) power plug.

Jim: The non-A is non-cost reduced version so came with a gen-u-wine, heavy duty, deluxe power

connector setup, as opposed to the cheaper terminals and stamped cover of the Non-A, re-designed primarily to free up funds for hammers and coffee pots. (Naw, I like my A's and non-A's alike, as well as SP-600's and even a RAK 'n RAL, BC-312/342 or two. An equal opportunity boatanchorist.)

Anyway, connect the green wire to the ground pin of the chassis plug. Do you have the correct connector?

Put the black hot wire to the fused/switched pin as recommended by others -- it's a safety requirement, and the neutral wire goes to the continuously connected pin. The 4th pin was for 28 volt accessories and is used in the '391 for the autotune. So forget about that one.

You can use the chassis ground terminal for earth ground, but earth grounding might be better done solely to the coax shield at the point of entry of the download. Any opinions on this? R-1051's have a similar 3-pin version of that power connector and some R-390A's are fitted with the Navy add-on that converts from the raw terminals to the 3-pin Navy type. The 1051's also use the ground pin, and also have separate grounding terminals for the case.

I think most tie the chassis to earth ground in addition to the ground through the power connector. What say the group? Barry

From jetemp@insightbb.com Wed Apr 10 01:48:4602  
Subject: [R-390] R-390 (non A) power plug.

Fellow groupees, Good explanations all. I have learned a lot about radio grounds.

What I have done is to wire the cable to make the hot lead (black) connect to the fused pin "D", and the neutral lead (white) to connect to the non fused pin "A", and the ground lead (green) to connect to pin "C". The chassis will be grounded to earth when I permanently install it in its operating location. Thanks, all, for your kind offers of knowledge. Regards, Jim

From jetemp@insightbb.com Wed Apr 10 01:54:0102  
Subject: [R-390] R-390 (non A) power plug.

Oh, power plug pin "B" is left unattached. Something to do with DC operation that is not normally used with an R-390. Jim

From ross@hypertools.com Wed Apr 10 02:53:3202  
Subject: [R-390] Re: R-390 power plug.

390 folks - Jim Temple mentioned DC power operation with an R-390... There is a dynamotor power supply for the R-390 & R-391 - has anyone ever seen one? I'd sure like to find one... best Dave Ross N7EPI ross@hypertools.com

From w5kp@swbell.net Wed Apr 10 05:20:2402  
Subject: [R-390] BC-221(series) Freq Meter Manual

I have a clean, complete, very good condition original Army War Department technical manual for this

series of freq meters available. 162 pages, covers "A" through "T" models, plus "AA" through "AL". This was also known as the SCR-211 series, and has been popular with hams since the end of WWII. \$15 shipped anywhere conus. Please reply via direct email. Thanks. Jerry W5KP

From w5kp@swbell.net Wed Apr 10 05:27:4202  
Subject: [R-390] BC-339 (series) Transmitter Tech Manual

Have a good condition original manual for this behemoth 4 MHz - 26.5 MHz 1 KW CW transmitter series. Covers 339 + "A" through "M" models. The many foldouts are all beautifully printed on watermarked vellum paper. They did things right in 1946. \$15 shipped anywhere Conus. Please reply direct. 73, Jerry W5KP

From w7itc@hotmail.com Wed Apr 10 03:52:2202  
Subject: [R-390] R-390 (non A) power plug.

RE: In shipboard electronics My Dad was an Electrician's mate in the Navy. I remember him blanching in horror when he found out a ship he was going to be posted on was a "DC" ship. He somehow talked his way out of that posting and instead was sent to a "Refrigerator ship". At the time I didn't understand what the horror was, I do now. Kenneth A. Crips W7ITC

From twleiper@juno.com Wed Apr 10 05:20:2102  
Subject: [R-390] R-390 (non A) power plug.

writes: Treatise on grounding deleted... I spent 22 years of my life in the submarine force protecting you from the evils of communism.

Yeah, but what have you done for me lately? Tom

From w2ec@attglobal.net Wed Apr 10 12:41:0702  
Subject: [R-390] R-390 (non A) power plug.

Can't remember the pin letter, but Jim is correct, one terminal is for the external 24vdc supply used for the motor on the R-391.

From rlruszkowski@raytheon.com Wed Apr 10 18:00:0002  
Subject: [R-390] Re: R-390 power plug.

David, In Korea in about 70-71.

I had a radio intercept van. It had 8 R390 receivers. 4 racks two receivers each. The whole van ran off the 24Volt generator on the truck's gas engine, or off a "small" gas powered DC generator.

The engine generator was not a stock item.

Those 8 receivers had the dynamotor power supply for the R-390 power supply. Our run time on the DC for the van was a little as we could. Once a month we did a 1 hour maintenance run.

When the R390 came out of the van into the shop, we dropped a 110 Volt AC power supply into them and did the maintenance that way.

We would pop the dynamotor brushes and look at wear. As our run time was less than an hour per month, when we looked twice a year the parts looked like new to us. We had a spare receiver with supply and 1 spare supply.

At the school house at Ft Devens in 1969 I saw one R390 with the power supply. It was a show and tell unit only for education. there was no 24 volts to run it in the building.

The Ft Devens School House R390's were all AC power supplies.

All the van stuff I ever seen in NAM, Korea, and Devens was all AC except for the one van.

All the filament strings added up to 24 volts (2 x 12.6 or 4 x 6.3) the dynamotor only had to make up the B+ (25 watts) Some one thought the dynamotor would be "cleaner" than the vibrator power supplies used in the battery radios of the 1930's. So these things were rare back in 1970 just to start with. Pop an add up on E-pay for a kilo buck and see if you even get an offer. Roger. KC6TRU.

From davidmed@sbcglobal.net Wed Apr 10 22:35:2602  
Subject: [R-390] [r390] Question

Cupla days ago I posted a plea for help with my R-391 autotune but was advised by the autoresponder that the moderator had to approve my posting. So far the moderator has not approved so I assume it is not permitted to discuss R-391 on this list. So I posted my plea on the Collins list and received an immediate response. So I guess this list is just for R-390A afficianados which is fine with me. Maybe this one will bounce too? Dave

From wb5hak@prodigy.net Wed Apr 10 23:27:1902  
Subject: [R-390] [r390] Question

That's strange, Dave. I see things on here all the time much more "off topic" than that, hi hi. I'm getting ready to "dig into" my R-390 (non A), and sure hope you'll be around for questions!!! 73, Don, WB5HAK

From rlruszkowski@raytheon.com Wed Apr 10 23:40:0802  
Subject: [R-390] [r390] Question

David, This one got through on You should get two copies back. One direct to David and one on the remailer.

David, Do you have the green gears for the R390 or a reasonable replacement? Do you have a web page up? I could not find you home page this week!!!! Roger.

From rbethman@comcast.net Thu Apr 11 00:24:2402  
Subject: [R-390] [r390] Question



Dave - You are welcome to post here! R39Xx or otherwise!

From beral@videotron.ca Thu Apr 11 01:26:1702  
Subject: [R-390] [r390] Question

Roger, David and All, David, post all you want. You are getting through. It would be unthinkable if you could not. Roger, he does have a Web page. All the info on the R-390 is still there for all to use. Used one his P/S tit bits last night. The one where the center tap on high voltage transformer not wired as per the schematic. Mine is wired as he indicates and made my problema lot easier to solve.  
<http://www.davemed.info/> Al

From Barry Hauser <barry@hausernet.com> Thu Apr 11 01:48:4502  
Subject: [R-390] [r390] Question

wrote: > Cupla days ago I posted a plea for help with my R-391 autotune but was advised by the autoresponder that the moderator had to approve my posting. So far the moderator has not approved so I assume it is not permitted to discuss R-391 on this list.

Hi Dave: Sounds like a glitch to me. I don't think the R-390 list is set up for manual screening of every post as are some of the other reflectors. However, the "mailman" software may have automatically screened your post, triggered by something or other, and responded with a catch-all message that was misleading, as is customary for software error messages in general.

For instance, with the old majordomo system, any post with the word "h e l p" in the subject line would get routed to the list manager. Could be the same now. Also, posts are screened if they contain html, rich text/formatting, or attachments.

> So I posted my plea on the Collins list and received an immediate response. > So I guess this list is just for R-390A afficianados which is fine with me.

Not at all, we post on '391's and other stuff all the time.

> Maybe this one will bounce too?

Maybe the "mailman" system couldn't believe Dave Medley would be needing help on a '391 and suffered a boolean crisis such as "Name Medley; R-391 IS LIKE R-390 non-A; Message contains 'Medley needs H E L P'; When Subject Contains 'non-A' Medley H E L P E R, NOT HELPEE; >>>SET KLAXTON BIT TO 1, AAAAOOOOOGAHHH!!!!, NON PARITY CONDITION EXISTS, SET IMPOSTOR FLAG BIT TO 1, FORWARD POST TO LIST MANAGER.

Or maybe it didn't go that way at all.. ;-) Barry

From pha@pdq.com Thu Apr 11 03:03:0302  
Subject: [R-390] [r390] Question -- now PS question

wrote: > Roger, David and All, > > David, post all you want. You are getting through. It would be

> unthinkable if you could not.

Al - were you using a mod-1 power supply, and have you found any chassis wiring differences? I'm very confused by this because I'm looking at three different 390/391 power supplies, and there are indications of them having been wired three different ways:

no-mod PS prior to HV CT change

no-mod PS after HV CT change

mod 1 PS with HV CT going to a different place altogether

The way I read David's page, he mentions two - no-mod prior to HV CT change, and no-mod after HV CT change, but as near as I can tell, not the mod-1 PS.

I can get the exact pinout differences if it would help anyone. Does anyone have a mod-1 r-390/r-391 power supply to compare notes with?

The reason that I care about this is that I have this mod-1 power supply that appears to be factory wiring, but it doesn't work in a chassis that does work with a no-mod post HV CT change (the one Dave relates on his page).

What that means is there must be a corresponding chassis change for a mod-1 power supply that I need to be looking for, too, and I want to know what that is before I needlessly hack a good original mod-1 PS. Hope this makes sense. Paul Anderson

From tbigelow@pop.state.vt.us Thu Apr 11 14:35:1002  
Subject: [R-390] [r390] Question

Dave - Folks talk about the R-391 here a lot, so I'm sure there's no issue with the content. Likely a glitch in the program, I've had the same thing happen to me on another list since the software was changed and I hadn't even posted anything recently. Seems to be a pretty good set up, though, probably just a few bugs to work out yet. 73 de Todd/'Boomer' KA1KAQ

From beral@videotron.ca Thu Apr 11 19:23:4802  
Subject: [R-390] [r390] Question -- now PS question

Paul, david and All, Don't know how to identify Mod status. Can't find any thing on the P/S. S/N 2113, Contract 13214-PH-51-93.

Paul, about Dave's P/S notes. He mentions that the HV CT goes to Pin 14 on P118. Well on mine it goes to Pin 15. There seems to be a few other anomalies in the P/S wiring. I don't have time now to get into this deeper at the present time. The radio is all in pieces. Waiting for spring to truly arrive here in Montreal to refinish the front panel. My apartment balcony is my paint shop.

I am working on a solid state module to replace the 6082 regulators. This is how I found the wiring problems. I am using the P/S and the Audio Chassis as a test bed for the module. Some problems but will be contacting the engineer involved in the design. Me, I am just an old Tx'd tech so need that engineering help. Al

From bill@iaxs.net Fri Apr 12 05:19:1302  
Subject: [R-390] r390/391 PS MOD 1

Can't give you specifics, but I chased that problem once. The unmodified supply has the center-tap of the high voltage winding returned to metal ground on the PS chassis.

The modified version lifts this ground and connects it to the pin in the PS connector that connects to (or used to connect to) the 28 VDC power line. It was used for a dynamoter PS, but the motor was so noisy that the Signal Corps retracted the requirement and so made the 28 VDC line unused. The line was used to ground the HV center-tap to the metal of the main chassis, perhaps through the old 28 VDC power fuse. The 390 that I found this in had the chassis mod done with cold solder and friction tape. Regards, Bill Hawkins

From clemens@it.dk Fri Apr 12 11:12:0202  
Subject: [R-390] 51J-4 in Denmark

Hi everyone, Having been away from the list for a while, I can report a lucky break. I have long wanted to supplement my R390A 92s and SP-600 with a Collins 51J-4. I finally located one, perhaps ex-NATO HQ in Jutland. It turned out to be almost unused, the rotary dial not the usual butter-yellow from heat and smoking, in its original black wrinkle case, with original manual and RCA valves (no tools though). Not a scratch or wear mark, so perhaps it has been a spare, or somehow supernumerary. The VFO did not need end-point adjustment and it does not vary more than 1-1,5 Kcs over the whole range.

The s/n is 3026 (at least on the label, on the back the receiver has the number 109 stamped not engraved, but I think this is unlikely to be the s/n since the manual is dated 1960 and 109 would be from 1957. Any comments? Any other places to look for dates, I don't see any obvious candidates?) Front panel is black wrinkle, - personally I like the 92non-black 92 versions which contrast with the many black knobs. Perhaps only the R-388A came like that? Is that the colour called St.James gray wrinkle?

It is unmodified, apart from the usual Danish military practice of replacing the 51J-4 meter with a small loudspeaker. It has been possible (thanks to my friend Ib M FCller) to find a suitable replacement meter, and copy the correct meter scale. Replacement of an electrolytic and the missing 100 kcs. crystal, and a thorough overhaul so it looks and feels like a new set.

The little I have tested it (with a T2FD and a trap dipole) seems very promising. It is indeed useful to have the mechanical filter at 6 Kcs.(and the other two) and the crystal filter gives an early version of a notch filter, often effective. SSB is not overly difficult to manage and I find the AVC-constant OK. A business-like audio, though at times one misses the 8 kcs filter of the R-390A. Amazingly accurate scale, it seems equivalent to a length of about 85 yards.

Handling this receiver, one can understand why the DOD, on the strength of its early version from 1949, asked Collins to create the R-390x, which admittedly are a cut above it in complexity, materials and performance under extreme conditions. Still, the 51J-4 leaves my wrist feeling a lot better, has the right filters and it is a great looker. (and it weighs less than two-thirds of our favorite BA)

How many were produced? 6-7000? Compared to 55.000+ of the R-390A? Perhaps we ought to make a caucus of 51J-4 owners if there isn't already one.(OK, make that 51J-\*/R388\* owners). Seriously, I would very much like to gather any advice, any lore available about this enjoyable set. I know there are a number of active people around like Jose, Dallas, W3AKEY, Martin Boesch, Dave Knepper, - and likely many others. It is difficult to get relevant articles from the newsletters, because they rarely seem

to make it over the Atlantic. If anyone can help I would be very grateful for that. I also seem to recall that there were two types of Kcs knob, was it improved in later s/n, did people switch it from the 75A-4, and what other changes were made over the course of production (1957-1963)? Were the R-388A manuals more detailed than the 92civilian 92 version? (which is good) Best, Clemens Clemens S.Ostergaard Stadion Alle 52 DK-8000 Aarhus DENMARK +45 8611 0018

From wa9vrh@ocslink.com Fri Apr 12 12:38:3602  
Subject: [R-390] 51J-4 in Denmark

Hi Clemens, If you are in need of a manual for your "New" find there is one on the Collins Collectors Association website you can download. <http://www.collinsradio.com/html/manuals.html> good luck with your new find! Also checkout [http://www.collinsradio.com/51J\\_R388Asur.pdf](http://www.collinsradio.com/51J_R388Asur.pdf) for numbers of J-4's built. I don't remember if there are any service bulletins or service information letters but they are all located in the CCA Archives on the website. 73's Larry WA9VRH

From courir26@yahoo.com Fri Apr 12 13:33:5802  
Subject: [R-390] Note on 51J-3/4 sn's, was 51J-4 in Denmark

Just a note of caution on the 51J-3/4 sn's, which it looks like the referenced website has accurately picked up on . . . I made some reproduction 51J-3 and J-4 nameplates with permission of the Rockwell patents and trademarks office in CR. The sn's on these plates begins with 12,000. I did this purposely, to start with numbers which far exceed the actual production. So if you see one for sale with sn 12,xyz then you know the nameplate is a repro, albeit authorized. 73 Tom N5OFF

From jlap1939@yahoo.com Fri Apr 12 15:23:1202  
Subject: [R-390] POSTING

Friends, I believe Daves' comments were at least in part, simple jest, and in part real..If necessary, he can correct me; (it won't be necessary for you to do so, even though I know you will, anyway.)...

He already knows how welcome his postings are..

However, he does point out the feeling of a few, (not to speak for him, however); longing for the old supplier. I have had trouble a few times, and so have others, a few several times. In addition, I simply dislike the format and form, as well as record keeping on the part of the corresponding individual.

Perhaps that is a price for security?..It matters not..I prefer Majordomo, and have other lists with TOTAL satisfaction that are supplied by that group. Best Regards, John

From pha@pdq.com Fri Apr 12 16:01:4102  
Subject: [R-390] POSTING

wrote: > However, he does point out the feeling of a few, (not to speak for > him, however); longing for the old supplier. I have had trouble a few > times, and so have others, a few several times.

I sort of agree, but since it is a volunteer effort, we have to respect the decision of the person volunteering their time. So, it may be helpful hearing about the best way to report technical technical

problems. But, asking for a change back to majordomo can cause a lot of heartache on the part of admins trying their best to manage a big list efficiently. So - anyone know the best way to report technical problems (failed attempts to subscribe, for example)? I looked at my monthly subscription email and don't see anything obvious. Paul

From jordana@nucleus.com Fri Apr 12 19:28:0402  
Subject: [R-390] IERC 6025-B Shields wanted..

Hi.. does anyone have any 6025-B IERC shields to swap...? I have other IERC shields, but none of the 6025-B's... Please let me know... 73 de Jordan....

From pjdefayette@earthlink.net Fri Apr 12 22:47:4402  
Subject: [R-390] Collins 4:1 reduction gear and knob set: Is it made of gold???

I see the bid, but I can't believe it! Is this what these are going for? I think I'll check my scrounge box for a receiver to go with my 4:1 reduction gear knob set. ;-) Item # 1345841437 Cheers, Paul

From terryo@wort-fm.terracom.net Fri Apr 12 23:12:0402  
Subject: [R-390] Collins 4:1

Something with a Collins name under a grand! Better buy it quick! What blew my socks off was the 312 speaker that went for over \$1500 a short while ago. A metal box with a garden variety Jensen 10" driver. Collins 312A-1 Speaker ""Very Nice "" Item # 1339221949

From wy6k@yahoo.com Fri Apr 12 23:13:3402  
Subject: [R-390] Collins 4:1 reduction gear and knob set: Is it made of gold???

\$100 bucks is nothing and there's 6 more days left in that auction. I saw one go for \$450.

From w2ec@attglobal.net Sat Apr 13 00:21:2002  
Subject: [R-390] Collins 4:1

Gotta keep in mind the 312A-1 has the lamp assembly, that's why a 312A-1 can get 1500 and a similar 270-G only gets \$300 or so. It's supply/demand working here, there just aren't that many, there are more collectors than 312A-1's so it keeps the price up. Why is an R-391 worth more than an R-390 and an R-390 worth more than an R-390A? Rarity, since basically they are pretty much all the same capable receiver. 73, Ray W2EC

From davidmed@sbcglobal.net Wed Apr 10 01:21:5902  
Subject: [R-390] Elmer Needed for autotune

Hi Guys. I need an Elmer out there to help me troubleshoot an R-391 autotune. I worked all afternoon on it but it has me beat as of now. Dave

From nryan@intrex.net Fri Apr 12 05:26:1302  
Subject: [R-390] CQ CQ CQ...

...de Norman...

Well, gang, after I aced the Technician amateur radio license test, I also took the General amateur radio license test and nailed that!

Congratulate me-- I'm a ham! Callsign will be assigned when paperwork goes through the FCC. Yee-haw!!! 73 to all... Norman

From w5or@comcast.net Sun Apr 14 15:32:3102  
Subject: [R-390] R-390 List questions

Gents, The list administrator (me) has a real job, and unable to check volunteer administrative chores while out of town for a week. So that is why you didn't get a response for a week. You could always try resubmitting a post, checking your syntax. In Dave's case, a simple typo in his email to: line triggered the message. I found another held up post because it was submitted to the list as a blind copy. Mailman flags that. As far as going back to majordomo, I think the hundreds of qth.net volunteer administrators for the hundreds of lists it hosts would resign should AI make that change. Its nickname is majordumbo, and that is being kind.

If you have problems with subscriptions or other procedural issues, you can contact me directly at w5or@comcast.net or w5or@radiohome.com. Look at the footers on any R-390 post for help.

No need to clutter up the list with this kind of chatter so any further discussion of the list mechanics should be off line and considered off topic. Thanks for your consideration. Don Reaves W5OR list admin w5or@comcast.net

From perge@attglobal.net Sun Apr 14 16:37:5602  
Subject: [R-390] FS:R390A

For Sale:R390A-mostly 1956 Motorola with 1967 EAC IF deck. Fair condition with working meters and some common mods. It works but sold as-is \$350-would prefer pickup in Newark,Ohio.  
Thanks,Joe,WB8HWF

From w5or@comcast.net Sun Apr 14 15:52:1502  
Subject: [R-390] R-390A Sightings

On the way back from Houston, I was lucky enough to stop off in Belton TX for the hamfest there Saturday. I saw 3 R-390A's (two with Collins tags, one with a repro tag) for sale. These were in fair to nice condition, different sellers, with a range of asking prices of \$350, \$500, and \$900. All had meters and looked complete. The \$900 one was restored by Dave Medley (according to seller) and included a cabinet.

The point of this post is for those of you looking for a R-390A. They are out there. You just have to ask around, or get to the swapfests and see what is available. I may have a couple available at Dayton next month. Happy foraging! Don Reaves W5OR w5or@comcast.net R-390 list manager

From djmerz@3-cities.com Sun Apr 14 19:06:3802  
Subject: [R-390] INCA xfmr id

Hi, I'm trying to i.d. an INCA transformer, told to me to be an audio output, type 1161 or 1?61 (hard to read). Does anyone have an old INCA catalog? Looks like 40's or 50's. It's about 4 x 4 x5 with 14 terminals. I hope I can use it with some on-hand audio tubes but don't know what impedance it was built for, thanks, Dan.

From Llgpt@aol.com Sun Apr 14 19:56:0502  
Subject: [R-390] Looking for a manual OT

Looking for a manual for a Siemens E311E2. I have one in german, looking for one in english. Les Locklear

From djmerz@3-cities.com Sun Apr 14 21:07:3502  
Subject: [R-390] INCA xfmr id  
Message-ID: <3CB9E187.6456F892@3-cities.com>

Hi again, looking through some old files, I found an INCA bulletin L-39 circa 1939 which had my transformer in it, a TF61 (funny how I can read a tag when I know the possibilities !!) which is for 6F6 type tube, 15 watts, evidently their highest quality audio transformer. Sorry if anyone wasted their time on this- but if anyone needs INCA data from that bulletin, let me know. I have data on other brands of old transformers as well, thanks, Dan.

From courir26@yahoo.com Sun Apr 14 21:10:3402  
Subject: [R-390] Looking for a manual OT

Might be easier to find a German, and toss some beer his way! Tom

From Llgpt@aol.com Sun Apr 14 22:04:3402  
Subject: [R-390] Looking for a manual OT

writes: << Might be easier to find a German, and toss some beer his way! Tom >>

Ya!! Les

From va3fsd@yahoo.com Sun Apr 14 23:47:1202  
Subject: [R-390] Need Info

Hi, I just recieved 3 R390As I have one working the 2nd unit is different at the back. It has the following extra plugs.

J707-7Pin connector

J706-2nd mixer in

J705-3rd mixer in

J704-VFO out

AGC Cathode Follower BOX sn 13

J1--Power in

J2/J3--AGC output

I was able to get it to work if disconnect and inject the freq. of the main Oscil. The main osc.not working  
3 wires are coming out of the main osc. that go to J707 If any one can help let me know Thanks  
Frank

From shadow@gilroy.com Mon Apr 15 00:50:0402

Subject: [R-390] R-390A Sightings

Swap meet price's..... From the Heart of Silicon Valley.....

I noticed a R-392 at a swap on Saturday, asking price was \$300. I have only seen one other about a year ago for \$0.

This was the same swap, I found receiver last month.

My unit is a R-390 A with a Motorola factory ID tag, original meter's, all the knobs with only the top dust cover. Needs some cleaning on the top chassis, it was stored in a shed, under side is clean and just needs a few nuts and screws I was told it was a working unit and just needed some TLC. Some one had replaced a few cap inside, including the one on the mechanical filter. Tubes were good and lucky for me, so was the mechanical filter, even the electrolytic are passable.

But I have started to cut the filter cans and rebuild them inside. Then will do a total cap replacement, resistor check, alignment then paint job. Some one had started to go through throw the unit, but I still have a lot of work ahead.

My only complaint is that it has a silk screened front panel. I plan to find a engraved one, some day and refinish it plus paint the front knobs. As for the missing bottom cover, I may mount the receiver in a cabinet.

But I locked out.... I Paid \$ 150 and have not seen one ever in 7 or 8 years below \$0. Most have been in the \$ 400 to \$ 650 range and I have only seen a few at the very most and they still needed some work and TLC.

I had been on this list for about two years, reading the messages and saving the service notes. About a year ago I started to look for a unit, before I found my last month and I go to lot's of swaps... You just need to look around.... Good Hunting..... Gary

A gun in the hand, is better then a cop on the phone.

From Normiehall@aol.com Mon Apr 15 01:46:1202

Hi, I went to the Joplin, MO hamfest yesterday morning. Not a whole lot of BA stuff but there was one R-390 non A for \$348 which looked to be complete and in good condition. Being a long way from home with no room in my vehicle, I passed on looking more closely. 73, Norm Hall, W6JOD



From ba.williams@charter.net Mon Apr 15 03:41:5002  
Subject: [R-390] Looking for a manual OT

>> Looking for a manual for a Siemens E311E2. I have one in german, looking for one in english. Les Locklear

My wife ain't German, but she used to translate for Helmut Kohl in Germany. The beer has to come my way just for general principles and because I would have to talk her into it. Let me know more details on how big the manual is, what kind of beer, how much beer, etc. Barry (the other, other Barry)

From w7itc@hotmail.com Mon Apr 15 03:36:2102  
Subject: [R-390] CQ CQ CQ...

<http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp>

Congratulations, and Welcome to the service. Check the above link for your call, which you should have by the end of the week or very early next week. Remember you are legal on the air when the you call is assigned, and not when you receive the actual license in the mail.

Now what are you going to do for an HF station? Now the fun begins 8^) Kenneth A. Crips W7ITC,

From liber.fab@iol.it Mon Apr 22 15:16:1702  
Subject: [R-390] 390A help...

Hello, we have a 390A with a particular problem : it doesn't work on the first part of ANY MHz, say about the first 80/120 KHz, then when you go over this point it start to work...

If we increase a bit the AC voltage power on the Variac, this receiver starts to work after the first 60 KHz (instead of first 80/120 KHz) : this is an interesting point for your ideas about this troubleshooting... Any suggestion will be very appreciated, thanks a lot ! Fabio, I0LBE  
"Proud owner of only US-made Radios" "...My shack is riceboxes-proof..."

From jlap1939@yahoo.com Mon Apr 15 15:24:4802  
Subject: [R-390] "major" changes

Friends, To clear up where I am; I have no interest in this list returning to Majordomo. I am certian that for list adm. there was good reason for the change, and they so mentioned at the time.

For my "poor" usage, however, I have been more happy with "dumo" than most others. I have never had a prob. (which may BE the prob.), in using the lists I use on Majordomo. Sorry to take the extra time on this...Just wanted to assure that I am not interested in any change, myself.

On the 390 series of receivers, my great neph. is still op. his, and is now married to a girl named Cathy..., in the event any remember them. They are not on any list, and have bought a house near the airport in Tallahassee. They were largely responsible for my start on this list..(You will have to get in line to shoot at 'em...) Best Regards, John

From n6py@QNET.COM Mon Apr 15 18:03:1602  
Subject: [R-390] R390 CABINETS AND SHOCK MOUNTS

Hi All, I think most of the R390 cabinets should be shipped by now. I have been getting emails from some of the guys near the end of the second list saying they have received them.

If you have paid for a cabinet from Mac but have not receive it by May 1st. please let me know so we can trace it. I want to be sure everyone that has paid for a cabinet, has theirs before we start selling the six remaining cabinets. But please don't let me know before May 1st since they are going by ground and many will take most of this month to all get to all of you.

Additionally, I have received emails from four of you saying you received your cabinet missing the shock mounts. Each box shipped should have had one cabinet, four shock mounts, two rails, and a bag of fasteners. I have started a list of those missing shock mounts. Mac suspects that some boxes also may have been shipped with more than four shock mounts, two rails, or one bag of fasteners.

If you didn't receive the four mounts or had more than four shock mount in the box, please let me know so Mac and I can try to get everyone their mounts.

I am putting a list of those missing mounts and have the following on the list for missing shock mounts:

DAMON W7MD  
MIKE W9WIS  
BILL AB0FX  
GREGORY M.

Also I want to thank all of you for your patience since getting all the cabinets obtained and shipped was a very large job for Mac. Bill N6PY

From Craig.Anderson@sptc.mnscu.edu Mon Apr 15 18:16:2702  
Subject: [R-390] Strange Rear Panel R-390A connectors

These are probably for the external digital readout units developed under a contract with the Electrical Engineering department at Cornell University back in the late 1960s. I have the manual for it with all of the schematics. It is very very rare to find the readout unit since there were only a limited number of them built. Craig W9CLA

A gun in the hand, is better then a cop on the phone.

From w5or@comcast.net Mon Apr 15:35:1002  
Subject: [R-390] R390 CABINETS AND SHOCK MOUNTS

I saw Mac Saturday and forgot to tell him how his and your efforts, Bill, are appreciated. I have one of the cabinets from Mac's first batch a couple of years ago and it is just a marvel. I know the new owners of the cabinets have to be happy. Any reports yet from lucky R-390 list members? Don Reaves W5OR

From nryan@intrex.net Mon Apr 15:44:4002

Subject: [R-390] R390 CABINETS AND SHOCK MOUNTS

Hi, Don, Got my cabinet same time as yours. It's a beauty-- makes an "eight" rated receiver look like a "five!" 73... Norman

From cthulhu@fhtagn.org Mon Apr 15:58:5102

Subject: [R-390] R390 CABINETS AND SHOCK MOUNTS

Yep, love mine. Looks great! Gives me a place to put that spare all-Collins 390A I have. Will end up being a bedside R-390A, I think when all is said and done... Tom KA4RKT

From David\_Wise@Phoenix.com Mon Apr 15 21:36:3802

Subject: [R-390] 390A help...

> we have a 390A with a particular problem : it doesn't work on the first part of ANY MHz, say about the first 80/120 KHz, then when you go over this point it start to work...

My main guess is the VFO. First, here is a simple test. This will tell whether it is the VFO, or something else.

1. Put a second shortwave radio with antenna near V701.
2. Tune the second radio to 2455.
3. Tune the R-390A KC dial to +000. The second radio should "hear" the R-390A's VFO.
4. Tune the second radio to 3455.
5. Tune the R-390A KC to 000. The second radio should hear the R-390A again. If it does not, the trouble is definitely the VFO, and you can concentrate on it.

You could also do the Oscillator Injection Voltage tests from the R-390A manual, section 5.5.3 .

If you have found that the VFO is bad, test V701. If it's ok, measure the voltages on V701. If RT510 is a 3TF7 as it should be, V701 heater should be 6.3VAC. Plate should be around 0, and screen grid should be around 60. Let us know how it goes, Dave Wise

From jordana@nucleus.com Mon Apr 15 21:44:0102

Subject: [R-390] IERC 6025-B Shields wanted..

Hi.. I am still looking for some 6025-B IERC Shields... I have other IERC shields to swap or will buy outright... please let me know what you have... 73 de Jordan...

From iasckids@pacbell.net Mon Apr 15 22:39:4602

Subject: [R-390] R390 CABINETS AND SHOCK MOUNTS

Hi Don. I recieved my cabinet from Mac and although it is lacking the mounts,it is a work of art.The CY 929 arrived in remarkable condition,like new off the assembly line.I have not the words to thank him adequately.Such a undertaking must have been epoch in scope.In short.Thanks to all involved.73 Gregory Mengell

From JamesMiller20@worldnet.att.net Tue Apr 16 01:24:3402  
Subject: [R-390] Re: {Collins} counter sunk holes R-390A

I have 3 original R-390a's, and all have counter sunk holes. Jim N4BE

From mikea@mikea.ath.cx Tue Apr 16 03:11:2502  
Subject: [R-390] Re: {Collins} counter sunk holes R-390A

I also have three R-390As, as well as one R-390. All have countersunk holes. Mike Andrews

From G4GJL@aol.com Tue Apr 16 22:35:5802  
Subject: [R-390] 390A help...

I had the same problem...the key is that the fault is on every band. The most likely cause is the PTO running out of sufficient feedback to maintain oscillation.

In my case the problem was cured simply by changing the PTO tube for a newer one with higher emission. Dont use brand new / NOS as these tend to drift more. Swap with one from the IF strip, and put the newer bottle in the IF.

An alternative problem could be a capacitor in the PTO feedback circuit, but as I dont have the precise circuit schema to hand I will leave it to others to pick up on this part. Try the tube first, its 95% odds on that! 73 Pete G4GJL

From DJED1@aol.com Wed Apr 17 01:40:4302  
Subject: [R-390] Re: {Collins} counter sunk holes R-390A

I noticed that picture, and I suspect that what has happened is that someone forgot (or lost) the countersunk lock washers that go in those holes. without the washer, the screw head will be below the surface of the panel. I agonized over whether I needed to mailorder one washer from Fair after I lost one- but I found that a conventional washer would compress to the proper shape. '62 Amelco- all original Ed

From courir26@yahoo.com Wed Apr 17 12:55:5902  
Subject: [R-390] NIB R209

see this gents <http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item 1346380054>

From Lester.Veenstra@lmco.com Wed Apr 17 15:03:1502  
Subject: [R-390] Mechanical filter postmortem

Before you get carried away on building new, check out  
<http://www.rockwellcollins.com/otherbusinesses/collins-filters/low-cost-series/>

There may be a way to retrofit their "low-cost product line" to replace the original filters. Les

K1YCM

From cbscott@ingr.com Wed Apr 17 14:48:3602  
Subject: [R-390] OT: Antenna tuner question

Has anyone ever heard of Gouyton equipment? I'm thinking of buying a Gouyton "Customatcher II" antenna tuner, but I've never heard of this brand. The pictures aren't helping me very much. Anyone? Thanks, Barry(III) - N4BUQ

From tbigelow@pop.state.vt.us Wed Apr 17 14:42:0702  
Subject: [R-390] NIB R209

Yuck. Gimme the R-390 or R-648 anyway. (o:

Still, it's a very interesting piece and certainly nice by virtue of its completeness. It'll be interesting to see what it brings and who ends up with it. Then it'll be interesting to see how many more appear from the woodwork, either not as complete or duplicate sets from the same warehouse. Boomer, KA1KAQ

"Tom M." wrote:

From wally.hunt@centurytel.com Wed Apr 17 23:00:5102  
Subject: [R-390] R390a Intermittent gear alignment

I came across a EAC R390a that was partially disassembled. The intermittent gear had been removed from the band switch. I have info on where the gear itself is supposed to be aligned while in the 7+000 mHz position but I need to know what position the band switch itself is supposed to be in also. Luckily, I have everything back together and have good audio, good gear movement and even static so I consider the project worthwhile to try to complete. Any help on the band switch alignment would be appreciated. Thanks

From rlruszkowski@raytheon.com Wed Apr 17 23:02:1402  
Subject: [R-390] R390a Intermittent gear alignment

The intermittent gear had been removed from the band switch.

Wally, Take the time to pull the FR deck to complete this alignment problem. Remember to remove the spring from the Odham coupler on the PTO. Once you have the deck out, you see the band switch is just a wafer switch.

Before you drop the front panel. set the dial zero in the center of its range. Forget the numbers on the counter the dial has a range. Set it as close the center as you can. Remember to loosen the dial lock before taking the front panel down.

Remember it switches as follows:

.5 - 1  
2 -3  
4 - 7

8 -15  
16 - 32

You want to watch it as you run the MC both up and down. Watch that the switch wiper centers in the switch contact. watch that each switch section is making contact. Watch that as you roll up 1-2, 3-4, 7-8, 15-16 each movement point sets the switch into good contact on each wafer segment. Watch that as you roll back down 1-2, 3-4, 7-8, 15-16 each movement point sets the switch into good contact on each wafer segment.

Remember, this switch not only use to work, it use to work for years. There is some adjustment point where it will work again.

If you remove the deck and do the adjustment by eyeball. It takes less time. Plus the end results are much more positive.

You may also want to inspect the 6C4 2.2K resistors for value You may want to look at replacing brown and black caps. Look into the CAL 5814 tubes for burnt resistors.

You know as long as you have that deck out, there is no reason to put it back in with problems that will need fixing later.

Panic Not. Prop the front edge up on some 2x4 blocks so you can drop the front panel flat on the bench. Remember the there is a couple of green screws in the sides (outside right MC end) (inside under the deck from the left (IF) end. then there are two in the front. You need to stick the screw driver through a hole in the KC dial lock disk to get one of them. there are two (three) green screws across the back. you need a long skinny #1 to reach down to get those green screws. Remember to un couple all the cable (1 power) most are the mini RF. Watch the PTO coax as it is strung around and needs watching as the RF deck is lifted free.

In the wafer sections you can see which section is wired to which RF transformers. This helps you determine if the switch is set to the correct contact as the switch changes sections. The switch change is all magic in the gear train. A special gear there decides when to move the band switch shaft to change the wafer section contact.

You get that gear to move the change on the MC detente to detente stop. and the switch to center in the wafer by adjusting the switch shaft in the switch gear clamp. These changes should not change the KC setting. Run the KC to both ends (with the zero center) and set your counter. remember to set the KC back to where it was so you do not rip up the PTO. Reset your cams and PTO after you get every thing back together.

This should leave you with a good mechanical alignment on the RF deck. Except for PTO alignment you should never need to do this again in. Until some clamp comes loose or breaks. Roger KC6TRU

P.S. You do have the Y2K Manual don't you? It really helps to have a book in one hand.

From w7itc@hotmail.com Wed Apr 17 23:58:1802  
Subject: [R-390] OT: Antenna tuner question

RE: Gouyton

This is a new one on me. Can you give us a link to the site. I am always curious about a new "tuner".  
Kenneth A. Crips W7ITC

From w7itc@hotmail.com Thu Apr 18 02:43:4202  
Subject: [R-390] Good utility

<http://www.agnitum.com/>

I never thought I would say this but I have found a better personal firewall then Zone Alarm. While this is off topic this is to good not to pass on. Go to the above site and take a look at "Outpost". The basic version is freeware. It has an easy to understand interface it's default settings are very powerful. I blocks ad's, and pop-ups. if a popup does appear all you have to do is drag and drop it into the outpost trash can and you will never see it again. It blocks spyware, trojans, etc. It also has filter settings to block the "nasty" from showing up. Take a look I think you will like it. Ken

From tube@spiritone.com Thu Apr 18 08:46:5102  
Subject: [R-390] Wanted: R-648 and/or R-864

I am looking for these to "round" out my collection. Thanks for any help or leads. Ed in Oregon.  
tube@spiritone.com

From courir26@yahoo.com Thu Apr 18 13:17:5402  
Subject: [R-390] 51J-3 500 kcs IF Questions

I'd like to swap notes with anyone who has mastered this.

Here is the issue.

As I see it, one can either align the IF at 500 kcs exactly, or align the IF at the frequency of the xtal filter (might be a tad off of 500).

On mine, if you align at 500 exactly, the xtal filter does not work as advertised (not a big deal for AM broadcasts) but the dial error from band to band, every other band, ping pongs from +2 to -2 kcs, etc.

If I align the IF right at the center of the xtal filter, the dial error is greatly reduced (probably band xtal pluses and minuses only) and the xtal filter works.

This is not by-the-book but the results seem to be better. Still trying to get symetry of the shape around the center freq.

Does anyone have experience with this alternate method? Also, when picking diode load signal off of R511 as advertised, signal is absent the BFO injection.

Has anyone hooked up an alternate detector signal which has the BFO injection present? Where is a good location to pluck this? Regards Tom

From cbscott@ingr.com Thu Apr 18 13:40:3102

Subject: [R-390] OT: Antenna tuner question

Kenneth, That's the problem. I can't find a site with any info. The guy selling it sent me some pictures. I can forward them to you if you want. By the way, if I use my hand-held a lot, will I get/20 vision? <<http://www.cnn.com/2002/HEALTH/conditions/04/17/fda.eye.surgery.ap/index.html>> Barry(III) - N4BUQ

From jlap1939@yahoo.com Thu Apr 18 15:38:1002  
Subject: [R-390] Archives/addresses

Friends, Well, I have had 3 questions dealing with boatanchors and archives.

In trying to answer,I found the r390 archive listing I used, is gone, and, as I am not a member of ANY other electronics list through Majordomo, I cannot help.(The other connections through Majordomo in other subject areas I got on lists with, I have forgotten; in addition, they do not pull up locations in the archives, as far as I know.)

PLEASE NOTE:

I used to simply go into "r390 archives" then back up one page to pick up a complete list of all the electronics dealing with tube tech, as well as other areas. This location gave the address for each. It was so easy, that I just did it that way..never wrote anything down...you could get it seemed, any list for electronics that was Majordomo.

The inquires were: for the Boatanchor list, and: two for the orig.(pre-2002) r390 archive.

It is my hope someone well acquainted with list addresses and management will tell these persons where to go for the needed information, and tell us if these old archives are still available, as well. My Best Regards, John

From Barry Hauser <barry@hausernet.com> Thu Apr 18 16:08:2102  
Subject: [R-390] Archives/addresses

John -- It's easy as pie. Just go to the main (new) qth URL which is <http://mailman.qth.net/>

Select the list you want (R-390, Boatanchors, etc.) from the drop down thing.

Then choose from the three "buttons" underneath that: 1998-2001 Digests, 1998-2001 Archives, and Recent Archives Sounds like you're looking for the middle choice -- which I missed the first time I went looking. Even if you try to go to the old URL, you get redirected to the new (mailman) one. At least that's what just happened when I tried it. Barry

From jordana@nucleus.com Thu Apr 18:01:4702  
Subject: [R-390] TOTALLY Off topic HELP..!!!!!!

Hi I realize this is totally off topic, but can someone tell me how to remove Adobe Acrobat reader from my computer...? I have installed 5.05, but as soon as I go to read a schematic or something , it kills my Internet connection and freezes my computer. I tried calling Adobe, but after being on Long distance



hold for minutes, I gave up... Has anyone else had this problem..?? 73 de Jordan...

From jordana@nucleus.com Thu Apr 18:09:1302  
Subject: [R-390] Re: TOTALLY Off topic HELP..!!!!!!

P.S.... it is not as simple as removing the software using the Add/Remove software panel from the Control Panel... I have tried that too many times to count..I think it's a registry problem with WIN 98... 73 de Jordan...

From cbscott@ingr.com Thu Apr 18:29:1102  
Subject: [R-390] Re: TOTALLY Off topic HELP..!!!!!!

Have you tried searching the registry for occurrences of "adobe", "acrobat", etc., and removing those entries? It may not get rid of everything, but it's worth a shot. Be careful, though! You can cripple your computer if you delete the wrong thing(s) in the registry.

If you can get a copy of RegMaid, it would help you a lot. It can identify orphaned keys and I'll bet these are part(all?) of your problem. GL, Barry - N4BUQ

From G4GJL@aol.com Thu Apr 18:37:1302  
Message-ID: <1e.26c5a902.29f07a69@aol.com>

And more especially the R-392...same era and soooooo much better. Trust me I have both! Pete G4GJL

From Barry Hauser <barry@hausernet.com> Thu Apr 18 21:01:1602  
Subject: [R-390] NIB R209

Not fair to compare to an R-392. The R-209 is more functionally equivalent to the R-174 AN/GRR-5, though much more compact. The later models, such as MK IIB, and MKIII have additional power modes, similar to the R-174 -- 110 and 220 AC plus several different DC voltages, 6, 12 and 24, as I recall.

Basically, the R-209 and R-174 are ruggedized military versions of AC/DC portable shortwave sets of the day -- more in common with a hollow state Zenith Trans-Oceanic than the R-392.

The -209 has that handy-dandy speaker with built-in cover and a veddy British black on white dial. Does have some degree of modular construction inside. Neat little radio -- actually smaller than a hollow T/O. Barry

From bsugarberg@core.com Thu Apr 18 21:07:2402  
Subject: [R-390] URL For RegMaid

Hello, Here is the URL for RegMaid: (It's free). <http://support.microsoft.com/default.aspx?scid=kb;EN-US;q156078> 73, Bruce Sugarberg WA8TNC

From jbrannig@optonline.net Thu Apr 18 22:04:3802  
Subject: [R-390] TOTALLY Off topic HELP..!!!!!!

Yes, Adobe versions 5 and over are squirrely. I have not found a solution. Jim

From bill@iaxs.net Thu Apr 18 22:58:2802  
Subject: [R-390] Archives/addresses

said, "It's easy as pie. Just go to the main (new) qth URL which is <http://mailman.qth.net/>  
Select the list you want (R-390, Boatanchors, etc.) from the drop down thing."

Well, yes if you only want one or two digests because you know exactly what you want by number. The dates are all Jan 5,02.

I would like to copy all 999 of them to my disk so I can use a search program to find what I want. We didn't always talk about fixing things in radios, don't'cha know. Maybe 90% of the mail does not talk about things that would improve the radio's condition. And that's the way life is, and that's why we have search tools.

I tried FTP because WS\_FTP can be told to save the contents of a directory (all 999 files) with one click. But mailman.qth.net does not allow an FTP connection on the standard port.

Has anybody solved this problem? Regards, Bill Hawkins

From bsugarberg@core.com Thu Apr 18 23:25:3202  
Subject: [R-390] [Fwd: FS manuals]

Reply to Larry, not to me, at: [Telegrapher@Qwest.net](mailto:Telegrapher@Qwest.net)

From mikea@mikea.ath.cx Fri Apr 19 00:02:4402  
Subject: [R-390] Archives/addresses

said, > I would like to copy all 999 of them to my disk so I can use a > search program to find what I want. We didn't always talk about > fixing things in radios, don't'cha know. Maybe 90% of the mail > does not talk about things that would improve the radio's > condition. And that's the way life is, and that's why we have > search tools.

There is a tool called "wget" for sucking down an entire website or subtree thereof. I know it compiles on \*BSD, Linux, and other \*nix-like systems. IIRC, it or something like it is available for Winboxen and Macs. Mike Andrews

From ross@hypertools.com Fri Apr 19 01:02:3302  
Subject: [R-390] Archives/addresses

mikea wrote: > >> Has anybody solved this problem? > > There is a tool called "wget" for sucking down an entire website > or subtree thereof. I know it compiles on \*BSD, Linux, and other > \*nix-like

systems. IIRC, it or something like it is available > for Winboxen and Macs.

In the windoze world, you want 'sitesnag'. It is available from PC Magazine as a free download. Get it at: <http://www.pcmag.com/article/0,2997,apn 3&s 1478&a 9616&app 1&ap 2,00.asp>

I've used it - works fine for grabbing an entire website I've never tried to download only selective parts of a site, though it may do it just fine. good luck Dave Ross N7EPI ross@hypertools.com

From ba.williams@charter.net Fri Apr 19 02:50:4302  
Subject: [R-390] Archives/addresses

> Even if you try to go to the old URL, you get redirected to the new (mailman) one. At least that's what just happened when I tried it. Barry

Barry, Is there an FTP site to download the entire archive file(s)? That would be best for me. the other other Barry

From Mercxx@aol.com Fri Apr 19 14:55:2502

Good morning all, I am new to the list and am looking to purchase and put into operation an R-390. I have looked and read many things on the web. My background is an O5H at Field station Augsburg in the 80s so my love for the R390 started then. I guess I am asking where can I obtain an operational one. I am not a repair guy thats for sure. I would appreciate any and all recomendations. Thanks. Steve Clark N4TKP Bartow, Florida

From cbscott@ingr.com Fri Apr 19 15:08:0302  
Subject: [R-390] Fun stuff

This doesn't apply to BA gear, but I thought it interesting.

I have a Kenwood TS440S/AT (yeah, yeah, it's not tube gear...). These radios are capable of remote control via a serial port. It's not a true RS232 port in that it operates at TTL levels requiring some extra circuitry to adapt its remote port to a RS232 logic levels. Additionally, from the factory, these did not come equipped with some internal chips that enable the communications (a UART and some memory...I think).

A couple of years ago, a guy in Spain advertised he had some of the internal chips for sale and I bought some from him with the intention of eventually hooking the radio up to the PC.

Recently I wanted to revive this project. In the mid-'80s, I built a simple interface to handle TTL to RS232 level translations so my VIC-20 could print to an RS232 printer and I figured I could adapt it. It turns out the Kenwood requires an active low interface and this project did not accommodate that. After a failed attempt on my part to adapt an optoisolator, I came across a very simple interface diagram from a fellow in Italy. I decided I would give his circuit a try.

Last night, I put the new circuit together and, using some shareware I found, I fired it up and it worked. I was elated!

I relate this for the following reason: this project came together with the help of people from the other side of the earth. Technology has shrunk my world such that these kind of things are possible. I would never have thought these things possible when I was a youngster.

This list is very much like the above experience. People from all over the world come together to help a member when they need it. I know I've benefited from the members of this list and hope I've helped someone in some small way. I guess this is just my way of saying thanks again to all on this list who have helped me in this hobby. Thanks and 73, Barry(III) - N4BUQ

From jlap1939@yahoo.com Fri Apr 19 15:21:4802  
Subject: [R-390] Archives see vol 1 #177...

Friends, My thanks to Barry for putting me straight..I am afraid I just don't keep up very well at present..and I again apologize to those who asked me, that I had not an answer..!! Again, thanks, Barry..  
John

From Richard.McClung@Dielectric.spx.com Fri Apr 19 15:25:3902  
Subject: [R-390] Good morning question.

What Steve didn't tell you when he said he was an 05H (That's Ohh Five HOG) is that he was a Morse Intercept Operator. Usually high speed with a mill. Probably not quite as good as a regular Navy CW operator who could copy two nets (one in each ear), drink a cup of coffee, smoke a cigarette, carry on a conversation with two other people, file previous messages, maintain the shift log, and go for a head break.....All at the same time. Did I miss anything Foster?

Hey, I'm not biased in any way. I spent 21 years in the Army 05B4SLA / 32Z4HGM / 31Z4SLAF4.  
RICH WA6KNW

From s-biddle@ti.com Fri Apr 19 15:37:4102  
Subject: [R-390] Pricing of Collins Low Cost Filters

I did a little poking around to find pricing on the Collins Low Cost Series of filters. This is not totally current, but should be close. Apparently these are popular upgrades for the AOR receiver/scanners.

Rockwell, Filter Products is pleased to provide you with the following pricing information on the LOW COST SERIES of filters. The LOW COST SERIES of filters have all three bandwidths are centered at 455 kHz. The pricing on these filters is the same for all three filters, 526-8693-010 (500Hz B.W.), 526-8694-010 (2.5kHz B.W.), 526-8695-010 (5.5kHz B.W.) and is as follows:

Quantity	Unit Price
1-4	\$ 75.55
5-9	\$ 62.17
10-24	\$ 50.81
25-49	\$ 43.12
50-99	\$ 38.44
100-249	\$ 33.43

Prices are FOB our plant and are per filter part number. Prices DO NOT include local taxes if required,

or shipping costs. Delivery will be from stock on the LOW COST SERIES. 73 de Richard, KB5WLH

From Mercxx@aol.com Fri Apr 19 16:01:1102  
Subject: [R-390] Good morning question.

Ahh a fellow Army soldier, you wouldn't happen to be related to a SGM McClung of Special Forces fame would you? Anyway the Navy guys always were on top of the copy, of course when the KSR came along us army types did speed up a little. But then again the sound of a mill always was music to my ears... 73 Steve O5H4Y4/18E4W4 Have a Great day.

From rlruskowski@raytheon.com Fri Apr 19 16:04:2102  
Subject: [R-390] Good morning question.

Steve, Fear not about keeping your R390 going. There are many 33C,D,E,F,G here who can help. Then there are a bunch of 31's Signal Corp Guys. And then lots of Navy guys and Air Force and Marines.

We even have fellows in several other countries that can help. And Women to. When you were at Augsburg in 80's, Did you have R390's or R390/A or some or both? Roger KC6TRU San Diego (33C4H)

From cbscott@ingr.com Fri Apr 19 16:54:0802  
Subject: [R-390] Good morning question.

Can I get a special decoder ring if I send in two brown beauties and some black ukkumpuckie?  
Barry(III) - N4BUQ

From cbscott@ingr.com Fri Apr 19 19:56:4902  
Subject: [R-390] Good morning question.

Scott, We'll have to shot you. Or you will need to enlist for at least four years and get cleared. Put Army Security Agency in the search box and bowse some ASA sites.

Roger, Well, in that case, I suppose I'll just file that under "Don't Need To Know". :) Thanks and 0111 0011, Barry(III) - N4BUQ

From john\_finigan@yahoo.com Fri Apr 19 23:01:1702  
Subject: [R-390] Pricing of Collins Low Cost Filters

It slipped my mind to post this earlier, but I got a quote from Rockwell a few months ago on these filters.

Prices were around \$90 for 1 to about \$48 for 25+. I guess the prices have gone up. It would be nice if some distributor bought in bulk passed the discount on, but I never found one on the web. John

From jlkolb@cts.com Fri Apr 19:47:4602  
Subject: [R-390] Good morning question.

> Anyway the Navy guys always were on top of the copy, of course when the KSR came along us army types did speed up a little. But then again the sound of a mill always was music to my ears...

Shortly after I reported to my first ship, fresh out of Navy Radioman "A" School, we went to Hong Kong. We had a hotshot CW operator, very proud of his newly purchased Hallicrarters TO Keyer (1967), whom I'll call Harb here. As we pulled into port, Harb was on the ship to shore circuit with the British operator and as they talked back the speed got faster and faster, Harb banging away on the bug and pounding on the mill. After awhile, when the speed got unbelievably fast, the British operator sent "wait one mate, gotta sharpen my stick." (pencil) Harb tore the phones off his head, stormed out of radio central and wasn't seen for the rest of the day. We later heard the British operators sign up for 12 years, and spend the first 4 in school where the US navy had a 4 year enlistment, and 3 or 4 month radioman school. John

From ba.williams@charter.net Sat Apr 02:32:0902  
Subject: [R-390] Other Fun stuff

> Recently I wanted to revive this project. In the mid-'80s, I built a simple interface to handle TTL to RS232 level translations so my VIC-20 could print to an RS232 printer and I figured I could adapt it.

Barry and list, That reminds me of starting out with home computers a long time ago with Atari 800XL's and other 8 bit computers. I remember the first memory upgrade to the 64k RAM. We piggybacked the chips per an article by someone, Scott Peterson I think. This was in the mid 80's when 64k was the limit in RAM. But, it needed to have DOS bankswitch to get to the other 64k banks. Finally, one night I decided to decode the memory boundaries in hex and patch MyDOS to jump hex boundaries in hopes it would see the new memory banks. It did the first time and I remember being elated that I made it work....kinda like you hooking the VIC-20 up to a RS-232 interface.

More off-off topic- today I went and looked at some old home radios and tubes that a lady had for sale. I got a few good tubes for a decent price, and brought home 3 unusual radios to tinker with. The best one is a metal case RCA. It is bigger than an old breadbox and gets the AM band and SW from around 9-12 mHz. The most unusual part is that it is a hotel coin operated radio. It has the chromed quarter coin slot with a change return hole in the side. I looked in the back and it looks like either a 5 or 7 tube radio. The only thing on the remaining part of the sticker on the bottom is ??MI-13182.

Does anyone know more about hotel type pay radios? I'll probably repaint the case and recap it just because it is unusual. Barry

From hardiem@intergate.ca Sat Apr 02:16:3202  
Subject: [R-390] Intermittent Filter

The 4 Kc filter in my '390A is "intermittent". It works OK when the radio is first switched on. After warming up even slightly, if the mode switch is moved to standby then to AGC, or if a different filter is selected then 4 Kc reselected, the audio is extremely weak. (Almost not there.) If no selections are changed after the radio is first turned on, the 4 Kc filter works normally.

The other filters work normally so far as I can tell. Does anyone have an idea before I start the honest-

to-goodness trouble shooting? Mike VE7MMH

From redmenaced@yahoo.com Sat Apr 02:55:1202  
Subject: [R-390] Intermittent Filter

Dirty bandswitch, dirty trimmer cap, maybe a short to ground on the center contact of the trimmer. Just generally do a poke around in there to see what you can find. Joe

From davidmed@sbcglobal.net Sat Apr 16:57:2502  
Subject: [R-390] Moving Again

We are moving back to Tucson in the middle of next month and a BIG clean up and reduction in stuff is taking place. I am selling a lot of radios including the following:

R-390A,R-391,R-392,R-648,AR88D,SX25.

I really don't want to have to pack any of this so want pickup in Fort Worth. Complete details, pricing etc is on my web site: <<http://64.49.219.162/davemed.info>>

There is also a good pickup load of stuff which is available. Haul it off no charge. There are signal generators, some non working radios and other useful stuff here. Anyone interested email me or you can phone 817 293 1273

From Mercxx@aol.com Sat Apr 18:01:3202  
Subject: [R-390] Thanks to everyone.

Good afternoon, I want to thank everyone who responded to my inquiry. I got a lot of information plus a lot of laughs. Thanks again and have a great weekend..... 73 Steve Clark

From w7itc@hotmail.com Sat Apr:49:1002  
Subject: [R-390] Good morning question.

There are times I wish I had striked for Radioman, signalman, or perhaps CT. Not that I regret being a Commissaryman I truly enjoyed it. I do regret not being at sea, Key West with VX-1, and The Naval Station a GITMO was where I went. Of course all of us at the time where happy to not go to Viet Nam.  
Ken

From davidmed@sbcglobal.net Sun Apr 21:33:1202  
Subject: [R-390] [R390] FS R-390 assemblies

I have the following R-390 parts for sale. Condition as noted.

- |   |          |
|---|----------|
| 1. IF decks. Complete without tubes or shields. Not tested.         | \$120.00 |
| 2. Audio/VR decks. Complete with tubes, inc 6082s. Not tested       | 50.00    |
| 3. Power Supply units. Good transformer but need some rewiring      | 25.00    |
| 4. Sets of two large knobs. Recently powder coated. Clamps missing. | 50.00    |

Will ship CONUS at buyers expense. Dave

From courir26@yahoo.com Mon Apr 22 00:10:0202  
Subject: [R-390] Make your own R-725 was: FS R-390 assemblies

Note to project types who wanted to roll their own R-725. Dave has the coveted R-390 IF decks. 73  
Tom N5OFF

From cbscott@ingr.com Mon Apr 22 14:57:2302  
Subject: [R-390] Other Fun stuff

<snip>

A prop from the Mission Impossible TV series - episode #131, set #82? <g> Barry(III) - N4BUQ

More off-off topic- today I went and looked at some old home radios and tubes that a lady had for sale. I got a few good tubes for a decent price, and brought home 3 unusual radios to tinker with. The best one is a metal case RCA. It is bigger than an old breadbox and gets the AM band and SW from around 9-12 mHz. The most unusual part is that it is a hotel coin operated radio. It has the chromed quarter coin slot with a change return hole in the side. I looked in the back and it looks like either a 5 or 7 tube radio. The only thing on the remaining part of the sticker on the bottom is ??MI-13182.

Does anyone know more about hotel type pay radios? I'll probably repaint the case and recap it just because it is unusual. Barry

From jlap1939@yahoo.com Mon Apr 22 15:10:3302  
Subject: [R-390] Remembering

Friends, Love the comments on mil. ex., (which I never have felt were in any way off topic..consider the main subject here...)

We've done it before, and it is great to hear from persons who had first hand experience, even maybe my limited ammt. as a tanker..

I heard from more than 50 w/prior ser. the last time; I hate to tell you: I lost all the addresses when the computer system here was damaged several months ago, but still have my list of non a correspondents.(I think it will work...) Keep up the good work! John

From jlap1939@yahoo.com Mon Apr 22 15:32:2902  
Subject: [R-390] P.S. >>>

Friends, Sorry, to the one who asked, and to the list. I have just checked, and I only have 9 who contacted me, (from a total of about 38 or 39), still on the list of 390 non a aficionados'...

I am not interested in working w/separate group anymore; the list members have shown an increased interest in the 390 non a,(my pref.) and I feel it is more to the point for all 3XX series, and related, to just say your piece here...(At least some are now avoiding the tendency to say "390" and expect you to know they are speaking of the "a". You would not believe the time in my life I have answered about a



"390" and found they had the "a", even in mil..) It was my mistake to suggest a separate list before...

This is a great list!! I am always here; just not saying as much anymore, as I tend to get off sub...(you would never guess it to read the above, huh...) My Best Regards, John

From hardiem@intergate.ca Tue Apr 23 01:43:1302  
Subject: [R-390] Broadcast Band On Other Bands

My R-390A was operating normally on 3870 but after a fairly loud audio click overlapping local broadcast stations could be heard. With some tuning around these "stations" occur at various places on several bands, notably the 3, 13,14,15 Meg bands, maybe others. It's hard to tell if the selected frequency is being received. The 1 to 2 Meg band seems OK. Ideas before the trouble shooting begins?  
Mike VE7MMH

From Normiehall@aol.com Tue Apr 23 01:45:3302  
Subject: [R-390] Other Fun stuff

writes: << Hi Norm, I wasn't the one who was wondering about the number. I think that was the other, other, other Barry. I was the one with the smart-aleck answer about MI being Mission Impossible -- sorry.

Interesting bit of information about the RCA Master Item stuff, though. Maybe you want to post this to the list? 73, Barry(III) - N4BUQ

From ba.williams@charter.net Tue Apr 23 03:44:0102  
Subject: [R-390] Broadcast Band On Other Bands

> My R-390A was operating normally on 3870 but after a fairly loud audio click overlapping local broadcast stations could be heard. With some tuning around these "stations" occur at various places on several bands, notably the 3, 13,14,15 Meg bands, maybe others. It's hard to tell if the selected frequency is being received. The 1 to 2 Meg band seems OK.

Mike, This makes me think of several things. First, I sometimes get a sudden pop of louder audio especially if I've had the radio parked on a frequency for a long time. Something seems to open up somewhere for full audio. It has been going on for a few years now. Turning up the RF Gain usually gives me full audio again, or turning the MC Change knob up or down a band will do it. I'm pretty sure that the racks are moving loose enough to not bind like they do on my other one. Sometimes I get the impression that crud on the Local Gain and RF Gain pots is causing the problem.

Maybe some of these stations are harmonics? Barry

From ba.williams@charter.net Tue Apr 23 04:04:1802  
Subject: [R-390] Other Fun stuff

Thanks for telling me now! You have no idea how long it took me to gently poke around the case looking for self destruct devices. The expense for bomb handling suits and head gear was hard to explain and they don't come cheap. I can use the industrial xray unit around here, so that may pay off eventually

with kids always breaking bones, etc.

Norm, that is interesting to know. At least I know that it isn't some sort of model number. I may have found a chassis number inside, but I haven't looked it up yet. It is so weird looking that it may be neat to get working one day. It looks like a big toaster oven with the door in the back. The coin op part (Acer) appears to be disconnected completely. I was worried about all of those quarters I would have to drop in to use the thing. Thanks for the info. I wonder if they ever made any money off of this racket. I read a few years ago that a major hotel in Japan was putting Drake R-8's in every room. Maybe it was Singapore. The other other Barry

From r.tetrault@attbi.com Tue Apr 23 04:43:5702  
Subject: [R-390] Broadcast Band On Other Bands

My guess is that you've got a leaky cap. Check the toobs but suspect a cap. Parasitic oscillations often show themselves as audio clicks or pops and the presence of BC stations on the HF bands would make me think of a parasitic oscillator that heterodynes stuff from the BC band into the detector chain. I wouldn't hazard a guess as to exactly where in the chain, but there are gents with opinions here, Oh Jeez!  
Bob

From courir26@yahoo.com Tue Apr 23 13:19:1502  
Subject: [R-390] Broadcast Band On Other Bands

Sounds like you either had a component failure in the RF section, or the RF is out of alignment.

The RF section has to track with the PTO and variable IF. You can tell if you can benefit from an RF alignment by slightly turning the MCS knob.

If you turn it half way to the adjacent band, it will move the slug rack a tad prior to changing xtal position. Try this and see if you get an increase on the signal meter. If you get an increase, then you need an RF alignment (at minimum). 73 Tom N5OFF

From BRingwoo@csir.co.za Tue Apr 23 13:28:4102  
Subject: [R-390] Broadcast Band On Other Bands

I have had this when an RF stage goes into oscillation - the pop is when it starts to take off. Usually accompanied by noisy signals on the band you want to hear. Would start with bypass caps in RF stage.

>>> >>> Sounds like you either had a component failure in the RF section, or the RF is out of alignment.

The RF section has to track with the PTO and variable IF. You can tell if you can benefit from an RF alignment by slightly turning the MCS knob.

If you turn it half way to the adjacent band, it will move the slug rack a tad prior to changing xtal position. Try this and see if you get an increase on the signal meter. If you get an increase, then you need an RF alignment (at minimum). 73 Tom N5OFF

From cbscott@ingr.com Tue Apr 23 14:00:4902  
Subject: [R-390] Other Fun stuff

Was the woman you bought the radio from in her 70s and occasionally refer to herself as "Cinnamon"?  
Barry(III) - N4BUQ

From ba.williams@charter.net Tue Apr 23 16:10:3102  
Subject: [R-390] Broadcast Band On Other Bands

> If you turn it half way to the adjacent band, it will move the slug rack a tad > prior to changing xtal position. Try this and see if you get an increase on > the signal meter. If you get an increase, then you need an RF alignment (at > minimum).

Me? Mike? Both of us? Mine does not get louder halfway to the next band. I think mine is a dirty pot problem but I'm not sure. Barry

From ba.williams@charter.net Tue Apr 23 16:14:4302  
Subject: [R-390] Other Fun stuff

> Was the woman you bought the radio from in her 70s and occasionally refer to herself as "Cinnamon"?

Yes, if you mean the one with crooked teeth and spandex pants. You know her too? We met at the Waffle House. Barry

From cbscott@ingr.com Tue Apr 23 15:16:1202  
Subject: [R-390] Broadcast Band On Other Bands

Mine does the same thing. It's almost like it gets a sudden 10dB gain. Is yours a '56 Motorola? I wonder if it's manufacturer/contract specific. Barry(III) - N4BUQ

From ba.williams@charter.net Tue Apr 23 16:45:2502  
Subject: [R-390] Broadcast Band On Other Bands

Yes, mine is a 56 Motorola and you described the effect better. It is a sudden gain without noise or harmonics. I have not had the IF or RF deck out to check manufacturers, but I am betting they are Motorola modules based on consistent metal work, lettering, and MFP type. It is pretty easy to look at everything and come to the conclusion everything was manufactured at the same plant. The PS and audio deck are Motorola. I am using an EAC audio deck at the moment until I can recap and replace resistors in the original. So, the audio deck is eliminated as cause of this phenomena. Barry

From Barry Hauser <barry@hausernet.com> Tue Apr 23 15:58:4802  
Subject: [R-390] Other Fun stuff

> > Was the woman you bought the radio from in her 70s and occasionally refer to herself as "Cinnamon"? Barry(III) - N4BUQ > Yes, if you mean the one with crooked teeth and spandex pants.

You know her > too? We met at the Waffle House. >> Barry

Oh ... \_that\_ Cinnamon! I got a black box, also with a coin slot. Put a quarter in, it shakes for about 15 minutes then stops. Y'think it came from the same lot? Barry (I?)

From roy.morgan@nist.gov Tue Apr 23 16:08:4502  
Subject: [R-390] Broadcast Band On Other Bands

wrote: >My R-390A was operating normally on 3870 but after a fairly loud audio click >overlapping local broadcast stations could be heard. >>Ideas before the trouble shooting begins?

Coax cable shield grounds and connectors through out the radio. Grounds in module power plugs.

Your downspouts. Yes. downspouts and other loose metal stuff around your antenna and house.. bad connections cause rectification and birdies.. not too likely compared to the coax shields though.

Do you get these extra signals with the antenna disconnected/input shorted? .. with the RF amp tube pulled out? (.. and so on down the tube lineup.) Have you put a cover over the top of the radio to see if the signals get lower in strength?

I look forward to hearing what you discover is the trouble. Roy

From David\_Wise@Phoenix.com Tue Apr 23 17:24:2202  
Subject: [R-390] Intermittent Filter

> The 4 Kc filter in my '390A is "intermittent". It works OK

I have one of the older IF decks, with hand-picked fixed mica caps instead of trimmers. One of these (8kHz in my case) turned out to be intermittent. However, it didn't respond very strongly to heat/cold; only just enough to make me suspicious. I used brute force and slapped in another mica. End of problem. Later I went back and hand-picked for maximum response. The old cap went in the "Bad R-390A parts" baggie. Not much in there, it was a good radio to start with. 73, Dave Wise

From David\_Wise@Phoenix.com Tue Apr 23 18:38:3302  
Subject: [R-390] Broadcast Band On Other Bands

> Yes, mine is a 56 Motorola and you described the effect better. It is a sudden gain without noise or harmonics. I have not had the IF Barry Mine does the same thing. It's almost like it gets a sudden 10dB gain. Is yours a '56 Motorola? I wonder if it's manufacturer/contract specific. Barry(III) - N4BUQ

I think we're onto a trend. My '54 Motorola does it too, on 4-7. In CAL, the carrier meter reads 10-20dB lower than on the other bands. I can clear it by briefly! shorting the middle RF coil's trimmer to ground. Days go by, then it's back down. I'm not saying it's the trimmer (the short is just a convenient way of generating a lot of EM racket), but that's where I'll look first. IIRC it doesn't get detuned, just loses gain. I suspect loss of Q due to a high-resistance contact. Now that I have a nice signal generator, I'll take some stage gain readings while it's bad, then clear it and repeat.

By the way. My nice signal generator does need one bit of help. Anybody got a cover plate for an HP 8640B modulator housing? Mine came without, and I bet it would radiate less if it were there. Doesn't have to be B; I'm sure an A would work fine. (Was there a non-A?) I can't fabricate one, since I don't have a milling machine to hollow it out. 73, Dave Wise

From billsmith@ispwest.com Tue Apr 23 17:31:2102  
Subject: [R-390] Broadcast Band On Other Bands

For what it is worth, I have the same problem in a Hallicrafters SX-62. It plays beautifully, then gain suddenly cuts down by quite a bit. If I switch mode to cw and back to am, I can restore normal operation. I have recapped the receiver and checked all the resistors. I suspect one (or more) mica caps inside one (or more) of the IF cans is opening up.

Couple of other notes. The R390 (non-a) here is still overloading on the AM broadcast band. I have recently rocked the bandwidth switch only to discover that the center of the bandpass changes when I hit just the right spot. Perhaps the problem is a combination of a recent alignment, and the condition of the bandwidth switch. Further, apparently due to my alignment, there are now two peaks in the 16 kHz position. The switch was cleaned, but apparently not well enough. I have samples of a conductive material, will have to try that the next time I can dig into the receiver. Perhaps this is the solution to the overload problem discussed previously (one can always hope).

In the RF section, I now notice some bands will increase in signal strength slightly when the MHz Change switch is rotated slightly. This is a departure from when I first obtained the receiver. Do R-390's need periodic realignment in the RF section? The set was pretty gummed up, perhaps it is only now loosening up a little. 73 de Bill, AB6MT

From oldradio@tin.it Tue Apr 23:21:2902  
Subject: [R-390] Carriers on 2 an 3 Mhz band

Dear all, I just reassemble my refurbishing job on a 390A ( second one). It looks like most thinks are working properly, and the one that do not, they have a good reason not to do so ( such as a broken mechanical filter, or a missing BFO).

But there is one problem that I can not figure it out. On the band of 2 and 3 Mhz, I have very high carriers signal every 50 KHz . I can only get those if I have an antenna connected , otherwise I do not get any signal at all ( and the Diode load level is showing accordingly to this fact).

When I disconnect the antenna, I do have a large oscillation signal (several volts on a scope) on test point E208 only on the 2 and 3 Mhz band. When I do connect the antenna, the oscillation disappears but I have carriers every 50 KHz.( obviously RF stage is very unstable).

I checked visually V201 and all looks ok, I change the bypass capacitor C227 but the problem is still there ( the modification with 47 pf in parallel is there). I am kind of suspicious about the ground connection of pin 7 of V201 ( as well as pin 3, they both are connected to the center of the tube socket), it shows grounded with the meter, but I can not see were it goes to ground ( unless the socket center is grounded by default), but it be grounded since it is obvious that this receiver had a long working life.

Does anybody have an idea were I should look to resolve the problem ( I do not have yet a spare 6DC6 tube to try) and eliminate those carriers that make the 2 bands unusable? Thanks CS Claudio Spiritelli

From Barry Hauser <barry@hausernet.com> Wed Apr 24 00:10:2402  
Subject: [R-390] Broadcast Band On Other Bands

wrote: > For what it is worth, I have the same problem in a Hallicrafters SX-62. It > plays beautifully, then gain suddenly cuts down by quite a bit. If I switch > mode to cw and back to am, I can restore normal operation. I have recapped > the receiver and checked all the resistors. I suspect one (or more) mica > caps inside one (or more) of the IF cans is opening up.

Possibly a lower-grade problem -- borderline switch contact or bad solder joint on one of the contacts. When you switch back and forth, it jostles the joint just enough to clear it -- theoretically.

>

> Couple of other notes. The R390 (non-a) here is still overloading on the > AM broadcast band. I have recently rocked the bandwidth switch only to > discover that the center of the bandpass changes when I hit just the right > spot. Perhaps the problem is a combination of a recent alignment, and the > condition of the bandwidth switch. Further, apparently due to my > alignment, there are now two peaks in the 16 kHz position. The switch was > cleaned, but apparently not well enough. I have samples of a conductive > material, will have to try that the next time I can dig into the receiver.

I don't know how advisable it is to use a conductive compound on that switch. Try re-cleaning it with DeOxit or similar. It may take several go-rounds. It also may be a weak contact. There's a way to re-tension these, but you have to be careful and go slowly. Use a small piece of paper or a piece of plastic cut from a blister pack to check for tension of the contacts against the rotor. If some are weak, they can open up a smidgen more when warmed up and break contact. To add tension back, use a small allen key or a piece of heavy wire bent at the end to make it easy to slide it under the loops in the contacts and pull them away slightly. Then use a jeweler's screwdriver or some other pointy tool to press on the business end of the contact. Takes some dexterity, so...

While your at it, check if the switch is tight to the module and the switch stack is tight. Also dress up the solder connections on the contacts as well as the other end of any short leads connected to them.

> Perhaps this is the solution to the overload problem discussed previously > (one can always hope).

>

> In the RF section, I now notice some bands will increase in signal strength > slightly when the MHz Change switch is rotated slightly. This is a > departure from when I first obtained the receiver. Do R-390's need periodic > realignment in the RF section? The set was pretty gummed up, perhaps it is > only now loosening up a little.

Could be the same thing (weak contacts, deteriorated solder joints), or the mechanical synch is slightly off. It could be continuing to slip if a clamp is loose. Barry

From redmenaced@yahoo.com Wed Apr 24 00:21:5002  
Subject: [R-390] Broadcast Band On Other Bands

I think we are on to something here. I noticed on the Motorola RF deck that I have that the bandswitch is loose and sloppy, the contacts don't quite close as nicely as I would like. Is it possible that they are coming open as they heat up? Could it be worn out where the ceramic centers turn against the ceramic outer ring? Joe

From davidmed@sbcglobal.net Tue Apr 23 19:33:0202  
Subject: [R-390] FS R-390 parts etc.

The RCA radio I have FS is actually an AR88LF not the D model. I still have:

- |   |                |
|---|----------------|
| 1. Large knobs just powder coated for the R-390/390A                  | \$ 50 per pair |
| 2. R-390 audio/VR decks. No tubes. Not tested                         | 35.00          |
| 3. R-390 xtal osc deck with all xtals and tubes. Not tested but clean | 100.00         |

All the IF decks and power supplies have been spoken for. Dave

From r-390a@al.tirevold.name Wed Apr 24 01:18:5402  
Message-ID: <02042320185407.27642@studio-one>

Wei-i Li has provided his next installment of "Pearls" of wisdom for the R-390A FAQ web site. They are available at: <http://www.r-390a.net/pearls.htm> Enjoy! Al

From twleiper@juno.com Wed Apr 24 04:15:5402  
From: twleiper@juno.com (Thomas W Leiper)  
Subject: [R-390] Carriers on 2 and 3 Mhz band

writes: ... > But there is one problem that I can not figure it out. > On the band of 2 and 3 Mhz, I have very high carriers signal every > 50 KHz .

Got any switching supplies floating around near the antenna, like a PC computer...or even a household alarm system? Twit

From ba.williams@charter.net Wed Apr 24 15:05:0602  
Subject: [R-390] Twinax connectors arrived

My twinax connectors that I ordered from Beacon arrived yesterday. Someone on the list passed on their website a while back. The solder type, Item #5100 for \$3.50 each looks the best. It has a perfect fit with the notch and threads. Very good quality connector for the price.

The website is 4Beacon.com. They are a bit slow in shipping out but it did arrive with a catalog on CD. Barry

From cbscott@ingr.com Wed Apr 24 14:33:2602  
Subject: [R-390] Broadcast Band On Other Bands

I'm guilty of spraying the wafer-style bandswitch with DeOxit. It was before I knew that was a bad thing to do. I wonder if this is phenomenon is a result of this? Perhaps the bandswitch properties are changing as the set gets warmer or sits on the same frequency for an extended time. Barry(III) - N4BUQ

From David\_Wise@Phoenix.com Wed Apr 24 18:23:3002

Message-ID: <C7C5B071F171D31193C100A0C91E114ED7DBF9@hil-exch.phoenix.com>

There may be several things going on. In my case, it's not the bandswitch, as repeated switching doesn't clear it. 73, dw

From hardiem@intergate.ca Thu Apr 25 00:31:0302  
Subject: [R-390] Update On Broadcast Band Stations On Other Freqs

After the initial post a different (non R-390) receiver was tried with the same results, overlapping broadcast band stations on a variety of frequencies and bands. The signals disappeared on both/either receiver when the antenna was disconnected. The next day everything had returned to normal.

Someone suggested a loose downspout or something similar "mixing" and re-radiating signals, which at this point seems a probable cause. So with a little luck the problem may not return, if it does the hunt will go on. Mike VE7MMH

From tbigelow@pop.state.vt.us Thu Apr 25 14:51:4302  
Subject: [R-390] Surplus/Boatanchor haunts sought....

Hello to all - Duty is taking me briefly to the Boulder/Denver Colorado area, so I thought I'd ask around to see if anyone knows of places to visit. I've heard of a couple connector dealers out that way, but no surplus houses or good places known for BA gear. I'll do the usual rounds of the usual suspects (shops and such), but it sure would be nice to hear from anyone with firsthand knowledge. Also if there are any hamfests coming up soon, it would be nice to meet some of the folks from these lists. Anyone out there? Thanks - de Todd/'Boomer' KA1KAQ

From Richard.McClung@Dielectric.spx.com Thu Apr 25 18:27:0302  
Subject: [R-390] ARMED FORCES DAY ANNIVERSARY

The following information is submitted for your information. RICH WA6KNW

ARMED FORCES DAY ANNIVERSARY

MILITARY/AMATEUR CROSSBAND COMMUNICATIONS TEST (11 MAY02)

1. THE ARMY, AIR FORCE, NAVY, MARINE CORPS, AND COAST GUARD ARE CO-SPONSORING THE ANNUAL MILITARY/AMATEUR RADIO COMMUNICATIONS TESTS IN CELEBRATION OF THE 52ND ANNIVERSARY OF ARMED FORCES DAY. ALTHOUGH THE ACTUAL ARMED FORCES DAY IS CELEBRATED ON SATURDAY, MAY 18,02, THE ARMED FORCES DAY MILITARY/AMATEUR CROSSBAND COMMUNICATIONS TEST WILL BE CONDUCTED ON MAY 11,02 (LOCAL) SO AS NOT TO CONFLICT WITH THE DAYTON HAMVENTION WHICH IS ON THE SAME WEEKEND (17-19 MAY,02) AS THE ACTUAL ARMED FORCES DAY.

2. THE ANNUAL CELEBRATION FEATURES TRADITIONAL MILITARY TO AMATEUR CROSSBAND COMMUNICATIONS TEST AND THE MESSAGE RECEIVING TEST. THESE TESTS GIVE AMATEUR RADIO OPERATORS AND SHORT WAVE LISTENERS AN OPPORTUNITY TO DEMONSTRATE THEIR INDIVIDUAL TECHNICAL SKILLS AND



RECEIVE RECOGNITION FROM THE SECRETARY OF DEFENSE OR THE APPROPRIATE MILITARY RADIO STATION FOR THEIR PROVEN EXPERTISE.

3. QSL CARDS WILL BE PROVIDED TO THOSE MAKING CONTACT WITH THE MILITARY STATIONS. SPECIAL COMMEMORATIVE CERTIFICATES WILL BE AWARDED TO ANYONE WHO RECEIVES AND COPIES THE DIGITAL ARMED FORCES DAY MESSAGE FROM THE SECRETARY OF DEFENSE.

4. MILITARY-TO-AMATEUR CROSS BAND TEST CONTACTS.

MILITARY-TO-AMATEUR CROSS BAND OPERATIONS WILL TAKE PLACE DURING 11-12 MAY 2002. TIMES IN ZULU (UTC) AND FREQUENCIES FOR EACH STATION ARE LISTED BELOW. VOICE CONTACTS WILL INCLUDE OPERATIONS IN SINGLE SIDEBAND VOICE (SSB). SOME STATIONS MAY NOT OPERATE THE ENTIRE PERIOD, DEPENDING ON PROPAGATION AND MANNING. PARTICIPATING MILITARY STATIONS WILL TRANSMIT ON SELECTED MILITARY MARS FREQUENCIES AND LISTEN FOR AMATEUR RADIO STATIONS IN THE AMATEUR BANDS INDICATED BELOW. THE MILITARY STATION OPERATOR WILL ANNOUNCE THE SPECIFIC AMATEUR BAND FREQUENCY BEING MONITORED. DURATION OF EACH VOICE CONTACT SHOULD BE LIMITED TO 1-2 MINUTES. THE FOLLOWING STATIONS WILL BE TRANSMITTING ON MARS FREQUENCIES LISTED BELOW WHICH ARE PROVIDED AS 'WINDOW/DIAL FREQUENCY' IN KHZ:

5. SECRETARY OF DEFENSE MESSAGE TEST VIA DIGITAL MODES.

THE SECRETARY OF DEFENSE MESSAGE WILL BE TRANSMITTED VIA DIGITAL MODES INCLUDING RTTY, PACTOR, AMTOR, AND CLOVER FROM THE STATIONS LISTED BELOW, INCLUDING FREQUENCIES, MODE, AND DATE/TIME IN ZULU (UTC). ALL FREQUENCIES ARE LISTED FOR CENTER OF INTELLIGENCE. OFFSET AS APPROPRIATE FOR YOUR TNC. (NOTE: NOT ALL STATIONS MAY NECESSARILY OPERATE ON ALL THE FREQUENCIES LISTED, DEPENDING ON PROPAGATION AND AVAILABLE EQUIPMENT.)

6. SUBMISSION OF TEST ENTRIES.

TRANSCRIPTS OF THE RTTY, PACTOR, AMTOR OR CLOVER RECEIVING TEST SHOULD BE SUBMITTED 'AS RECEIVED.' NO ATTEMPT SHOULD BE MADE TO CORRECT POSSIBLE TRANSMISSION ERRORS. PROVIDE TIME, FREQUENCY AND CALL SIGN OF THE MILITARY STATION COPIED, INCLUDING NAME, CALL SIGN, AND ADDRESS (INCLUDING ZIP CODE) OF INDIVIDUAL SUBMITTING THE ENTRY. ENSURE THIS INFORMATION IS PLACED ON THE PAPER CONTAINING THE TEST MESSAGE. EACH YEAR A LARGE NUMBER OF ACCEPTABLE ENTRIES ARE RECEIVED WITH INSUFFICIENT INFORMATION, OR NECESSARY INFORMATION WAS ATTACHED TO THE TRANSCRIPTIONS AND WAS SEPARATED, THEREBY PRECLUDING ISSUANCE OF A CERTIFICATE. ENTRIES MUST BE SENT TO THE FOLLOWING MILITARY ADDRESS AS FOLLOWS:

A. STATIONS COPYING AAZ, AEA, OR WAR SEND ENTRIES TO:  
ARMED FORCES DAY CELEBRATION  
CHIEF, ARMY MARS  
HQ, USASC  
ATTN: AFSC-OPE-MA (MARS)  
FORT HUACHUCA, AZ 85613-5000

B. STATIONS COPYING NAV, NAV-2, NAV-4, NBL, NPL OR NUW SEND ENTRIES TO:  
ARMED FORCES DAY CELEBRATION  
CHIEF, NAVY-MARINE CORPS MARS  
CHEATHAM ANNEX BLDG 117  
108 SANDA AVE  
WILLIAMSBURG, VA 23185-5830

C. STATIONS COPYING AIR SEND ENTRIES TO:  
ARMED FORCES DAY CELEBRATION  
CHIEF AIR FORCE MARS  
C/O MR VAN EVANS  
789CS/SCP  
ANDREWS AFB DC762-6116

BT  
NNNN

From nryan@intrex.net Thu Apr 25 19:15:4702  
Subject: [R-390] Surplus/Boatanchor haunts sought....

Hello, Boomer, A few years ago I shopped at OEM Surplus in Colorado Springs, CO. Interesting store laid out much like a small supermarket or drug store-- well lit, clean, and aisles of neatly stocked shelves. There are small parts instead of Chef Boyardee and electronic components instead of Preparation H.

The top shelves are reserved for the owner's (Dick Peacock) extensive boat anchor collection. Lots of gear to crane your neck at, but none of it for sale.

Here are directions taken from this website:  
<[http://www.repairfaq.org/ELE/F\\_surplus\\_us2.html#SURPLUSUS\\_013](http://www.repairfaq.org/ELE/F_surplus_us2.html#SURPLUSUS_013)>

"Take the Fillmore exit from I-25, head east approximately 2 to 3 miles, Turn north on Hancock Ave, and go about 1/2 a block. Located on the right in the Venetian Village shopping center."

OEM Parts  
3025 N. Hancock Ave  
Colorado Springs, CO 80907  
Tel: (719) 635-0771  
Owner: Mr. Dick Peacock

Since it's been a while, it's best to call ahead to verify store hours or whether the business exists any longer. Share your experiences when you get back home. Happy hunting! 73... Norman, KG4SWM

From cbscott@ingr.com Thu Apr 25 19:32:4302  
Subject: [R-390] Need a VARIAC?

These appear to be decent units. I do not have one, have not seen one in person, have no dealings with the company, etc., etc., but they do appear nice. I just thought someone might benefit.

<<http://www.halted.com/cgi-local/SoftCart.exe/cgi-local/smpagegen.exe?U+scstore+vfdg1009ff208620+-p+-c+scstore.cfg+80474>> 73, Barry(III) - N4BUQ

From n6py@QNET.COM Thu Apr 25:12:2002  
Subject: [R-390] Don, your cabinet is ready to ship

Hi Don, Mac has informed me he is now ready to start shipping the left over cabinets since he is now shipping the last cabinets on the second list. The price is the original estimate of \$295. To get it do the following. Remember these cabinets do not have rails or shock mounts

1. Give me your correct shipping address by return email ASAP so I can get a shipping label made.
2. Send a check or money order for \$295 to Mac for the cabinet which will include shipping. His address is:

Herschel P. Mc McCullough  
7215 Lakewood Blvd.  
Dallas, TX. 75214

Please get the check out ASAP since some from the first list have taken over a week to send theirs and are being dropped from the list. Your return email with the shipping address will also confirm you are buying a cabinet. Bill N6PY

From w5kp@swbell.net Thu Apr 25 22:25:1702  
Subject: [R-390] Surplus/Boatanchor haunts sought....

Yep, OEM Surplus is a heck of a place. I visit it every time I'm in Colo Springs, always leave with something I can't live without. You should plan on spending some time in there, it's a huge (I mean HUGE) repository of surplus electronic parts, equipment, and tubes, amazingly well organized. Highly recommended for a visit. Good deals on parts and pieces, not so good on used/surplus test equipment - IMHO prices are pretty high on TEK and HP plug-in modules, etc. They do have a heck of a selection, though. Complete boatanchors are about non-existent, but if you need parts and pieces it's the place to go. As of my visit last year he had about doubled his floor space, so it's still growing. 73, Jerry W5KP

From tbigelow@pop.state.vt.us Thu Apr 25:45:3102  
Subject: [R-390] Surplus/Boatanchor haunts sought....

Thanks for all the suggestions from folks. Someone else also suggested OEM, but it seems there isn't a lot out that way for Surplus/BA equipment. Looks like I'll have to dig around a bit for hidden treasures. 73 de Todd/'Boomer' KA1KAQ

Date: Thu, 25 Apr02 13:43:34 -0700 (PDT)  
Subject: [R-390] sale 2 R390A.s

Hi, I have for sale 2 R390a,s 1-is not bad looking the other needs work. Can send Jpeg of units or email me for more info.Fair offer will take them Frank VA3FSD

From Bill Marx" <bmarx@bellsouth.net Fri Apr 26 00:28:0602  
Subject: [R-390] Need a VARIAC?

I have the amp version. It was about \$120 plus shipping and it is well made and convenient. Bill Marx  
W2CQ

From wb5hak@prodigy.net Fri Apr 26 01:15:0802  
Subject: [R-390] Don your cabinet is ready

Don who?? I hope not me, since I didn't order one, hi. 73, Don

From ba.williams@charter.net Fri Apr 26 02:56:5702  
Subject: [R-390] Surplus/Boatanchor haunts sought....

I wonder if the Hawaiian Club is still open in Denver. Saturday nights were the best times to go. The  
Cowboy Palace was a very rough joint in Colorado Springs. The Peppermint Lounge was a bit friendlier.  
(g)

From DAVEINBHAM@aol.com Fri Apr 26 04:10:3202  
Subject: [R-390] ReCap kits shipped

I shipped the last of the recent batch of ReCap kits Tuesday. Sorry I was a bit later getting this done  
than promised. My supplier shipped the wrong capacitors to me so I had to get the right ones before I  
could ship the ReCap kits out. If anyone else wants one, I have 7 under-the-chassis capacitor units in  
stock and ready for same day shipment. For those of you who like to deal with the dreaded black  
ukkumpucky, I have 3 kits with in-the-can capacitors. Kindest regards, Dave

From w5or@comcast.net Fri Apr 26 17:21:4702  
Subject: [R-390] Don your cabinet is ready

Bill, check your email lists and alias properties again. Your message is being posted to the R-390 mail  
list. I don't know which Don you are trying to reach. Don Reaves W5OR

From wb5hak@prodigy.net Fri Apr 26 23:22:5902  
Subject: [R-390] ReCap kits shipped

If you are like me, and had been procrastinating about your ReCap kit for your R-390A, QUIT!!!  
Dave's kit is very complete, very nicely packaged individually and LABELED so that the job should be  
a snap!! Thanks, Dave, for the great job putting this together for us. I wish I hadn't waited for sure now.  
Vy 73, Don, WB5HAK

From krk@ix.netcom.com Sun Apr 28 10:14:2302  
Subject: [R-390] Kit site update

fyi, I updated my kit site and added info on the Precise label. 73 Ken kb7rgg  
<http://www.qsl.net/kb7rgg/>

From RDavis24@carolina.rr.com Sun Apr 28 15:20:4202  
Subject: [R-390] Hello, New Member wanting to own a R-390A

Hello, I have just found out about the great boatanchor receivers, and I am learning all I can about SP-600's and R-390's. I bought a SP-600 to work on and restore till I can find a R-390. I have alot to learn about the tube rigs. I have picked up several old books that I hope will teach me what I need to know. I also plan on buying the video to restore my SP-600. I do have one question for the group, since I have not seen any R-390's local, is it safe to buy one from Fair Radio Sales? I do not know much about the rigs and do not want to be taken, and im sure it would be easy to do hi. I do not mind working on them, cleaning, repainting and replacing caps, resistors etc. Just one big problem I have to learn the correct way of trouble shooting hi. I do not understand yet the way the rigs work and im hoping the books and the videos will solve that. Anyone out have any good advice I would really appreciate it. Anyone out there have one that they want to sell at a decent price, please email directly hi. Thanks for the time and space Ronnie KE4VPN " A wanna be R-390A owner"

From pha@pdq.com Mon Apr 29 03:24:3402  
Subject: [R-390] aligning an R-391 IF deck

Hi folks,

I'm doing an R-391 alignment (390 non A), and hit a snag early on. When tuning the coil on Z-501, there is no change in the diode load voltage. I think my earlier steps are good enough, but I'm not sure.

I notice that with my URM-25D, the output frequency drifts fast enough that it is fairly difficult to find peak frequencies - even just turning the frequency generator knob carefully enough while peaking on the .1KC bandwidth setting is challenging.

Is getting the coil (not the cap) on Z-501 sensitive to correct IF alignment prior to that point? Everything else was peaking pretty easily (though touchy due to URM-25 drift).

Is dumping the URM-25 and getting a better siggen a reasonable idea? Will redoing caps and resistors stabilize it to any significant degree? The drift is about 10-20 cycles/minute (downwards), which is a pain when trying to align circuits trying to filter 100 cycles. Thanks for any advice, Paul

From roy.morgan@nist.gov Mon Apr 29:14:1002  
Subject: [R-390] aligning an R-391 IF deck

>I notice that with my URM-25D, the output frequency drifts fast enough that it is fairly difficult to find peak frequencies -

There is something very wrong with your URM-25. Push and pull on the frequency set knob.. if the frequency changes much, the shaft end play mechanism is loose. Gotta fix that. Other wise something else is out of whack. Roy

From salmaniw@shaw.ca Tue Apr 30 01:51:2902  
Subject: [R-390] [Fwd: Virus: W32Klez.gen@mm]

wrote: >> Re: virus Klez.gen@mm

I've had the same experience, Harry, sometimes three or four incoming messages one after another, each one with the same virus, also intercepted by Norton. Not sure how they got my email address. Since changing from @home to shaw.ca, the volume of spam has decreased 95%, and I've had no viruses until very recently.....Walt.

From greg\_werstiuk@msn.com Tue Apr 30 05:55:4002  
Subject: [R-390] [Fwd: Virus: W32Klez.gen@mm]

Klez has become quite virulent. Number of reported cases has been exploding.

Klez takes any address book entries or other email addresses it finds on infected systems and uses them to forge the "From:" header in the emails it sends to propagate itself. People are getting "yelled" at as being infected because the recipient isn't sophisticated enough to realize the "From:" is forged rather than coming from the displayed sender.

In addition to possibly having infected emails sent to you, you may receive bogus "bounce" messages.

If the destination address in a klez email is invalid, the bounce goes back to the forged address rather than the real sender. The received bounce messages may make one think one is virus infected when one is not. In addition, opening the attachment returned in the bounce can infect one. - greg

From jetemp@insightbb.com Tue Apr 30 13:11:2502  
Subject: [R-390] Question about R-390 (Non A)

Things have been a little slow, so thought I would ask a couple of questions.

1. After aligning the RF section, the calibrator signal peaks at a different position than where the antenna coils aligned. I did make sure that the antenna trimmer was at half mesh and did not touch it during the complete alignment. Now, the antenna peaks at "0" and the calibrator will only put out about 1 volt diode load voltage. The diode load will peak at about 5 volts if I peak the antenna trimmer, which ends up at about 2 O'clock. I tried to leave the antenna trimmer in the position where the cal is peaked, and realigning. The realignment went fine, but the cal signal is still displaced at about 2 O'clock. Adjusting the two trimmers on the Calibrator deck does nothing to move the peak to coincide with the antenna peak. Does this anomaly suggest off value parts in the calibrator deck?? Perhaps this is normal for the R-390? On my R-390A both coincide perfectly.
2. On bands below 16mhz, the antenna trimmer will peak with internal noise. At 16mhz and above, I can not detect a peak with internal noise. However, it will peak with an incoming signal. My R-390A will peak with internal noise on all bands. Again, is this normal for an R-390? I understand that the 16-32 coils, in earlier units, might have slugs and coils that do not realize the total potential that later units have. Has anyone heard of this? Thanks for your past support. Regards, Jim

From jetemp@insightbb.com Tue Apr 30 16:14:2902  
Subject: [R-390] Variable caps in coils

I have one more "gotcha" that I hope the collective knowledge of this group can answer.

I have found that a source of considerable noise, popping, and static are broken wafers (the wafer that sits between the rubber grommet and the actual cap).

The question is: Do both the cap and the brittle wafer work as a matched pair? Is it possible, permissible, to retain the cap and replace the broken wafer from another cap of a different value? Are all wafers created equal (from within the set in these radios)? Thanks, guys. Jim

From nryan@intrex.net Tue Apr 30 18:54:2102  
Subject: [R-390] Variable caps in coils

Hi, Jim,

If I recall right, the variable cap ceramic bits aren't matched, but one piece or the other will have more or less metal visible when you take them apart. That determines their capacity. I think that's the piece which has the capacity printed on top.

It's the base that's the "one size fits all," isn't it, and it's usually the piece that cracks. I've replaced them with no problem.

If you're feeling REALLY lucky, you can slip all of the variable caps apart and clean them carefully, being sure not to leave any residue in the ceramic. However, you have to be very careful around fine Litz wire, because if you break one, it's a beast to repair.

I did break a Litz wire once and tried the aspirin-tablet-as-flux trick and it worked like a charm. For Litz wire to repair correctly, I think you have to connect as many strands as possible. To use aspirin, take the hot iron to the tablet and melt a lot of it and transfer it quickly to the joint to be soldered. The aspirin dissolves the insulation so you don't have to worry about trying to strip wire as fine as the hair on a gnat's eyebrow.

This amazing cure supplied by someone on the r-390 list.

After you're done, put a teensy dab of De-oXit on the bit that turns inside the three prong clip underneath so as cut out noise due to oxidized contacts. THEN do your alignment! :-) Good luck and 73... Norman KG4SWM

From Llgpt@aol.com Tue Apr 30:59:4702  
Subject: [R-390] Variable caps in coils

writes: << After you're done, put a teensy dab of De-oXit on the bit that turns inside the three prong clip underneath so as cut out noise due to oxidized contacts. THEN do your alignment! :-)

And, if you need or want new ones, contact chuck rippel <A HREF "http://www.r390a.com/">R390A/URR Receiver Home</A> Les Locklear

