

R-390 Reflector June '03 Edited

From lal@cyberwc.net Sun Jun 1 00:05:07 2003
Subject: [R-390] R-392

Hello to the list..

I have purchased, my first, R-392 receiver ! It is in fair shape but can be restored nicely. I would like to purchase the following if any of the list members have them for sale, if not then I will try Fair Radio and any others who might sell parts for these radios. I am in need of the male and female power connectors, the headphone connector (the one that is mounted in the front panel) a speaker with the cord and connector attached and lastly the little BNC jack with the chain that is used to cover the IF output connector. Thanks for reading, if you have any of these for sale please drop me an E-mail. 73 Merle W1GZS

From ghayward@uoguelph.ca Mon Jun 2 13:47:56 2003
Subject: [R-390] 26A7 replacement

Here is the URL for the official solid state module. The 392 site here is absolutely excellent for anyone using or fixing an R-392. I tried building one out of some power transistors but the crossover distortion was too much. Maybe my Mark II (plan b?) design will work better if I ever get around to building it. http://www.roveroresearch.com/r392/r392_ss_audio.gif Cheers es 73 de Gord (VE3EOS) Gordon L. Hayward

From ghayward@uoguelph.ca Mon Jun 2 16:51:57 2003
Subject: [R-390] R-392 connectors

Unfortunately I don't have any spare R-392 connectors, but I saw a pile at the Rochester hamfest this past weekend, both the power and audio, so they are around. In the mean time since power, audio and break in are on the same connector (diagrams on the Rovero site) you can get molex female inserts which will push over the pins very nicely, so cover them with heat shrink before you push them onto the 392 pins and you get a temporary but nice connection without any surgery on the set. (I don't get to be burned at the stake for this one ;-) I have an R-392 and its a really nice radio, but its big brother (R-390 or R-390a) is even nicer. Gordon L. Hayward

From gfgitz55@orca.cetus.com Mon Jun 2 17:05:43 2003
Subject: [R-390] Re: 26A7 replacement

Gord wrote: >I tried building one out of some power transistors but the >crossover distortion was too much.

Looking at the 2N498 output stage, that comes as no surprise. A bit of redesign with some real forward bias on the bases should improve things significantly.

> Maybe my Mark II (plan b?) design will work better

Noticing that T603, the original output xfmr, is still on chasis would prompt me to create a design using FETs as outputs, possibly driven by a diff-amp or even some flavor of linear IC. That would eliminate

the two xfmrs in the original design. I'm leaving now to go stand by the 4X4 (10X10, for the metric folks) so someone can pile on the firewood and light it as they chant He's a witch! Burn him! Gary

From drewmaster813@hotmail.com Mon Jun 2 18:18:07 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #711 - 12 msgs

On paints Boomer wrote: "If memory serves me correctly, folks have posted about Krylon not being as tough as they'd like, Dave. The consensus seemed to be that Rustoleum was a better choice."

In my experience Rustoleum is much tougher than Krylon. It seems that Krylon's only advantage is shorter drying/curing time. Rustoleum takes weeks to reach full hardness if not baked. Painted finish hardens in a couple of days when placed in attic (120 to 130 degrees) in warmer weather.

Enamels (Rustoleum is one) are tougher than lacquers. However, lacquers will flow, hiding minor surface imperfections and giving that "wet" look. Drew

From davemed@davemed.com Mon Jun 2 18:44:31 2003
Subject: [R-390] Cover plates

Larry, Assuming this is an R-390 (non A) there are a number of cover plates which are frequently missing. These are:

1. RF deck cover. This is NOT the so called UTAH plate which belongs to the R390A. Available from Fair or Hank Arney.
2. Cover over the xtal osc. No known source.
3. Cover over the adjustment caps on rear panel. No known source.
4. Top and bottom covers interchangeable with R-390A. Available from Fair. The radio will work fine without any of the above but you will have to be careful with dust and dirt. After all they are dust covers. If you want any help with this radio I am at your service. Don't forget my web site davidmed@davemed.com If you have an R-390A ignore all of the above. Dave

From jtone@sssnnet.com Tue Jun 3 00:34:14 2003
Subject: [R-390] Epoxy paint toughness

Gents, Re painting problems and techniques... Have used several different brands of paint including the Krylon type...all with good success... There are too many variables to say exactly what might have happened to the "meter re-hab" project...but... Seems as though I recall a comment about a "Toaster Oven" ??

Any idea what the actual temperature was? Have seen tendency to 'crack and line' when temps get too high...

Even the best quality paints can literally 'shrink' and hence 'crack' if temps are too high and sustained during curing process....

For suggestions on temperatures...I'm regularly using aprox. 150 degrees max...utilizing the indicated temp indicator on the oven itself...(digital)....note this is the minimum this oven will operate at...the oven is in my wife's kitchen...and yes, I get to use it for paint curing...

Did find one time, when my wife didn't know I was "baking," when she up-ed the temperature...I discovered it after about 30 minutes...at 300 degrees...and Yep...there were signs of early cracking and spider webbing...

Cooler temps are ok...the object is to remove solvent and 'gently' allow the chemistry to work. So, loooooonnger and a bit cooler is fine...

And btw, before baking...use your nose...all hint of solvent should be gone before heating...may take a bit of time...like several days...but, painting is not a race...but a search for quality...so take ur time ... no solvent by the nose test...then baking for two to three hours at minimum temps...in the range of 150 degrees F...

Have done several St. J. Panels, knobs, and lots of other 19 inch custom panels here for the station in a variety of colors without problem and good durability...

I usually use Rustoleum...but have had good success with many others as listed by others...sometimes, if the color is what I want, I use it...regardless of the brand...so far so good...

Hope this helps...there has been enough stuff on the list over the past several years to write a book...it is entirely possible to do absolutely professional work with a spray can and patiences... Good luck es 73,
Gene W8KXR

From ba.williams@charter.net Tue Jun 3 03:20:58 2003
Subject: [R-390] Cover plates

Larry, Dave sent me a message to correct my assumption that you were talking about an A version. Sorry about that. I didn't read the message thoroughly. Barry

From jlap1939@yahoo.com Tue Jun 3 15:55:31 2003
Subject: [R-390] Hi

Hi... Still here..still read most..just have not posted for a while...(A long while..)

Wish to publicly thank David Medley for discovering a hidden difficult problem that had stopped my R-390. (thats NOT R 390 >A< !!!, thank you very much...) His good work is very much to be admired. Regards to the list, John

From jimsim@adelphia.net Tue Jun 3 17:13:50 2003
Subject: [R-390] Hi

I have been thinking about the use of the term "non-A", I have changed my mind, and now fully support the use of the term "non A". However to accomplish this and to insure perfect clarity, we will have to refer to the R390A as the non, non A and keep referring to the R390 as the non A. It's clear, easy to understand and will stop the confusing caused by using the correct terms of R390 or 390A. Jim

From my_black_shoe@yahoo.com Tue Jun 3 17:35:00 2003
Subject: [R-390] Epoxy paint toughness

On this, I did have my meter baking at about 150, but I did not wait for the paint to dry; the toaster oven was the only dust-free spot I had in the room.

I'll try letting it dry next time. Also, I recently had a can of Brownell's Metal Coat Epoxy. Anybody had good luck with this stuff? Dave Goncalves

From my_black_shoe@yahoo.com Tue Jun 3 20:34:53 2003
Subject: [R-390] Epoxy paint toughness

I know this is a minor error, but: between "had" and "a" is "friend give me".

From r.tetrault@attbi.com Tue Jun 3 21:09:51 2003
Subject: [R-390] Vacuum pumps

Guys, This is off-topic, and I won't joke about wanting to purge the rebuilt ballast tube...

I salvaged a compressor out of a bent-up freezer and quickly found that it is capable of high vacuum. But it also has/had compressor oil circulating along with the refrigerant and here's the question: Does anyone have any idea how/where I can get some type of oiling working with this? Right now I'm thinking of a bubbler set-up at the input and the exhaust. The input bubbler would promote suspension of oil vapor and the exhaust bubbler would serve as a collector. When exhaust is full and the input is empty I would switch 'em. The problem with this set-up is that the initial purge with it's high air flow rate would have the highest oiling rate but the long term operation towards high vacuum would be comparatively oil starved. Any ideas?

Are there oiling systems for vacuum? Where? Sucking air in Portland, OR Bob

From eldim@worldnet.att.net Tue Jun 3 21:27:55 2003
Subject: [R-390] R-392 connectors

If someone has the Part Numbers or Stock Numbers on these items, I'll be happy to search our database and see if we have them in stock. Best Regards, Glen Galati , KA7BOJeldim@att.net

From robert_h_goff@hotmail.com Tue Jun 3 21:27:43 2003
Subject: [R-390] Navships

This is a little off topic, but does anyone know the Navships number for the TCS-12 manual. I think it's 900. something. Thanks, Robert Goff W7MKA

From r.tetrault@attbi.com Tue Jun 3 23:25:57 2003
Subject: [R-390] Vacuum pumps

OK, so my bubbler scheme should work for the odd and very intermittent kind of vacuum sourcing that my wife can find so many uses for around the house....and probably for the rest of my life. BTW, it was an old Gibson freezer, better than a Frigidaire! <G> Thanks for the reality check. Bob

From chacuff@cableone.net Wed Jun 4 01:30:01 2003
Subject: [R-390] Hi

Dead horse alert!

From jimsim@adelphia.net Wed Jun 4 02:04:01 2003
Subject: [R-390] Hi

Well why can't I beat it, everyone else can! Jim

From Dxingsince1957@aol.com Wed Jun 4 03:11:22 2003
Subject: [R-390] Hi

Maybe we could start a SP-600 (non JX) list too..... DX'ing Since 1957

From ezeran@concentric.net Wed Jun 4 03:40:58 2003
Subject: [R-390] Navships

> This is a little off topic, but does anyone know the Navships number for the > TCS-12 manual. I think
it's 900. something. > > Thanks, > Robert Goffetc > W7MKA

Hey, not off topic at all! I was working on R390s/390As along with TCS/TEDS-REDS/ URD-4 (shudder!!), GRC-27 etc. sets during Navy Nam time back in the early-late '60s. By the way, "A" or "nonA" we just called them all '390s. The TCS manual covering later sets, 7-12, is 900 291-1B, mine dated 14 November 1944. The earlier manuals are here too but I just can't put my hand on them right now. The manual is in the scan process and I've been promised server space for it so it can be shared on the web. The TCS-12 (complete...all the bits) I gave LST-325 it headed up stream on the Mississippi so listen for the ship to work a pre D Day TCS. EdZ

From ezeran@concentric.net Wed Jun 4 03:42:42 2003
Subject: [R-390] Hi

> > Dead horse alert! Whinny(A)

From rodney_bunt@yahoo.com Wed Jun 4 07:49:51 2003
Subject: [R-390] Fuse lamp in TV/7 Tube tester.

My Fuse lamp is blown !!! In the TV/7 manual it says it is a type 81, the lamp I have is a type 83 on the side of the lamp (probably why it has blown) Any one know of a source ? What are the specs on this lamp Volts / Amps ??? I live in Australia, don't have a source here. Could some one ship me a couple and I will reimburse them, please. Rodney VK2KTZ

From r390a@rcn.com Wed Jun 4 12:48:19 2003
Subject: [R-390] Fuse lamp in TV/7 Tube tester.

Hi Rodney, The # 81 is a 6.5V 1.02A lamp, originally for auto service when US cars were 6 volts. Here is a supplier who ships worldwide: <http://www.vacuumtubesinc.com/index.html> 73, /dave N9ZC

From jlap1939@yahoo.com Wed Jun 4 15:49:28 2003
Subject: [R-390] In Name Only??

Friends, Due to the prob. often encountered with "John", I am going to try to remember to use JLAP in my sig. Then you will not mix me up with another.. Thanks for kind comments returned to me about my 390... JLAP (John)

From jlap1939@yahoo.com Wed Jun 4 16:06:28 2003
Subject: [R-390] various burdensome beasts...

Hi, Friends, One more short one please...

Would mention that in beating anything dead, often a newbie won't even know of the death, much less the burial, so sometimes it doesn't hurt to "re-beat", as long as we don't "beat around the Bush.. .." (No pun intended...?) And we can also remind about archival material at those times, perhaps...

And in regards relating to our treasured beasts, I think a bit of care is best if any tech. material is mentioned...I remember a few bad cases when "a" or "non a" were left out...(One ordered Mech. Filter for his non..and had to return it.. Of course you could say it was his own fault...)

And, regarding the 600, I guess I have a "17".. Does anyone have a "non 17" on this list? (Thats tongue in cheek, and well bitten...) Best Regards, **JLAP** (John)

From tbigelow@pop.state.vt.us Wed Jun 4 17:12:42 2003
Subject: [R-390] Hi

wrote: >I have been thinking about the use of the term "non-A",
>

Okay, but I still get credit for R-390 non-VLF, R-390 non-391 (sometimes referred to as the R-390 non-autotune), R-390 non-392, KWM-2 non-A and 75S-3 non-A-non-B-non-C

Please don't confuse any of these with the R-390 sans-covers. ~Boomer, KA1KAQ

From cbscott@ingr.com Wed Jun 4 17:20:17 2003
Subject: [R-390] Hi

Was the Model T Ford really a Model T (non A)? Barry(III) - N4BUQ

From Richard.McClung@Dielectric.spx.com Wed Jun 4 18:01:26 2003
Subject: [R-390] Hi

Looks like a bunch of non-sense to me..... RICH @B> }

From flood@Krohne.com Wed Jun 4 18:04:40 2003
Subject: [R-390] Hi

Oh No! It's time for me to break a radio. When things get quiet and all radios are warm and happy, your brilliant R-390(X) minds begin to wander to this no win topic. Duckin' and a runnin' John Flood (KB1FQG)

"Scott, Barry(Clyde B)" 06/04/2003 12:20 PM
Subject: RE: [R-390] Hi

Was the Model T Ford really a Model T (non A)? Barry(III) - N4BUQ <snip>

Okay, but I still get credit for R-390 non-VLF, R-390 non-391 (sometimes referred to as the R-390 non-autotune), R-390 non-392, KWM-2 non-A and 75S-3 non-A-non-B-non-C

Please don't confuse any of these with the R-390 sans-covers. ~Boomer, KA1KAQ

From jimsim@adelphia.net Wed Jun 4 18:07:51 2003
Subject: [R-390] Hi

I understand your concern and I do agree that that you should get the sole credit for these often used terms; R-390 non-VLF, R-390 non-391 (sometimes referred to as the R-390 non-autotune), R-390 non-392, KWM-2 non-A and 75S-3 non-A-non-B-non-C. The terms that you are credited with introducing certainly state the items as described. I am sure they will soon be in use throughout the radio community. I, and I am sure, all of us, appreciate your continuing efforts in providing clarity in this matter! Jim Simmons

From tbigelow@pop.state.vt.us Wed Jun 4 18:11:09 2003
Subject: [R-390] MC/KC knob dancing

Okay, now for something completely different....

Can someone tell me what the correct term is for the phenomenon exhibited when the MC knob slowly turns when the KC tuning knob is turned? I noticed this the other day on my Teledyne which has been sitting for a while unused. Also, what causes it? I know the gears are obviously crudded up since I've not yet done the complete tear-down, but specifically it seems like a type of clutching taking place?

Yep, I know - it's been mentioned before. I've just forgotten. They say the mind is the second thing to go, can't remember what the first one is..... de Todd/'Boomer', KA1KAQ

Date: Wed, 4 Jun 2003 14:06:19 -0400
Subject: [R-390] MC/KC knob dancing

Todd, there is a stainless steel "leaf" springy thing in the front of the RF deck which presses into the notches on the differential gear plate (I think), thus holding it in place when the KC knob is tuned.

If the tension is insufficient it will allow slippage; the tension is an easy thing to adjust. On the other hand the spring could be cracked; I had this problem in my EAC and replaced it. Not a big problem, but if the MC knob turns it means the cams are moving too which will affect the RF alignment. John KA1XC

From David_Wise@Phoenix.com Wed Jun 4 21:35:37 2003
Subject: [R-390] MC/KC knob dancing

Excess friction in the gear train exacerbates this. Also, the MC detent notches wear with use of the MC knob and may simply be worn out. It's probably possible to re-cut them, but you have to get them exactly 120 degrees apart to avoid poor sensitivity on some bands due to misalignment. IMO Collins should have used a pull-to-turn or push-to-turn arrangement with positive locking. Dave Wise (SWL)

From redmenaced@yahoo.com Thu Jun 5 00:42:05 2003
Subject: [R-390] MC/KC knob dancing

wrote: > Excess friction in the gear train exacerbates this. > Also, the MC detent notches wear with use of > the MC knob and may simply be worn out. It's > probably possible to re-cut them, but you have > to get them exactly 120 degrees apart to avoid > poor sensitivity on some bands due to misalignment. > IMO Collins should have used a pull-to-turn or > push-to-turn arrangement with positive locking.

++++++

Nolan Lee says:

The detent spring can be shimmed out by putting washers between it and the mounting panel, this will give some new metal to wear on if the spring is grooved.

BUT, the most common problem is that the gears need to be cleaned and lubed. Joe

From Dxingsince1957@aol.com Thu Jun 5 01:14:04 2003
Subject: [R-390] MC/KC knob dancing

writes: > Nolan Lee says:Who is nolan lee? DX'ing Since 1957

From paull@lake-haven.org Thu Jun 5 01:21:24 2003
Subject: [R-390] MC/KC knob dancing

Message-ID: > Who is nolan lee? We're in trouble now!!

From redmenaced@yahoo.com Thu Jun 5 01:37:09 2003
Subject: [R-390] MC/KC knob dancing

<http://www.acadiacom.net/nlee/> Proceed with caution!! Joe

From Dxingsince1957@aol.com Thu Jun 5 02:00:13 2003
Subject: [R-390] MC/KC knob dancing

redmenaced@yahoo.com writes: > <http://www.acadiacom.net/nlee/> > Proceed with caution!! > > Joe

And, your point is??? You still haven't answered my question. DX'ing Since 1957

From barry@hausernet.com Thu Jun 5 02:09:30 2003
Subject: [R-390] MC/KC knob dancing

<sigh> It has come to THIS! Who would think the day would come? Not a criticism of the inquirer it's no wonder he doesn't know. BTW have there been any sightings? Has Nolan replied to any emails to anyone?

From hankarn@pacbell.net Thu Jun 5 02:31:09 2003
Subject: [R-390] MC/KC knob dancing

Barry, Nope. But it sure is the Reflectors loss not to have his Georgia REDNECK comments but worst of all his very informative knowledge that he parted with to the list. I hope he is fine and maybe sitting back having a sip of GREAT MOON and relaxing. Too the ones that did not have the pleasure SORRY!! Hank KN6DI

From Dxingsince1957@aol.com Thu Jun 5 02:40:26 2003
Message-ID: <176.1b3a48cb.2c0ff98a@aol.com>

writes: > Barry, Nope. But it sure is the Reflectors loss not to have his Georgia > REDNECK comments.

Was he some sort of R-390 guru? I don't believe I have ever seen a post by anyone with that name. DX'ing Since 1957

From wa4zlk@acer-access.com Thu Jun 5 05:53:16 2003
Subject: [R-390] R-392 connectors

Message-ID: I got a new power connector (Amphenol 164-44FS) from Fair last year. Also got a couple of used audio output connectors (U-77/U). If you want the matching mobile speaker, it's an LS-166/U, but it will sound like what you would expect a 3 1/2" waterproof speaker to sound like. If you can find a ratty LS-166/U, at least you'll have the connector which you can connect to a speaker more suitable for home use. A matching xfmr will be required for a low impedance speaker. I'm using a Hallicrafters R-46. Label says it's 500 ohms input- sounds good. Bruce WA4ZLK

From hankarn@pacbell.net Thu Jun 5 03:02:39 2003
Subject: [R-390] MC/KC knob dancing

More of an all around GURU, tube testers, radios, humor, wisecracks, smart post to the reflectors. Hope he pops to the surface again. Hank KN6DI

From ezeran@concentric.net Thu Jun 5 04:43:42 2003
Subject: [R-390] MC/KC knob dancing

Nolan had, perhaps has, a website with receiver and tubetester info that was/is a good 'un.

From pha@pdq.com Thu Jun 5 14:10:12 2003
Subject: [R-390] R-392 connectors

wrote: > I got a new power connector (Amphenol 164-44FS) from Fair last year. > says it's 500 ohms input- sounds good. William Perry aka "The Connector Guy" has R-392 power connectors.

The LS-166 has an internal matching transformer to go from 600 ohm on the R-392 to the 8 ohm on the internal speaker. I pulled the vehicle/radio switch and put a switching 1/4 jack in with a little re-wiring to let me plug in other 8 ohm speakers. They still sound like crap, so either I did something wrong (quite possible) or the transformer doesn't match very well (also quite possible).

Calling an LS-166 crappy sounding is still quite charitable. Paul

From Dxingsince1957@aol.com Thu Jun 5 15:00:46 2003
Subject: [R-390] Nolan Lee etc.

I saw that, a pretty decent webpage. Someone told me that the picture of him is 20 years old, maybe more.

Looked at the archives, his main claim to fame seems to be a 3TF7 ballast tube that has lasted 3 bazillion hours, along with cat meat, survival gear and redneck stories. I bet if one were to get around him, you could probably hear "Dueling Banjos" playing in the background. DX'ing Since 1957

From tbigelow@pop.state.vt.us Thu Jun 5 15:53:27 2003
Subject: [R-390] MC/KC knob dancing

Many thanks to all who offered advice and suggestions. The 'gears need cleaning' part rang a bell, but for the life of me, I couldn't remember the detent/spring part. Although this unit appears to have seen little use, the metal could still be fatigued I'd guess. At any rate, it tells me right where to look when I tear back into it. I ned to get after the band/crystal deck switch as well, so maybe it'll make a good weekend project. Forecast is for rain again, so why not? Too wet to plow, too windy to stack BBs... Boomer, KA1KAQ

From w5or@comcast.net Thu Jun 5 16:00:33 2003
Subject: [R-390] Administrative Note

Hi Gang, Be advised junos is blocking some qth.net email. If you have a juno account you may get unsubscribed if bounced email hits the list server limit. In fact, if you use a 'throwaway' email account from hotmail, yahoo, or other free service your chances of having mailing list trouble rise exponentially, due to anti-spam efforts, both guided and mis-guided. Thanks, and now back to your regularly scheduled program. Don Reaves R-390 list administrator <mailto:r-390-admin@mailman.qth.net>
R-390 Mailing List Rules: 1. Stay on topic 2. Be civil and courteous

From Richard.McClung@Dielectric.spx.com Thu Jun 5 16:12:40 2003
Subject: [R-390] MC/KC knob dancing

The better question is W H E R E is Nolan Lee? Who is Nolan Lee, indeed? HUUUUUUUUUU? Possibly DXingsince 1957 has had the old cans on too long..... RICH @B> }

From Tarheel6@msn.com Thu Jun 5 16:12:18 2003
Subject: [R-390] Nolan Lee etc.

Nolan Lee posted some of the most informative and technically correct postings about R-390A's that I've ever read. These were often laced with his offbeat humor, which added to the readability of the postings and his use of the English language was talented and skillful. His contributions to this reflector are substantial, IMHO. He gave us a step by step explanation of what he did to rebuild one of his R-390A's, a very detailed master list of capacitors for the R-390A, and many postings rich with insight and depth. Nolan's humor was top flight, and seemingly misunderstood by some. He is certainly undeserving of any gratuitous and unsubstantiated comments. 73's, -tom

From cbscott@ingr.com Thu Jun 5 16:17:19 2003
Subject: [R-390] Nolan Lee etc.

Ditto. Wasn't he from Mississippi, not Georgia? Barry(III) - N4BUQ

From gregorymengell@attbi.com Thu Jun 5 16:36:39 2003
Subject: [R-390] Nolan Lee etc.

Nolan Lee is beyond any doubt a fine man and one of the masters of the R 390A. No "Dueling Banjos" there .He is missed by all. Gregory Mengell

From Dave_Faria@hotmail.com Thu Jun 5 19:08:58 2003
Subject: [R-390] Low Noise Tubes

How would you select tubes for low noise and get performance??? Thanks Dave Faria

From Barry Hauser <barry@hausernet.com> Thu Jun 5 17:03:43 2003
Subject: [R-390] Nolan Lee etc.

Actually, he's based in Sun, Louisiana. Might have ventured too far South and got kidnapped by Cajuns or maybe some swamp dwellers, I dunno. Or maybe it was N'Orleans too far down Bourbon St. at night or Algiers. Or maybe he drank some bad likker at a fai-do-do. Nobody knows. "Dueling anjos"? What was that movie with Burt Reynolds? Or maybe the other one, "Southern Comfort" with the Army or National Guard troop that disappeared in the bayou.

Also fearful that they get some pretty bad weather there hurricanes, tornadoes. We've had nothing but rain for more than a week here in the NYC area, so maybe we'll be swamp people soon. I probably should check the e-thing under pierots or whatever those boats are called get one while they're still reasonable. Anyway, Nolan's input is sorely missed. Barry

From jbrannig@optonline.net Thu Jun 5 17:09:56 2003

Subject: [R-390] Low Noise Tubes

The first RF tube sets the noise floor for the entire radio. If you pull the RF tube you should hear a decrease in noise. If not there is work to do. Start with an alignment, check voltages and replace components as necessary. Jim

From shortwave@zerobeat.org Thu Jun 5 17:19:16 2003

Subject: [R-390] Nolan Lee etc.

His website's still around... <http://www.acadiacom.net/nlee/> df

From my_black_shoe@yahoo.com Thu Jun 5 18:06:47 2003

Subject: [R-390] ID Tag Painting

Hello All, Just because I had nothing better to do at that moment, I took an old tag and stripped it clean. Then, using one of those large permanent markers (Avery Marks-A-Lot) I coated the tag, getting ink into all of the pits and crevases. I let it dry for a couple minutes, not letting it get too hard, and then began to rub it on a flat sheet of paper. Presto! The ink wiped off the raised lettering, leaving the silver on black text. The ink didn't have the color rainbow that other marker inks have - it was flat black.

The result was very satisfying when compared to the ease of application; there were some little fibers embedded in the dried ink, but it wasn't very noticable.

The particular tag I was working with had scratches, which raised that area above the paper during the polishing. I used some Q-tips and toothpicks dipped in acetone to remove the ink in and around the scratches. Now it looks marvelous.

Tonight I am going to apply a light first coat of a gossy clearcoat. I'll report if that operation is a success. I'm a bit worried that the spray will dissolve the ink on contact, and splatter it about the tag face. Dave Goncalves

From r.tetrault@attbi.com Thu Jun 5 18:12:51 2003

Subject: [R-390] Nolan Lee etc.

It's a shame that we should resort to eulogizing him when all he "did" was to run afoul of some of the "morals proctors" lurking herein. His threads were over-the-top classics and certainly defined our group. Bob

From Richard.McClung@Dielectric.spx.com Thu Jun 5 18:33:08 2003

Subject: [R-390] Nolan Lee etc.

I don't think its so much us eulogizing him as its us expressing our respect for his diverse knowledge and abilities not only in mechanical and electrical ways but in his organizational skills and his seemingly off-beat, oddball prose and humor. NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! NOLAN! RICH @B> }

From r390a@cgcabletv.net Thu Jun 5 20:40:25 2003
Subject: [R-390] Nolan Lee etc.

Both Wrong! He is from Louisiana. 73....Receiver

From pha@pdq.com Thu Jun 5 22:36:33 2003
Subject: [R-390] R-392 connectors

Some folks asked how to get R-392 connectors:

William Perry Co., Inc.
702 (Rear) Beechwood Road
Louisville, Kentucky. 40207
Phone: (502) 893-8724
Fax: (502) 893-9220

I'm not sure if the street address is correct - last time I talked with him, he said something about it changing. He has lots and lots of other connectors, too. Paul

From _dave.f@mail.com Fri Jun 6 02:26:53 2003
Subject: [R-390] R-392 tubes

Do any of you have a good (read cheap) source for 26A6, 26A7, 26C6, 26D6, and 6AJ5 tubes? Guess what I just bought and it's missing almost every one of them. I thought the price was too good to be true. Dave, WW8S

From Robert Nickels" <w9ran@oneradio.net Fri Jun 6 03:28:30 2003
Subject: [R-390] R-389 at Auction

With the permission of the list-meister I will post the following - I have no financial interest in Estes Auctions nor the seller, but being a fellow R-389 owner, I know how much in demand they are...

In the June issue of "Antique Radio Classified" there is a full-page ad by Estes Auctions of Medina Ohio - a prominent auctioneer of vintage radio equipment. This listing has more ham gear than most, and included is an R-398/URR. Details can be found here: <http://www.estesauctions.com/June14sale.html> If the 389 isn't enough, the rest of this collection is to die for! 73, Bob W9RAN PS: Check out the RED SP-600, too!

From wb5hak@sirinet.net Fri Jun 6 03:44:05 2003
Subject: [R-390] R-389 at Auction

Man, a "fire engine red" SP-600 is an attention getter too!!

From mark.richards@massmicro.com Fri Jun 6 03:57:32 2003
Subject: [R-390] R-389 at Auction

Good gracious! Wish I had a cool million. Just to keep all that stuff together as museum pieces would be a valuable service - would be a shame for some of it to be split off to different owners. ...still wiping the drool off the floor. -m-

From Dxingsince1957@aol.com Fri Jun 6 03:47:24 2003
Subject: [R-390] R-389 at Auction

writes: This listing has more ham gear than most, and included is an R-398/URR. Details can be found here: > PS: Check out the RED SP-600, too!

The red SP-600 is a John R. Leary Rebuild.

From jonandvalerieoldenburg@worldnet.att.net Fri Jun 6 04:10:57 2003
Subject: [R-390] R-392 connectors

The LS-166 will always sound poor due to the weatherproofing of the speaker. Open it up and replace the speaker if you wish to use it. A better fix is the use of a Radio-shack PA 70 volt to 8-ohm transformer and then use your speaker of choice, the Radio shack small meal cased speakers have real nice fidelity. Jon AB9AH

From buzz@softcom.net Fri Jun 6 04:58:54 2003
Subject: [R-390] R-392 tubes

Dave, I didn't look for all of them but Antique Electronic Supply at: <http://www.tubesandmore.com/> has 26a6 for \$2.80 and the 26a7 for \$7.55 Select tubes in the left frame. 73, Buzz

From ai2q@adelphia.net Fri Jun 6 13:50:46 2003
Subject: [R-390] R-392 tubes

Here's a note I sent in January of 2002:

"I confess! I've poked JFETs into both 26C6 mixers on my R-392, and those 24-V stages work really well. I used a Dremel tool cutter to scribe the glass of 7-pin miniature tubes, cracking them open and removing the innards. I then soldered the JFETs with drain source and gate connected to the old plate, cathode, and grid leads, respectively. After inserting a label with my callsign on it, I then glued the glass envelopes closed. I popped 'em into the R-392, where these solid-state jobbies perform flawlessly. ..." Vy 73, AI2Q, Alex in Kennebunk, Maine
<http://users.adelphia.net/~alexmm/ai2q.htm>

From cthulhu@fhtagn.org Fri Jun 6 14:59:35 2003
Subject: [R-390] Nolan Lee etc.

you wrote: >His website's still around... <http://www.acadiacom.net/nlee/> > >df

Some of the web site is being kept up to date fairly regularly, at least more regularly than mine, so he is still around and playing with radios. Tom

From tbigelow@pop.state.vt.us Fri Jun 6 15:16:25 2003
Subject: [R-390] R-389 at Auction

wrote: >With the permission of the list-meister I will post the following - I have >no financial interest in Estes Auctions nor the seller, but being a fellow >R-389 owner, I know how much in demand they are...

Nice collection of goodies! That's some spinner/crank system on the R-389, doesn't look stock though?
grin Does look nicely done.

Interesting to see the R-649 and SC-88/R-320 as well. Both are probably more scarce than the 389(or SX-88). R-649 is a VLF/LF/MF Hallicrafters rig made for the Treasury Dept/Coast Guard in very limited numbers (perhaps 100 or less). Looks a lot like the VLF counterpart to the SX-73. SC-88 is the Signal Corps R-320, or latest version of the RCA AR-88. They were used in diversity/triversity systems and supposedly made in quantities of only a few hundred. Not to be confused with the CR-88 civilian/marine version which is quite similar but differs in a few details.

Then of course, you have all of those lovely AK boards (including a mod. 12 and what looks like a 7?) and W.E. goodies, as well as some beautiful table and floor radios. mmmm MMM!

Looks like one of the better offerings since the Ford auction not quite ten years back. Wonder what those \$40-\$50K Marconi pieces would fetch today? What an affliction to have.... de Todd/'Boomer'
KA1KAQ

From redbeard@softcom.net Fri Jun 6 15:47:03 2003
Subject: [R-390] Re: Nolan Lee etc.

Being the veteran lurker that I am here.....I find the need to make one comment about the legendary Nolan Lee. Of all his many musings, and commentaries made here, the one that I liked the best was the tag-line at the bottom of all his posts right after "Carnivore" was revealed to us all.

C-4 - Semtec - rocket propelled grenade launcher - M-16 - etc, etc, etc. As I recall it must have gone on for 4 or 5 lines. Now that's STYLE!

From chg111@hotmail.com Fri Jun 6 15:58:14 2003
Subject: [R-390] R-389 at Auction

Gents- Ahhh, the tuning knob on the R-389 isn't correct...the heck with it !!! ...Grin... BTW, I need some help. I recently bought a Hallicrafters S-27 & wonder if there is anyone here who is familiar w/these receivers. The tuning knob on mine is very loose, & I wonder if there was a bushing or bearing thru the front panel that is missing on mine. Any help/suggestions will be greatly appreciated. - Sandy G. C.H.(Sandy)Geiger III

From: (mikea) Fri. Jun 6 16:00:49 2003
Subject: [R-390] Re: Nolan Lee etc.

wrote: >> C-4 - Semtec - rocket propelled grenade launcher - M-16 - etc, etc, etc. > As I recall it must have gone on for 4 or 5 lines. Now that's STYLE!

But I've seen tags of that sort ("NSA Crypto NOFORN ...") in posts and E-mail since 1982.

\$DEITY, it's been more than 20 years. I certainly remember when Eternal September began. Today is 3566 September 1993 GMT. Mike Andrews

From tbigelow@pop.state.vt.us Fri Jun 6 16:17:01 2003
Subject: [R-390] R-389 at Auction

Sandy Geiger wrote: >Gents- Ahhh, the tuning knob on the R-389 isn't correct...the heck with it !!!
...Grin

No bushing, Sandy. Oversized hole in the front panel where the shaft passes through. I have a -27 and RBK-13 (S-36). Both are tight. I'll take a lookover the weekend and see what it might be. Probably the knob itself or where the shaft attaches to the drive assembly. Fun little(!) rig for VHF. ~ Boomer

From tbigelow@pop.state.vt.us Fri Jun 6 16:48:38 2003
Subject: [R-390] Mystery solved....sortakinda...

G'day - After reading all of the responses on the MC/KC waltz, I decided to pull the Teledyne out of the rack last night for a quick peek. Really had no expectations of finding anything too exciting or amazing and NO intention of getting into it in any depth.

Sure 'nuff, those "clean" looking gears and cams really had a nice gray crud about them. I sprayed some WD-40 into the gear train just to loosen things up a bit, not as a long-term solution of course. Well, it did work better and the MC knob seemed to stop turning when the KC knob was tuned, at least for the most part.

HOWEVER....while tuning to and fro, I noticed something *else*. The two slug racks to the right weren't even moving...ever! I could switch bands, tune up and down, all to no avail. This also means one of the rear racks wasn't moving either, since it apparently keys off one of the front racks. Further inspection showed a gear or two, doing absolutely nothing. Damned freeloaders!

In a weak attempt to ascertain what was going on, I reached in to spin the front most, smaller gear. It flew off the shaft and fell onto the front porch. Still more inspection showed....a cracked clamp. a HA! So maybe this is why I couldn't make it work anywhere but the broadcast band, and then on last checking, not even there.

Now it's time to bite the bullet and do it all the right way. No more piecemeal approaches to specific symptoms. Somehow I got distracted with the mongrel A and never got back to the 'good' radio, probably because the mongrel worked!

At least for now I have some idea where most (if not all) the problems with the radio lie. Once I get a clear work area, I'm going to take the 'one module at a time' approach and got through the entire radio. Pull a unit out, clean, repair, and replace it after completion to be sure I haven't made it worse. There's always the mongrel set too, for temporary donor parts.

So....who has clamps? Or where? Recalling Scott's advice on his gear train restoration, I'm thinking it

would be wise to have a few spares on hand. Also - any other suggestions on spare items (beyond complete modules/chassis) to have on hand? Besides a good bottle of scotch? There's just no way around it. I'm gonna hafta do it right. ~ Boomer, KA1KAQ

From jtone@sssnet.com Fri Jun 6 20:45:52 2003
Subject: [R-390] Hi

Cecil, Agreed...either too much time and no projects to work on, or a "New-be"... 73, Gene

From jtone@sssnet.com Fri Jun 6 21:08:05 2003
Subject: [R-390] Mystery solved....sortakinda...

Todd, Interesting post...and a common problem... Regarding clamp sources...I had a friend machine a couple for a ST. J Blue Striper....and in this case it was not necessary to disassemble the whole system...because I made dual clamps...i.e. two halves with two bolts...not the horse shoe type...

If u have a machinist friend it will be good to make up a few...because it is only a matter of time, and you will find the need...

Efforts here, as have been posted earlier, have been to advance the rehab capability by acquiring a lathe...and in the fall a small milling machine. Great fun, and then no reason not tackle any restoration project...plus u learn more neat stuff if u've never done machine type work...

Alternatively, check with a company called. W.M. Berg out of East Rockaway, NY...try 1-800-232-berg for starters....I think they're still in business...ask for catalog...huge assortment of gears, shafts, clamps and belting for instrumentation... Good luck... Gene W8KXR

From r.tetrault@attbi.com Fri Jun 6 21:10:30 2003
Subject: [R-390] Nomenclature

Then there is ALWAYS the most accurate and "on the money" nomenclature: "the real 390" and "the cheap 390" Is there any further doubt? Cheap 390 owner Bob Portland, OR

From tbigelow@pop.state.vt.us Fri Jun 6 21:35:00 2003
Subject: [R-390] Mystery solved....sortakinda...

wrote: Regarding clamp sources...

Thanks for the tip, Gene - another source to add to the file! I've "started" this project several times, but something always gets in the way. If I have to take a day or two off from work to get it done, then I will. It'll probably be raining anyhow.

I'd be interested to hear how the machine shop project goes. A fellow I used to work for had a small milling machine and a few other goodies which came in handy for odd jobs. Unfortunately he wasn't cut out for Vermont's climate and moved back to California. But it sure planted some seeds in the ol' Mr. Fixit file.

BTW, how did the T-3 project come out? Did you make it online for the Heavy Metal Rally? Just the thing to offset a rack of R-390s. de Todd/'Boomer' KA1KAQ

From jimsim@adelphia.net Fri Jun 6 21:37:37 2003
Subject: [R-390] Hi

New guy, I wish. Been a amateur radio operator for 30 yrs. Started out as WN4WYO, moved around, keep changing call signs, now kf4tun. Used my first 390 a bit over 40 years ago. Had a couple assignment where we did our own repairs. Got to know the 390 and 390A fairly well. Own both a 390 and a 390A. The only real problem I have is BS, and thats what this "non" business is . If you own a model T Ford, does that make all other Fords made non-A fords. If you have a 390, just state it. I bet everyone on this list will know what your are talking about and you won't sound kind of goofy. Are the non speaker using new-speak or just trying to be politically correct? The same is true of the 390A. If my comments and that making light of the "non-A" types offends them, it should be noted that I am not sorry. When you say something, say it, be proud of who you are and what you own, use, needs parts for, want to sell, need help adjusting, ect., ect.... Jim Simmons

From tbigelow@pop.state.vt.us Fri Jun 6 21:40:27 2003
Subject: [R-390] Nomenclature

wrote: >Then there is ALWAYS the most accurate and "on the money" nomenclature:

Absolutely! But I love 'em both! Sorta like having a 75A-4 and 51S-1. Both are nice radios, both do some things better than the other, yet I wouldn't want to be without either. (yes, they both work!) de Todd/'Boomer' KA1KAQ R-390 expert-in-training (for a few years, now)

From _dave.f@mail.com Fri Jun 6 22:02:05 2003
Subject: [R-390] R-392 tubes

Thanks to all on the list for the tips, private offers, and taunts (for being cheap). Here is a list of suppliers recommended, Antique Electronic Supply seems to have the best selection and pricing on new tubes, IMO.

Antique Electronic Supply www.tubesandmore.com
Vacuum Tubes, Inc. www.vacuumtubesinc.com
Fair Radio www.fairradio.com
Radio Electric Supply www.vacuumtubes.net
Dave, WW8S

From chacuff@cableone.net Fri Jun 6 23:10:52 2003
Subject: [R-390] Hi

Jim and group... You've no doubt heard all the arguments of why the "Non-A" speak is used....It clearly reduces confusion and there is no harm done. Here is another area where it is done to clarify what is being spoken of....I repair/restore R-1051's...there were the R1051, the B model the C model the D model the H model and the G model. But when we speak of the undesignated R-1051 we designate it the "Plain" It removes all doubt....so does the "Non" speak as it relates to the 390 series.

It's clear that you have been around long enough that you ought to know "That when in Rome you should do as the Romans do" meaning I think you are in the minority on this one....so why not go with the flow...

This whole endeavor is recreational and about a love for the radio....why try to make it so structured....I get enough of that at my job (yep...I'm not retired yet)....this should be fun (is)...and the humor we have around here is mostly fun...until it is mixed with too much attitude! Respectfully Cecil Acuff WB5VCE (30yrs)

From barry@hausernet.com Sat Jun 7 00:00:23 2003
Subject: [R-390] Hi

Nope not BS that would be the R-390BS version very rare.

Neither is the use of "non", though awkward, it the established, defacto descripto delicto.

Even with this add-on, helpful respondents sometimes jump in and suggest cures that apply to the "A" model in a non-A situation, but mostly it is helpful in preventing that kind of confusion.

Problem started a half century ago. The R-390 non-A (not sorry), was just the "R-390" as there was no plan to develop other models, that is, until the gov't. got the bill. Somebody must have said, or wrote "These are great receivers we're gonna' need a whole lot more. Is there a volume discount?" After the laughter subsided at Collins, the push was on to come up with a cheaper version the would work as well overall and would not cause 3rd degree burns when curious pilgrims stuck their fingers through those holes on the side and touched the pretty orange 6082's. The rest is history.

Had they anticipated a second model, they would have called the first one the R-390A and the second one the R-390B. Or maybe they would have given it a whole new number, like the R-391, but that was taken and so was R-392. I don't know about R-393, but there's an R-394 which may have predated the R-390A.

Meanwhile, in the emerging world of data processing, code development, operations automation, and technology in general, the principle of the "positive designator", "positive indicator" or words to that effect had become well established. Part of this was encouraged, if not mandated by the prevalence of "fixed field" methodology in data processing (as on punch-cards, flat files, etc.) which brought us great things like leading zeros, and so on. Each data item had to have the same number of positions. The notion of a positive indicator a rule in many environments stems from the known fact that it is downright dangerous to identify two different things by the simple presence or absence of an element. This is even true of such diverse nomenclature and indexing schemes as military tech manuals and the Dewey Decimal System. The presumption is that the shortened form of a designator applies to a whole family of items and the added "fields" or suffix identifies the specific family member. To some extent, that's true of this reflector. This is the "R-390" list which is so encompassing it includes the R-389, R-390, R-390A, R-391, R-392, and sometimes even the R-388. So, this was a bit messed up at the start.

Now all of these have unique identifiers within the same length, except the R-390A. From a communications standpoint, it is undesirable to use simply 390 to refer to the original model. As there is no letter which preceeds "A" in our alphabet, the clarifier "non-A" has been customarily added. Adding a "B" would be counter-intuitive and cause some of the uneducated to assume that the "B" model is newer. Just because something sounds a bit silly, doesn't mean it's not "established". Take the federal gov't. for example please.

Also, there are many more "A's" around because once they got the cost down, they made a whole lot more of them. Then, at some point, the order was given (fed. gov't. again) to destroy all "R-390A's". As there are still a fair number of "non-A's" (still not sorry) around, none are known to have blue or yellow stripes painted on them and may have escaped that fate due to the absenced of the "positive designator". ("Heck, this one here sez just "R-390", not "R-390A". Guess we better leave it alone and bust up the other ones." In that case, the lack of a postitive designator was beneficial.)

However, as with the Sherman tank, overwhelming production numbers won the war and most often, when a question or "issue" arises on the reflector, someone is talking about the A-version. When the subject is the original model, it needs to be flagged to avoid confusion, and the "positive indicator" has become "non-A" for lack of a better alternative. I suppose we could call it "R-390O" for original, but another rule is not to mix zeros and the letter "O", so forget it. "R-390blank" doesn't cut it. We could do what Zenith did with the 600 series of Transoceanics. They ran it up to the Y600 (I think), didn't want to use "Z" because, I guess that might be confused with "Zenith", and so the last two versions were the A600 and B600. By the same token, we could take some liberties and call the original one the "R-390B" but that would confuse a lot of folks looking for the "B" on the tag. Also, once again, it violates the rules of designating stuff no going backwards Zenith notwithstanding. Other alternatives don't quite cut it, like "Un-A", "Anti-A", "Pre-A", and so on.

Have I worn you down yet? If not, you need to get indoctrinated. Say "non-A" over and over again until the B/S reaction subsides. Make a point of thinking and saying out loud "Hmmm, perhaps I will use the NON-A this evening as I plan on listening to some music from afar and do not want those pesky mechanical filters ringing and adding harshness. Yes, indeed, I do think the NON-A will be a better choice. I can always switch over to the A later on."

Nope the use of "non-A" is not B/S, though some of the foregoing may qualify. ;-)

Barry (The one with the Nomex suit and flak jacket.)

From bernice@videotron.ca Sat Jun 7 00:00:51 2003
Subject: [R-390] Mystery solved....sortakinda.../Clamp Source

Todd, Check out Item #3028404570, Qty 10 clamps. Qty. 10 went for \$26.50 back in April. See Item 3018437605. Al VE2TAS

From r.tetrault@attbi.com Sat Jun 7 00:25:22 2003
Subject: [R-390] Hi

Look what you did, you got Barry started. Don't forget my earlier post about nomenclature: The real 390 and The cheap 390 In the back of my mind I am groping for a metaphor I can wrap around "the good, the bad and the ugly" but I can't think of anything bad except perhaps some hack job with lost of holes in the front panel and wires, lots of wires, hanging out. Bob owner of a cheap 390

From jimsim@adelphia.net Sat Jun 7 00:34:17 2003
Subject: [R-390] Hi

You reasoning sounds very much like those people at the very bottom of the totem pole who worked for

asa. To impress people like me, one of the common soldiers, with how important they were, they referred to the radios the used as A's and non A's. We, in the real world, just referred to them as R390's or 390A's. Your little elitist altitude must come for the same need the asa guys had.

What you are saying in the effort to justify your use of the term "non-whatever", putting all the bs aside, is that some of have been using the term and don't like to be told we are wrong. So there; Na, Na, Na, , , Jim Simmons

From barry@hausernet.com Sat Jun 7 00:43:54 2003
Subject: [R-390] NON-A Truth Revealed (was Hi)

OK, OK, my previous post was a bit of a crock. I only just now got clearance to reveal the truth. "Non-A" is in point of fact, the accurate, official designation for the original "R-390". An NSA memo, previously labeled "Top Secret" has just been declassified to the point where I am permitted to reveal some of its contents.

Back in the late 50's, a encoding/decoding device which I'll refer to as the Clyde-Bedeiter-Box was developed which went between receiver and teletype machine. Initially these were deployed by NSA to decode secret messages paired up with R-390A's at the receiving end. However, there was a problem. The IF module with the mechanical filters rang and caused extra letters to be inserted in the decoded text. As it turns out, the stray letters almost always inserted were "A's". This caused confusion in the interpretation of the messages. Someone had an idea try the original R-390 with L/C filters. It worked. At that time, NSA officially designated the original design as the "Non-A". The double entendre was entirely intentional. After all, the R-390(blank) was effective in removing the extra "A's". This is also the reason for the appearance of some modified R-390A's with the non-A IF deck fitted in. They did not want to draw too much attention to calling too many "Non-A's" from the field. Some hybrids were given an entirely new number.

Meanwhile, unbeknownst to NSA and CIA, the Soviets had replicated the Clyde-Bedeiter-Box (CBB) and also the R-390A by the very early 60's. Naturally, they chose to duplicate the later version of the receiver and could not afford to make up any of the original more expensive design. When they intercepted US coded messages they were confused and distracted. Some KGBers thought there was something to the pattern of "A's" the content of the real message. In some cases, they assumed the transmissions came from the Italian embassy. (think about it).

This was of crucial importance at several points in cold war history, particularly during the Cuban Missile Crisis. Hence, it is also a known fact that the original, officially (though secretly) designated NON-A saved the world from thermonuclear demise.

Print this email out on rice paper and be sure to chew well before swallowing, just in case the memo gets reclassified and I disappear. Barry (w/Nomex suit, flak jacket, deep in bunker)

From jimsim@adelphia.net Sat Jun 7 00:57:38 2003
Subject: [R-390] NON-A Truth Revealed (was Hi)

Barry, Good! Jim

From hankarn@pacbell.net Sat Jun 7 01:08:42 2003

Subject: [R-390] Hi

Cecil, You are a smooottthhh cool one. Very well said. Hank KN6DI

From hankarn@pacbell.net Sat Jun 7 01:24:43 2003
Subject: [R-390] Hi

Barry a great job of sucking the air out of the sails on that dissertation. Since I make parts for a lot of the R39XX series (see I stopped short of Z) it sure helps when people order parts like the RF deck covers for a NON-A instead of an "A". Hank KN6DI

From hankarn@pacbell.net Sat Jun 7 01:44:04 2003
Subject: [R-390] Hi

Joe Foley , it is now time for you to jump into the fray. Hank KN6DI Stir up the pot.

From jimsim@adelphia.net Sat Jun 7 01:47:01 2003
Subject: [R-390] Hi

O' let's not be too quick, I could go on and on. But what is the purpose? Barry just provided a line of bs which I thought was good! And you have to admit it was, it sucked some of you guys in. It was part truth with a lot of near truth and some fibs. But you got to admit it was a good reply to me. So, I told him so. I was not trying to hide what I had to say, I provide copies to almost everyone. Jim

From ai2q@adelphia.net Sat Jun 7 02:04:27 2003
Subject: [R-390] R-392 solid-state mixer notes

A whole bunch of folks have e-mailed me asking about my solid-state mixer "tubes" I put in my R-392. It's been awhile since I fiddled with these, and a lot of project water has passed under the proverbial bridge since then. But, if I recall correctly, I used El Cheapo Radio Shack MPF-102 MOSFETs, or perhaps they were MPF-105 types.

Also, I used Sears/Craftsman No. 25024 cutoff wheels. I mounted the Dremel motor in a vise, arranged so that the sparks fly away from you. I then rotated the tubes by hand. I think the wheel as much melts the glass as cuts it. You'll see the glass get red at the point of contact. Good luck. Vy 73, AI2Q, Alex in Kennebunk, Maine <http://users.adelphia.net/~alexmm/ai2q.htm>

From hankarn@pacbell.net Sat Jun 7 02:08:08 2003
Subject: [R-390] Hi

I don't remember you violating the freedom of speech or hurting any one. Of course me am not the censor and a LLLOOONNGG way from being "PC". Just hang in there you did not get a Cherry. Done been there. Hank KN6DI

From Dxingsince1957@aol.com Fri Jun 6 17:14:01 2003

Subject: [R-390] Mystery solved....sortakinda...

writes: >Then there is ALWAYS the most accurate and "on the money" nomenclature:

Call George Rancourt, tell him I sent you. DX'ing Since 1957

From Dxingsince1957@aol.com Fri Jun 6 22:14:45 2003

Subject: [R-390] Hi

writes: > The only real problem I have is BS, and thats what this "non" business is . > If you own a model T Ford, does that make all other Fords made non-A fords.

Well put, I have never had a problem with calling it like it is, it's either a R-390 or R-390A. If "they" can't decipher that, tuff...On topic I hope...:-) or not...:-) doesn't matter to me. DX'ing Since 1957

From ba.williams@charter.net Sat Jun 7 01:51:40 2003

Subject: [R-390] Mystery solved....sortakinda...

> Now it's time to bite the bullet and do it all the right way. No more > piecemeal approaches to specific symptoms. > > ~ Boomer, KA1KAQ

Hold up a minute and let me get this straight. You have a radio that just spontaneously shoots out parts all the way to the front porch, somehow comes up missing parts, won't receive except the bc band, then it won't get that suddenly, and you call the other one that works fine a 'mongrel'? Something about this picture ain't right. Barry

From Dxingsince1957@aol.com Sat Jun 7 01:57:37 2003

Subject: [R-390] Hi

writes: > Joe Foley , it is now time for you to jump into the fray. > Hank > KN6DI > Stir up the pot.

He might be in the penalty box like me. DX'ing Since 1957

From ba.williams@charter.net Sat Jun 7 02:06:52 2003

Subject: [R-390] Hi

Jim, I've been on this list for about 5 years now and this is an old topic we mostly abuse for light humor. It is just how the whole group gravitated at some point.

You would have enjoyed being around OH-58s, oops, there is no such thing. My bad. There is the most common A model which is not like the Bell Jet Ranger at all due mostly to an extended tail boom to make way for the larger rotor system so it would hover high. Then, there came the C with upgraded transmission, instruments, etc. Then, they bastardized a few As to make them almost Cs and called them A pluses. Everyone wondered what happened to the mysterious B models. Well, I looked it up and those only went to Australia; about 50 of those were made. Oh, there were flat plate Cs and A model canopy Cs. Flat plates didn't autorotate as well in steady state descent due to airflow problems. Also, flat plate Cs had the airframe chopped up for the canopy design. Forgot, there were little tailrotor As and

improved tailrotor As. Little tail rotor As had the red and white stripes. Barry

From ba.williams@charter.net Sat Jun 7 02:13:52 2003
Subject: [R-390] Hi

> Joe Foley , it is now time for you to jump into the fray. > Hank > KN6DI > Stir up the pot.

Yeah. Where is that old coot, anyway?

I think he is really Joe Redda in real life. Look at the whole 'redmenaced' thing. Joe Foley. Joe Redda. Joe Redmenaced. I think the Foley part is made up. Think about it. the other other Barry

p.s. I'm only saying all of this because Joe is in New York and I'm way down here. And, I can probably run faster than him.

From jlap1939@yahoo.com Sat Jun 7 02:38:31 2003
Subject: [r-390] hi

Well, Don't remember if I started this mess or not...But..it was tongue in cheek anyway...now you guys got B Hauser and Hank going...and he's askin' for Foley...

I really accept the "non a" desg. but as pointed out by Jim..Those who used them or were around them in mil. appl. and in ham use didn't worry too much what you called them..and most said "390" when they meant either. If they spoke of the "a",you might say 390a, but usually not spoken of as 390a, ,, It just wasn't done, so 390 meant "one of the units in the 3XXxx series of rec." If you were asking in servicing, THEN, you would say 390 "a".

If you maybe made a call to maint. for repair....:

"We got a broke radio!....".."which one"... "the 390".. "well send it over, but its' gonna be a week..."....(yeah, right...) later, the service depo or other agency:...(to someone else, maybe another Company or Bat....) : "Ya got a power sup. for a 390 AYE, you can transfer on inven."? I was around more "nons" myself, and still believe it serves (maybe best), for every application EXCEPT extremely "tight" areas where interference required (and found), more accuracy in the mech. filters of the 390a. But, I was NCOIC for training probs...I never was a comm. tech...I was a tanker..

One thing I saw, and have mentioned before, was a lot of real mis-treatment, even dropping out the back of a deuce 1/2 ...These radios kept on working..(All in this series,).. (we all know that...sorry)

Each to his own..but I always was partial to the "non a".. MY Regards, John (JLAP)

From redmenaced@yahoo.com Sat Jun 7 02:46:21 2003
Subject: [R-390] Hi

Well, I'm 6'3" weigh 190 and cut my firewood with a crosscut saw. Maple, not that pine crap. You be the judge. Joe Redda knows what I think of him, and his kind. I was at the Rochester, NY Hamfest, too. Joe

From redmenaced@yahoo.com Sat Jun 7 02:51:50 2003
Subject: [R-390] Mystery solved....sortakinda...

wrote: > suddenly, and you call the other one that works fine > a 'mongrel'? Something > about this picture ain't right.

+++++

No, it's right. He's in Vermont. Joe

From redmenaced@yahoo.com Sat Jun 7 02:53:26 2003
Subject: [R-390] Hi

Huh?? What'd I do now?? Joe

From ToddRoberts2001@aol.com Sat Jun 7 04:00:32 2003
Subject: [R-390] Hi

Been enjoying reading all the postings about "A" vs "non-A" nomenclature. Thought I would add that as I understand it the military used the "A" suffix to denote the radio has mechanical filters in the IF, if the original version did not contain them? For example the Collins R-388 became the R-388A (same as the 51J-4). The SRR-11 became the SRR-11A along with the rest of the SRR-11,12,13 series. That is helpful to know if you see a radio up for sale - I would rather have an SRR-11A for the tighter mechanical filter selectivity. This has probably been gone over before. 73 Todd Roberts WD4NGG.

From hankarn@pacbell.net Sat Jun 7 04:43:03 2003
Subject: [R-390] Hi

Joe, You are lightweight, I am 6'2" and weigh 285 plus 71 years old and hold my own. Just got through with 8 hours with a man basket and 126' Crane working on my 70' sky needle with 25' mast and 5 hours in basket and full body harness tweaking antenna elements on my LM-470 and have to sked another 4 hours to tweak the antennas on the Sky needle with the 2 el 75M at 95'.plus 2 el KLM-40M2 and 4 el Raibeam on 20 Nice ride and at at 126' can only see one pool and no sunbathers Oh well. Hank KN6DI

From bill@iaxs.net Sat Jun 7 06:00:30 2003
Subject: [r-390] hi

Haven't seen the real reason for "non-A" come out yet.

It's a crowd thing. Billions of R-390/A sets were made, and now circulate with high demand. Almost no R-390 sets were made and only a few people know about them. So we have the R-390/A owners saying that they have R-390 sets, dropping the /A the way Brits drop the 'h'. When they do make a disparaging remark about non-A, what they really mean is 'not of our kind of people', not fit to consume Earth's limitless resources, stuff like that.

Who was it that had the signature line, "You are not of our tribe. We must kill you."? Regards, Bill Hawkins Minnesota, where never is heard a disparaging word, and the skies are only cloudy at night.

From jamesmiller20@worldnet.att.net Sat Jun 7 13:51:01 2003
Subject: [R-390] R-390A (was Hi)

Go to <http://www.r-390a.net/faq-refs.htm>

Read the "Cost Reduction Program for Radio Receivers, R390/391()/URR Final Progress Report, Collins Radio Company" This report may shed some light on the evolution from the R-390 to the R-390 (A model). It also mentions a "B model".

From jlap1939@yahoo.com Sat Jun 7 15:18:40 2003
Subject: [R-390] Hi

Friends, Can't believe the interest in good fun on this subject...Hope it is not a problem for the more sedate on the list..but a little fun is good for everyone..and to Barry...What a piece!! good thinking and writing...

On that note, may I say thanks for not complaining about my nonsense as well. And a reminder that my non a will be back with me soon!...Ready to go again. Also, still have the "antique" (almost) RCA meter I would like to give someone..if anyone thinks it is worth holding on to, and remembering..have a few other items I have picked up at yard sales..will detail sometime.. Regards to all, John (JLAP)

From Dave_Faria@hotmail.com Sat Jun 7 18:32:53 2003
Subject: [R-390] R-392/T-195

GM list. I have a GRC-19 and had a question about the T-195 transmitter. My boss (alias the wife) complains abt the blower noise. R there any old timers on the list who know if the transmitter can be operated out of the case without the blowers or if a muffin fan directed at the final/modulator tubes would be all that's necessary? I was thinking of a wood platform box with the fans below. Thanks for ur comments Dave Faria

From jbrannig@optonline.net Sat Jun 7 18:15:53 2003
Subject: [R-390] R-392/T-195

I had a T-195 and between the dynamotors and the fans it sounded like a demented vacuum cleaner.

You can't operate it out of the case without defeating the safety interlocks. Also the fans have heating elements and sensors on them. If the fans stop the radio shuts down, these would also have to be defeated. The input is filtered to keep dust out of the enclosure.

With all that said, it should be possible to operate the radio out of the case and shut down the squirrel cage blowers.

However is very important to leave in place the fans for the final RF and modulator tubes. They are in "air system" sockets and require a minimum air flow at some level of back pressure. Without the air flow they will quickly self destruct.

From ba.williams@charter.net Sat Jun 7 16:23:31 2003
Subject: [r-390] hi

We all love boatanchors on this list. SP-600s and 1051s get mentioned a lot around here. I only have As as I've not run into any good deals on un-As yet. You offered the reason for the mostly A talk yourself- a lot were manufactured compared to the non-A. One of the few topics that remain to be censored on this list is the diversion to general boatanchor talk. Just because non-A talk is sparse it doesn't indicate that A owners are snooty about other radios. Talk about un-As all you wish. I enjoy reading about boatanchors.

The author of that quote was a paranoid schizophrenic with persecution ideation. Barry

From ba.williams@charter.net Sat Jun 7 16:38:36 2003
Subject: [R-390] Hi

> Cecil, You are a smooottthhh cool one. Very well said. > Hank > KN6DI

Hank, You got that right. Barry

From Dxingsince1957@aol.com Sat Jun 7 17:44:09 2003
Subject: [R-390] For Sale R-390/URR

R-390/URR top and bottom dust covers, total rebuild. Electrically as near perfect as new. mechanically it's better. No shipping, you pick up. \$575.00 DX'ing since 1957

From redmenaced@yahoo.com Sat Jun 7 23:32:29 2003
Subject: [R-390] For Sale R-390/URR

ME! ME! ME! I want it! Um,.... can you knock some off the price because it's really not original anymore. Joe

From Dxingsince1957@aol.com Sat Jun 7 19:57:15 2003
Subject: [R-390] R-390/URR sold!!

Subject header says it all. The gentleman who bought it already picked it up, this must have set a record for the fastest sale ever! DX'ing since 1957

From Dxingsince1957@aol.com Sat Jun 7 21:24:54 2003
Subject: [R-390] R-390/URR was sold!!!

There is some sort of delay going on, I sent an e-mail to the list right after it was picked up. Sorry for the delays, not my fault. All who wrote, it was posted as sold some time ago.....sorry! DX'ing since 1957

From ezeran@concentric.net Sun Jun 8 05:30:09 2003
Subject: [R-390] Hi

The SRR-11 became the SRR-11A along with the rest of the > SRR-11,12,13 series. That is helpful to know if you see a radio up for sale - I would > rather have an SRR-11A for the tighter mechanical filter selectivity. This has > probably been gone over before. 73 Todd Roberts WD4NGG.

Todd, I've been picking up the 390/390A back and forth too but the old ears jumped up when the SRRs got mentioned. The receivers in my SRT-14-15-16 manual(I have the transmitter, manual 1955) are RBA-RBB-RBC. When I went to Navy ET school in the early '60s the taught receivers series was SRR-11/12/13 ..along with the SRT series but...but..R390(A and non A) was there too. ET school was in Bldg 520 at Great Lakes. As a young squid, before my three all expense paid SE Asian Vacations, we called them all '390s. Not R390, not R390A...just shittin' '390...as in "I went to the comm shack to swap out a '390." It was the circuit/ comm. function that counted not what was on the name plate.

By the way..working on the SRR receivers just sucked. The '390s were ok but then we got a saddled with the R1051 and UCC-1V for tone diversity multiplex receive traffic.....Bozo EdZ.

From jlkolb@cts.com Sun Jun 8 06:45:07 2003
Subject: [R-390] Hi

As Navy Radiomen, we only called them 390's also. Even though every one we had was an 'A. Wasn't a problem there as everyone knew what we meant - and for our purposes, they would have interchangeable.

However things are different here in this group - many of the messages asking technical questions will get different answers depending on if they are asking about a 390 or 390A. Since so many people have said 390 when they were referring to a 390A, unless you know well the person asking a question about a 390, you won't be sure which they are really asking about.

If I post an ad asking to buy a 390A IF strip, everyone knows exactly what I want. If I ask for a 390 IF strip, and really wanted one for a 390A, I've just wasted everybody's time plus maybe even end up buying the wrong part. Even if I really wanted one for a 390 non A, someone who might have sold me a 390 IF strip may not bother answering assuming I'm one of those sloppy people that calls everything a 390 and probably really want one for a 390A. However if I ask for one for a 390 non A, everyone will be sure exactly what I want. So I will always consider references to 390 non A's to be in good taste and an aid to clear communications.

To answer a different message also: I don't recall ever hearing about the SRR-11A series with mechanical filters, but it's just random luck that the A in SRR1xA, R-390A, and R-388A all indicates mechanical filter versions - doesn't mean you can buy any radio with an A in the name and find a mech filter. Speaking of filters, I have some mechanical filter info on my web site
<<http://members.cts.com/king/j/jlkolb>> John

From ToddRoberts2001@aol.com Sun Jun 8 12:25:50 2003
Subject: [R-390] Hi

writes: > I don't recall ever hearing about the SRR-11A series with > mechanical filters, but it's just random luck that the > A in SRR1xA, R-390A,

Hi John, thanks for your posting to the R-390 reflector. I cannot agree that it is just random luck that the SRR-11A, R-390A and R-388A all have mechanical filters. I have both the original SRR-11 and the SRR-11A with mechanical filters. The manual clearly states that the SRR-11A contains mechanical

filters. It is nearly identical to the SRR-11 except for the added mechanical filters in the IF strip. Can you give me an example of a U.S. military radio receiver with the "A" suffix that does not have mechanical filters? Yours Truly, Todd Roberts WD4NGG.

From g4gjl@btopenworld.com Sun Jun 8 15:06:01 2003
Subject: [R-390] R392 Condensation

When my R392 has been on for an hour or two the tuning window fogs up with internal condensation. How can that be prevented? Peter G4GJL

From dpg@coe.neu.edu Sun Jun 8 15:13:34 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #723 - 12 msgs

I just bought one of those SRR receivers - before I find out the hard way, how does serving the radio suck? Is it the soldered-in tubes? Or are there more horrors? Dave Goncalves

From ToddRoberts2001@aol.com Sun Jun 8 15:14:52 2003
Subject: [R-390] R392 Condensation

writes:> When my R392 has been on for an hour or two the tuning window fogs up with internal condensation.

Open up the case while it is running and let it air out for a day or two. 73 Todd Roberts WD4NGG.

From Barry Hauser <barry@hausernet.com> Sun Jun 8 15:41:04 2003
Subject: [R-390] Mechanical Filters and "A" (was Hi)

Hi Todd, Well, there's a fly in that ointment. For example, the R-1051 plain (not to be called "non-A" to prevent extreme confusion if the 'R-1051' part is omitted) what was I saying? Oh yeah the R-1051 plain has mechanical filters and there was no known R-1051A. The R-1051B and later also had them.

Then (somewhat coincidentally) there is the R-105/ARR-15 and the R-105A/ARR-15 whereby the crystal filter in the former was replaced by half a tube (12SL7) in the latter. This is the famous airborne receiver with 10 frequency autotuning and remote control for the pilot, etc. Please do not refer to it as an R-1051 non-1. None of uhhh none of these had mechanical filters.

Of course, then there was the BC-348(x)'s. Used up practically half the alphabet, but only started with "E" no plains or A's through D's. Seemed to end with "S", but still no mechanical filters, at least as originally equipped. All sorts of things appeared on them installed by their 2nd, 3rd, 4th, etc owners until the practice fell out of favor.

There are plenty more examples. Skipping to more recent history, and a bit of a mystery, an RA6790GM just sold on that e-place for \$1,325. It was fully loaded with six mechanical filters, instead of the usually smaller set of crystal filters (or none at all). That particular one still has its mil tag "R-2174A (P)", however just says "RA6790GM". However, my understanding is the "A" version referenced the added fault light and had nothing to do with mechanical filters.

BTW Todd, The WD-40 Company, has asked me to ask you to please cease and desist from using your call sign which they feel is a thinly veiled attempt to defame their product. Or it may be a complete random luck coincidence and you're innocent but change it anyway.

Also to the group in general: Please do not use "Hi" as a subject line. It's rather ambiguous and resembles a lot of spam. 10-Q Barry

From Barry Hauser <barry@hausernet.com> Sun Jun 8 16:04:31 2003
Subject: [R-390] R392 Condensation

Hi Peter: You must be running it battened down - as it was designed to run. However, that can result in heat buildup, especially if you're still using the 26A7 audio tube.

Some have resorted to drilling vent holes in the case - not nice. Instead, you can loosen up the allen bolts on the front panel and slide the radio forward, leaving a gap of about 1/4", or a small handful of millimeters to allow venting of heat and humidity as it warms up. Might be a good idea to run it that way regularly to minimize heat buildup, or you can close it up after a few hours of running while it's still warm so as to seal out the humidity.

If that doesn't work, you may have to leave both case and rx out in the sun on a hot dry day or use a hair dryer on it, but carefully. If it's not bolted to the back of a Jeep being driven through swamps, I recommend running it partially opened. Barry

From glennmaillist@bellsouth.net Sun Jun 8 16:35:14 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #723 - 12 msgs

The tubes are soldered into modules that plug in. The modules contain the tube, the bypass, biasing and coupling components. This makes it relatively easy to maintain, if you have spares. The actuating arms that go from the RF modules break easily. The receiver is so unstable that a fully insulated tuning wand inserted into the area where the straps from the tuning capacitor to the RF modules causes the radio to shift frequency. The projection dial is rather interesting and novel. I have worked on a few and own a few. They are real cheap (in the free to \$100.00 range). The higher price is for one new in the box. Most hamfests that I go to have one there priced at \$75.00 and it goes back with the owner. The radio requires a special cable or the back plate removed from your radio to maintain it. 73 Glenn WB4UIV

From Llgpt1@aol.com Sun Jun 8 16:38:50 2003
Subject: [R-390] Mechanical Filters and "A" (was Hi)

writes: > Well, there's a fly in that ointment

Yep, the R-388A was just a thinly disguised R-388 with the "addition" of mechanical filters to "supplement" the L/C and X-Tal filters. "Never say never" Les

From hcjoel <hcjoel@direcpc.com> Sun Jun 8 17:15:08 2003
Subject: [R-390] HRO-50TI Question

Forgive this off the subject query. But there is so much collective knowledge displayed here that I hope

someone will know.

I run a National HRO-50TI here while applying some TLC to my R-392 magic box.

How does one set the tuning on the lower end of each band on the plug-in coils. There are instructions in the official National operators manual. But there is no access to the holes at the rear of the individual stage coils/capacitors. Could it be that National used a test jig that allowed access?

Thanks for any input Harry R-392:HRO-50TI:Icom PCR-1000:Sony IFC-2010

From wgdavis@bellsouth.net Sun Jun 8 17:36:12 2003

Subject: [R-390] Magazine Storage

Hi Guys, Question; what is the best way to store old 73's and/or QST's, in a manner that one could go back and search or research for articles thru them on occasions.. C U Later, 73 WG

From g4gjl@btopenworld.com Sun Jun 8 17:51:45 2003

Subject: [R-390] R392 Condensation

Thanks to all thos who replied to my question...I have had the set out of its case to replace the tuning lock, which some idiot had removed and lost previously.

The replacement came from Dan (Hank) Arney.....Thanks Dan!

I thouht the idea of running it up until it is hot and then casing it was a good one, and that is in fact what I did when I re-cased it yesterday.....It must be more humid here than it feels, I guess!

Good advice from Bill W2CQ.....Perhaps the Equatorial region shopuld be re-named as the boatanchor belt! 73 Pete G4GJL

From billsmith@ispwest.com Sun Jun 8 18:00:32 2003

Subject: [R-390] Hi

How about 390/ and 390A? Agreed, some means to differentiate the two is needed. 'Course someone will ask if is there significance in only a half-A (/) 73 de Bill, AB6MT billsmith@ispwest.com

From jbrannig@optonline.net Sun Jun 8 18:02:27 2003

Subject: [R-390] Magazine Storage

Buy the CD-ROM's and throw out the magazines.

From ba.williams@charter.net Sun Jun 8 17:44:35 2003

Subject: [R-390] R-390/URR was sold!!!

Do you know why your message was delayed? Barry

From n4xy@earthlink.net Sun Jun 8 18:39:14 2003
Subject: [R-390] HRO-50TI Question

Yes they did (use a tuning jig.)

From billsmith@ispwest.com Sun Jun 8 18:59:35 2003
Subject: [R-390] Magazine Storage

We set up a clubhouse and obtained shelves, put the magazines vertically stacked and packed so they cannot warp. Have a good part of QST (early issues missing), 73, Ham Radio and CQ magazines.

Much better than a CD. There is no replacment for cruising through the back pages of an old magazine.

'Course hobbies of all sorts are becomming a virtual experience and with the present rage of discouraging anything "hands on", we are all soon to be relegated to the outcasts of Farenheit 451. Taken your pills today? 73 de Bill, AB6MT billsmith@ispwest.com

From r.tetrault@attbi.com Sun Jun 8 19:04:03 2003
Subject: [R-390] Magazine Storage

Taken your pills today? Gutte Frage...

From ToddRoberts2001@aol.com Sun Jun 8 19:05:02 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #723 - 12 msgs

writes: > I just bought one of those SRR recievers - > how does serving the radio suck? Is it the soldered-in tubes? Or are there > more horrors? > > Dave Goncalves

Hi Dave, congratulations on your SRR series receiver. I always thought they were straightforward to work on. Everything is laid out in a straightforward logical manner. You can troubleshoot each stage if something goes wrong. The tubes are a little harder to replace but they can be tested on many of the older tube-testers with subminiature test sockets on them. You have to remove the rear filter assembly from the case in order to power up the radio outside of the slide-in case, but it only takes a few minutes to do that with a screwdriver. Main horrors would be if one of the RF/IF coils shorted or went bad. They are sealed in epoxy and impossible to repair. Also would be bad news if the mechanical filters ever went bad if you have one of the "A" models. Only thing you can do in those cases is have another receiver you can take apart for spares. Good luck. 73 Todd Roberts WD4NGG.

From wa6knw@sbcglobal.net Sun Jun 8 19:36:07 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filters.....

> Can you give me an example of a U.S. military radio receiver with the "A" suffix that does not have mechanical filters?

How about the TMC R-5007A/FRR-49(V). No mechanical filters. How about the Hallicrafters R-649A/URR. No mechanical Filters. Hoq about the R-274A. No mechanical filters. Need I say more?

RICH WA6KNW

From wa6knw@sbcglobal.net Sun Jun 8 19:46:28 2003
Subject: [R-390] R-392 humidity

> When my R392 has been on for an hour or two the tuning window fogs up > with internal condensation.

If I remember there is a hexhead plug just below the dial window eschteen centered on the front panel. If memory serves me this is a venting plug. You could also put a small bag of silica jell in the receiver to absorb any incidental humidity and of course periodically replace and recharge it. RICH WA6KNW

From jlkolb@cts.com Sun Jun 8 19:58:22 2003
Subject: [R-390] Mechanical Filters and "A" (was Hi)

wrote: Oh yeah the R-1051 plain has mechanical filters and there was no known R-1051A. The R-1051B and later also had them.

As best I can recall now, when the R-1051 was first introduced, it only tuned in 1 kHz steps - then someone noticed that the Navy frequencies mostly ended in .5 for the actual carrier freq the radios would be tuned to, so there was a quick field change to add the .5 step switch. I think the R-1051A name was intended to be used for newly manufactured sets which included the .5 kHz step switch, but probably experience quickly found other necessary changes causing the creation of the 1051B with few or no 1051A's ever made. Anyone here old enough to prove or disprove this? As far as I know, I was the first one to successfully copy the fleet broadcast when it was introduced to westpac, using R-1051's and UCC-1's. Of course there weren't many ships with the equipment to compete with for the honor. John

From bratcher@pdq.net Sun Jun 8 20:06:16 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filters.....

wrote: > Can you give me an example of a U.S. military radio receiver with the "A" suffix that does not have mechanical filters?

R274A? Never heard of it. The R274 I've got is the mil version of the Hallicrafters SX-73 with no A on the label. Which receiver is the R274A? What is the Hallicrafters R649? Never saw one....

From g4gjl@btopenworld.com Sun Jun 8 20:29:17 2003
Subject: [R-390] R-392 humidity

Thanks, Rich. I will check out that plug.... I assumed it was an access port for the tuning mech!

. I opened the RX after the last postings to let out the wet air....Im not sure that is the cure as the present air is probably just as wet....But the Silica Gel should nail it. Hazards of living on a fog bound island in the middle of the North Sea!!! 73

From jimsim@adelphia.net Sun Jun 8 20:45:17 2003

Subject: [R-390] R390A for sale

I have a R-390A in the same condition as the day it was removed from service. All the meters are original and both the upper and lower panels are there. It works, but it will need tuning (has been detuned). Has not been exposed to the elements, just spent a long time in storage. Kind'a dusty inside. Also have a case for it to fit into. The radio will mount perfectly, but the case is a bit too deep (about 3~4 inches). Thought I would check with you guys before putting it on eBay. Jim

From ToddRoberts2001@aol.com Sun Jun 8 20:55:59 2003

Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: Can you give me an example of a U.S. military radio > >>receiver > >>with the "A" suffix that does not have mechanical filters? Yours

Interesting examples BUT doesn't R-274 denote a "family" of receivers and not one particular model? The R-274 series could be either a Hammarlund SP-600 variant or a Hallicrafters SX-73 variant - two mechanically and physically different radios? There was an R-274 series, R-274A series, R-274B series, R-274C series. There was indeed an R649 receiver made by Hallicrafters. Built for the Treasury Dept. and used as Coast Guard monitors. Never seen or heard of an R649A. They are so obscure that Chuck Dachis is looking for one on his web page. Never seen a listing for an R-5007A receiver. I have seen a mention of an R-5007/FRR-502 series - must be really obscure. 73 Todd Roberts WD4NGG.

From rnharsh@attbi.com Sun Jun 8 21:36:44 2003

Subject: [R-390] Where to find the Tube list for my R-390/URR

I am now the proud owner of a new/old R-390/URR and have downloaded hundreds of megabytes of manuals but haven't been able to find a list of the tubes used. Is this because there were many variations? I would have thought that since all of the particular model were manufactured to a milspec the tube compliment would have been the same. K3PID - Ron

From jlap1939@yahoo.com Sun Jun 8 21:54:42 2003

Subject: [R-390] Re: [r-390} Hi

Friends, It occurs to me that nothing is going to change...but who cares, if you understand what you are doing..None the less if asking or offering parts, you should be careful, right,? And then 390a and 390 non a makes pretty good sense..

For my (hopefully) last word on this, let me mention a case from about 10 years ago. Even after stating r-390 on my request...(note; I said r-390....) a famous re-builder in the north east area sent me ant. con and dial lites for the a...Without looking I installed the bulbs....and promptly blew them out...needless to say, in parts conversations, I say "non a" now...

Want to mention the reply from John Kolb, as I feel it was so well prepared, and literate. The RCA meter is gone... John (JLAP)

From Barry Hauser <barry@hausernet.com> Sun Jun 8 22:58:31 2003

Subject: [R-390] Where to find the Tube list for my R-390/URR

Hi Ron: I assume you're asking about the NON-A which is the original, non-cost-reduced model, AKA "a man's radio", etc.

While most of the information was declassified some time ago, the tube list itself, remains TOP SECRET and remains on a need-to-know basis.

However, you can look in the parts lists or, after signing the proper authorization forms, take the top and bottom covers off and look inside. (If you have one of these radios, you are required to look inside -- frequently.) Y'see, they printed the tube numbers right by the sockets they go into. See, that's why they kept it Top Secret. They figured if you didn't have an R-390, AKA NON-A, you don't need to know, but if you have one, you can just look inside, so then you don't need it anyway. And if you've managed to get hold of the manuals and can't find the tubes in them, you probably don't represent a serious security risk. It's a DC bureaucratic spook thing.

So much for the tomfoolery, or, in this case, barryfoolery, perhaps. I think someone has a tube compliment list on a web page somewhere. One must visit is Dave Medley's web pages <http://www.davemed.com/>

Here's another must-see <http://www.r-390a.net/Pearls/edited-R-390-non-A.pdf>

This one includes tube layouts of the top and bottom <http://asa.npoint.net/35720-3.pdf>

To my knowledge, there were no changes in the tube lineup for the R-390 (non-A) and it was also the same for the R-391 the autotune version, which is electronically identical. Some previous owner may have made substitutions, I suppose. You might find that the two 26Z5W's have been replaced by silicon diodes and/or the 3TF7 ballast tube has been subbed out with a resistor or something or other.

It's a good idea to pull all the tubes and check them on a tester. While the final test is performance in the receiver, it's best not to use the receiver to test for shorted tubes which can cause collateral damage. At the same time, you can check what tubes are actually in the sockets, and clean the pins and socket contacts with DeOxit. You should also check the mechanical alignment/synchronization. But here's the most important issue of all: Does it have the "green gear" or was it purloined by an enemy agent posing as a tech pretending to be forgetful? This will either be up high on the front of the RF deck hanging on a screw a bit toward the left or hidden down below as if it's part of the gearworks, but not meshing with any other gear (if it's in the proper storage position.) If you do not have the green gear, you should now be obsessed with acquiring one. This is a tradition. We'll expect a complete report. Barry

From jbrannig@optonline.net Sun Jun 8 23:10:49 2003
Subject: [R-390] Magazine Storage

If you insist. There are cardboard and plastic magazine holders available from most office supply stores. They are reasonable priced. Each will hold a years worth of your favorite magazine. The sides of the holder will keep the magazines from warping. Vertical stacking will lead to tearing as one retrieves the bottom issue.

The ARRL CD-ROMS from the 60's back are B/W, low resolution with a klugy search engine. They are print only. If you want to send an article to a friend it is print, scan, send. No cut and paste. The later QST CD-ROMs and the HR CD-ROMs were done by a different vendor and are of much higher quality. The ARRL WEB site allows you to do global searches of all QST's and HR's. i.e.: a search for "Collins"

will return all articles going back to the thirties.

I do miss taking out an old issue and browsing, but I freed up a lot of shelf space. Browsing on a screen is also nice and if you have a laptop it will follow you into the head. (that IS what we are talking about) BTW, Little or no market for the old issues, they went into the trash. (Sob) Jim

From rnharsh@attbi.com Mon Jun 9 01:16:11 2003
Subject: [R-390] (got it!)Where to find the Tube list for my R-390/URR

Thanks Greg and all who responded! Found it on TM -11-5820-357-10? Page 5 & 6. Page 6 is the pictorial version for those who have trouble with tables of data... Hi Hi K3PID - Ron

From ba.williams@charter.net Mon Jun 9 03:20:23 2003
Subject: [R-390] R-390/URR was sold!!!

Les, I had wanted to contact the owner for a friend who is dying to own his first R-390 type. He missed out this time. I hope we get better message postings in the future whatever the reason. Barry

From Llgpt1@aol.com Sun Jun 8 18:13:46 2003
Subject: [R-390] R-390/URR was sold!!!

He might have been in the "penalty box", when one is put in there, their posts are scanned and scrutinized before they are allowed through.....must stay on "topic" you know.....is this on topic? Who cares, that is one reason I have always liked this list, the bit of irreverance and frivolity breaks up the norm at times. Too much work etc. makes jack a dull boy. Les Locklear

From Llgpt1@aol.com Sun Jun 8 19:51:31 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: Can you give me an example of a U.S. military radio receiver

Yes, we want the entire list! Les

From Llgpt1@aol.com Sun Jun 8 21:22:44 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: > R274A? Never heard of it. The R274 I've got is the mil version of the > >Hallicrafters SX-73 with no A on the label. Which reciever is the R274A?

Well, it is the Signal Corps version of the Hammarlund JX-1, there was also a R-274B and a R274C. The R-274 (no suffix) was the Hallicrafters SX-73, oh yeah, there was also a R-274D, that was the last version of the Hallicrafters SX-73 (military version) Les Locklear

From Llgpt1@aol.com Sun Jun 8 21:25:19 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: > Interesting examples BUT doesn't R-274 denote a "family" of receivers and > not > one particular model?

According to Chuck Teeters who was the director of radio at Ft. Monmouth, the R-274 series was "family" of receivers, hence the designation FRR. But the letters (suffix numbers) tells who made them. Look at Osterman's book, pages 459 through 464. Les Locklear

From Llgpt1@aol.com Mon Jun 9 00:03:26 2003

Subject: [R-390] List of R-274 suffix numbers/more A receivers w/o mechanical filters

R-274/FRR Hallicrafters military version of SX-73

R-274A/FRR Hammarlund Signal Corps JX-1, JX-12

R-274B/FRR Hammarlund U.S. Navy JX-6, JX-35, also SP-600 JL-24 Special U. S. Navy

R-274C/FRR Hammarlund Signal Corps JX-14, JX-26

R-274D/FRR Hallicrafters

And, Ta Da.....

More A suffix receivers without mechanical filters R-320A/FRC Hammarlund SP-600J-4 (no x-tal frequency control) R-483A/FRR Hammarlund SP-600J-20 (no x-tal frequency control)

I'm sure there are many more, but my area of expertise is on the SP-600 series.

For further information, check out "Shortwave receivers Past and Present" edition 3 By Fred Osterman. Pages 461 through 464 Les Locklear

From Llgpt1@aol.com Mon Jun 9 03:07:29 2003

Subject: [R-390] Jan 6DC6 tubes for sale

Have 5 NIB Jan Phillips ECG 6DC6 rf amp tubes for sale. \$12.00 shipped continental U.S. Les Locklear Gulfport, Ms.

From Llgpt1@aol.com Mon Jun 9 03:26:57 2003

Subject: [R-390] R-390/URR was sold!!!

writes: I had wanted to contact the owner for a friend who is dying to own his first > R-390 type. He missed out this time

Looks like he sold it pretty quick. Les

From chacuff@cableone.net Mon Jun 9 04:54:35 2003

Subject: [R-390] Mechanical Filters and "A" (was Hi)

Greetings, All the R-1051 "Plain" designation radio's I have seen and had through the shop have had the 500cps switch. Unless there were maybe a few early Prototype R-1051's that were retrofitted to what the production R-1051 "Plain" turned out to be. (hard to imagine with the way the front panel is cast)

There were no "A" models that I have been able to determine...seems they went directly to "B"s. Don't think I have ever seen an "E" or "F" model either....jumped to "G"s and "H"s..... Cecil Acuff
www.r1051.com

From ghayward@uoguelph.ca Mon Jun 9 14:35:22 2003
Subject: [R-390] R392 condensation

I had the same problem when I got mine and I did exatly this suggestion and it worked. Good advice from Todd.

From cbscott@ingr.com Mon Jun 9 14:47:14 2003
Subject: [R-390] Recap kit?

Dave, Clearly you're selling kits for the wrong hobby... :)
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item2537193128&category38086> Barry(III) - N4BUQ

From jbrannig@optonline.net Mon Jun 9 14:58:25 2003
Subject: [R-390] Recap kit?

I hope Mouser doesn't see this.....

From tbigelow@pop.state.vt.us Mon Jun 9 15:54:57 2003
Subject: [R-390] Hi

wrote: >Jim and group... >> You've no doubt heard all the arguments of why the "Non-A" speak is >used....It clearly reduces confusion and there is no harm done.

I just gotta disagree with this. (o: I've heard arguments in favor of other things too: didn't make them 'right'. What you're basically saying Cecil is that, since some people initially have no idea about the differences between the two models, the best thing we can do for them is to somehow speak in 'simple' terms or otherwise talk down to them in a language that even they can understand. I'm sorry, but I find that just crazy. What could be more simple than using the actual designation/nomenclature for the radio? It doesn't get much easier than that.

> Here is >another area where it is done to clarify what is being spoken of....I >repair/restore R-1051's...there were the R1051, the B model the C model the >D model the H model

So you don't call it the R-1051 non-B-non-C-non-D-non-H to reduce confusion? This goes completely against the convention you just supported in the above paragraph. It's an R-1051, like the R-390, which some of us also refer to as the 'plain' R-390. Hmmmm.....talk about confusing. So it's a good idea to call the plain R-1051 what it actually is, but not the plain R-390?

Here's an example from me: if someone asks what type of dog you have, do you tell them the breed or do you call it a non-cat because they have a kittycat and you don't want to confuse them?

>It's clear that you have been around long enough that you ought to know >"That when in Rome you should do as the Romans do" meaning I think you are >in the minority on this one....so why not go with the flow...

I think the majority call it what it is. At least, the folks I communicate with know the difference without doublespeak. The fact that the vast majority don't usually get into this discussion because they find it pretty silly. Just look at the recent discussion of past members who no longer post as a guide. I don't ever recall seeing Nolan, Dr. Jerry, or any of the others who know these radios so well having referred to anything as a 'non-(*).'

>This whole endeavor is recreational and about a love for the radio....why >try to make it so structured...

I agree, Cecil. Unfortunately, removing the already-simple, basic structure in order to address some perceived need for a 'dumbing down' has always gone against my grain. I truly believe the *best* thing we can do for a newbie or anyone else lacking the knowledge is to give them the basic facts and truths, not try to mold it into something considered 'simpler and less confusing to them'. That starts to lead a group of (overall) intelligent people down the same path as the education system has gone with so-called basic competencies and the resulting graduation of kids who can't read. I have to agree with Jim, it doesn't at all appear to be a case of wanting to give someone good, helpful information as much as a few who have grown comfortable with misinformation wanting to indulge. de Todd/'Boomer' (list omitted for fear of retaliation) (o:

From tbigelow@pop.state.vt.us Mon Jun 9 15:58:36 2003
Subject: [R-390] Hi

wrote: >Look what you did, you got Barry started. Don't forget my earlier post about >nomenclature:
>The real 390 and >The cheap 390
>

You forgot Prof. Locklear's favorite description, something about the R-390 being a man's radio and the R-390A being a boy's radio. Wait...now it all makes sense!! ~Boomer owner of both, just to be safe

From tbigelow@pop.state.vt.us Mon Jun 9 15:59:51 2003
Subject: [R-390] NON-A Truth Revealed (was Hi)

Barry Hauser wrote: >OK, OK, my previous post was a bit of a crock > <snip>

It's a good thing I wore my boots this morning! ~ Boomer (o:

From tbigelow@pop.state.vt.us Mon Jun 9 16:01:47 2003
Subject: [R-390] Hi

hankkarn wrote: > Barry a great job of sucking the air out of the sails on that > dissertation.

I'm still waiting for you to make some of those repro NON-tags for the NON-A, Hank. That should put

it all to rest. (o: ~ Boomer, KA1KAQ

From Llgpt1@aol.com Mon Jun 9 12:56:04 2003
Subject: [R-390] 6DC6 tubes sold

Header says it all. Thanks Les

From jlap1939@yahoo.com Mon Jun 9 16:33:31 2003
Subject: [R-390] Not! No Its' Not!!

Friends, Before any other sad 390a owner begins begging...the 390 re-built by D. Medley is NOT I repeat, NOT for sale.. Take that, you "a" lovers... Regards, John (JLAP)

From wa6knw@sbcglobal.net Mon Jun 9 17:14:09 2003
Subject: [R-390] Member List

Off Topic Question. If I remember there is a list member who is a Professor at the University of Seoul in Korea. If so, I would like that person to please contact me off list <sgm460122@yahoo.com>. I'll be going to Korea for business from 13-28 JUNE..... Hopefully we can discuss R-390(*)'s over some Bulgogi and Soju. RICH WA6KNW

From tbigelow@pop.state.vt.us Mon Jun 9 17:37:34 2003
Subject: [R-390] Mystery solved....sortakinda...

wrote: >>Now it's time to bite the bullet and do it all the right way. No more >>piecemeal approaches to specific symptoms.

>

I agree 100%. What's not right about it is that it's all true! Okay, I confess - I was "attempting to manually manipulate" the gear train with a finger when the gear flew off.

(Guess I should've added that I hauled the beast out to the front porch to apply the temporary WD-40 bath to the geartrain)

The mongrel came from a list member a few years ago when he was cleaning house. I bought 4 radios from him ranging from a BC-348 to the mongrel,. \$400 for all. Best \$100 I ever spent on a radio, methinks.

Here's the essential truth: Teledyne clean (sorta), complete, looks like new, works like a stone Mongrel missing meters, covers, overall scruffy looking, works like an R-390A ~ Boomer

From tbigelow@pop.state.vt.us Mon Jun 9 17:40:19 2003
Subject: [R-390] Hi

wrote: >Well, >>I'm 6'3" weigh 190 and cut my firewood with a crosscut >saw. Maple, not that pine crap. You be the judge. >>Joe Redda knows what I think of him, and his kind. I was at the Rochester, NY Hamfest, too. >>Joe

>

6'2", 185, chainsaw, splitting maul, wedges. And I kin carry an R-390 in each hand, byt a handle. Just not very far! How was the 'fest? I was hoping to ride over with Mr. Mike but it didn't happen due to too much happening here. Find any bargains? ~ Boomer

From tbigelow@pop.state.vt.us Mon Jun 9 17:50:23 2003
Subject: [r-390] hi

wrote: >Haven't seen the real reason for "non-A" come out yet.

I think it's more along the lines of 'what are you talking about?' since none of the manuals, literature, nomenclature, etc makes mention of something called a 'non-A'. It's confusing to those who know what the two radios are, just not in the same way it's confusing to those who don't. Probably a curiosity at seeing someone make up a new name for something that already has a clear one assigned.

Technically they are both R-390s, which is why this list is called the R-390 list. The R-390 came first, the cost-reduced 'A' came second. If anything, it would make more sense to call the 'A' the non-R-390 since it came later, if it didn't sound so foolish. (o:

There was a fellow at Hosstraders (probably a list member, so we'll keep his identity secret) who, when someone referred to a 'non-A' squinted his eyes and said "is that a Japanese radio?". Was rather funny, considering the 'non-A' guy was some kind of 'expert' having gotten one in the last year or two when this guy had only been one of the fellows who serviced and used them in the military for years.

>Who was it that had the signature line, "You are not of our tribe. >We must kill you."? > > That'd be Nolan. de Todd/'Boomer' KA1KAQ

From tbigelow@pop.state.vt.us Mon Jun 9 17:51:33 2003
Subject: [R-390] R-390A (was Hi)

wrote: >Go to <http://www.r-390a.net/faq-refs.htm>

Thank God THAT never made it to production. Then we'd need to rename it the "R-390-B non-A".

From tbigelow@pop.state.vt.us Mon Jun 9 17:57:02 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #723 - 12 msgs

wrote: > The tubes are soldered into modules that plug in.

Reminds me of the URC-32/KWT-6. Separate sub assemblies with plug in modules. A major PITA to deal with if you're trying to trobuleshoot and don't have spare modules. With the spares, you can not only swap them out for testing, you can also leave the spares in place while you service the corrupted module. A sort of 'rotating spares' arrangement.

No experience here with the SRR-series of receivers, but the URC-32 is indeed a wonderful radio to use with the following caveats: if it's working properly and if you don't have to service it. For the military it wasn't likely an issue with the multitudes of spares they keep. de Todd/'Boomer' KA1KAQ

From tbigelow@pop.state.vt.us Mon Jun 9 17:59:06 2003
Subject: [R-390] Hi

wrote: >How about 390/ and 390A? Agreed, some means to differentiate the two is >needed.
>

I thought that's what the additional 'A' on the end was for? duckin' and runnin'... ~Boomer KA1KAQ

From chacuff@cableone.net Mon Jun 9 18:02:02 2003
Subject: [R-390] Hi

Hi Todd and group,

No Todd I meant nothing of the sort....I don't believe in dumbing anything down or being condescending in any way. This is not about the inexperienced....we have had confusion occur on this list amongst those that have been around here for a while...It's just a means of clarifying.....And as a few have mentioned...I don't find it silly at all!

There is no "convention" as you mention below...except for what works for a particular group. (majority) You added tremendous confusion to the R-1051 series to try and make your point....the simple fact is they are called by their letter designations....except when speaking of the undesignated. When speaking of the undesignated there can be confusion as to whether one is speaking of that single model or the series as a whole, so it has been "Unofficially" designated as the "Plain". I did not come up with this....it existed before I started with these radios....primarily because someone somewhere must have decided there was a need. Same goes for the R-390x series. We wouldn't be having this discussion if there weren't a need identified somewhere in the past.

Personally I will refer to the radio's in whatever way the group chooses as a whole to do so! Makes no nevermind to me! I just know when someone I am talking to about great tube radio's asks me if I have ever owned an R-390 my answer has been "yes, I have two "A" models".....I guess I'll need to start replying "No" since I don't actually own an R-390.

You guys figure it out and I'll go with it! No problem here! We will still refer to the R-1051 undesignated as the "Plain" though...at least around my shop! Cecil...

.
From Llgpt1@aol.com Mon Jun 9 17:04:06 2003
Subject: [R-390] Hi

writes: > You forgot Prof. Locklear's favorite description, something about the > R-390 being a man's radio and the R-390A being a boy's radio. Wait...now > it all makes sense!! > > ~Boomer > owner of both, just to be safe
>

Hey Boomer, I wish I could take credit for that one, but a friend in the UK came up with it. Neil Clyne G8LIU. Les

From tbigelow@pop.state.vt.us Mon Jun 9 18:22:33 2003
Subject: [R-390] For Sale R-390/URR

wrote: >R-390/URR top and bottom dust covers, total rebuild. Electrically as near perfect as new. mechanically it's better. No shipping, you pick up. \$575.00 DX'ing since 1957

>

Nice radio, no surprise that it sold fast. Probably because it included the rare non-covers... Boomer (o:

From billsmith@ispwest.com Mon Jun 9 18:30:54 2003
Subject: [R-390] Hi

Yes, but is the R-1051 the same (or similar) to an R-105? (R-105 I believe was a Navy Aircraft receiver, but don't hold me to it, have never seen one.)

We might go the way of Hallicrafters... SX-15 is almost the same as SX-16. S-20R is the same as an S-40B except for a style change and minor changes in the first audio. etc. All too confusing to me. 73 de Bill, AB6MT billsmith@ispwest.com

From billsmith@ispwest.com Mon Jun 9 18:35:17 2003
Subject: [R-390] Hi

Well, I was thinking about R-390/ for R-390/URR (as listed on the tag) and R-390\ for R-390A (just to really confuse everybody under the guise of political fairness and balance) But I was afraid of raising a half-assed comment. 73 de Bill, AB6MT billsmith@ispwest.com

From chacuff@cableone.net Mon Jun 9 18:39:30 2003
Subject: [R-390] Hi

Greetings, I don't know anything that is similar to the R-1051 series....It is an 80 lb shipboard radio...fairly large and heavy with rack mount handles...even has some tubes in it!....some have called it the replacement for the R-390 series...sure is an improvement.....if you are talking about in strengthening ones wrists....makes tuning the R-390 series seem like an SP-600! Cecil....

From barry@hausernet.com Mon Jun 9 18:40:42 2003
Subject: [R-390] Mystery solved....sortakinda...

wrote: <snipped> > Mongrel missing meters, covers, overall scruffy looking, works like an R-390A

That's supposed to be a "D" model Depot Dawg.

Stop complicating the official non-official designation system. Also, an R-390 NON-A cannot be called an R-390-Plain as done for the R-1051 because it is actually more fancy. More tubes, including 6082's which are very fancy, extra control or two, double-laminated side panels, full size BNC connectors, deluxe power connector, extra RF stage, etc.

As you well know, Boomer, some folks of the upper New England persuasion (and possibly also many north of the parallel) are in the habit of ending many of their sentences with "eh?", whether it's a question or not. So if someone from Vermont comes up to you and says "Hi there Boomer. Do you want to buy a nice R-390 eh?" Then what? Of course, if they say "do you want to buy a nice R-390 NON-A eh?" then it will be more clear, though more annoying.

Since this is the mystery solved thread and there was a recent incident involving a creeping MC knob due to a broken clamp, please allow me to change to a more substantive, though not particularly exciting alternative subject:

Why are were the clamps made of the breakable alloy they were made of? Why not use brass or stainless steel? Barry

PS. An alternative solution is to always type the full designation of the rx R-390/URR or R-390A/URR. When speaking out loud you would pronounce, actually shout, the last part like this:
UUUUUURAAAAAHHHHHH!

From keng@moscow.com Mon Jun 9 16:48:31 2003

Subject: [R-390] SRR-11/12/13 receiver question...

> I just bought one of those SRR recievers - before I find out the hard way, > how does serving the radio suck? Is it the soldered-in tubes? Or are there > more horrors? > > Dave Goncalves

Hello, Dave: I am not sure which SRR receivers Ed is talking about, but I have found the SRR-11/12/13 series to be very EASY to work on, especially when compared to an SP-600 or R-390(*). Everything is so heavily modularized that there is nothing to removing those to work on them. The only thing left in the case when the all modules are removed is the tuning mechanism and the tuning capacitor.

Also, someone mentioned instability. Again, I have not yet seen this either. Putting a tuning wand down in along side the connections to the tuning capacitor might make it move frequency, but those places are so far away from any adjustment you might make that I can't see why you would do this unless it was just to see if you could. The oscillators are either stabilized or crystal controlled and appear to be pretty stable so far.

By unscrewing two or three captive screws, the covers on top or bottom are easily removed, and one can easily connect scope leads, and measure voltages since all the tubes are upside down and very easily gotten to. You don't have to remove ANY modules to check ANY circuit voltage or resistance.

I have 23 of the various models of the receiver and find them fun to work on when compared to others. They seem to have been designed for service, yet need very little of it.

Further, the receivers use Sprague glass-sealed capacitors, and I have yet to find one that is bad. Unlike many receivers in which the first thing you do is replace all the paper and some of the mica caps, with these receivers, you put that problem way down on your list.

The special service cable isn't really needed since it is very easy to simply remove the filter-back-plane. In addition, the manual states that for certain tests you can't use the test cable anyway since its length introduces errors.

Lastly, concerning the RF , mixer and osc coils, although that is a (very minor) problem, the coils I have seen so far are NOT epoxy enclosed and on Josh Rovero's site (<http://www.roveroresearch.com>) there is a discussion and photos of someone who rewound one or two of the coils in his rig, so it isn't all that hard to do if you need to.

His site also has info on how to fairly easily make those problematic switch crank arms if you ever need

to. Ken Gordon W7EKB

From tbigelow@pop.state.vt.us Mon Jun 9 19:09:57 2003
Subject: [R-390] To Non or not to Non (was Hi)

wrote: >Hi Todd and group, > > No Todd I meant nothing of the sort >There is no "convention" as you mention below...except for what works for a >particular group. > <snip>

Agreed, Cecil - and my failure to keep up with email over the weekend has resulted in a bombardment of the list with my response, for which I apologize. Didn't realize there were so many!

I guess the part that confuses me is where, when, or how it was decided that 'the list' has made such a decree and that is therefore *is so*. The list has far more member than the few of us who contribute or respond regularly. Having been here since '97 and seen things go along, I feel quite confident in saying that the 'non-A' issue has only become accepted by a few overall and moreso on the list only in the last couple of years. Not that it was never said before, just not as often. People used the correct designation for a particular radio more as the rule, not the exception. It just wasn't an issue. Oddly enough, this seems to correspond with the drop off in participation from a good portion of the older (in experience, not age) members. I doubt it drove people off, but it could certainly have been just one more negative aspect (unless you're fond of the term, of course). Imagine trying to impart knowledge to someone who can't even use the name of the radio. Sadly, it seems when we get new members here, we get them off on the wrong foot by telling them a fairy tale which sounds nice, but has no basis in fact. Helluva reflection on us. *chuckle*

As far as a convention, I'd like to know this - which is simpler? Using the convention:

R-390A and R-390 non-A (I have an R-390A and also the R-390 non-A)

-or-

R-390 and 'A' (I have an R-390 and the A [model?])

I just have to believe that Collins, the military, whoever/whenever must have had some idea that the latter was indeed simpler since this is the one they chose. And we all know how little the military thought of what the average grunt was capable of knowing or doing.

You said: You added tremendous confusion to the R-1051 series to try and make your point....the simple fact is they are called by their letter designations....except when speaking of the undesignated. When speaking of the undesignated there can be confusion as to whether one is speaking of that single model or the series as a whole, so it has been "Unofficially" designated as the "Plain". I did not come up with this....it existed before I started with these radios....primarily because someone somewhere must have decided there was a need. Same goes for the R-390x series. We wouldn't be having this discussion if there weren't a need identified somewhere in the past.

...which I agree with, completely. Even the part about adding confusion in my example because that was my intention. But if it makes sense to use this convention for the R-1051, why not the R-390(*) also? Your statement above seems to say so. Same radio, same series, different model. Instead of a B, C or D we have only the A. You're right on the money - it doesn't get any easier. Which is why this whole 'non-A' issue seems so pointless. Granted, some will call it what they please. It's a free country, after all. But if we truly want to put an end to this so-called 'confusion' (something I've yet to really see, btw), all we

need to do is speak clearly and not try to change the naming convention to get someone else to nod and say "uh huh. That one". It's an excellent opportunity to ask "Is it an R-390 or an A?" to someone who isn't being clear, then explain the differences they appear not to know. The 'need in the past' was more likely someone deciding that it was easier for them to remember it this way than that more than someone needing to have it called a non-A. Honestly, compared to many of the guys on this list I'm still 'wet behind the ears'. But if such a need exists, shouldn't we be showing these people the accurate way instead of something supposedly easier? We take great pains to point out the differences between the black and neutral wires when installing a grounded cord, to be sure to replace the 'deadly caps', to replace the filter caps to prevent frying the transformer, to use the right oil and to not lick the meters. Why would we go to such lengths and then not be able to tell them the correct name of the radio? It just makes no sense. Not in terms of making things more 'simple' or 'clear', at least. Opinion and preference are another matter entirely. (o: Having read a lot of your posts I feel pretty safe in saying that you probably forget more about radio in a night than I'll ever know. I'm sure glad we're not debating anything technical! 73 de Todd/'Boomer' KA1KAQ

From rbethman@comcast.net Mon Jun 9 19:22:15 2003
Subject: [R-390] To Non or not to Non (was Hi)

For my two cents worth: The use of R-390 non A and R-390A is fine. Also the use of R-390/URR or R-390A/URR is also fine. There are significant differences between them, and some sort of differentiation is definitely needed. However, all said and done, I believe the proverbial horse has been long dead. Bob - N0DGN

From chacuff@cableone.net Mon Jun 9 19:23:30 2003
Subject: [R-390] Mystery solved....sortakinda...

That sounds like a solution to me....R-390/URR and R-390A/URR That way the designation is terminated....the problem is the open ended R-390you don't always know if it was meant specifically or generally....no question with the /URR. Would work for the R-1051 series as well..... All in favor say AYE! Update the Constitution and Bylaws! Document it in the FAQ! Now can we get on with arguing about which balast tube replacement is the best! NOT! Cecil....

From tetrode@worldnet.att.net Mon Jun 9 19:28:59 2003
Subject: [R-390] To Non or not to Non (was Hi)

Amen Bubba!!!

From tbigelow@pop.state.vt.us Mon Jun 9 19:43:03 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

wrote: >>>>Can you give me an example of a U.S. military radio >>>>receiver

Still? Figured he'd have one by now. Since I don't have the R649 to sit beside it and compare, I can't tell you what the differences are. They look identical from what I can tell, at least externally. Rich is right, though - no mechanical filters. Interesting radio, still have a ways to go with the restoration. I find this one pretty interesting from Les' post:

>R-320A/FRC Hammarlund SP-600J-4 (no x-tal frequency control)

The R-320 is the designation given to the SC-88 made by RCA. It's not at all similar to the SP-600 in any way (other than perhaps coverage?), particularly the turret assembly. SC-88 doesn't have one. Seems really odd how they applied this nomenclature. The SX-73 and SP-600 are at least somewhat similar. Les, does that listing contain any information about diversity configuration(s)? ~ Boomer, KA1KAQ (the other Todd)

From Llgpt1@aol.com Mon Jun 9 19:56:09 2003

Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: > I find this one pretty interesting from Les' post:

Hi Boomer, No, not in regards to the R-320/FRC (the FRC designation has me stumped, not sure what it meant) There was probably a geek sitting somewhere in the Pentagon assigning numbers to these receivers. I believe he is still up there, as the Air Force and the rest have an affinity for mumble jumble and numbers with slashes after them. Les

From Llgpt1@aol.com Mon Jun 9 19:57:27 2003

Subject: [R-390] To Non or not to Non (was Hi)

writes: > However, all said and done, I believe the proverbial horse has been long dead.

Quite so, but the deadest horse there ever was, is the Ballast tube thread imho. Les Locklear

From Llgpt1@aol.com Mon Jun 9 19:59:45 2003

Subject: [R-390] Mystery solved....sortakinda...

writes: > That sounds like a solution to me

>

Aye Matey.....or just plain Aye? Ballast tubes? We don't need no steenking Ballast tubes sez aye or is that I? Les Locklear

From ToddRoberts2001@aol.com Mon Jun 9 20:42:44 2003

Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

Thanks to everyone for the information they have posted on some other receivers with the "A" suffix. Indeed there are several different examples of U.S. Military receivers out there with the "A" suffix that do not have mechanical filters. I sure have learned a lot about the R-274 series and R-1051 series here and that is the most fun when you can learn something while enjoying the hobby! Fun to learn about some of these really obscure receivers like the R649A out there also! 73 Todd Roberts WD4NGG.

From tbigelow@pop.state.vt.us Mon Jun 9 20:45:54 2003

Subject: [R-390] Mystery solved....sortakinda...

wrote: wrote: <snipped> Mongrel missing meters, covers, overall scruffy looking, works like an

scribbling notes....

Okay, that's it. I'm telling Art!

>As you well know, Boomer, some folks of the upper New England persuasion

You're confusing us with Cana-duh. Other than saying things like "aboot" instead of "about", most Canadians are easy enough to understand. We don't git many of the 'eh?' types here anyway, more the almost-but-not-quite-french speaking ones. They say things like "You canadien are, no?" Makes yer head hurt. If you ever run into Mr. Mike, ask him for a free demo. He grew up in Montreal and is fluent in whatever-it-is. Fortunately he speaks 'merican, too. Vermonters say things like "yessah" or "By th'Jesus" or "can't get theyah from heeyah". Yep, it's true - we ain't too bright, but we kin lift heavy things.

>Since this is the mystery solved thread and there was a recent incident >involving a creeping MC knob due to a broken clamp, please allow me to >change to a more substantive, though not particularly exciting alternative >subject:

>

>Why are were the clamps made of the breakable alloy they were made of? Why >not use brass or stainless steel?

Y'know, this is the first one I've run into (figuratively-speaking, of course) but I must say: That's a damned good question! I thought of trying JB Weld just for grins, but immediately realized that this solution would simply give it an excuse to break someplace else. Nosireee - if I'm gonna break a clamp, it's gonna be a new one!

>PS. An alternative solution is to always type the full designation of the >rx R-390/URR or R-390A/URR. When speaking out loud you would pronounce, >actually shout, the last part like this: UUUUUURAAAAAHHHHHH! >

Oh, I dunno.....if a simple A is so confusing, what will that funny / thing and all those extra letters cause??

From tbigelow@pop.state.vt.us Mon Jun 9 21:04:57 2003

Subject: [R-390] Mystery solved....sortakinda...

wrote: wrote: > the mongrel A and never got back to the 'good' >No, it's right. He's in Vermont. > >Joe

Yessah! Where men are men, radios are heavy, and sheep carry UZIs for protection against the tourists.... and politicians... ~Boomer KA1KAQ

From roy.morgan@nist.gov Mon Jun 9 21:25:17 2003

Subject: [R-390] R392 Condensation

wrote: >When my R392 has been on for an hour or two the tuning window fogs up with >internal condensation. > >How can that be prevented?

Dry the thing out: Open the case abit and run it for a while on a dry day. Then put some dessicant inside (or maybe dried out rice in a cloth sack) if you can find some room. Roy

From roy.morgan@nist.gov Mon Jun 9 21:55:40 2003
Subject: [R-390] R392 Condensation

wrote: >>dessicant inside (or maybe dried out rice in a cloth sack) ... >But, will that make it a Ricebox?

Egad! It will. A Pox upon me. I'll go eat rice for supper and listen to a 75S-4 for an hour in penitence.

> Will it ever work properly again?

Oh Yes. IT WILL. Especially with advice from this list!

>How about the audio?

It might have a slightly grainy edge to it

>Would the agc have to be modified?

Only if Hanta Virus Infected Rodents are attracted, then a very fast attack system may help.

> Would wild rice work?

No doubt. Just make sure it's not as wild as Nolan.

>Explain this Roy.

Did I do good? Roy

From Llgpt1@aol.com Mon Jun 9 21:00:22 2003
Subject: [R-390] Mystery solved....sortakinda...

writes: > Vermonters say > things like "yessah" or "By th'Jesus" or "can't get theyah from heeyah". >
Yep, it's true - we ain't too bright, but we kin lift heavy things.

Thats what Joe Foley said about you, so I guess it's true.....:-) Les

From Llgpt1@aol.com Mon Jun 9 21:03:46 2003
Subject: [R-390] "A" Versions of Military Receivers with/without Mechanical Filter...

writes: > Thanks to everyone for the information they have posted on some other > receivers with the
"A" suffix. Indeed there are several different examples

You are welcome Todd. That is a part of the hobby that intrigues me the most, the different model numbers etc. I remember many years ago, most articles said the JX-26 was the last of the SP-600's built. I thought, then where in the hell did this JX-28 come from? I surmised (correctly it turned out) that there was a -27 out there too. Thus started a search for the lineage of the SP-600 receivers. I think I've got it nailed now. Les Locklear Gulfport, Ms.

From Llgpt1@aol.com Mon Jun 9 21:31:22 2003
Subject: [R-390] R392 Condensation

writes: > Open the case abit and run it for a while on a dry day. Then put some > dessicant inside (or maybe dried out rice in a cloth sack) if you can find > some room. > > Roy

But, will that make it a Ricebox? Will it ever work properly again? How about the audio? Would the agc have to be modified? Would wild rice work? Explain this Roy. Les

From Llgpt1@aol.com Mon Jun 9 22:04:58 2003
Subject: [R-390] R392 Condensation

writes: > Did I do good? > > Roy >

Velly good! Les

From g4gjl@btopenworld.com Mon Jun 9 23:29:54 2003
Subject: [R-390] R392 Condensation

Will try that out and will keep you posted. 73 Pete

From jlap1939@yahoo.com Tue Jun 10 02:19:13 2003
Subject: [R-390] Hi

Friends, Gotta speak here..about diff. in units..

The two stage rf is better...The additional controls work very well, and the lc filters, all of the above in the 390, result in a radio that can be properly tuned for excellent SSB (in spite of the 'experts' who deny it, and require an outboard converter). Many find the radio the best by far, unless tuning in EXTREME conditions of interference...then you need the 390a..

I will write up the correct method again, and put it on, inc. the details dealing with the value of the natural sensitivity of human pitch discrimination in finding the correct tuning, (and, I might add the often highly effective field alignment by "ear" or manual alignment as done in an emergency...Saw it done in the field...You just gotta have the ear, and the understanding..) ... (sombody back me up on this, who has been there in field experience...)

I guess the above will require me to run and duck,... John (JLAP)

From redmenaced@yahoo.com Tue Jun 10 02:20:27 2003
Subject: [R-390] How long??

No, not the China man! How long have I been on this list? Has it been ten years? How long has this list been active? Thank, Joe

From jlap1939@yahoo.com Tue Jun 10 02:24:39 2003
Subject: [R-390] The b word

Friends, The best ballast is a res. or the 12V conversion..... The best radio is the John (JLAP)

From jlap1939@yahoo.com Tue Jun 10 02:27:02 2003
Subject: [R-390] The B word

Friends, But I also heard the best radio was a Rhody Shorts... John (JLAP)

From dsmaples@comcast.net Tue Jun 10 04:03:48 2003
Subject: [R-390] To Non or not to Non (was Hi)

All: The horse is dead, skinned, ground into burger, and served by the clown long ago... Dave WB4FUR

From ba.williams@charter.net Tue Jun 10 04:17:26 2003
Subject: [R-390] To Non or not to Non (was Hi)

> Quite so, but the deadest horse there ever was, is the Ballast tube thread imho. > > Les Locklear

Simple Green and gear lube oil rank way up there. Barry

From jamesmiller20@worldnet.att.net Tue Jun 10 04:15:45 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

For what it's worth, the Collins Cost Reduction Project Document available at <http://www.r-390a.net/faq-refs.htm> identifies the following apparent "improvements" investigated for the R390A "A model" as compared to its predecessor (R-390). With these improvements, which model would you want?

- ** B+ filter improvement - Reduction of receiver temperature caused by location of the type 6082 tubes, reducing the cost of the B+ filter.
- ** Added a VR tube to get the required stability from the VFO and crystal oscillators.
- ** Mechanical filter designs incorporated for improved selectivity - although phase nonlinearities did impact DF performance;
- ** Improvements in accessibility, reliability and performance;
- ** Savings resulting from elimination of the squelch facility and remote control;
- ** Repackaged power line filter;
- ** Tuning control stops of improved design;
- ** Crystal oscillator redesign to reduce/consolidate crystals - A new frequency scheme permitted a greatly simplified mechanical construction and gearing,
- ** RF and variable IF coil redesign to improve tracking;
- ** Savings resulting from elimination of the 3500 cps low pass AF filter, retaining the narrowband filter.
- ** Mainframe redesign for cost and weight reduction.
- ** Eliminated need for hum balance control;
- ** VFO end point adjustment was made more accessible. In the R-390A;
- ** Holes were provided in the gear plate so that this adjustment could be made without removing the

VFO or RF units.

- ** Simplified design and improved the performance of the gear train and slug racks;
- ** Redesigned RF module to remove an RF amplifier stage (for cost savings), put mixers on AGC control, use 6DC6 tube for RF amplifier, etc. - probably the most controversial change, next to mechanical filters.
- ** Calibrator using a 200 kc crystal was built and tested. In comparison to the former model using a 1 mc crystal, reliability was improved and harmonic out-put increased.
- ** Where possible tubes were replaced by more rugged equivalents.
- ** Improved antenna relay provided to overcome poor attenuation in original;
- ** Changes in mechanical construction were also made, such as the closer attention paid to electrolytic corrosion, the new means for chassis mtg. and the radical power supply unit redesign.

Personally I'll take a 390A any day.

> Go to <http://www.r-390a.net/faq-refs.htm>

From ba.williams@charter.net Tue Jun 10 04:20:45 2003

Subject: [R-390] Mystery solved....sortakinda...

>> No, it's right. He's in Vermont. Joe

> Yessah! Where men are men, radios are heavy, and sheep carry UZIs for protection against the tourists....and politicians... ~Boomer KA1KAQ

Ain't that where men marry men? Barry

From Miguel Bravo" <mbravoc@wanadoo.es Tue Jun 10 12:08:16 2003

Subject: [R-390] Mechanical Filters and "A" (was Hi)

Cecil, I have one R1051A front panel. It looks like a B but with an A tag. Haven't a manual for either so can't say if there are any difference between.

<http://personal.telefonica.terra.es/web/ea5baa/frontA.jpg>

<http://personal.telefonica.terra.es/web/ea5baa/tagA.jpg>

Own Montedel manuals for the following equipments.

SRT-100 Receiver transmitter set

CU-973/UR-N antenna coupler

AM-3007/URT-N RF amplifier (group Receiver R-1051-A-URR; FSK conv-comp

SP-270; Exciter T-827-A-URT; RF amp. AM-300-URT-N & interconnecting unit

SP-363-A)

T-827A/URT Exciter

SP-263-N LF converter (for use with R1051A/URR receiver or similar, Extend the frequency range of the R-1051A/URR down to 14 kc/s)

Perhaps Montedel was/is an European contractor for maintenance. Maybe some of the Italian fellows, or the ones who spend some of their "tax-paid vacations" in Italy, can say more about Montedel.

There must be E & F models because I own one manual for R-1051E (Navelex 0967-428-2010), one for the R-1051F (Navelex 0967-LP-617-7010) made by Stewart-Warner Electronics (N00039-76-C-0297 15-Nov-1978) and the Maintenance Standards Book for R-1051F (Navelex 0967-LP-617-7020).
Regards Miguel

From jbrannig@optonline.net Tue Jun 10 13:05:39 2003
Subject: [R-390] Coil forms

I have a Heath SB-620 panadaptor set up for a 3395 kc IF. I finally found a description for the coils needed for a 455kc. IF. conversion. Does anyone know of a source for 1/4 inch slug tuned coil forms?
Tnx, Jim

From Barry Hauser <barry@hausernet.com> Tue Jun 10 13:39:57 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Well, Jim, there's more than one way to read the product brochure. As far as beating dead horses is concerned preferred here as beating live ones would be cruelty to animals. ;-)

Let's review, maybe one last time ... (right)

> For what it's worth, the Collins Cost Reduction Project Document available > at <http://www.r-390a.net/faq-refs.htm> identifies the following apparent > "improvements" investigated for the R390A "A model" as

Well, let's see ...

> ** B+ filter improvement - Reduction of receiver temperature caused by location of the type 6082 tubes, reducing the cost of the B+ filter.

Getting that heat out of there was worthwhile. Can be done with a muffin fan or the 6082's can be reversibly solid stated out.

> ** Added a VR tube to get the required stability from the VFO and crystal oscillators.

That was necessary because regulation was inadequate without it, so tossed in a common VR tube as used in SP-600's and many commercial rx's. Not an enhancement, but a "fix" to a "mod".

> ** Mechanical filter designs incorporated for improved selectivity - although phase nonlinearities did impact DF performance;

Latter day evaluation yes, better selectivity for SSB, but introduced ringing, and more important, apparently prone to wear out and break down after 40-50 years. Expensive to replace.

> ** Improvements in accessibility, reliability and performance;

That's a broadside yes & no. Helps if you ignore introduction of Sprague's latest wonder "Black Beauty" line of molded paper caps, hermetically sealed to last forever. Original "non-A" seems to have less in the way of cap failures 50 yrs out, and the failures on the BBOD's probably started much earlier, but still after the warranties expired. Mixed bag.

> ** Savings resulting from elimination of the squelch facility and remote control;

That's not an improvement. Space was reserved for a retro-fit squelch under principles of CYA, blowing \$4 of the \$14 savings.

> ** Repackaged power line filter;

Again, a simpler one and there was a tradeoff. Also the power connection arrangement is sub-par compared with many mil sets and downright unacceptable. Ambiguous hookup of AC ground wire with grounded cordset, risk of shock/shorting out of power if cover left off or bent, no integral strain relief, allows for improper hookup of hot vs neutral. Should have retained 3 pin round connector. "Improved" version probably wouldn't qualify for UL approval.

> ** Tuning control stops of improved design;

Part was retrofitted to production non-A's. Correction of defect with better 10-turn stop.

> ** Crystal oscillator redesign to reduce/consolidate crystals - A new frequency scheme permitted a greatly simplified mechanical construction and gearing,

Not so great: Overuse of smaller number of crystals. While "a diamond is forever", an oscillating piece of quartz is not. Original design distributed use over more xtals, and consequence of a crystal failure would take out fewer bands. Also, crystal mounts/contacts are inferior in "improved" set. Contact area is not as solid, prone to mild oxidation, intermittents, etc. (40 yrs out, anyway.) That and gear train mostly cost reduction, not much improvement, if any.

> ** RF and variable IF coil redesign to improve tracking;

Maybe, but cheaper mounts and connectors. Thin pins vs. substantial "mini-banana". However, standardization on a common ferrite core rather than custom matched powdered iron IS an advantage to the "A". (Color coded, hand tweaked iron powder slugs were apparently the means of handling tracking problems in the non-A.)

> ** Savings resulting from elimination of the 3500 cps low pass AF filter, retaining the narrowband filter.

No AF filter switch.

> ** Mainframe redesign for cost and weight reduction.

I dunno gotta go weigh a couple of samples. What's weight difference - -a couple of pounds at best? Again cost reduction. The laminated side panels of the original were not worth the expense and flexed more than the heavy aluminum ones on the A. The ability to drop the front panel without removing the handles (on the A) is also nice.

> ** Eliminated need for hum balance control;

Fell out of dropping electronic regulation. What's a pot cost? Less "tinker value" ;-)

> ** VFO end point adjustment was made more accessible. In the R-390A;

Seems most PTO's have to be pulled to take off a winding or do some other internal work anyway.

> ** Holes were provided in the gear plate so that this adjustment could be made without removing the VFO or RF units.

Probably one of the reasons that guy dubbed the R-390 NON-A "a man's radio". Not for lazy wuzzes.

> ** Simplified design and improved the performance of the gear train and slug racks;

Original, though more expensive, was more substantial. I suspect the real reason that there was no autotune version of the "A" model is that the gear train was not up to the additional stress of motor drive. They did introduce lateral adjusters for slug mounts on slug racks - maybe to accommodate wider manufacturing tolerances.

> ** Redesigned RF module to remove an RF amplifier stage (for cost savings), put mixers on AGC control, use 6DC6 tube for RF amplifier, etc. - probably the most controversial change, next to mechanical filters.

Section on RF module changes is difficult to follow. Seemed to be a lot of fixing and patching to compensate for dropping one stage.

> ** Calibrator using a 200 kc crystal was built and tested. In comparison to the former model using a 1 mc crystal, reliability was improved and harmonic out-put increased.

Also mentioned difficulty of getting suitable 85 C degree xtal "solution appears in sight".

> ** Where possible tubes were replaced by more rugged equivalents.

I suppose, but I think you can retrofit most of the better version if you want.

You skipped the part about "VFO stability". Sounds like they had to make the endpoint adjustment more accessible due to difficulties.

> ** Improved antenna relay provided to overcome poor attenuation in original;

Some unclarity on this re: attenuation at higher frequencies. I forgot -- do non-A's have the selenium rectifier added to run the relay on DC?

> ** Changes in mechanical construction were also made, such as the closer attention paid to electrolytic corrosion, the new means for chassis mtg. and the radical power supply unit redesign.

Fair dose of smoke & mirrors here. I see a great deal more electrolytic corrosion on R-390A's than the predecessor. Don't see where mini-coax and MB connectors are an improvement over beefy standard BNC's and good thick coax cable. Most of the mini-coax has deteriorated except maybe the teflon covered type of the '67 EAC's. MB connectors complicate test hookups requiring adapters.

Finally ... You have to read the whole thing between the lines as well. The main benefit to us now is that they found a way to "cost reduce" the R-390, paving the way for much higher production of the R-390A so many survive. However, just looking at the construction design differences, the full amount of cost savings is not all that apparent the R-390A was still very mechanically complex. Some cost reduction

elements were really minor -- like dropping the squelch and making it optional. After allowing for the squelch mounting plate in the "A", the net reduction was placed at \$10. Saved some change by eliminating tools, tube pullers and pin straighteners off the back panel, etc.

I suspect most of the cost savings was achieved through pencil sharpening and more aggressive RFB's for components and manufacturing over a wider group of prospects, not just Motorola and Collins plants. Don't forget, the cost reducing elements had to overcome the fixed re-engineering and retooling costs "We'll make it back on volume."

There is one other "business thing" I will share with you. If you've been selling an item to a client for, say \$100 a pop and the client comes back to you and says "Can you do any better? We'd like to order more of these, but they're too costly." Unless you're an idiot, you do not come back and say "OK, how about \$75?" for the same item. You have to change it and take some things away or find some way to rationalize the price break ... or, what does that imply about your previous price-points if you don't? I have no doubt that was part of (not all of) the re-design process, but it's a part that does not get documented, much less discussed out of school by anyone intending to remain employed in a particular industry. It's business, it's only business. Fortunately, and to the Collins group's credit, they managed not to screw up the radio in the process. A lot of products don't survive "cost reduction" and re-bidding very well, let alone design by committee.

As for which version is a better one now 40-50 years later? It depends more on condition of the individual unit, including any restoration/recapping that's been done as well as personal preferences -- not to mention pot luck of what you come across at what price. Gotta go put the dead horse back in the freezer. Barry

From tbigelow@pop.state.vt.us Tue Jun 10 15:33:21 2003
Subject: [R-390] Mystery solved....sortakinda...

wrote: No, it's right. He's in Vermont. Joe Yessah! Where men are men, radios are heavy, and sheep carry UZIs for protection against the tourists....and politicians... ~Boomer KA1KAQ >Ain't that where men marry men?

Not yet. Massachussets is vying for the right to be the first to allow same sex marriage. We only have something called 'civil unions' for insurance purposes and crap. Cost a lot of politicians their jobs for going against the people, too (majority didn't want it, legislature passed it anyway - so much for 'representing your constituents'). I don't know of any that were R-390 users, which probably explains a lot! ~ Boomer KA1KAQ

From flood@Krohne.com Tue Jun 10 15:31:41 2003
Subject: [R-390] Mystery solved....sortakinda...

Be nice now. All of us in southern New England are depending on the Green Mountain Boys to defend us from the French speaking invaders from Montreal who plan on invading New England. We need men like Boomer who can beat them off with an R390 (any version) in each hand. (At least I found a way to stay on topic...) John Flood KB1FQG

From tbigelow@pop.state.vt.us Tue Jun 10 16:00:50 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

wrote: >Well, Jim, there's more than one way to read the product brochure. As far >as beating dead horses is concerned preferred here as beating live ones >would be cruelty to animals. ;-)> >Let's review, maybe one last time ... (right) > > <snip good clarification info>

>As for which version is a better one now 40-50 years later? It depends >more on condition of the individual unit, including any >restoration/recapping that's been done as well as personal preferences -- >not to mention pot luck of what you come across at what price.

> >

This is more accurately what determines the 'best' radio to an individual. After all, if you 'cost-reduce' a viable product into something less, is it not 'cheaper' by intent? When writing it all up, you pretty much have to justify your decisions to change this or remove that, in a positive light (of course). Otherwise, who'd agree to the program/plan?

They knew they had a winner with the R-390, so it makes some sense that they'd want to strip it down a bit or 'streamline' the process with the thought of mass production. Adding mechanical filters wasn't cheap either.

The "A" model is certainly more plentiful and therefore, more popular. Familiarity has a lot to do with it, but it's just a great radio none-the-less. Still, you cannot beat its namesake, the good ol' R-390, for overall performance and construction. Comparing the "A" to the R-390 is a lot like comparing a Bentley to a Rolls Royce. It's not a case of comparing a Toyota to a Rolls or even a Lincoln (I feel a car thread approaching!).

>Gotta go put the dead horse back in the freezer.

>

While you're in there, wanna grab me another cold can of that black stuff from capacitor innards? Whassat called again? You know, the gooey stuff.....

Solve the great debate of R-390 vs. A - drive both!! (o: Boomer, KA1KAQ

From (mikea)Tue Jun 10 16:11:47 2003

Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

PS wrote: [snip Barry Hauser's good stuff on cost-reduction] > This is more accurately what determines the 'best' radio to an > individual. After all, if you 'cost-reduce' a viable product into > something less, is it not 'cheaper' by intent? When writing it all up, > you pretty much have to justify your decisions to change this or remove > that, in a positive light (of course). Otherwise, who'd agree to the > program/plan?

Not always. I've seen cases where the thought that went into knocking the cost down also resulted in a better product. Admittedly, the product wasn't a radio, but I think that it *could* happen there, too. "Cheaper" and "less costly to manufacture" don't always go together. And there is the old software writer's caution to the boss: "Smaller, faster, more reliable: Choose any two."

> The "A" model is certainly more plentiful and therefore, more popular. > Familiarity has a lot to do with it, but it's just a great radio > none-the-less. Still, you cannot beat its namesake, the good ol' R-390, > for overall performance and construction. Comparing the "A" to the R-390 > is a lot like comparing a Bentley to a Rolls Royce. It's not a case of > comparing a Toyota to a Rolls or even a Lincoln (I feel a car thread > approaching!). > Solve the great debate of R-390 vs. A - drive both!! (o: I do. And I like

'em both. Got four of the newer ones, and one great example (All-Collins, from Rick Mish) of the older. 73s, folks. Mike Andrews

From tbigelow@pop.state.vt.us Tue Jun 10 16:22:55 2003
Subject: [R-390] How long??

wrote: >No, not the China man! > >How long have I been on this list? Has it been ten >years? > >How long has this list been active? > >Thank, > >Joe >

I started in late winter/early spring of '97, Joe. On my old PC (affectionately named 'Frank', short for Frankenstein) there still resides many-a-old-post, including Nolan's "Flight of the Phoenix" in which he described hauling the old R-390A from his attic, removing the mud dauber nests, and rehabbing it. Was a great post, one of the first I saved. I was limited though, by a HD somewhere in the low MEGS for space. At the time, it was HUGE.

Maybe Chuck or Mike will chime in if they're listening. I think they started it around 95/96 IIRC. I'll ask Mike next time I see him, which should be soon because I have an Eldico transmitter for him. ~ Boomer, KA1KAQ

From PDulaff@dpconline.com Tue Jun 10 16:27:50 2003
Subject: [R-390] R-390A Cost Reduction and Improvements

Everyone Something to consider also is that when the R390 was developed, the mechanical filter development project(s) Collins was not yet complete. The use of L/C networks for selectivity was the current approach during the R390 development. Had the mechanical filter project(s) been complete, the R390 would have had them from the beginning. Paul Dulaff P.E. - WB2NMI

From djmerz@3-cities.com Tue Jun 10 17:14:48 2003
Subject: [R-390] Coil forms

Jim, I have one of these coils - it may be the one you want or it may be the 3395 KC type - I'm pretty sure it goes with the 620 - it was left over from one I had for awhile. But the amount of wire on it makes me think it's the 3395. How bulky is the actual coil on the 455 - mine looks like it has about 100 turns fairly level and more or less a single layer, Dan.

From ba.williams@charter.net Tue Jun 10 18:53:22 2003
Subject: [R-390] Coil forms

> Jim, I have one of these coils - it may be the one you want or it may be the

Will you guys keep me updated on how this project goes? I have one 455 kHz SB-620 that is kaput right now. I may end up buying another for repair and parts. Also, there is one resistor up on the top that is IF dependent, located on one of the CRT controls. Don't overlook that as the wrong one will squish the display horizontally. Barry

From rnharsh@attbi.com Tue Jun 10 21:26:44 2003

Subject: [R-390] Gear Train in R-390/URR

Are there any significant differences in the gear trains on the R-390 and the R-390A? Tnx K3PID - Ron
From wewilson@knology.net Tue Jun 10 22:36:00 2003
Subject: [R-390] Gear Train in R-390/URR

Ron,

Here are some of the more significant differences:

- 1) Remove the R-390 gear train without the green gear in place, and you'll easily get it out of sync
- 2) The R-390 slug racks do not go in order by frequency
- 3) The slugs are different type/diameter for different bands
- 4) The zero cal functions differently
- 5) The alignment of the R-390 gear train is done at 2 000 KC, and is aligned from marks on the back of the RF deck, which are impossible to see with the xtal oscillator installed. The R-390A gear train is aligned at 7+000 KC with alignment marks on the front, and the alignments can be made without removing anything except the covers and front panel. Walter - KK4DF

From redmenaced@yahoo.com Tue Jun 10 23:24:54 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Has anyone ever tried to brew up a coil/capacitor replacement for the mechanical filters? Joe

From ba.williams@charter.net Wed Jun 11 00:39:20 2003
Subject: [R-390] How long??

Joe I started in late winter/early spring of '97, Joe. On my old PC > (affectionately named 'Frank', short for Frankenstein) there sill > resides many-a-old-post, including Nolan's "Flight of the Phoenix" in > which he described hauling the old R-390A from his attic, removing the > mud dauber nests, and rehabbing it. Was a great post, one of the first I > saved. I was limited though, by a HD somewhere in the low MEGS for > space. At the time, it was HUGE.

I would like to read Nolan's version of The Flight of the Phoenix if anyone has it saved. The real book was good too, as well as the movie. Barry

From ba.williams@charter.net Wed Jun 11 00:42:38 2003
Subject: [R-390] Mystery solved....sortakinda...

Heh heh, what a distinction that will be. That civil union thing causes problems for 'them' as there are no provisions for un-unions. Non-unions? Non-A unions? Whatever it is in queer talk. Barry

From cfandt@netsync.net Wed Jun 11 02:21:40 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Whoa Joe! Now that is a message of interest to me and perhaps others! This deserves trashing the old Subject: title and creating a new one so the Archives will be searchable for any constructive responses.

Anybody responding please setup some sort of subject title that you feel is fitting. Someday most of the mechanical filters may not be found at a civilized price or be available at all.

Thanks for bringing this up Joe. Regards, Chris NNNN

From ezeran@concentric.net Wed Jun 11 03:10:21 2003
Subject: [R-390] SRR-11/12/13 receiver question...

> Hello, Dave: > > I am not sure which SRR receivers Ed is talking about, but I have > found the SRR-11/12/13 series to be very EASY to work on,

The ones I worked on were pretty beat having been attacked by many others. EdZ

From Llgpt1@aol.com Wed Jun 11 02:46:41 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

writes: >Has anyone ever tried to brew up a coil/capacitor replacement for the mechanical filters?
Joe

Well, we could use the Kiwa filters which have better shape factors and the prices are not bad. They have better audio qualities and are compatible with any receiver with a 455 kc if. At present, I use a Kiwa Map Unit with 6 cascaded filters resulting in bandwidths of 2.9 and 6.8 with shape factors of 1.32 and 1.62 respectively.

I realize that many of us won't want to change the filters and want to continue to use mechanical filters. Then, use the Rockwell/Collins torsional mechanical filters, beware though, they are expensive.

Ya pays yer money and ya takes yer choices..... Les Locklear Gulfport, Ms.

From nepar390@epix.net Wed Jun 11 03:57:33 2003
Subject: [R-390] Re: R-390 digest, Vol 1 #723 - 12 msgs

Now it looks like I'm living on the right coast, just too far north.... I've never come across one at that price at any of the local hamfests..... ow well../ Greg

From barry@hausernet.com Wed Jun 11 04:18:04 2003
Subject: [R-390] SRR-11/12/13 receiver question...

Attacked all right. I have one where a bunch of modules (don't remember whether it was top or bottom) was replaced with an aluminum plate with a bunch of mini tubes (not subminis) on sockets. The mode switch was undone with some separate toggles. I gave up trying to figure it out. Hackenstein Re-engineered Special, not a neat job either.

I'd sell it, but don't want to ruin my reputation, not that I have one to begin with.

Are these OT for this venue? Could take it to the RCA list, but I only saw one post on the series and it

was from Federico looking for an SRR-13 in good shape. Barry

From scr-287@sbcglobal.net Wed Jun 11 06:12:09 2003
Subject: [R-390] R-390A bottom cover

Hi all, Anyone want a new bottom cover for an R-390A/URR? This is one of Dan's repros, and it wound up extra to my needs. Free for postage. If I get more than one response, I'll wait 24 hours, put all the names in a hat, and draw one out. Thanks Jack

From jbrannig@optonline.net Wed Jun 11 12:45:51 2003
Subject: [R-390] Coil forms and more

Thanks to all for the suggestion and help with my SB-620. After many years the 455 kc. conversion project might get off the ground. Does anyone know the mixer oscillator injection frequency? It is not stipulated in the manual or on-line sources.

Here is my guess:

The IF of the Heath "Scanalyzer" is 350kc. To convert 455kc., the oscillator may be either 805 or 105kc. The "high" injection of 805kc produces first order products of 350 and 1260kc. "low injection of 105kc produces 350 and 560kc.

The "High" injection products are further apart and it would be easier to filter the unwanted sum frequency. So my "guess" is 805kc. I know the value of the parallel capacitance. If the oscillator frequency is known, I can calculate the coil inductance. Any help or ideas greatly appreciated. Jim

From courir26@yahoo.com Wed Jun 11 13:22:54 2003
Subject: [R-390] Gear Train in R-390/URR

> Are there any significant differences in the gear trains on the R-390 and > the R-390A?

Oh, God yes. Tom N5OFF

From tbigelow@pop.state.vt.us Wed Jun 11 17:46:05 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

wrote: Has anyone ever tried to brew up a coil/capacitor >replacement for the mechanical filters? Joe

I seem to recall our pal Nolan posting something about this. Maybe it was Dr. Jerry, or a combination of both? It all came from the understanding that, eventually, all of the filters would fail and we'd need to figure out some way to repair/replace/retrofit them. Might be something in the archives? ~ Boomer

From tbigelow@pop.state.vt.us Wed Jun 11 17:49:27 2003
Subject: [R-390] How long??

wrote: <snip> >I would like to read Nolan's version of The Flight of the Phoenix if anyone >has it saved. The real book was good too, as well as the movie.

I've had a few others say the same, so if all goes well with booting up my old PC I should be able to post it here soon. If I get a chance, I'll try tonight. Gotta reinstall the "high speed" 33.6 modem. It was the replacement for the cool outboard 14.4 with the flashing LEDs.... ~Boomer

From redmenaced@yahoo.com Wed Jun 11 20:37:15 2003

Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Ok, so what's the recipe, ala R-390 style, for an LC filter?

Can the R-390 filters be used in an R-390A?

Or do we have to start from scratch, winding a coil shouldn't be too tough, selecting a cap to go with it should be easier. Or do we have to have a tuneable cap for adjustment? Would a slug tuned coil be better?

Any ideas/possibilities for producing a short run of such a thing? Joe

From roy.morgan@nist.gov Wed Jun 11 21:05:09 2003

Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

wrote: >Ok, so what's the recipe, ala R-390 style, for an LC >filter?

Would be coil winders, Just look at the design and construction of the R-390 non-A IF section. Start there.

Three or four stages of very carefully designed, built, and tuned "double tuned inductively coupled" IF amplifiers.

See Radiotron Designers Handbook, 4th Edition to get a start on the theory and practice. Then see Valley and Wallman's RadLab book: Vacuum Tube Amplifiers for stagger tune methods, if you wish. Roy

From ghayward@uoguelph.ca Wed Jun 11 21:09:40 2003

Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Doing the coils shouldn't be too hard. I rebuilt the AGC coil in my R390A using a slug tuned unit that I found in my box of coils. The trick was to use a big L and small C to get the Q that I needed. It took me two tries to get it right. The first try gave a peak, but the Q was so low that it didn't give enough gain to get a high enough AGC voltage. The second try was dead on and the result meets the specifications for the performance and the carrier meter calibration is good. I think the IF strip construction will be a pain. To this end I've thought about trying (I know this is unrealistic :-)) to get an R390 IF deck and adapting it to the R390A . How about an outboard R392 IF strip?

Solid state tubes are another can of worms that I've thought about. Easier in an R-392! Cheers, eh! de Gord, VE3EOS

From chacuff@cableone.net Wed Jun 11 22:30:36 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

Adapting an R-390\URR IF deck to an R-390A\URR is not at all unrealistic. Seems I remember the Military had it done because of the phase shift problems the mechanical filters created in diversity operations. There is a military designation for it...I just can't remember it at the moment. Someone on this list did the conversion just in the last few months....I remember the posts....

Les Locklear...Chime in here anytime I know you have the info on it!

Finding a source for R-390\URR IF decks is the biggest problem! (maybe that's what you meant by unrealistic) Cecil...

From courir26@yahoo.com Wed Jun 11 22:40:54 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

Cecil, I've done the 390 IF conversion for the 390A, and so has Gene (I think it was Gene). Works like a champ. I run it in my regular rig. 73 Tom N5OFF

From bratcher@pdq.net Wed Jun 11 22:48:33 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

wrote: >Adapting an R-390\URR IF deck to an R-390A\URR is not at all unrealistic.

It's known as the R-275. I saw one at a hamfest 4 years ago in Irving TX. Should have bought it but I didn't think about it at the time...

From redmenaced@yahoo.com Wed Jun 11 23:05:57 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

Sure, we've covered that scenario. But that burns up already rare R-390 IF decks. I'm talking about making NEW filters for the R-390A out of discrete, generic parts, or even custom made parts. Joe

From chacuff@cableone.net Wed Jun 11 23:14:34 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

That's it!!!

From chacuff@cableone.net Wed Jun 11 23:16:19 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

I think the KIWA filter modules would be the way to go...unless you are just trying to go back to L\C filtering... Cecil...

From djmerz@3-cities.com Wed Jun 11 23:26:46 2003

Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

>Tom/Cecil, I did the conversion and also use the 390 non-a i.f. deck all the time in the 390a - kept the regular 390a i.f. deck in reserve but doubt it'll go back in. Yes, my biggest problem was finding the 390 i.f. deck which took about a year of looking and I finally bought one on eBay. I think I've only seen 3 on eBay since I started looking, and no luck trying to get one out of other guys. At one point Fair Radio told me they had some parts decks but the price seemed too high, about \$125, if I remember right, to go that route without knowing where I'd find other parts I might need. I didn't pursue that avenue and ended up paying about a \$100 for the one I have. I doubt that I hear more with the conversion but it's pleasant listening. Dan Cecil,

From redmenaced@yahoo.com Wed Jun 11 23:33:31 2003
Subject: [R-390] R-390A New Mechanical Filter Construction

All RIGHT! That's IT! I'm changing the Subject Line so we can find it later! Joe

From barry@hausernet.com Wed Jun 11 23:38:36 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

How about this crazy idea: Leave the original IF deck in there and tap off ahead of the MF's with a switch or RF plug 'n socket setup to feed the signal into another rx with a good L/C 455 IF? The other receiver would also need a similar gimmick. Maybe a crossover switch setup? Actually, the other receiver could be ... brace yourselves .. a NON-A. Or maybe even an SP-600. Barry

From redmenaced@yahoo.com Thu Jun 12 00:18:22 2003
Subject: [R-390] R-390A Mechanical Filter replacement

wrote: I think the KIWA filter modules would be the way to go...unless you are just trying to go back to L\C filtering...

++++++

Well, yeah, kind of, The KIWA is expensive, I think it would be good if it fit in the same place as the mechanical filters, too. And, of course, it HAS to sound good,..... maybe better. Joe

From Scott Seickel" <polaraligned@earthlink.net Thu Jun 12 00:48:25 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

The chemo may have me a bit brain dead these days but it sounds to me like you guys need to trash the chepo 390a's and get yourselves a quality 390 that needs no mechanical filter replacements. (and is more sensitive too) Scott

Uh.. did I get it right? 390 and 390a? or should I have said 390 non-a? I never did figure out what the outcome was of that thread.

From Llgpt1@aol.com Thu Jun 12 00:17:03 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

writes: > Adapting an R-390\URR IF deck to an R-390A\URR is not at all unrealistic. Seems I remember the Military had it done because of the phase shift

It was the R-725/URR. which used the R-390A and a modified version of the R-390/URR if deck. The mechanical filters caused a phase shift in the df equipment which was small at the antenna, but when extrapolating it out to the source, it could have amounted to hundreds of miles in error. Servo Corp. of America manufactured the if decks (interesting fact that they were located in the Richmond Hill area of Long Island) this area was also the home of several other defense related industries, such as American Trans Coil.

My good friend Tom Marcotte N5OFF documented this in Electric Radio several years ago. Les Locklear Gulfport, Ms.

From Llgpt1@aol.com Thu Jun 12 00:19:14 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

writes: Sure, we've covered that scenario. But that burns up already rare R-390 IF decks. I'm talking about making NEW filters for the R-390A > out of discrete, generic parts, or even custom made parts.

You weren't listening were you, too busy kicking over beehives. Kiwa Industries has 455 kc filters that have wonderful audio and work great. Better shape factors than mechanical filters too. Remember this: Mechanical filters will only resonate so many times and then they die..end of story. Les Locklear Gulfport, Ms.

From Llgpt1@aol.com Thu Jun 12 00:20:08 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

writes: > It's known as the R-275. I saw one at a hamfest 4 years ago in Irving TX. Should have bought it but I didn't think about it at the time...

Close, but dyslexic.....R-725/URR Les Locklear

From Llgpt1@aol.com Thu Jun 12 00:20:50 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

writes: > I think the KIWA filter modules would be the way to go...unless you are > just > trying to go back to LC filtering... > > Cecil... >

Yup, kinda my thoughts..... Les Locklear

From Llgpt1@aol.com Thu Jun 12 00:22:27 2003
Subject: [R-390] R-390A New Mechanical Filter Construction

writes: > All RIGHT! That's IT! > > I'm changing the Subject Line so we can find it later! > > Joe >

What should we change it to? Beehive kicking 101? Arleigh F.Burke

From Llgpt1@aol.com Thu Jun 12 00:24:14 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

writes: How about this crazy idea: Leave the original IF deck in there and tap off ahead of the MF's with a switch or RF plug 'n socket setup to feed the signal into another rx with a good L/C 455 IF? The other receiver would also need a similar gimmick. Maybe a crossover switch setup? Actually, the other receiver could be ... brace yourselves .. a NON-A. Or maybe even an SP-600. Barry

Kinda like a Hammarlund HC-10 or SPC-10.....or, Taaaa Daaaaa a Kiwa Map Unit. It connects to the 455 if output. Makes it into a whole new receiver. Les Locklear

From Llgpt1@aol.com Thu Jun 12 00:25:05 2003
Subject: [R-390] R-390A Mechanical Filter replacement

writes: The KIWA is expensive, I think it would be good if it fit in the same place as the mechanical filters, too. And, of course, it HAS to sound good,..... maybe better. Joe

Cheaper than mechanical filters these days, and yes, it does sound better. Les

From r.tetrault@attbi.com Thu Jun 12 01:05:14 2003
Subject: [R-390] R-390A Mechanical Filter replacement

Also waaaa-aay cheaper than a new stagger-tuned L/C retro-fit into an A I.F. deck. The early mech filters were much more peaky in the passband than what was later considered good in the late 75A's and 75S's. As much as 6dB!

From jlkolb@cts.com Thu Jun 12 01:40:09 2003
Subject: [R-390] R-390A Cost Reduction and Improvements (was dead horse Hi)

The mechanical filter could be replaced with a single IF transformer or one or two tuned LC circuits, but the overall bandwidth of that filter position will no longer be 2, 4, 8 or 16 kHz with steep skirts. Instead, it will be the overall selectivity of the replacement LC tuned circuits plus the added rejection of the remaining IF transformers in the set. It would take a number of hi-Q tuned circuits to match the response of a 2 kHz mechanical filter.

There may be a shortage of R-390A mechanical filters in the Collins "N" case, but there's not a shortage of 455 kHz mechanical filters - many flow past on that auction place. Many could be adapted for use in the R-390A if one doesn't need the replacement to fit within an "N" filter case. Alternatively, a good ceramic filter and matching circuitry would fit inside a replacement filter case, and would give a rounded top response rather than the rectangular top of a mechanical filter, but could give a good shape factor.

(Wouldn't have the MF ringing either)

You can find a couple of R-390A filter plots as well as some ceramic filter plots on my website,
<<http://members.cts.com/king/j/jlkolb>> John

From keng@moscow.com Thu Jun 12 02:15:56 2003
Subject: [R-390] SRR-11/12/13 receiver...an e-mail list??????

> Attacked all right. I have one where a bunch of modules (don't remember > whether it was top or bottom) was replaced with an aluminum plate with a > bunch of mini tubes (not subminis) on sockets.

I've been considering starting a list for the SRR-11/12/13 and its ilk. I have the hardware and software already set up and can add it with about 1/2 hour's work. I already provide space and software support for the Glowbugs list and a couple of others. Would there be enough interest? Ken Gordon W7EKB

From ba.williams@charter.net Wed Jun 11 21:51:11 2003
Subject: [R-390] How long??

>> I would like to read Nolan's version of The Flight of the Phoenix if anyone has it saved. The real book was good too, as well as the movie.

Somebody sent me a copy and I remember that one well.

That sounds like me with my ancient, unused 33.6 Supra Faxmodem too. I guess it still works. I liked the lights too. I can see a few with the cablemodem and router now, but like real outboard modems. My first modem was a 300 baud. (g) Barry

From dsmuples@comcast.net Thu Jun 12 03:16:48 2003
Subject: [R-390] Mystery solved....sortakinda...

All: I'm not sure I ever want to even MEET someone who can even LIFT a pair of R390As, one in each hand. Dave WB4FUR

From wli@u.washington.edu Thu Jun 12 06:54:08 2003
Subject: [R-390] Re: R-390 IF

I like the idea of leaving the original IF deck in, tapping off before the mechanical filters. How about running the R-390A's 455kc IF signal thru an outboard BC-453 (remember those ARC-5's that we all cut our teeth on?) that has its own 85kc IF and passable audio.

I did this as an experiment and it sounds fine. **BC-453's** can be had for \$25 or less at hamfests. W. Li Mercer Island, WA

From BRingwoo@csir.co.za Thu Jun 12 09:46:58 2003
Subject: [R-390] R-390A Mechanical Filter replacement

Hi,

I have a 455kHz "Ferritronics" LC Filter ~16kHz bandwidth - This uses several coils wound on pot cores and is the same general size and shape of the R390 mechanical filters. For those of you contemplating that route, my (thankfully limited) experience of winding 455kHz IF transformers, adjusting the

coupling and fiddling with a sweeper is that its very time-consuming indeed.

Apart from the windings at each end of a mechanical filter - how do they fail ? Are the Kokusai type which use piezo crystals as bad or worse ? Just curious - Bryce

From tburr@dixie-net.com Thu Jun 12 12:59:12 2003
Subject: [R-390] AN/URM 25E ?

What are the differences between the AN/URM 25 "D" and "E" models ? Terry.

From lester.veenstra@lmco.com Thu Jun 12 13:31:56 2003
Subject: [R-390] R-390A Mechanical Filter replacement

Pointer to KIWA data: <http://www.kiwa.com/kiwa455.html> It says "The Standard Filter Module is an encapsulated filter consisting of three ceramic filters with input and output buffer amplifiers".

So if that is not suitable, why not do what they did, stating with standard 455 ceramic filters, and possibly some of those there terminal monolithic RF amps for isolation. Inside the box for the four mechanical filters, there is plenty of room to put a substitute.

IMHO \$50 does not sound unreasonable compared to a new Rockwell mechanical filter. However the Ceramic filters (CFM2 from Digikey) prices are less than \$3 each for 4/6/8/10/12 khz wide Of course these are only two section:

STANDARD FILTERS SELECTION GUIDE TYPE CFM2/CFM3

TOKO Center Bandwidth Selectivity Ripple Insertion Input/Output

Part Frequency (Fo)* at 6dB at Fo?9kHz in Pass Band Loss Impedance

Number (kHz) (kHz) (dB) (dB) (dB) (kW)

CFM2

AHCFM2-450Z 450?1.0 4.0?1.0 24.0 min. 1.0 max. 7.0 max. 1.0/1.5

AHCFM2-450AL 450?1.0 4.0 min. 18.0 min. 1.0 max. 6.0 max. 1.0/1.5

AHCFM2-450BL 450?1.0 6.0 min. 16.0 min. 1.0 max. 6.0 max. 1.5/2.0

AHCFM2-450CL 450?1.0 8.0 min. 12.0 min. 2.0 max. 6.0 max. 2.0/2.0

AHCFM2-450DL 450?1.0 10.0 min. 9.0 min. 2.0 max. 6.0 max. 2.0/2.0

AHCFM2-450EL 450?1.0 12.0 min. 6.0 min. 2.0 max. 6.0 max. 2.5/2.5

However the 6 element, I suspect, are comparable to the existing Collins filters, two in series would be even better of course.

TYPE LFY/LFYM

TOKO Center * Bandwidth Bandwidth Attenuation Insertion Input/Output

Part Frequency at 6 dB at 50 dB fo ? 100 KHz Loss Impedance

Number (kHz) (kHz) (kHz) (dB) (dB) (kW)

LFY

ALFY455H 455?1.0 ?3.0 min. ?9.0 min. 35.0 max. 6.0 max. 2.0

ALFY455G 455?1.0 ?4.5 min. ?10.0 min. 35.0 max. 6.0 max. 2.0

ALFY455F 455?1.0 ?6.0 min. ?12.5 min. 35.0 max. 6.0 max. 2.0

ALFY455E 455?1.0 ?7.5 min. ?15.0 min. 35.0 max. 6.0 max. 1.5

BLFY455D 455?2.0 ?10.0 min. ?20.0 min. 35.0 max. 4.0 max. 1.5

BLFY455C 455?2.0 ?12.5 min. ?24.0 min. 35.0 max. 4.0 max. 1.5

BLFY455B 455?2.0 ?15.0 min. ?30.0 min. 35.0 max. 4.0 max. 1.5

From lal@cyberwc.net Thu Jun 12 13:47:20 2003

Subject: [R-390] Meter needed !

Hello to the list..

Just finished rebuilding my first R-392 receiver, works like a champ ! The meter that came with the radio has a white background with several vertical green stripes. I have seen pictures of this meter someplace but can't remember what it was used on. The meter operates but looks strange. I would like to replace it with the correct meter for the radio. If anyone has one they might sell or can direct me to a place that sells them I sure would appreciate it.. Thanks.. Merle W1GZS

From: (mikea)From Thu Jun 12 14:16:53 2003

Subject: [R-390] Mystery solved....sortakinda...

Dave and Sharon Maples wrote: > All: I'm not sure I ever want to even MEET someone who can even LIFT a pair > of R390As, one in each hand.

Aw,_c'm'on_! It's only about 170 pounds. I'm a 160-pound wimp, and I was lifting 200 pounds when I was 16 years old and weighed 125.

So were some of the guuuurrrrrrrrrllllsssssss. ;)

I grant you, I'm not about to curl them, or press them, but if you can get 'em on my back, suitably padded, I can still give you a dozen squats. Mike Andrews

From Llgpt1@aol.com Thu Jun 12 00:59:46 2003

Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

writes: > The chemo may have me a bit brain dead these days but > it sounds to me like you guys need to trash the chepo 390a's > and get yourselves a quality 390 that needs no mechanical > filter replacements. (and is more sensitive too) > > Scott
>

Zing.....I agree, the R-390/URR is a superior receiver as compared to the (cost reduced) R-390A/URR Correct nomenclature used, no need for "A" or "Non A" Les Locklear

From cbscott@ingr.com Thu Jun 12 15:25:54 2003

Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

If y'all don't cut it out, you're gonna have me wanting to buy a 390. With 2.3 R390A's in the shack, I don't know where I'd put the 390. Barry(III) - N4BUQ

From roy.morgan@nist.gov Thu Jun 12 16:29:36 2003

Subject: [R-390] R-390A Mechanical Filter replacement

wrote: >Also waaaa-aay cheaper than a new stagger-tuned L/C retro-fit into an A I.F. >deck.
> >The early mech filters were much more peaky in the passband than what was >later considered good in the late 75A's and 75S's. As much as 6dB!

Bob, Do you mean either or both of the following..??? 1) Pass band ripple in the R-390A filters can be as much as 6 db. 2) Pass band ripple in the filters used in the 75A and 75S receivers is much less than 6db. Thanks, Roy

From roy.morgan@nist.gov Thu Jun 12 16:35:41 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

wrote: >If y'all don't cut it out, you're gonna have me wanting to buy a 390. With >2.3 R390A's in the shack, I don't know where I'd put the 390.

Why, on TOP of the R-390A's, of course! Silly! Roy

From tetrode@worldnet.att.net Thu Jun 12 17:20:21 2003
Subject: [R-390] Coil forms and more

Hi Jim, if I read your post correctly you are attempting to mix down 455 kc to your Scanalyzer IF for use with a 390 rx. Cool!

In this case you want to use a low-side LO injection frequency, because if you use a high-side LO you will end up with a spectral inversion which will be very evident on your Scanalyser display!

The unwanted mixer products should be far enough way because with the 390 you'll only be able to see a narrow slice of the band anyway: - if you are monitoring the IF output then the scanned bandwidth will be the 390 IF bandwidth - if you are tapping off the 3d mixer (recommended) the bandwidth will be only 35 to 40 kc max due to all the cascaded selectivity in the RF and 2nd IF stages (yes, it is that narrow).

Also, try to use a balanced or double balanced mixer, you'll get far less troublesome RF and especially LO feedthrough into your scanalyzer IF. John KA1XC

From jbrannig@optonline.net Thu Jun 12 17:40:58 2003
Subject: [R-390] Coil forms and more

John, The SB-620 has a mixer in it. (now set for a 3395kc input) I was trying to find the frequency of the oscillator Heath used to mix 455kc. to the 350kc. IF of the SB-620.

My "guess" was confirmed, it is 805kc. Certainly, another solution is an external mixer for 455kc. to 3395kc. I plan to use it with a 75S-3B. Actually my R-390A had a "panadapter" output on it. A 6BE6 used instead of the 6C4 in the third mixer. I removed it last winter in a general maintenance session. Jim

From tbigelow@pop.state.vt.us Thu Jun 12 19:00:00 2003
Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

wrote:>How about this crazy idea: > >Leave the original IF deck in there and tap off ahead of the MF's with a >switch or RF plug 'n socket setup to feed the signal into another rx with a >good L/C 455 IF

Or you could just use a real R-390..... *grin* ~ Boomer

From tbigelow@pop.state.vt.us Thu Jun 12 19:09:16 2003

Subject: [R-390] Mystery solved....sortakinda...

wrote: >All: I'm not sure I ever want to even MEET someone who can even LIFT a pair >of R390As, one in each hand. > >Dave WB4FUR

>

It's the R-390 (real man's radio) that'll getcha, Dave. It's not all that difficult, and you'd be surprised what you can do when someone offers you something free with the stipulation that you gotta carry them off. Bend at the knees, grab, lock elbows as you stand and lock knees....watch arms stretch. You won't wanna go very far, very fast.... ~Boomer KA1KAQ

From tbigelow@pop.state.vt.us Thu Jun 12 19:21:47 2003

Subject: [R-390] R-390 IF, was Dead Horse, Hi, and Other Subjects.

wrote: >If y'all don't cut it out, you're gonna have me wanting to buy a 390. With >2.3 R390A's in the shack, I don't know where I'd put the 390.

>

On the bottom. Let gravity be your friend. ~Boomer, KA1KAQ (o:

From dp@coe.neu.edu Thu Jun 12 19:30:06 2003

Subject: [R-390] R-392 available - needs work

Fellows, I've talked to him, and he'd prefer somebody take to whole. Dave Goncalves

From: Steve Hersey <N1XNX@rcn.com>

Subject: Department of Boat Anchors: R-392 chassis with Collins VFO available cheap

I am trying to find a home for most of an R-392 ; I have the chassis with its Collins VFO (sans nameplate, the goofus who stripped out the plug-in modules removed it), but none of the plugins. It's in very good condition, but only of use to an R-392 enthusiast. I'll accept any offer that covers shipping costs and dark chocolate. Al\nyone interested? Regards, Steve Steve Hersey N1XNX

From keng@moscow.com Thu Jun 12 19:32:41 2003

Subject: [R-390] E-mail list for SRR-11/12/13, etc...

OK, gang, I have it set up so we can get this traffic of the R-390 list. For those interested in subscribing to it, post a message to: majordomo@piobaire.mines.uidaho.edu and write ONLY the words subscribe srr13 in the BODY of the message. I doubt if there will be much traffic...at least for a while. There is also web space available for the list if someone would like to handle that job... Ken Gordon W7EKB

From flood@Krohne.com Thu Jun 12 19:47:09 2003
Subject: [R-390] Mystery solved....sortakinda...

Dave, Boomer is correct and my wife will confirm, that I'm slow to drag out the trash to the curbside on a Monday morning but she is amazed at the amount of heavy metal I can drag inside on my own. The official pacrat motto, thanks go to Kenny KA1OXQ, is: You Call, We Haul, That's All... and No Rice Is Nice. A friend of mine, Steve WA1HUD, the chief pacrat of all pacrats, has climbed so high on the pacrat ladder that electronic junk is often left on his doorstep like an abandoned baby. He no longer needs to go and pick it up. He is my mentor. Some day, when I find that first item on my front porch when I get home, be it a small box of shaft clamps or a lonely old R390(x)/URR, I'll know that I have arrived! John Flood KB1FQG

From gwmoore@moorefelines.com Thu Jun 12 20:28:11 2003
Subject: [R-390] R-392 overhauls

GA, All on the reflector, does the Y2K R390 disk also cover the 392? While I am more than familiar with the 390, I am going to go over my R392, have the manual, etc., but I was wondering if there are any quirks I should know. As of now, the unit works fine, but I wanted to check for proper lube of the geartrain, etc, etc. I believe the major assemblies align basically like the 390, so I am not concerned there, but if someone could advise me as to the need for extender cables, etc, it would be appreciated. 73
es tnx de Greg WA3IVX

From dp@coe.neu.edu Thu Jun 12 21:16:04 2003
Subject: [R-390] Want to Borrow: Meters

Pulling the bones of this dead horse up from the grave...

Is there somebody on the list that would be kind enough to send me a pair of panel meters (carrier and line) to be scanned? The scans that I have are OK, but having a set of good image files would be an improvement. A matching set (similar look) is preferred, as are meters with sharp readable markings. I know a few list members live and work in the Boston area; I could pick them up and drop them off on the same day. Thanks, Dave Goncalves

From mark.richards@massmicro.com Thu Jun 12 21:22:54 2003
Subject: [R-390] Want to Borrow: Meters

Dave I can just scan my meters if it will help. I have the set apart for restoration anyway. One concern is opening the meters themselves. I think they will scan without doing so. Any suggestions on this? Mark Richards (west of Boston)

From tbigelow@pop.state.vt.us Fri Jun 13 00:42:28 2003
Subject: [R-390] FWD: Flight of the Phoenix Msg 1

Okay - you asked for it, so here it is. The old PC is up and running, and it's just like stepping back in time two years. Date came up as July 10th 2001, the day it was shut down for the last time. Talk about a time capsule! Definitely some fine posts from Nolan, Dr. Jerry, Barry Hauser, Roy Morgan...and many

others. Even found the last emails I exchanged with Bill Orr W6SAI about the SP-200 and 600. Some on here from Ed Clegg, too. (Yep - love that Clegg gear too!)

Turns out that this is only message #1, not the actual completed unit post that I thought. Still, it's a very interesting post and is - indeed - classic Nolan. Maybe this was his first post? Maybe not. Either way, it's a good read and you can see many of the early questions Nolan had before he had done the new research and found better ways and materials. I also have the BETA copy of his Rev. 4 (11/29/99) Master Capacitor list for the R-390A (Nolan always called them by their true name, not a non-name). Be sure to see one of the famous signature files at the end. Enjoy! ~Boomer

From: Nolan Lee <nlee@communique.net> Date: Tue, 19 May 1998 17:30:22 -0500
Subject: [R-390] Flight of the Phoenix Msg 1

Starting a couple of days ago, I pulled what was left of my first (aquired in the mid 1970's) R390A out of the attic where it's been baking for 5 or 6 years or so at high temp, here in the Deep South. Is it soup yet ma? You bet! Mmmmm mmmmmm good bubba!

I had retired it after a rather spectacular IF deck meltdown. When it went, it looked like a special effect from either Star Trek Next Generation or an old Voyage to the Bottom of the Sea re-run. Ever wonder why they didn't used fuses on that submarine?

After putting the fire out. I shut it down and stuffed one of the spare IF decks in it. No good, it was gone. DOA bubba. I didn't feel like looking for a cure at the time so I did something like was done to Walt Disney's body. Since I was just a rather poor Redneck at the time, and am still, I didn't have access to a cryogenic chamber to freeze it. Instead, I stuffed it in the attic where a generous coating of mud dauber nests and some of that there theroputic heat stuff would preserve it for future generations in the event I died before I could fix it.

At any rate, a couple of days ago, I was up there fixing the attic vent fan that died a couple of three years ago and I happened to see it. It was setting there calling to me. "Fix me....fix me....." I sat the quart of beer down and hauled the 390A down the ladder. I let it sit in a low spot under a tree in the shade for a few hours to cool down before I hosed it off. I didn't want to subject it to sudden thermal shock. It might have damaged something. After it cooled (about 4 beers later) I took it apart and used about 6 cans of Gunk on it. Sure nuff looks purty now. All of the protective mud dauber nests are gone along with the grease off of the geartrain. A side benefit was that I finally got around to filling in that low spot that the wife's been complaining about for ten years or so. I bent me up a mess of hooks and then hung each of the modules on the clothesline to dry in the sun.

I intend to go thru each of the modules and resurect this thing. Since the RF Deck is a pain to remove for occasional repairs, I want to pay special attention to it.

Here is a list of questions concerning the repair of that there RF Deck thing that I'd really appreciate yall answering.

1. I've checked all of the carbon resistors in it and will have to replace about a half a dozen or so of them. Since carbon resistors suck in the long run, what would be the best non-inductive resistor to replace these with? Think it's worth the hell of changing ALL of them?
2. The three brown tubular caps suck (1 blowed up bubba, 2 cracked). What's the best long term replacement for these?

3. What's accepted as the best grease for lubricationg the gears and rollers. I used rifle grease for years, but remember, I'm a Redneck so I'm sure that there are higher tech lubricants.
4. Ideas on the best oil to lubricate the bronze bushings in the gear train where the various sharts extend thru the RF Deck panels? I used 40W motor oil, jes' like the tractor.....ideas on something better?
5. This deck is marked as having Mod 5 done. What exactly did Mod 5 involve? What's the oldest bulldog you know of?
6. I don't like the looks of several of the little coaxial cables that extent to the other modules. Anyone know the specs on this coax? I'd like to replace several of them.
7. I've never knowingly had a mica cap go bad in a 390A. Come to think of it, I don't think I've ever had a mica cap go bad in anything. Removing and checking every one of them with a bridge would take forever. ;-(Should I even bother? I say know, but some of yall are a lot sharper. What do YOU think?
8. Have I missed anything concerning the IF deck? Anything I should look for that some of you guys that have repaired dozens of these things have seen? Evil forces? The dark side?
9. I'd imagine that the chokes and ceramic discs are all OK. Comments?
10. See, you didn't think I could count that high with only 9 fingers, huh?

thanks in advance, nolan

If an infinite number of rednecks riding in an infinite number of pickup trucks fire an infinite number of shotgun rounds at an infinite number of highway signs, eventually they will produce all of the world's great literary works in Braille.

From courir26@yahoo.com Fri Jun 13 01:10:24 2003
Subject: [R-390] FWD: Flight of the Phoenix Msg 1

I hope you don't resurrect the email about Nolan butchering a deer (or was it a sheep) in the parking lot of his apartment complex in New Orleans. Lots of stuff like that goes on in New Orleans, I just try and avoid it at all costs. 73 Tom

From ba.williams@charter.net Fri Jun 13 01:39:29 2003
Subject: [R-390] Coil forms and more

A HSN states that the greatest width you can get from the R-390A is 100 kHz. I'm pretty sure that is the limitation. I can't check my issues right now. There is an inherent limitation in the SB-620 with the 455 kHz IF, but I forget what it is at this moment. I think it is 1 mHz. Still useful in crowded situations, beacon DXing, and looking for clandestines that jump around to avoid jamming, etc. Barry

From ba.williams@charter.net Fri Jun 13 02:18:45 2003
Subject: [R-390] Want to Borrow: Meters

> Is there somebody on the list that would be kind enough to > send me a pair of panel meters (carrier and line) to be scanned?

If someone sends me a good scan in TIFF format I'll do a layout over that in Freehand 10 for really accurate, crisp lettering, lines, etc. I'll send the file back to you as a TIFF, ready to print. Scans normally need to be cleaned up for good print jobs. Scans also produce some distortion via lens and mirrors. I'll do the work with solid colors. A TIFF file would be correct in a very high resolution with the only limitations being in ones printer, ink, and printer. Therefore, the guys with low rez printers can print the best they can, and the guys with high rez printers can print their best.

I mention using TIFF as it saves in the object oriented format, which means it can be easily corrected/modified. The TIFF format is almost universal. It also uses no compression techniques. JPEGs compress and compress and compress every time you save them save them save them. Plus, JPEGs are basically bitmaps anyway.

One last tip- scan at the highest possible resolution you can. Don't worry about file size. Go for the most accuracy. Barry

From ba.williams@charter.net Fri Jun 13 02:26:30 2003
Subject: [R-390] Want to Borrow: Meters

> Dave I can just scan my meters if it will help.

Mark, Go for it if you can get a reasonable good scan. The relief from meter face to dial looks to be about 1/8". What I'm offering to do is use that scan as a background to work over. I will redraw everything over the scan. It may turn out perfectly correct If the scanned proportions are right, and it is not too fuzzy. Fuzziness means the letters bleed out too wide. Some of this depends on the type of scanner you use.

If you wish, send me the file if you decide to do this, and I'll do my best to get a clear background image to work over. This used to be my job so I like doing this sort of thing from time to time. Barry

From jlap1939@yahoo.com Fri Jun 13 03:03:08 2003
Subject: [R-390] The cost reduction program

Friends, Be advised that the cost reduction did not result in a better unit, in spite of claims. It simply was cost reduction, avoiding as much as possible, damaging the performance. The pretty words were just to make the program appear to be more significant than it really was.

I have been closely associated with both in full duty cycle as a NON (?) sig. corps NCO. It depends upon the use to which you put the unit in question, indeed..

The 390 (non) is in general, more solid on all copy, whatever you may think...I used them...But whatever you want to think, its O.K. with me...But...Did you see both, in many examples, used in field probs?? Regards, John

From jlap1939@yahoo.com Fri Jun 13 03:15:29 2003
Subject: [R-390] LC sections for the 390a

Friends,v short note: Joe is legit.

I have heard of such a thing, and was told it could be done by an eng, but I never saw a 390a w/LC filters. Please, if anyone has tried it or knows of it, reply to us...! Regards, John (JLAP)

From scr-287@sbcglobal.net Fri Jun 13 03:19:59 2003

Subject: [R-390] Bottom cover

Hi all There were 10 responses for the cover, and a name has been drawn out of the hat (actually a cardboard box). Wish I had more..... Jack

From jamesmiller20@worldnet.att.net Fri Jun 13 03:56:20 2003

Subject: [R-390] LC sections for the 390a

Rockwell Collins still makes mechanical filter modules using modern design. You can buy them on small boards as plug ins for the S Line from Inrad. Or you can buy the modules directly from Rockwell I believe. Also I think Longwave Products sells direct replacements for the 75A4 and 390 that uses the Rockwell modules mounted in the metal cans. The modules are small and could easily fit inside an old mechanical filter can. Why not try them?

From hankarn@pacbell.net Fri Jun 13 04:07:32 2003

Subject: [R-390] Bottom cover

FYI for the frugal I have the set for \$55.00 plus shipping. Hank KN6DI

From buzz@softcom.net Fri Jun 13 04:52:13 2003

Subject: [R-390] Want to Borrow: Meters

I put the R-390 line level meter face up some time ago at: <http://webs.lanset.com/buzz/meters/faces.html> click on the meter you want to get the high dpi scan. Regards, Buzz

From keng@moscow.com Fri Jun 13 07:04:28 2003

Subject: [R-390] Coil forms and more...SB-620, etc...

You fellows might want to take a look at Kees Talen's web site. He has info on winding coils for the SB-620 for the other frequencies and service data. <http://www.qsl.net/k5bcq/> Ken Gordon W7EKB

From jlap1939@yahoo.com Fri Jun 13 16:01:18 2003

Subject: [R-390] SSB on the 390 series

Friends, A few have asked about the item I sent a few years ago, relating to reasonable SSB on a unit not intended for SSB. They wanted the method again.

We have so many experts on this list...I hesitate to write up the method taught me long ago. I got it

straight from cpl. Stone when I was young and viable...(?) But you don't have to be highly sentient to do this..The ability to listen is the most important requirement..

First of all, while pitch discrimination ranges from perfect pitch, to tone deaf, my understanding is that all can generally detect a very small change in pitch. As a result, the best, (or lowest, in case of the 390), point for the osc, (usually called BFO..)can be determined easily. The change detected by most people is 4 to 5 cents, or 4 to 5 / 100 of a half step in music pitch, a very small ammount indeed. It is, by the way, this ability that allows highly experienced persons to align w/ amazing sucess, with only the ear. (That is, "manually", as is often said). In mil. practice, I saw alignment done to near perfection with this method..

On the above, I refer you to an enormous amount that is available just using the term "sound"..on the internet...Add "music", or "physics" and you could not read it in less than a lifetime..I will not continue on acoustics, but suggest you might want to read, if you never have..(By the way, my minor was Acoustics. I once thought I was bright enough to be an engineer..) It is important to remember that you will always hear a harmonic content in any sound, and you have to listen carefully. It is of interest that the result for all radio SSB transmissions, is sometimes as good as the best converter..It will depend upon being very careful to find the correct settings, and on your filters.

The Method for the 390 series Is...:

1 Remove ant. and go to a very quiet point (rel. to the internal noise). Remove BFO knob, and with BFO switch on, tune BFO to find point where the pitch, or the harmonic complement is at the lowest pitch. (In other words, the "hiss"...). Check several times, then you will tighten the knob at "zero". All this assumes that alignment and BFO neut. and so on, has been done already.

2 When you calibrate for a band, turn the BFO value, to + 1 for LSB, or - 1 for USB, and then run your calibration at the nearest point for your radio. In other words, you will calibrate with the BFO at + or - 1, not at 0. At + 1, you will place that low point, near over the point where the USB complement of any signal would be..(+ or - a little...) In use I vary from 1 to 1.5 with the BFO position. This will result in your LSB component appearing at "0", on the BFO scale..Don't get mixed up about upper and lower..BFO positive is lower, and neg. is upper... Some find 1.5 a more reasonable starting figure for setting up the BFO..bandwidth for signals does vary, after all..

3 In calibration, the accepted method is to find the highest meter reading, but for SSB, tend toward 0, rather than the highest reading..In other words, compromise, and seek zero, if you wish an accurate freq. indication.

4 Select a filter position of 1 or 2, for the 390, and 2 or greater for the 390a, (as the mech. filters will not allow the harmonic complement as well, and you have to allow more room, (as the skirts are so sharp...))

5 On the 390 use the medium setting on the response. (A position that, it turns out does have a value on this radio...)

6 set your RF and Local gains around 6 to 7 to start with. Be aware that the most common mistake made is setting the RF wide open...The smaller gain you can use with sucess, the better will be your signal.

7 It will now be necessary to play your controls against one another, and the signal. Note that your indicated freq. is right on, with the correct sound to the vocal if you have followed the list above. I find

the miscue in freq. smaller than can well be resolved by the eye...However you may remove a bit more at times, to avoid interference. (And I assume you can tell human speech, from "Donald..")

I use the following example:

Do all the calibration for LSB, and do it at 3900.00. Now tune 3898.5, and listen to the chicken farmer and friends..check out by using ONLY your main tuning, (not BFO..Leave it set at about + 1 to 1.5). You will note that the "excellent" and "useful" digital readout of the 390 series is right on 3898.5...! (depending on align.)..Yes.It is much closer than you can resolve on most dials like the, for ex, HQ 180....!! Well Well..

Try 20 meters, follow a few contests...you will be "right on", in freq., or try a few nets...They are usually "at or about.." so you will be closer than you might expect..or than the net actually is..(Try Hurricane net at 3935.)

In other words, its' darn near as good as some of your electronic digital...and this in a unit dating back to the late forties..

May I add at this point; It seems that some are not willing to become used to the sound. Others are not keeping the gain of the unit low..or don't stop to realize where the signal for a given sideband actually falls.

I also add, that the 600 works very well...just no decent read-out..And.. I want to point out that I have done this since a child, and got excellent results with the most economical Nat. and Halli. radios..even the 38 series...In those days there was almost no SSB, and you really had to look to find some...Of course, you have to change the method a bit for different radios, according to filters and controls..

It only remains for me to offer my apology for the long-winded post, in the event you have no interest. In addition, I realize that many may find fault with my method, or some may be kind enough to correct me where I have made a mistake. Please feel free to comment, whatever it may be..For those who think I am full of strong wine...try it..you might be surprised... Regards, John (JLAP)

From ba.williams@charter.net Fri Jun 13 17:30:28 2003
Subject: [R-390] FWD: Flight of the Phoenix Msg 1

> I hope you don't resurrect the email about Nolan butchering a deer (or was it > a > sheep) in the parking lot of his apartment complex in New Orleans.

Tom, Watch out for them alley-gators whilst you are avoiding it. (g) Barry

From ba.williams@charter.net Fri Jun 13 17:39:16 2003
Subject: [R-390] fixin' gassy tubes

Thought this tip from Nolan would be of use to someone, somewhere, some time.....found it while searching for something else. Barry

I had a few more than a half dozen inquiries wanting more info about my mentioning "fixing" gassy tubes, so here's an explanation of the method I use. I've been doing this for ages and have had a pretty good rate of success. Sometimes a tube will break while doing this. Your mileage may vary...

It's a very simple procedure involving the use of a glove, a Zippo cigarette lighter, and a tube tester. I suppose that eye protection would be a good idea. Also a fire extinguisher if you're a little clumsy. <grin> I wouldn't advise doing this to any tube containing radioactive isotopes. You wouldn't want have one break and possibly contaminate you or the shack.

I make it a point to test all applicable "amplifier" tubes for gas anytime I plug a tube into the tube tester. I've had some odd ball problems with gear in the past that ended up being caused by gassy tubes.

At any rate, lets say that I just pulled one of the 5814A's out of the R390A and it tested as gassy. The first step is to leave it in the tester for about ten minutes at it's normal filament voltage to get the envelope good and hot. Think of it as preheating. Next, while wearing a suitable glove, I pull the tube out of the tester and using the Zippo, play a flame over and around the getter of the tube, evenly for a few moments. I've never measured the amount of time that it takes, it's just something that you'll develop a feel for after you've done it a number of times.

The Zippo coats the tube with a layer of soot while doing this. This is good. It helps prevent hot spots and helps to decrease the odds of stress cracking the tube. I have had a lot more tubes break heating them with a butane lighter than with a Zippo. A candle would probably work OK too.

If you think you heated it enough, wipe it off and plug it back into the tube tester and test it for gas again. Maybe it's fixed, maybe it ain't and needs another treatment, and maybe the treatments just flat out ain't going to work on that particular tube.

If you did heat it enough originally, you can often see a change in the appearance of the getter. But not always. Don't you just love something that's cut and dry? <grin>

If it doesn't test gassy anymore, leave it in the tester for about a half hour and test it again to make sure. Usually gassy tubes show up a lot easier after they've run for a while.

When doing octal tubes, sometimes the getter is in the bottom of the tube below the edge of the tube base. This is one reason that I don't like RCA 6K6GT's and prefer Sylvania or GE 6K6GT's. :-) The Zippo method isn't practical for tubes built like this. ;-(

If you put your eye out, don't come crawling to me whining that I owe you an eye or something...

my disclaimer below applies, nolan

*** Disclaimer: Opinions are my own and in no way reflect those ANYONE else!

This disclaimer does not cover misuse, accident, lightning, flood, tornado, tsunami, volcanic eruption, earthquake, hurricanes and other Acts of God, female misinterpretation, neglect, damage from improper or incorrect line voltage, improper or unauthorized use, broken antenna or marred cabinet, missing or altered serial numbers, electromagnetic radiation from nuclear blasts, sonic boom vibrations, customer adjustments that are not covered in this list, and incidents owing to an airplane crash, ship sinking or taking on of water, motor vehicle crashing, dropping the item, falling rocks, leaky roof, broken glass, mud slides, forest fire, or projectile (which can include, but not be limited to, arrows, bullets, paintballs, shot, BB's, shrapnel, lasers, napalm, torpedoes, or emissions of X-rays, Alpha, Beta and Gamma rays, knives, stones, sharp sticks, etc.) And lastly, Not warranted for any particular merchantability or use.

From tburr@dixie-net.com Wed Jun 11 13:51:43 2003
Subject: [R-390] AN/URM-25 Model Differences

Would appreciate info on what the differences are (if any) between the URM-25D & URM-25E models are. Judging from photos, they appear to be identical. Terry.

From w5or@comcast.net Sat Jun 14 03:23:45 2003
Subject: [R-390] Testing new email, delete

Looks good! Thanks for taking the time to make sure you are posting in plain text. Sure makes a difference when readers don't have to wade through lots of HTML litter...

Don Reaves R-390 list administrator
<mailto:r-390-admin@mailman.qth.net>
R-390 Mailing List Rules: 1. Stay on topic 2. Be civil and courteous

From jamesmiller20@worldnet.att.net Sat Jun 14 17:51:47 2003
Subject: [R-390] WTB Z202 RF Coil

I need a replacement front end coil Z202 plug-in for the 1.0 - 2.0 Mc band. (390a). Any out there? Jim M.

From jlap1939@yahoo.com Sun Jun 15 00:09:59 2003
Subject: [R-390] re: SSB on the 390 series

Friends, Thanks for sending me replies. I appreciate them. Regards, John (JLAP)

From redmenaced@yahoo.com Sun Jun 15 03:29:11 2003
Subject: [R-390] Meter Meister?

I need someone to tell me what I just did to ruin this DC voltmeter. I was checking the voltage on a UPS when my Steel Six meter decided to crap out! Not good, I liked that meter! It seems to have either demagnetized the magnet or magnetized the vane, not sure which. The coils are Ok because when I reverse the probes the needle is drawn below zero, it just won't go above about 2 volts on a 50 volt scale. If there was an AC component on the DC I was measuring would it have done this? The charger was on, I was trying to determine if the batteries were charging. Thanks, Joe

From billsmith@ispwest.com Sun Jun 15 08:29:27 2003
Subject: [R-390] Meter Meister?

> I need someone to tell me what I just did to ruin this DC voltmeter.

You probably didn't do anything, but you can fix it.

> I was checking the voltage on a UPS when my Steel Six meter decided to crap out! Not good, I liked that > meter!

Many meters have this problem.

> It seems to have either demagnetized the magnet or > magnetized the vane, not sure which. The coils are > Ok because when I reverse the probes the needle is > drawn below zero, it just won't go above about 2 > volts > on a 50 volt scale.

Nope, the problem is likely a very small iron fragment that is jamming the mechanism.

If there was an AC component on the DC I was > measuring > would it have done this? The charger was on, I was > trying to determine if the batteries were charging.

Nope. Here is how you return the meter to service:

(1) take the meter apart, exposing the mechanism.

(2) prepare very thin strips (1/16") of regular Celophane tape.

(3) With (stainless steel) tweasers or some other tool, run the thin strips along the armature, and between the magnet and the meter windings. Metal particles will stick to the adhesive on the tape. Examine the strips. If there is the slightest fragment on the strip, replace it with a new strip, and continue until the strips come out clean.

Change strips often, for particles can be rubbed off the strips can re-contaminate the meter movement. This operation is best done under a magnifying glass. Be careful not to damage the spring or you may really loose the meter.

(4) Gently blow across the meter scale, moving the pointer. You should be able to very gently position the meter pointer at any point on the scale without touching it. If it sticks at any point, there are still magnetic particles jamming the mechanism. Continue cleaning with additional tape strips.

(5) When the movement is free, clean the inside of the glass and reassemble the meter. It will work as new.

(6) If you did crunch a spring (there are two, one on the top and another on the bottom of the movement), use a small pointer to very gently bend the anchor points so that the spring doesn't rub against itself at any point. It should form a level, symmetrical spiral about the pivot.

Resetting the spring is a very delicate operation that takes some experience. If you are working with a valuable meter, you might practice on another meter first. 73 de Bill, AB6MT billsmith@ispwest.com

From stevehobensack@hotmail.com Sun Jun 15 16:11:57 2003
Subject: [R-390] Meter Meister?

If there is no foreign matter in the meter movement, one or both of the protective diodes might be shorted. They are mounted in parallel (but opposite in polarity) across the meter terminals.KJ8L

From barry@hausernet.com Sun Jun 15 16:33:27 2003
Subject: [R-390] Meter Meister?

Joe & List: If it isn't particles or a bad protective diode, it may be that the armature has come off one of its bearings or is loose. Depends on the design, but many meters have needle bearings which are adjustable. It's sometimes difficult to spot because just the very tip of the tiny shaft may become worn enough to slip out of center and jam. Usually the needle won't move at all, but I've seen cases where they'll move partway in one direction. If the meter has adjustable bearings, you can loosen a locknut and turn in the bearing slightly to tighten it up. If that's the case, be careful not to overtighten and make sure the shaft lines up straight as you do so or you'll damage what's left of the pointy end of the shaft or bend it altogether. (Center the shaft somehow and just tighten a small amount, then blow on the needle to see if it swings freely. If/when it does stop. A bit too much and the needle won't move, then back off a smidgen.) Often these adjusters are secured with a droplet of glyptol or cement. Usually a partial situation is obvious because when the shaft is crooked, the needle hits the scale, but sometimes it's the "tail" of the needle or some other part that binds because it rubs up against something, or even the spring itself gets out of sorts due to the misalignment. Those situations are not so obvious. Barry

From hankarn@pacbell.net Mon Jun 16 00:53:47 2003
Subject: [R-390] RE: R-390-A Engraved panels

Tom Norris was kind enough to post pictures on the first engraved panel. The color of the filling is Titanium White and the panel is Ebony Black. Have a look at: www.fernblatt.net/KN6DI/ NOTE call sign is in upper case. Hank KN6DI

From jtone@sssnet.com Mon Jun 16 01:26:55 2003
Subject: [R-390] Meter Meister?

Barry, Excellent post...and a frustrating subject for the casual meter repairman...

Agree with ur assessment that sounds like pointer/vane is somehow out of alignment...but the blowing technique is a good test...also have used a very thin/narrow bit of paper to "Gently" touch, or prod the movement to check for rubbing or scraping. Btw...have found that on some "Hamfest" specials...that the glass has worked loose and has pushed the pointer back against the scale...sometimes, the glass doesn't look like it moved, but has been pushed in enough to cramp the pointer...and stay jammed so the glass doesn't "rattle"...just another check Joe...but sure you thought of this one...it's easy to fix...but again am sure u check this one because it's a classic...

Now...further questions...

Barry . . . Do you have any pet suggestions regarding tools, and handling techniques for these ultra delicate manipulations....I've used the "blowing" technique to check for free movement, bits of paper cut to small manipulators, re-machined nut drivers to reduce over-all od...and re shaped screw drivers of various breeds...and types...

In some cases I've had great success, but in others...seems the most common meter repair problem has been an "apparently" open coil...yuk...not a good situation...and have not had luck solving that one...even with resoldering micro joints...so I assume in these cases, it must be open some place I can't isolate other than the coil...

Just ramblings, but meter info always of interest... 73, Gene

From jtone@sssnet.com Mon Jun 16 01:36:26 2003
Subject: [R-390] Meter Meister?

Bill, Another great post...re the sticky tape...I tried the sticky portion of a post it...with some success...but like ur tape suggestion too... What kind of "probe" do u use to manipulate the spring...? Thanks for any info... Gene

From redmenaced@yahoo.com Mon Jun 16 01:41:55 2003
Subject: [R-390] Meter Meister?

wrote: > Barry, > > Excellent post...and a frustrating subject for the > casual meter repairman...
+++++

Update, so far,

This meter is in a 5 3/4" square copper plated steel box painted black, 3 1/4" deep, the mirrored meter is 5" wide and 2 3/8" high, the coil is HUGE by most meter standards 1 1/8" X 1 3/8", the moving coil is inside an aluminum doughnut. There are no protecting diodes of any kind, just two coils, evidently series resistors. BTW, there are three tiny balancing nuts on the needle placed at 90 degrees apart from the needle itself. Mostly it's a bare meter movement. I have a similar DC current meter to pair with it if I can keep it working. The needle is free, responds to full scale with the puff test, smoothly, too.

It's not, however, my biggest meter, that's a Welch that's 14" X 14", YES, the ones you saw in high school science class!

The Steel-Six came from the USAF and is due to be calibrated again in 2006! That's why this is such a bugger. Anyway, the meter glass had been replaced before I got it because it was plexiglas, I just put in a new piece of REAL glass, no telling what went in there over its life time, but it is dusty in there. Thanks, good suggestions, Joe

From AB3L1@aol.com Mon Jun 16 02:34:17 2003
Subject: [R-390] 390A Engraving

Thanks Hank, I can't imagine what it took to pull off this project but thanks nonetheless for the effort. I can't wait to see the final product. Bob AB3L

From Barry Hauser <barry@hausernet.com> Mon Jun 16 02:59:42 2003
Subject: [R-390] Meter Meister?

wrote: > BTW, there are three tiny balancing nuts > on the needle placed at 90 degrees apart from the > needle itself.

Sounds more complicated than usual.

Mostly it's a bare meter movement. I > have a similar DC current meter to pair with it if I > can keep it working. The needle is free, responds to > full scale with the puff test, smoothly, too.

Probably not particles or misalignment of the armature then. Sometimes I've come across such severe

static that a meter won't zero just hangs wherever you point to on the "glass". (Mostly happens with plastic lenses.) I doubt if that's it given the vintage and so on and that usually clears up sitting around or when subject to some current.

Have you tried running the meter out of it's case? Does it have a range switch with precision resistors. Maybe one is bad. You said it won't go above 2 volts, but will peg with reversed polarity how much swing between zero and "peg left"? Might be 2 volts or less. Does it have other ranges? Barry

From Barry Hauser <barry@hausernet.com> Mon Jun 16 03:30:38 2003
Subject: [R-390] Meter Meister?

wrote: > Barry . . . Do you have any pet suggestions regarding tools, and handling > techniques

As for tools, a jeweler's screwdriver/nutdriver set and improvising (like you, with paper, toothpicks, etc.)

As for handling verrrrry careful. You have to be particularly careful with steel tools around them that can snap to the permanent magnets. Also be careful just moving your hand away there's a tendency to snag things. Sometimes you can manipulate the shaft back in place by finessing the outer turns of the spring - very lightly bumping it. And after all that, it's not a sure thing. Might be worn out or an open coil. A true meter mechanic can go as far as rewinding them, but that's beyond me. Very expensive, I hear. Barry

From billsmith@ispwest.com Mon Jun 16 08:09:22 2003
Subject: [R-390] Meter Meister?

Thank you for the compliment, Gene. I don't have any specific tool, just grab what is handy. It might be a toothpick (non magnetic), or a pair of stainless steel tweasers I picked up somewhere. Also use a small tip screwdriver. If real trouble is found with the spring, it can be usefull to temporarily unsolder it from the small mount that normally protrudes from the meter bridge. The spring can be reformed, and then positioned so that there is minimum deformation when it is resoldered to the post. 73 de Bill, AB6MT
billsmith@ispwest.com

From jlap1939@yahoo.com Mon Jun 16 17:00:45 2003
Subject: [R-390] Power Cable

Good Morning, Dave, I did indeed send the cable, but I guess thats pretty dumb, when the guy you are sending it to probably has plenty to plug in..

It was one of the newer w/heavy pin attachment, but that was not the orig. (I believe maybe, made in Mexico)? You supplied it last time when you wern't sure which cable was mine..But it doesn't matter to me, as long as I can get it plugged in... My Regards, John

From jlap1939@yahoo.com Mon Jun 16 17:16:46 2003
Subject: [R-390] Meters and things

Friends, Enjoy the material on damage and dirt in meters. It is an interesting thread that has a number of applications...

Thanks to those who sent private responses about r-390 SSB. They were appreciated. Best regards, John (JLAP)

From redmenaced@yahoo.com Tue Jun 17 00:25:03 2003
Subject: [R-390] Meter Meister?

Nope, no ranges, no resistors except the two coils on the back panel.

One wire goes directly from the terminal on the side of the box to one end of the coil, the other wire goes from the other terminal to the two resistor/coils in series, then to the other end of the coil. Simple, very simple,..... just doesn't work much.

Reverse needle movement doesn't peg, only about the same as forward movement.

From billsmith@ispwest.com Tue Jun 17 04:54:48 2003
Subject: [R-390] Meter Meister?

Sounds to me like something is open. Set an ohmmeter on a high scale, then measure from outside terminal to resistor, through resistor, to meter, then to the small terminal that holds the spring, then to the other side of the meter (watch meter movement here), etc. Test from both meter terminals. The meter current passes through the springs to the wiring in the armature.

Have found metal-to-metal contact can still be an open electrical path, particularly the hardware between the meter bridge and the spring. Sometimes just moving things around will break down oxidation. Don't think that is the case with yours, though. You might look for a broken or disconnected spring (though that would affect meter zero), or open armature. If you see a lot of life in the meter movement (let's all hope) then one of the series resistors has opened.

If the armature is open, you might try looking under a very strong magnifying glass (as in a lab microscope) to insure the wire contact between the armature and spring terminal is still intact. Have fixed a meter or two by reattaching a loose or broken wire end. The wire size is extremely small. Of course that is a very delicate operation.

If the armature winding is broken somewhere inside the winding, that may be fini, would be for me. 73 de Bill, AB6MT billsmith@ispwest.com

From Miguel Bravo" <mbravoc@wanadoo.es Tue Jun 17 20:50:12 2003
Subject: [R-390] `portable boatanchor shack

Don't know how arrived to this page but are selling a well boatanchor equiped portable shack (if you are acostumed to drive by the left!) <http://www.sanyonet.ne.jp/~bm/Parts.htm> Look after :-)) or better scroll down and look the pictures.

Regards Miguel P.S. need a currency converter ? <http://www.oanda.com/convert/classic>

From cbsscott@ingr.com Tue Jun 17 20:54:45 2003

...and 3TF7's to boot! Barry(III) - N4BUQ

From odyslim@comcast.net Wed Jun 18 00:32:26 2003

Subject: [R-390] need help

Hi Gang, I wonder if someone can point me in the right direction. First I will tell you that I do not have much experience with these rigs.

The lamp in my 390A stays on even when the power is turned off. It seems logical to check out the power switch with an ohm meter. I wonder if someone has had this problem before? I would like to avoid taking the front panel off if possible. I do hear a relay clicking when I turn it on and off.

I do have a manual somewhere but can't find it at the moment. I just totally re-modeled my radio room and can't find anything right now. Thanks for any advice. Scott (another Scott)

From redmenaced@yahoo.com Wed Jun 18 01:13:01 2003

Subject: [R-390] need help

Oh, no! Not another Scott! Line up over there with the Barrys.

Well, Scott, Your problem is obvious to the assembled multitude, even I have dealt with the subject switch. You will/should probably take off the front panel, it's not too tough to do.

Set the radio on two 2"x4" blocks so that the side panels rest on the blocks but the front panel is free to drop to the bench top. Then remove the two big knobs and their bushing retaining nuts, remove the BFO knob, the BANDSWITCH knob, the ANT TRIM knob, and the 15 Phillips-head screws that hold the panel on. Then you can just lay the front panel on the bench in front of you and gain access to the microswitch that is causing the problem. It is attached to the FUNCTION switch.

The clicking relay you hear is the antenna relay which is operated when setting the FUNCTION switch to STAND BY, the radio should NOT be left in the STAND BY position ever, the B+ raises to a possibly damaging level.

While you're in there put some oil on the transmission gears, the knob bushings, and anything else that looks like it moves, or moved at one time.

Then clean, clean, clean, do a very careful visual inspection of everything, smell for trouble spots, look for smoke trails, oil anything that moves, and clean, clean, clean.

Ya' see, this will be the best way to get familiar with the beast. Just look at that gear train! Have you ever seen anything like it? Smart guys built that! Joe

From r390a@rcn.com Wed Jun 18 01:14:05 2003

Subject: [R-390] need help

Sounds like you have trouble with the microswitch that the Function Control operates. This is a common failure mode and its remedy is covered in Wei-Li's excellent 'Pearls of Wisdom' under (not surprisingly)

'Power Switch'. <http://www.r-390a.net/Pearls/>

From odyslim@comcast.net Wed Jun 18 01:16:34 2003
Subject: [R-390] need more help

Okay, Does anybody have a function switch for sale. Thanks, Scott

From Barry Hauser <barry@hausernet.com> Wed Jun 18 02:15:23 2003
Subject: [R-390] need more help

I can see you're new aroun' here.

It's not the function switch, and they're generally not for sale as a matter of principle. Most other parts are for sale, but not function switches. You can buy a panel with some stuff hanging on it, but not a function switch. And if you buy a panel, the microswitch may well be bad on it.

It is the microswitch on the function switch assembly that you need but you don't need it yet and you can't have one yet.

It is in the hallowed tradition of R-390-ers (both A, non-A and hybrid) to first attempt a fix of any defective part. While it is customary outside this circle to treat a microswitch as a "sealed unit", such notions are eschewed, discouraged and basically run outta town on a rail, in these parts. That would be like stopping cold in one's tracks when encountering the dastardly challenge: "Do Not Open. No user serviceable parts inside. Refer to a qualified technician."

Most likely the contacts have fused in the microswitch. Before I forget, make sure the screwdriver operated switch in the back is turned to "Ovens Off". Don't ask, just do it and read up on it later.

So, unplug the receiver from the AC outlet, drop the panel (according to procedure) and put an ohmmeter across the the microswitch terminals. Operate the switch from off to standby to AVC, etc. When going from off to the other positions, it should go from open to nearly zero ohms. Most likely, it will read zero ohms in all positions.

If so, it's either because the contacts have become fused or the microswitch position is not properly adjusted, such that it's always on. Or perhaps, there may be some gunk around it that needs to be cleaned away. See if you can make it make/break the connection by some studious fiddling. (Fiddling is a form of tinkering, and this is also required)

Does it click at all? If it just needs to be adjusted, that will be obvious. If not, the next step is to remove the microswitch, take it apart, being mindful of airborne springs, and free up the contacts. Then burnish them with a stick or something and treat them with some DeOxit (which you are required to have). Reassemble and test. Some of them are put together with small screws others are riveted, presenting a minor challenge to the determined man with a drill. Replace the microswitch, and carefully adjust position so that it now works. If you had to drill out the rivets, replace with suitable screws and nuts.

Once you've tried all that and it still doesn't work submit a full report, have it notarized, and then come back.

(Some people here and there have NOS microswitches. Maybe Dave Medley. Maybe Hank (Dan) Arney, or maybe you can get a used one from Fair Radio. I have two NOS switches, but you can't have

'em.

Y'see Scott, to better understand and get properly indoctrinated, follow this guide: An R-390 guy needs to fix a loose plank on his deck. Needs two 10-penny nails. Down to his last two, but one is bent and the other is broken in half. Go to Home Depot Naaaahhhhh! Ace is the Place NOPE! Straighten out the first one and weld the other one back together. OK, a little grinding to get it smooth enough to drive in.

It's not so much the money, more like the guy who climbs the mountain "because it's there". Heck, we'll even fix gassy tubes. The broken ones are more of a challenge because it's tricky to re-fuse the glass fragments, and then a bit dicier to replace the vacuum. Barry PS did you read the "Pearls"

From jamesmiller20@worldnet.att.net Wed Jun 18 03:43:34 2003
Subject: [R-390] need more help

I have a replacement microswitch left over from a past repair, but you will have to disassemble your function switch and replace the microswitch. That's not hard, however. Jim N4BE

From hankarn@pacbell.net Wed Jun 18 03:59:45 2003
Subject: [R-390] need more help

I still have the NOS micro switches. \$12.50 each mailed in USA. Hank KN6DI

From jlkolb@cts.com Wed Jun 18 06:23:35 2003
Subject: [R-390] R-390A Mechanical Filter replacement

wrote: > Apart from the windings at each end of a mechanical filter - how do they fail ? Are the Kokusai type which use piezo crystals as bad or worse ?

The Kokusai MF-455-10AZ, used in the frDX-400 and similiar vintage receivers has a failure rate perhaps approaching 100 % from the foam in the filter decomposing. The good news is that they are dasy to open and repair. <<http://members.cts.com/king/j/jlk/site/koku.htm>>

I haven't heard of any problems with the transducers on the filter. John

From cbscott@ingr.com Wed Jun 18 14:08:11 2003
Subject: [R-390] need help

Scott, My first R390A did the same thing. The tiny "button" on the microswitch was stuck in the "down" position. I moved it a bit further down with a flat instrument and let it snap back out a couple of times. It was fixed. Easy. If yours doesn't come back to life that easily, then you might have to disassemble and fix as others have suggested or buy a replacement. Good luck, Barry(III) - N4BUQ

From bill@iaxs.net Wed Jun 18 16:17:18 2003
Subject: [R-390] need help

Think the relay clicking sound is caused by the DC part of the function switch. As you know, the

microswitch is probably stuck on. But this is not something that you need to fix. Nolan ran his sets all the time (24-7) and it was 10 years before he had a tube fail. So let it run ten years - or until there's nothing left to listen to with an analog receiver. Regards, Bill Hawkins

From redmenaced@yahoo.com Wed Jun 18 16:55:24 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Barry? Run this one through the drill, too! Joe

From flood@Krohne.com Wed Jun 18 17:32:16 2003
Subject: [R-390] R-392 available - needs work

Greetings, This lonely R-392 was just down the road from me and I couldn't resist so it followed me home last week. I'm now in need of the crystal cal module, AF module and IF module, so I was told. A power and audio connector would be nice as well. It looks nice outside and has the meter! There may be other things as well as I have not had a chance to open it up yet. (it's still in the back of the car waiting for my wife to go out long enough to sneak it in) I'd thought I'd ask here before I went to Fair Radio. Not sure when I'll get to it and it is my first R-392 so I figured it best to put out a posting to see who has what for parts as well as who here is into the R-392 to see if I can join the super secret society. At least I don't have to worry about an "A-nonA" thing with this radio! John Flood KB1FQG

From R390rcvr@aol.com Wed Jun 18 17:51:53 2003
Subject: [R-390] Differences between CV-591 and CV-1758

Good afternoon all: Can anyone tell me the functional difference between a TMC CV-591 and TMC CV-1758? On the surface they look very similar, and the description on the FAQ site is the same. Thanks Randy

From ghayward@uoguelph.ca Wed Jun 18 18:17:35 2003
Subject: [R-390] R392 needs work.

The R392 is hermetically sealed so the inside will likely be in pristine shape (no dessicated critters) but there's a gotcha. The R392 IF and AF modules aren't separate units! I got an AF module from Fair Radio and there's a bundle of coax that came from the IF area that was snipped. I got what I needed from it, but I couldn't use the module as a swap in. I think the whole lower deck is a unit. That's one aspect where the 390 (any variant) is much superior. Gordon L. Hayward

From barry@hausernet.com Wed Jun 18 18:26:22 2003
Subject: [R-390] R-392 available - needs work

John wrote: > This lonely R-392 was just down the road from me and I couldn't resist so it followed me home last week.

Uh-huh, I see ... The seem slick on the bottom, but really have millions of tiny caterpillar feet.

> I'm now in need of the crystal cal module, AF module and IF module, so I was told.

Whoa .. sounds like you're really short on modules there, John.

> A power and audio connector would be nice as well. It looks nice outside and has the meter!

Those are obtainable. You could haywire 3 leads to the power connector -- actually two filament and B+ are generally jumpered for +28 vdc and one is ground. Best to pick up an LS-166 matching speaker. Sound quality is not too terrific as it's waterproof and concussion resistant (not much audiophile compliance in the surround or spider), but it is plug 'n play and comes pre-assembled with the correct connector. Has a small 600 ohm matching transformer built in.

> There may be other things as well as I have not had a chance to open it up yet.

Sounds like it was an organ donor, but I'm surprised the meter survived. I'd suspect you're missing some shafts and/or shaft couplings at least -- stuff that falls loose when the module gremlin absconds with the modules.

> (it's still in the back of the car waiting for my wife to go out long enough to sneak it in)

Aahhh yessss, the old "boatanchor shuffle", I know it well. That's one of the reasons to have more than one. "Is that another one of those ugly smelly radios?!!!", "No, dear, it's the same ol' one, just hauled it out of the garage to work on it, heh heh." Fortunately, She-Who-Must-Be-Obeyed doesn't read tags and serial numbers. Actually, you need at least three of each one to play, one to tinker with, and another as a decoy ;-). Also, the R-392 fits pretty well in one of those "banker's boxes" with the cutout handles and the lid, though the lid won't completely close. So they can be hidden in plain sight. Mark the label area of the box with something innocuous and deceptive, like "Tax Files Save 100 years".

> I'd thought I'd ask here before I went to Fair Radio. Not sure when I'll get to it and it is my first R-392 so I figured it best to put out a posting to see who has what for parts

Fair may have some stuff and might not have a few items, depending. It's a bit premature as you need to more completely evaluate what's missing. It may have been more randomly cannibalized with lots of small unobtainiums missing.

> as well as who here is into the R-392 to see if I can join the super secret society.

Can you do the secret handshake?

> At least I don't have to worry about an "A-nonA" thing with this radio!

Well, I dunno. Sounds like you got an R-392-(Minus) A-C-I(?)

You might get lucky, but this radio is probably like most things, the whole is cheaper than the sum of its parts. Most I've come across are intact/complete give or take a small part. Not a particularly good sign that it was an obvious organ donor. As with humans, even though they sign the back of their driver's licenses, you can't harvest any useable parts unless the prospective donor has gone SK.

Good luck in your quest. Do you have a manual? If not, you can download one from several sites. Paul Rovero has some nice, informative web pages on the subject. Barry

From barry@hausernet.com Wed Jun 18 18:30:17 2003
Subject: [R-390] need help

Bill sez: > Think the relay clicking sound is caused by the DC part of the > function switch..

That's right! Easy fix is to run it off a power strip if you don't want to go 24/7. Sometimes when you re-hab a microswitch, burnish the points, etc, it fuses up again quickly due to worn plating. Might even produce some noise. If it's fused, it can't do that. Barry

From ghayward@uoguelph.ca Wed Jun 18 18:56:32 2003
Subject: [R-390] the old "boatanchor shuffle"

>> (it's still in the back of the car waiting for my wife to go out long enough to sneak it in) > >Aahhh yessss, the old "boatanchor shuffle",

My wife is VA3LWH so all I have to do is point to the pile of 6m trancevers that she scrounged and I'm home free! On the other hand, my shack is full (really full!). The thought of another 390A or a T195 brings fear to both of us. Cheers de Gord, VE3EOS.

From jtone@sssnet.com Thu Jun 19 02:42:23 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Gents, and Joe...(yea...ur a real Gent too Joe!)

Seriously, have seen no source for such motor over the past several years of watching the reflectors and the fests...but... Just wondering if a motor from an ART-13..might work?? Strickly a guess and possible "last chance"sometimes the ART'y shows up for parts...?? Just a thought... Gene

From ToddRoberts2001@aol.com Thu Jun 19 02:46:37 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Just an idea. If it is impossible to find a replacement motor for the R-391 could there be some kind of a motor shop that could rebuild it? If it has a burned out armature or something maybe some kind of specialist could rebuild it? Might be worth looking into? 73 Todd Roberts WD4NGG.

From redmenaced@yahoo.com Thu Jun 19 02:57:17 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

> Seriously, have seen no source for such motor over > the past several > years of watching the reflectors and the > fests...but...

>

++++++

If we get a better description of the motor's condition we can determine if it's repairable, or maybe parts can be substituted. Joe

From barry@hausernet.com Thu Jun 19 02:59:36 2003

Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Which Barry? Gene I assume you have a bad motor? What's wrong with it?

There are rumors of motor mechanics hither and yon who can rebuild these things. If I'm not mistaken, one of mine is made by Hamilton Beach. It may well be an adaptation of something more generic, like a MixMaster or other appliance motor converted made for 24-28vdc. Maybe some kind of 24v truck wiper motor? The trouble is that its design is from the late 40's/early 50's.

The R-105(a)/ARR-15's have a similar motor, but I think it's smaller and less powerful. Some tuning modules for the APR-4Y (four band 20 Mhz to 1 Ghz) have a "scanner" motor, but I don't recall the voltage. The receivers were originally AC/400 cycle, but I don't remember whether there was a separate DC feed for the motor or if it was AC.

It's possible your existing motor may be rebuildable. Many old ones have to be rebuilt anyway new brushes, commutators turned down and back cut, bearings, etc. Barry

From jtone@sssnet.com Thu Jun 19 03:54:47 2003
Subject: [R-390] need more help

Barry, once againHooo Raaa...

Too bad there arn't more out there with the 'can do spirit...'

btw...most of my pets are turned on and off with external switchces...via variacs..just for the fun of watching all the V and A meters work...so far no biggies with the micro switch...and yes...they can be rebuilt...with 'fiddling, tinkering, and appropriate excerpts from the "Marine Language Manual" for all occasions...and a few "807's to add to the fun... Gene

From w5or@comcast.net Thu Jun 19 04:15:26 2003
Subject: [R-390] Differences between CV-591 and CV-1758

Randy, There are some circuit differences. I'd say the CV-1758 is the improved version internally. The CV-591 and CV-591A are based on the TMC MSR-1 and MSR-4, respectively, and the CV-1758 is based on the TMC MSR-9. Those models span a life time of mid 50's to mid 60's.

Functionally, they are the same, and the interconnect diagrams are the same to your R-390 or other 455KC IF receiver. The CV-1758 has an additional front panel switch for a limiter on/off and a slightly different scheme to select upper/lower sideband. Don Reaves W5OR www.militaryradio.com

From eldim@worldnet.att.net Thu Jun 19 06:51:55 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Hello Gene, How about a Part Number or any info from the manual that I could research to see if I can help with your dilemma on the R-391 Motor? Best regards, Glen Galati, KA7BOJ

From eldim@worldnet.att.net Thu Jun 19 07:08:09 2003

From: eldim@worldnet.att.net (Glen Galati)
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Hello Gene, Another thought just passed my mind regarding the motor for your R-391! Could it use the same motors that are in the R-389? I do not have a manual on the R-391. If so, I have a R-389 manual that I could check and if it the same I could, GOOD GRIEF-SAVE MY SOUL, cannibalize my 389 to get the motor you need. Of course you would have to sign your life away, and will me all your boatanchors, radio equipment, tools, and any hidden treasure. Could this be a winner? On a serious note, I can research this part and get you a status if it is anyone inventory. 73, Glen

From pha@pdq.com Thu Jun 19 12:14:52 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

wrote: > If we get a better description of the motor's > condition we can determine if it's repairable, or > maybe parts can be substituted. > > Joe

I'm pretty sure Bob is missing the motor - he bought an eBay R-391 that had no autotune motor.

Fair Radio has "similar" hamilton beach motors that are about half the power. They have exactly the same mounting and spur gear. The inputs appear to be the same. You'd need a very slick and smoothly operating R-391 to run it with half the power, however. I believe these motors are from the T-195, which has a number of autotune components.

I have several R-391's, and am still writing an article about restoring the autotune, including the motor. Rebuilding the motor is pretty easy.

Here are the specs that I have for the motor:

I have what appears to be several different Hamilton Beach motors that are used in several of my R-391's: ALC-1000 28.5VDC 3100 RPM, 1/10 HP, or ALC-1000 28.5VDC 5800 RPM, 1/15 HP electric motor. I believe that both have the same Collins drawing number: 230-0155-00. The motor brushes are both Hamilton Beach part # AUG-61 (21/64 long by 1/4 wide). The ball bearings are two different types: 36KDD and R4FF (about \$7 or \$8 each). Paul

From courir26@yahoo.com Thu Jun 19 13:07:22 2003
Subject: [R-390] Re: [Milsurplus] Wanted - Auto-Tune Motor for R391 Receiver

Could it be possible that it used the same motor as other Collins autotune radios such as ART-13? I had an autotune radio once that had a motor made by a blender company. Tom

From dpq@coe.neu.edu Thu Jun 19 08:21:44 2003
Subject: [R-390] A couple of R-390A available

Anybody here been to the MIT Flea? I went, and bought some tubes from Bob McTeague the tube and old parts guy. He's always got what I'm looking for (new 6C6 and 6D6). Well, I was talking to him about getting 5651 tubes, and he tells me that a couple of R390A would like a new home, for a reasonable price.

1. R-390A with a special SSB mod supposedly done by the military, replacing the BFO knob with a new escutcheon labeled LSB - USB.
2. R-390A in original cabinet, sold to local school system after manufacture.

He told me that the radios are complete, but I didn't hear if they worked. My attention was on a Millen Grid-Dipper. So, why don't you call him to find out?

Bob McTeague (781)643-3567

Tell him I sent you. BTW, does anybody on this list have National RAS parts? Dave Goncalves, N1XZB

From jbrannig@optonline.net Thu Jun 19 14:07:08 2003
Subject: [R-390] A couple of R-390A available

When and where is the MIT flea? I will be in Boston on a regular basis.

BTW go for the Millen GD meter, none better.....

From gkaufman@the-planet.org Thu Jun 19 14:20:05 2003
Subject: [R-390] MIT Fleamarket

MIT Flea is the third sunday april to october on Albany Street in Cambridge. Sadly, the amount of ham and tube gear has fallen off steeply in the past few years. Still fun and there are a good group of "regulars". Just be prepared to trip over lots of computer junk.

The NEARC (Nashua NH) radio show can be fun btw, much more tube gear per sq. foot. Only about 50 minutes from Boston. The best in the area is HossTraders imho. '73 Gary KB1FBI

From dp@coe.neu.edu Thu Jun 19 13:04:20 2003
Subject: [R-390] A couple of R-390A available

Info on the MIT Flea is here: <http://web.mit.edu/w1gsl/Public/flyer>

Basically, it is held near MIT on the 'penultimate' Sunday of the month. Next one is July 20. There tends to be alot more computer and other requipment then radios and parts. I go there to get parts myself, finally got everything I need for the R-390. See you there. Dave Goncalves, N1XZB

From odyslim@comcast.net Fri Jun 20 00:57:43 2003
Subject: [R-390] micro switch fixed

I would like to thank everybody for the help. My problem was indeed the microswitch. I went to the Pearls Page, read the instructions and took the front panel right off. It was much easier than I thought. It took about 5 minutes to fix the switch and another 10 to put it back together. 5 more to take it back apart and tighten the zero adjust thingy and then 5 more minutes to put it back together again. Not too bad for a rookie. It was a lot of fun actually. Thanks again for all of the help. Scott W3CV

From r.tetrault@attbi.com Fri Jun 20 02:21:20 2003
Subject: [R-390] micro switch fixed

You have ventured out onto the tip of the iceberg... Bob Tetrault Portland, OR

"Outside of a dog a boatanchor is a man's best friend, Inside of a dog it's too low an impedance." - latter day Twain

From cfandt@netsync.net Fri Jun 20 02:41:02 2003
Subject: [R-390] micro switch fixed

He says it was a lot of fun . . . Looks like we got him fellas! Christian Fandt

From redmenaced@yahoo.com Fri Jun 20 02:54:01 2003
Subject: [R-390] micro switch fixed

YUP! He's a goner, he's hooked. Someone get him an R-391. Joe

From barry@hausernet.com Fri Jun 20 04:01:05 2003
Subject: [R-390] micro switch fixed

Right-o! Scott has been transmogrified. Beyond rookie, knob-twister, tube jockey ... Once you drop an R-390(A) panel, there's no turning back. Can a full gear train teardown be far behind?

Willing to bet that within six months to a year, some pilgrim will come along posting "Hey guys, my radio won't shut off !". Within 10 minutes, Scott will be on the 'net with the answer.

Speaking of R-391's, hope to have the HSN autotune edition out in a month or two, so he'll be able to rebuild one of those too. Barry

From hankarn@pacbell.net Fri Jun 20 14:36:02 2003
Subject: [R-390] micro switch fixed

It is always nice to order something then back out. Hank KN6DI

From flood@Krohne.com Fri Jun 20 15:17:13 2003
Subject: [R-390] micro switch fixed

Scott, I have good, bad, good , and more bad news for you.

Good: Great job in the repair

Bad: Now you are sucked into the black hole of R-390 series addiction. I gave up the drugs and seriously cut down (note did not give up) the drinking of my youth but the lust of the 390 still hangs on

Good: You'll continue to have fun!

Bad: You have now made me feel bad that one of my units has a stuck switch and I have not yet done anything about it other than a small tap from a rubber hammer on the front panel. A former Army service tech, name withheld as part of the witness protection program, told me that was his preferred method of switch repair when he was busy. John Flood

From flood@Krohne.com Fri Jun 20 16:04:58 2003
Subject: [R-390] R-392 available - needs work

Barry, Some times I post things just to see your replies!

I'm going to get another LS-166 speaker. I have one from the dumpster at a local reserve base. No connector and the transformer was bypassed. I rewired it and now use it on a CEI surveillance receiver. I'm sure you can newer have enough speakers that have 600 ohm input possible. I agree that this will take some TLC to get back up alive. Worst case if I get an ugly working unit in the future I'll have this nice clean case, front panel and a spare VFO. Now I need a 24vdc vehicle to put it in! John Flood

> This lonely R-392 was just down the road from me and I couldn't resist so it followed me home last week.

Uh-huh, I see ... The seem slick on the bottom, but really have millions of tiny caterpillar feet.

> I'm now in need of the crystal cal module, AF module and IF module, so I was told.

Whoa .. sounds like you're really short on modules there, John.

> A power and audio connector would be nice as well. It looks nice outside and has the meter!

Those are obtainable. You could haywire 3 leads to the power connector -- actually two filament and B+ are generally jumpered for +28 vdc and one is ground. Best to pick up an LS-166 matching speaker. Sound quality is not too terrific as it's waterproof and concussion resistant (not much audiophool compliance in the surround or spider), but it is plug 'n play and comes pre-assembled with the correct connector. Has a small 600 ohm matching transformer built in.

> There may be other things as well as I have not had a chance to open it up yet.

Sounds like it was an organ donor, but I'm surprised the meter survived. I'd suspect you're mising some shafts and/or shaft couplings at least -- stuff that falls loose when the module gremlin absconds with the modules.

> (it's still in the back of the car waiting for my wife to go out long enough to sneak it in)

Aahhh yessss, the old "boatanchor shuffle", I know it well. That's one of the reasons to have more than one. "Is that another one of those ugly smelly radios?!!!", "No, dear, it's the same ol' one, just hauled it out of the garage to work on it, heh heh." Fortunately, She-Who-Must-Be-Obeyed doesn't read tags and serial numbers. Actually, you need at least three of each one to play, one to tinker with, and another as a decoy ;-) Also, the R-392 fits pretty well in one of those "banker's boxes" with the cutout handles and

the lid, though the lid won't completely close. So they can be hidden in plain sight. Mark the label area of the box with something innocuous and deceptive, like "Tax Files Save 100 years".

> I'd thought I'd ask here before I went to Fair Radio. Not sure when I'll get to it and it is my first R-392 so I figured it best to put out a posting to see who has what for parts

Fair may have some stuff and might not have a few items, depending. It's a bit premature as you need to more completely evaluate what's missing. It may have been more randomly cannibalized with lot's of small unobtainiums missing.

> as well as who here is into the R-392 to see if I can join the super secret society.

Can you do the secret handshake?

> At least I don't have to worry about an "A-nonA" thing with this radio!

Well, I dunno. Sounds like you got an R-392-(Minus) A-C-I-(?)

You might get lucky, but this radio is probably like most things, the whole is cheaper than the sum of its parts. Most I've come across are intact/complete give or take a small part. Not a particularly good sign that it was an obvious organ donor. As with humans, even though they sign the back of their driver's licenses, you can't harvest any useable parts unless the prospective donor has gone SK.

Good luck in your quest. Do you have a manual? If not, you can download one from several sites. Paul Rovero has some nice, informative web pages on the subject. Barry

From barry@hausernet.com Fri Jun 20 17:20:46 2003
Subject: [R-390] R-392 available - needs work

wrote: > Some times I post things just to see your replies!

Heck that's what I'm here for. Actually I must confess. I'm an agent of the International Cyberspace Consortium. We monitor various lists and post interesting or amusing replies to maintain interest levels in the Internet. Group was founded in the wake of all the "dot.com" failures a couple of years ago. Have to run in a minute to go post something to a paleontology list, just as soon as I can verify the spelling of pteradactyl. Some of our agents are trying to locate and recruit that Iraqi information minister. Anyone who could deny the presence of American troops with a tank gun barrel aimed where the sun don't shine, we feel, is eminently qualified. (The preceding is a total fabrication provided for entertainment purposes only. However, in the process of developing material from "whole cloth", some factual data may be incorporated either intentionally, or completely by accident.)

>

> I'm going to get another LS-166 speaker. I have one from the dumpster at a local reserve base.

A-hah! A dumpster diver! You may qualify for the Boatanchor Medal of Desperation and Subsequent Valor.

No connector and the transformer was bypassed. I > rewired it and now use it on a CEI surveillance receiver.

Uh-oh! If it's the CEI/WJ type of rack mount receiver I have in mind, well ... it's not green. <sigh> so

much for the medal.

I'm sure you can

> newer have enough speakers that have 600 ohm input possible. I agree that > this will take some TLC to get back up alive.

I guess you mean the '392. LS-166's are fairly cheap and also available in "unused" condition, if not NIB.

Worst case if I get an ugly > working unit in the future I'll have this nice clean case, front panel and > a spare VFO. Now I need a 24vdc vehicle to put it in!

Or you can wire two 12 v. vehicles in series, but the auto manufacturers tend to frown on this. A bit awkward to actually drive them that way also.

The "boatanchor shuffle" doesn't work so well when acquiring big green trucks, or personnel carriers. I've always wanted a DKW (duck). I think this would make a real, uh, statement ... in the driveway.

Again ... good luck on your quest. Barry

From k06bb@elite.net Fri Jun 20 17:39:42 2003
Subject: [R-390] Does this sound like a reasonable deal?

Hi. Hi.

I've been made an offer for a swap on the SP-600JX17 that I just recently overhauled. It is a VERY clean SP-600, plays well but the face is probably only about a 7.5. The following receiver is supposed to have been "gone through" and plays well. NATURALLY I'll do a COMPLETE "go through" myself, replacing any doubtful caps, cleaning the gear train and so forth. He said the name tag says Collins though everything else except the AF deck are EAC. So, I can presume that it's an early model (weren't the Collins name tags a different size than the later ones) that has been through a depot (a depot dawg GRIN). QUESTIONS.

1. Does this sound like a reasonable deal from my viewpoint?
2. How much does the indicated case (new?) add to the overall value of the set?
3. How do you best cool this beast if it's in the cabinet, multiple fans?
4. This would be R-390A number 5 or 6 (lose count) that I've had/restored. Are they addictive or what??

Here are the particulars on the R-390A.

>> I have a EAC R390A rx in very good condition in a Mac out of the box table top case .The case is the CY 929.All modules except the AF are EAC. If you unload the SP600 keep me in mind

>>actually a few years back Mac Mc Collough from the R 390 list found a warehouse full of these table top cabinets that were designed for the R 390A.Radio slides into case on skids on the interior .Rear of case opens only enough to utilize connectors.Sides and top of cabinet are louvered and the louvers are covered with Fine metal wire mesh.Cabinet has 4 large shockmounts which are inturn mounted on two Ski-like metal rails that form the base.The EAC is #4563 has all appropriate tube shields and meters.Comes w alt covers top and bottom and is cosmetically akin to the EAC I recieved from you 73 de Phil, KO6BB

From odyslim@comcast.net Fri Jun 20 23:56:59 2003
Subject: [R-390] micro switch fixed

Hank, I never ordered anything from you OM. Did you send this to me in error?

From g4gjl@btopenworld.com Sat Jun 21 17:38:38 2003
Subject: [R-390] R-392 Moisture

Thanks to all those who engaged in this one, two weeks or so ago. I re-opened the RX on a hot day and ran it for about 4 hours. Subsequently I re-closed the case and tightened all the fasteners. So far there has been no recurrence of visible moisture in the tuning window :-) 73 all Pete

From g4gjl@btopenworld.com Sat Jun 21 17:50:32 2003
Subject: [R-390] R-392 Performance on Loop antenna

I have been playing with a 1 metre square loop antenna soldered up from 15mm water pipe lengths. I use a 1000pF cap to tune (it runs 2700 to 14500kc barefoot) and I add a parallel pair of 1000pF 10kV caps to take it down into top band.

As the R-392 has been out to play with on the bench for a few weeks, and I am running it from a 30 vdc accumulator, I decided to try the loop on the r-392.

The performance is astonishing!

The loop delivers enough rf to overload the '392 on 4000 to 6000kc after darkness has fallen. Performance is excellent over the entire range with topband noise (a real problem here) reduced to very low levels. The directivity and the e-wave noise immunity contribute to its performance and off set the lower signal levels it delivers to the RX load.

To anyone wishing to use HF receivers in a noisy or no-antenna environment I would recommend using loops they are easy to build and most effective buck (£) for dB. BTW there is no hi-Z amplifier between the loop and the RX....just a screened single turn of coax and an inductive coupling link.

I will take the 392 out to a rural noise free location on batteries with the loop to see what the performance under those conditions is like in the next week or two. The results will be posted later. 73 Pete G4GJL

From mark.richards@massmicro.com Sat Jun 21 19:49:45 2003
Subject: [R-390] R-392 Performance on Loop antenna

Peter, Do you have a photo of your creation? Please consider posting it somewhere (or I will host it for you). Sounds like a neat project. Mark K1MGY

From k06bb@elite.net Sat Jun 21 21:22:46 2003

Subject: [R-390] R-390A on LF.

Hi. About a year or so back somebody sent me a modification for the R-390 that allowed it to tune well below 500kc (down to about 10Kc or less). As I recall the "mod" was a simple one consisting to one inductor and two capacitors that tied to the first mixer cathode. It seems I recall that it was a "Barry" who sent me the mod, though Barry Hauser says it wasn't him ;-)

Anyway, to make a short story long, I can't find my copy of that mod anywhere, though I could swear that I kept it. If anybody has it and could send it as an attachment I'd sure appreciate it. This time I WILL burn it to a CD I have set up specifically for the R-390A. 73 de Phil, KO6BB

From theprof@texoma.net Sat Jun 21 23:55:09 2003

Subject: [R-390] R-392 available - needs work

> I'm going to get another LS-166 speaker. I have one > from the dumpster at a local reserve base. 73 de Richard, WBSRB

Aha, a fellow member of NORADD, the National Organization of Radio Amateur Dumpster Divers....

From ba.williams@charter.net Sun Jun 22 01:37:22 2003

Subject: [R-390] R-390A on LF.

Phil, It was me. Contact me and I'll send it one way or the other. Barry Williams p.s. CLE results last night were abysmal.

From g4gjl@btopenworld.com Sun Jun 22 12:20:22 2003

Subject: [R-390] R-392 Performance on Loop antenna

Hi, Gregory, and thanks for your interest.

You are right theat the R-392 will work on 28vdc, but the extra volt or two on the 'HT' improves sensitivity with only a minute reduction in noise factor.

The R-392 Heaters are fed from a 28 volt tap on the accumulator. This is normal practice and is allowed by the Military in one of the handbooks.

I charge my accumulator stack on cheap power at night and use it during the day. It also serves to power my Collins 18S-4 100Watt AM rig!

The loop consists of 3 x 1 metre lengths of pipe, joined at right angles to form a u shape. The fourth side closes the U to make a square with a gap in one side with two pieces of pipe about 0.45 metre each, again attached by right angle elbows, so there is a gap in the centre of one side. Here I mount a 1000pF airspaced variable Cap.

The coupling is done in coax and consists of a 1 metre length of coax connected to a tee piece at one end, by a normally terminated coax plug. The other end is terninated (unusually) in a coax plug, but with the inner of the coax cable connected to the outer body metalwork of its plug. This is then returned to the second socket on the tee piece. This forms a screened single turn pick up

coil.

I used BNC coax fittings throughout.

I sweated a machine screw onto the rear of the tee piece and fixed it to a plastic pipe clip. I attached another pipe clip to the coax cable with a small plastic 'P' clip. Thus the pickup loop is supported by two points by clipping it onto the 15mm copper pipe forming the main loop.

The third socket on the tee piece goes via a normal coax to the RX antenna socket.

Theory says that the loop should be positioned opposite the capacitor arm of the main loop. In practice I have found it makes no difference where it is placed, except that the antenna is easier to handle if it is placed lower down due to lower centre of gravity. I will re-test this findind in open space away from metal objects to see if the theoretical prediction holds where the field is more natural around the antenna.....need the field trip for that one! 73 Pete

From Forrest Myers" <femyers@attglobal.net Mon Jun 23 02:31:19 2003
Subject: [R-390] Proud owner

Hello All, I'm now the proud owner of an R-390A/URR. Bought it today from Don Reaves in Little Rock. It works but I am going to check a few things on it before using it. Found out that my workbench is too weak and too small. The R-390A takes up most of the room on it and causes it to wobble somewhat. Need to do something about that too, ASAP! Forrest Myers AG4ND

From k06bb@elite.net Mon Jun 23 03:27:39 2003
Subject: [R-390] Proud owner

Yep, every radio room should have a bench heavy enough to hold a few good boatanchors. When I first bought this mobile home the first thing I did was remove the doors off the 8 foot closet and put an 8 foot long counter top in it for the listening post. Well constructed with two by fours and heavy laminated counter top it's not your usual piece of furniture. It was immediately "broken in" by setting an R-390A, SP-600, Ranger Transmitter and Icom R-71A receiver on it, all at the same time. It didn't even budge!!

On another note, I had intended to install an identical bench on the other side of the small room to use as a repair bench. Three years later I'm still using the small Formica dining table that bows slightly under the weight of an R-390 or similar rig.

Moral of the story? When you move into new quarters, IMMEDIATELY set up the radio room first, THE WAY YOU WANT IT! 73 de Phil, KO6BB

From barry@hausernet.com Mon Jun 23 03:53:34 2003
Subject: [R-390] Proud owner

wrote: > I'm now the proud owner of an R-390A/URR.

Many happy returns of the day, but you need to provide more info what mfr. & contract? Do the modules match (mostly)? 26Z5W's or diodes? Diode load jack? Ballast tube or modded? Got its Utah cover? Gotta give us somethin' to chew on.

> Bought it today from Don Reaves in Little Rock. It works but I am going to check a few things on it before > using it.

Is that our Don Reaves? You're gonna check a few things 'cause it's customary do so, right?

> Found out that my workbench is too weak and too small. The R-390A takes up most of the room on it and causes it to wobble somewhat.

You sure that's a workbench? You wouldn't be usin' the dinette set would ya'?

I've got regular workbenches, but prefer the height of the conference room table. Unfortunately, '390's are Formica friendly NOT. Have to remember to put down some cardboard first. ;-)

You're gonna need some 4 X 4's (in addition to the one in the driveway), or maybe some cinder blocks.

If you're really tough, you can balance the radio on your knees, but might develop some funny lookin' lines on your legs, so no more Bermuda shorts. Good luck we'll be expecting a full report. Barry

From Forrest Myers" <femyers@attglobal.net Mon Jun 23 13:17:54 2003
Subject: [R-390] Proud owner

Thanks for all the responses to my note to the list.

As far as the work bench goes, I really do believe it is a solid state workbench and will have to be upgraded to something more basic and substantial. Yup, I got it from the Don Reaves in Little Rock. It seems like a very nice radio and is in decent shape considering how old it is. Don't know who built it, contract number or anything like that. There is no name plate on it. Don speculated who the manufacturer might have been but, with information overload on my part, I forgot who it was. It wasn't Collins though.

Don has pictures of the radio on his web site. It is the one numbered 557.
<http://militaryradio.com/FS2003/> . The ballast tube is still there. The power supply has a mod that removed two tubes. It will take me a while to figure out the mods and, perhaps, who built it. I used R390's ,both A and non A, as well as R391's while in the US Army back in the early 60's. It's been a while. It will take me some time to get back up to speed. More information and lots of questions as I go along. Cheers and 73 Forrest Myers AG4ND

From robert_h_goff@hotmail.com Mon Jun 23 23:39:30 2003
Subject: [R-390] TCS-5 manual (somewhat OT)

Does anyone out there have a manual for the Collins TCS-5 that they would be willing to lend me for a couple days for copying or scanning? I see that Fair has the manual for the 7-12 models, but I'm not familiar enough with the different series to know what differences there might be between the -5 and -12 model. I would of course pay for any mailing costs etc. Thanks, Robert Goff W7MKA

From ba.williams@charter.net Tue Jun 24 01:30:03 2003
Subject: [R-390] Manual help needed

I bought a Masco ME-32 amp today for \$20. It looks to be in excellent condition. Luckily, it uses 6L6s instead of the almost unobtainiums. Found 2 black beauties and one brown beauty in it, but very clean and well taken care of. I searched all of the usual sites for a manual with no luck. Can anyone help? Thanks, Barry (the other other one)

From ba.williams@charter.net Tue Jun 24 01:36:28 2003
Subject: [R-390] Proud owner

>> Found out that my workbench is too weak and too small. The R-390A takes up

My main workbench is an interior door from Lowe's. It cost around \$21. I got the one that is not drilled for door knobs. It holds a lot of heavy things. I wouldn't hesitate putting 4-5 boatanchors on it. You can put it on sawhorses okay, but I have 2 nonworking small refrigerators for support. The fridges make good storage areas too. Very sturdy and very economical. (g)

I have a monster bench out of 4x4s in the basement, but I don't do much work down there. Maybe Hanta virus carriers are lurking around there! Barry

From tplaninac1@charter.net Tue Jun 24 01:46:28 2003
Subject: [R-390] Proud owner

you bes git them reefers running sos you can put yer beer in thar..... Tony

From jtone@sssnet.com Tue Jun 24 02:46:57 2003
Subject: [R-390] Proud owner

Forrest, Welcome aboard to the world of real radios . . . The motto over here at W8KXR is "If YOU CAN PICK IT UP; IT'S NOT BIG ENOUGH!" Shore up that wimpy work bench and fire up the soldering gun... 73 es keep us posted... Gene

From jlap1939@yahoo.com Tue Jun 24 02:51:09 2003
Subject: [R-390] New Owners, and Old

Friends, Am enjoying the postings from new owners very much..It is most pleasant that so many are interested. I guess it will prove necessary for me to obtain a 392 in the future, (if I live long enough..)

Again, I am pleased that a few were sucessful with SSB tuning on their BA's...

I got my 390 non a back from Dave Medley today and will return it to its' place of honor, right above the SP 600 in my rack, and then,.....who knows..But I assure you I will follow the hams, inc. the AMers..and some contests and some nets..(I know..I should get a ticket...but...I LOVE listening, (..so you never know when I might be listening in.....!))

Still helping the kids down the block with mil. and astro pratice, which they are much better at now than me..(They now own my NRD 515, and have outboards on it...). The older is planning a science project for nxt year of building and using a small radio telescope..Hope it comes off O.K. He is super-sharp, but

I wonder if he really knows what he is attempting...

will explain the repair on my 390 sometime in the future, perhaps, if O.K. with Dave... My Regards,
John (JLAP)

From jtone@sssnet.com Tue Jun 24 03:23:11 2003
Subject: [R-390] Proud owner

Gosh Barry, My last effort found all my benches full of parts and stuff...ended up working on the cellar steps and finally on the floor...ugh...bad for the knee caps but in the case of a truly grand R390A...the pain and asprin were worth it... Darn...had to lift it off the floor too... 73, Gene
Barry Hauser wrote:

From redmenaced@yahoo.com Tue Jun 24 03:19:15 2003
Subject: [R-390] Proud owner

> wrote: > >>> Found out that my workbench is too weak and too > small.
++++++

BA Radios need BA workbenches! I have a '50's grey metal table with the linoleum top. GREY, goes with R-390/T-368 decor! Ok, the bench in the shop is MAPLE! Boatanchor MAPLE! Joe

From k06bb@elite.net Tue Jun 24 03:33:43 2003
Subject: [R-390] Size of CY-929 cabinet?

Hi. I'm looking forward to the arrival of my next R-390A on Wednesday. This one's coming in a CY-929 cabinet with shock mounts etc. It will be the first time I've had such a cabinet. Question. How much tabletop space is this critter going to consume? I presume it'll be a little wider than a "nekid" R-390A. How about depth and height? And lastly, how much actual weight does it add to the receiver. I'm sure that the addition of the case probably brings it up from a boatanchor suitable for a dingy to one at least suitable for a cruiser and possibly a destroyer. Is that the correct naval terms 8^) I was a "wing nut" not a "swabby" for 20 years. 73 de Phil, KO6BB

From ba.williams@charter.net Tue Jun 24 04:07:41 2003
Subject: [R-390] Proud owner

> > My last effort found all my benches full of parts and stuff...ended up working > on the cellar steps and finally on the floor...

My basement is one of those dirt floor jobs with only a small patch with a concrete floor. Bad lighting and no moisture/humidity control. Just ain't right for that kind of work. Barry

From ba.williams@charter.net Tue Jun 24 04:12:23 2003
Subject: [R-390] Proud owner

Yeah. That's right. They don't work and they make pretty heavy duty stands. I keep the beer in real refrigerators. Barry p.s. You may be pushing up pansies soon

From ba.williams@charter.net Tue Jun 24 04:14:33 2003
Subject: [R-390] Proud owner

> BA Radios need BA workbenches! > Ok, the bench in the shop is MAPLE! Boatanchor MAPLE!

I spent 20 years around that stuff, so you can be a wannabe all you like. Maple, smaple. Wood is wood. What kind of Locklear talk is this, anyway? Barry

From k06bb@elite.net Tue Jun 24 04:58:18 2003
Subject: [R-390] URM-90 LCR bridge question (OT)

Hi. I have a line on a URM-90 that I may acquire. My primary interest would be in testing capacitors and inductors. Especially the latter as my DVM does capacity over a limited range but no inductance. Is this a suitable instrument for checking inductors. I downloaded the manual and it mentioned possibly needing an outboard audio generator for certain tests, something I don't have. To keep this message "OT", yes I might use it for testing an occasional coil or transformer in a R-390A 8^) 73 de Phil, KO6BB

From Llgpt1@aol.com Tue Jun 24 02:28:35 2003
Subject: [R-390] Proud owner

writes: > sawhorses okay, but I have 2 nonworking small refrigerators for support.

"Non-working refrigerators?" Are they made by Lucas? Where do you keep the beer? The next thing you will tell us is you are raising Pansies Les

From Jim Shorney" <jshorney@inebraska.com Tue Jun 24 06:44:07 2003
Subject: [R-390] Proud owner

wrote: >BA Radios need BA workbenches! > >I have a '50's grey metal table with the linoleum top.

My workbench holds my Polarad spec analyzer without breaking a sweat. Should handle a tiny 390A...
Jim

From bill.riches@verizon.net Tue Jun 24 11:50:35 2003
Subject: [R-390] Size of CY-929 cabinet?

Question. How much tabletop space is this critter going to consume

20" wide - 15" deep - 12.5" high. Beautiful. Enjoy. 73, Bill Riches,

From jbrannig@optonline.net Tue Jun 24 13:09:57 2003
Subject: [R-390] Proud owner

A good test bench requires some planning. Test equipment placement, electrical outlets, grounding, lighting, parts.....a vice or two. Since it will usually double as a general house hold work area some thought is necessary to protect the test equipment while mixing paint, woodworking, etc.

My bench is 8 feet by 4 feet. 4X4 legs with 2X6's on top. Masonite covers the 2x6'S. There is plenty of room for B/A's. I built a wheeled "scope cart" out of lumber. This keeps the TEK 545 off the bench and serves as rolling storage for test equipment not in use. An old shower curtain covers it when not in use.

I built it at waist height, but wish I had it at sitting height. The workshop shares the laundry room. Heavy work and the saws are kept in the garage to keep dust away from the electronics. Jim

From jbrannig@optonline.net Tue Jun 24 13:23:28 2003

Subject: [R-390] Proud owner

More thoughts. I keep several binders for the radios. One has the original manual. Another for MODS and good ideas. The third is for shop notes. Repairs, changes, voltage readings and charts. MS Excel is great for voltage/resistance charts. I enter the values from the manual in a tabular form. The actual readings are entered and a formula in a cell can be set-up to look at variances (10%, 20%, high, low, etc.) If you set the out of parameter cells to display in red it is really easy to use.

Excel charting functions are used for PTO linearity, drift, SWR curves..... A printed, dated copy is placed in the shop book for future reference.

From K2CBY@aol.com Tue Jun 24 14:19:28 2003

Subject: [R-390] URM-90 LCR bridge question (OT)

I've used a URM-90 for a number of years and have found it to be highly accurate, effective, and pretty straightforward to use. The built-in 1000 Hz generator is adequate for most all purposes.

The URM-90 is not really great for extra-low values of inductance and capacitance (<10uH, <100pF) but it's adequate. For RF-scale values you're better off with a grid dip meter (or a Q Meter if you want to get really fancy).

Where the URM-90 really excels is making up or picking precision value capacitors from, say, 1000pF to 0.1uF to make up audio filters, phase shift networks, or timing circuits. It also works well in sorting through junk box inductances, especially chokes and iron-core audio frequency stuff.

A more generally desirable instrument might be the ZM-11/U R-C-L bridge. It has only about half the accuracy of a URM-90, but it allows you to make leakage measurements at voltages up to 500 and also permits you to measure the value of an electrolytic capacitor with a DC voltage impressed on it. It's probably more useful than the URM-90 in determining the "GOOD - BAD" state of a capacitor. It also seems a little easier to use than the URM-90 takes less time to find the balance point.

Like the URM-90, the ZM-11 uses an internal 1000Hz oscillator as the signal source. The main difference apart from precision is that the URM-90 permits the DC measurement of resistors, while the ZM-11 uses AC for all measurements.

From r.tetrault@attbi.com Tue Jun 24 15:27:57 2003
Subject: [R-390] Proud owner

...a vice or two.

Jim, Our wives would assert that we've already got a vice or two just having all these things and always pre-occupied with something not directed at the "household." Myself, I've got several vises, a big mofo for heavy stuff and some smaller ones with plastic jaws. For a while, Home Depot had some that were made by Record in jolly old England that were many cuts above the ones made with rice hulls. Arguably better than Wilton Bob Tetrault Portland, OR

Outside of a dog, a boatanchor is a man's best friend, Inside of a dog it's too low an impedance. a latter day Twain

From billsmith@ispwest.com Tue Jun 24 17:04:59 2003
Subject: [R-390] URM-90 LCR bridge question (OT)

Does anyone have a spare manual for the ZM-11/U? 73 de Bill, AB6MT billsmith@ispwest.com

From r390a@rcn.com Tue Jun 24 17:29:45 2003
Subject: [R-390] URM-90 LCR bridge question (OT)

There is one on BAMA: <ftp://bama.sbc.edu/downloads/miltest/zm11u/>

From jlap1939@yahoo.com Tue Jun 24 22:32:06 2003
Subject: [R-390] Strong supporters

Friends, Yes, we have a number of Barrys' and they all have good content to share...True for so many on this list. I am always pleased to re-discover the kindness from so many...

I am on several others, and they don't equal () this one...I am thankful for the list, and I am always here tho' sometimes I go a long time silent..

Thanks to Gene and others for reminding me that for the student I work with, it is the ATTEMPT at a radio telescope that is the important thing.. I just forget sometimes, as I get older... And I will keep this 390 glowing, thanks to Dave Medley.. My regards to the list.. John (JLAP)

From Barry Hauser <barry@hausernet.com> Wed Jun 25 01:39:04 2003
Subject: [R-390] Strong supporters

> Yes, we have a number of Barrys' and they all have good content to share...

On behalf of the International Confederation of Guys on the R-390 List Named Barry, 10-Q.

Barry Major General, ICGRLNB, Kazoo Marching Band

PS, in a special plenary session at our last Global Semi-Millennial Conference and Beer Drinking

Contest, best we could determine, the plural of "Barry" is "Barries", based on the plural of "berry". (Sometimes, non-Barries try to call us that, or spell it that way.) There was considerable dissenting opinion, however the issue became blurred due to the mass quantities of brew consumed and a "brew-haha" that ensued over a digression into the question of what to call the original version of the receiver prior to cost reduction. Fortunately, we did agree not to refer to all those with a different first name as "Non-Barry-" followed by a 12-digit serial number.

2nd PS, Unfortunately, insufficient attendees were sufficiently conscious to determine the winner of the beer drinking contest. However, some progress was accomplished: Measurement of topsoil resistance in a one meter radius of the contestants, while determined not to be a reliable indicator of beer consumption over the previous 6 hrs., does show promise as a technique for assessing the effectiveness of radio grounding systems.

Final PS Hope this didn't blow the complement about "good content to share" ;-)

From ba.williams@charter.net Wed Jun 25 02:26:50 2003
Subject: [R-390] Strong supporters

>Barry >Major General, ICGRLNB, Kazoo Marching Band > > Final PS Hope this didn't blow the complement about "good content to > share" ;-)

Nah, don't worry about it. The only whiners are Locklear and Joe Red (something). Barry non-Hauser

From Barry Hauser <barry@hausernet.com> Wed Jun 25 03:22:14 2003
Subject: [R-390] Proud owner

The Plaintiff, writes: > Ya' know, I just don't get it..... > I spend the weekend fix'in a radio...using "all my powers" to get it just > right and the XYL sez, but did you finish painting the kids bedroom???

No, Jim, in the world of She-Who-Must-Be-Obeyed, there is no justice for the likes of us. You must take your case to a higher court. As Chief Justice of the Inner Sanctum of Perfect Justice (one of a tribunal of guess-whos), there is, in fact, perfect justice, and even more come-uppance and, even what-fors..

The Court renders the following verdict:

1. Paint the kids' bedroom as "insinuated" without further delay.
2. To be painted smoke grey with 1 and 2 1/2 inch round polka dots and some small rectangles distributed randomly thereon, notwithstanding any complaints to the contrary.
3. Reassure said kids that this action was not intended as an action against them, and that the paint job, while not particularly cheeful, is hereby certified "unique" and "kewell" by the authorities. This case is closed. Court is adjourned. Barry

From jbrannig@optonline.net Wed Jun 25 03:30:19 2003
Subject: [R-390] Proud owner

Yeah, right..... One coat "our way" two to cover it and another in pink (I have girls)

From jamesmiller20@worldnet.att.net Wed Jun 25 03:31:47 2003
Subject: [R-390] Dead Horse Walking (was Proud owner, strong supporters, etc.)

And so it begins again.

From redmenaced@yahoo.com Wed Jun 25 03:59:38 2003
Subject: [R-390] Proud owner

> made with rice hulls. Arguably better than Wilton
+++++++
The OLD Wiltons were good!

I got my 4" Wilton at an auction for \$15, after some woman kept jacking everyone's bid up. There was a pile of vises on the ground and I wanted ONE of them, didn't really care which one. They kept going for \$50 each, high bidder gets his choice. Son of a gun if they kept taking the HUGE junky ones and left the little Wilton laying there on the ground!

I think I can count six vises at this time, but they multiply when I'm not looking! Joe

From ezeran@concentric.net Wed Jun 25 04:47:18 2003
Subject: [R-390] Size of CY-929 cabinet?

>Question. How much tabletop space is this critter going to consume.....

The table they were used on, called a LOP as in "local operating position" held two receivers, key, storage, and pukas for notes/traffic. The CY rack was the same as a 19" rack..so..the table/LOP was about 48" wide but deep. Sure would like to find a couple or three LOPS! One for R390As, another for RAK/RAL, and perhaps a bigg'in for RBA/RBB/RBC. . EdZ

From ba.williams@charter.net Wed Jun 25 04:54:27 2003
Subject: [R-390] Proud owner

> right and the XYL sez, but did you finish painting the kids bedroom???

Well, you could have asked her if she finished fixing your radio. heh heh Barry non-Hauser

From hankarn@pacbell.net Wed Jun 25 05:39:03 2003
Subject: [R-390] Proud owner

Ya might look at who pays the bills and WEARS THE "PANTS" around the house.. I am a widower and miss the companionship but not the "BS" Hank KN6DI

From ezeran@concentric.net Wed Jun 25 06:21:58 2003
Subject: [R-390] Proud owner

>...miss the companionship but not the "BS" > >Hank >KN6DI

Yep! Been there 3 times, and still on the road.

From n1udi@att.net Wed Jun 25 06:41:53 2003
Subject: [R-390] Info needed RT-671/PRC47

Gents: Can some one supply me with the pinouts for the power connector for the subject unit PRC-47. I'm in need of the DC voltage and pin letters. I would like to find a T.M. or web sight that might also have technical info for this radio.

I was given this unit via a fellow ham that never used it nor had any manuals with it. The radio looks as tho it as never seen military service? Any pro's and con's that I should be aware of? Any and all feed back is appreciated. Regards' Rock

From Llgpt1@aol.com Wed Jun 25 02:06:54 2003
Subject: [R-390] Strong supporters

writes: > Fortunately, we did agree not to refer to > all those with a different first name as "Non-Barry-" followed by a 12-digit > serial number.

Why not refer to them as an "A" or "Non A" ? Barry H/A or Barry W/nonA, you get the idea. But maybe not. Les

From K2CBY@aol.com Wed Jun 25 13:52:11 2003
Subject: [R-390] URM-90 LCR bridge (Bill Smith) ZM-11 Manual (OT)

The ZM-11/U manual posted on BAMA leaves a lot to be desired. Apparently it is a preliminary draft based on the prototype, rather than the production unit.

A lot of the component values shown on the BAMA parts list and schematic are high precision specialty parts while the box itself uses garden variety 5% and 10% parts for most everything except the bridge standards and the meter multipliers & shunts.

The biggest problem is that the BAMA voltage/resistance diagram and chart are incomplete. A lot of the values are shown just as lettered footnotes, but the footnotes table is not present.

To further complicate matters, there is also a ZM-11B/U model which, I am told, uses a slightly different tube lineup.

I posted a query similar to yours to the "Milsurplus digest" page a week or two ago and was referred to "<http://www.pacificsites.com/~brooke/CDW.shtml>". Fair Radio also advertises a reproduction of a ZM-11/U manual. I have been trying to find out (without success) which version of the ZM-11 these offerings describe before I shell out hard money for either. Any help? Clues?

From k06bb@elite.net Wed Jun 25 15:17:21 2003
Subject: [R-390] Strong supporters

> Why not refer to them as an "A" or "Non A" ? >Barry H/A or Barry W/nonA, you get the idea. But maybe not. >Les

In that case they'd all have to be "nonA" as their surname isn't "Atchley" 8^) 73 de Phil/"A", KO6BB

From k06bb@elite.net Wed Jun 25 16:51:08 2003

Subject: [R-390] Size of CY-929 cabinet?

Yep, that would make an ideal SWLing position. But naturally no small "rice boxes" would fit on it, they'd be squashed when an incoming R-390, either an A or nonA hit. (what's the correct way to spell and capitalize "nonA"). 73 de Phil, KO6BB

From ba.williams@charter.net Wed Jun 25 16:51:47 2003

Subject: [R-390] Proud owner

> Ya might look at who pays the bills and WEARS THE "PANTS" around the house..

Seriously, who was it on this list who was married to a woman that did more boatanchor work than he did? I'm thinking this guy was a member about 7 years ago. They had a website with his radio stuff, but the link to his wife's had a massive amount of ba stuff, including R-390As.

It was this list, right? I don't think it was that 'other' list. You know, the no-fun list. The non-Dead Horse Walking list. Barry

From ba.williams@charter.net Wed Jun 25 16:53:04 2003

Subject: [R-390] Dead Horse Walking (was Proud owner, strong supporters, etc.)

> And so it begins again.

Yup. Ain't it fun to have a laugh every once in a while? Barry non-Hauser, aka the other other Barry

From LairdThomasN@JohnDeere.com Wed Jun 25 16:59:00 2003

Subject: [R-390] RE:BA wife (was Proud owner)

Seriously, who was it on this list who was married to a woman that did more boatanchor work than he did? I'm thinking this guy was a member about 7 years ago. They had a website with his radio stuff, but the link to his wife's had a massive amount of ba stuff, including R-390As. It was this list, right? I don't think it was that 'other' list. You know, the no-fun list. The non-Dead Horse Walking list. Barry

--

Might have been George Misic (sp?). He and his wife have 500 to 600 boatanchors in their house. He had a photo album at Dayton this year to prove it! Tom Laird WC9M Moline, IL.

From Barry Hauser <barry@hausernet.com> Wed Jun 25 17:15:32 2003

Subject: [R-390] Strong supporters

> In that case they'd all have to be "nonA" as their surname isn't "Atchley" > 8^> > 73 de Phil/"A",
KO6BB

Also have to add "URR" for Union of Radio Restorers. Which reminds me - -I want to file a complaint with the shop steward. Barry-H/URR

From Barry Hauser <barry@hausernet.com> Wed Jun 25 17:25:38 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

Yup there are a lot of past contributors missing from the list. May be time for a roll call. Barry

From hankarn@pacbell.net Wed Jun 25 17:53:03 2003
Subject: [R-390] Proud owner

Barry, Yes it was this list and I think they lived in WA or OR. Nice site and lot of good input. Hank
KN6DI

From barry@hausernet.com Wed Jun 25 18:14:27 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

> I thought there are/were 600 members? > > Les

Mee 2 so name 'em. Barry

From Llgpt1@aol.com Wed Jun 25 16:58:03 2003
Subject: [R-390] Strong supporters

You are 100% correct. OK here is the revised list: Barry Hauser is an "H" model, hey, if he obtains a R-1051H, he can be the first on his block to have a receiver named after himself. Barry Williams is a "W" model.....not much hope for him, we'll all be dead before the government comes up with a "W" suffix number. The rest of the Barry's or Barries or Berry's will have to fend for themselves. Les

From Llgpt1@aol.com Wed Jun 25 17:49:24 2003
Subject: [R-390] Proud owner

I believe that you are thinking of Randy and Sherry Guttery. Les

From Llgpt1@aol.com Wed Jun 25 17:50:35 2003
Subject: [R-390] Dead Horse Walking (was Proud owner, strongsupporters, etc.)

Laugh??? You vill not laugh, just sign ze papers old man!!! Les

From Llgpt1@aol.com Wed Jun 25 17:52:25 2003
Subject: [R-390] Strong supporters

Are you sure it isn't Barry H/FRR? or maybe Barry H/FRC Les

From Llgpt1@aol.com Wed Jun 25 17:53:35 2003

Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

I thought there are/were 600 members? Les

From k06bb@elite.net Wed Jun 25 20:29:01 2003

Subject: [R-390] She's a real beauty!!

Hi. Howdy R-390A fanatics and "Barries" of all flavors.

Well that expected R-390A arrived at my door today. I can only say one thing about it. SHE'S A BEAUTY! The man said that it was cosmetically nice and, except for the audio module had all EAC modules. Well, inspection shows that all the modules including the audio one are EAC, or at least have EAC stamps on them. The back panel is also EAC and it has a very nice engraved panel. So far as I can determine, the entire receiver is EAC "EXCEPT" for the tag on the front that says Collins. I suspect the tag was missing and somebody stuck that one on it.

The PTO is Cosmos (ugh), everything including the gear train is spotlessly clean (some dust of course). It has all the black tube shields (not the heat dissipating type), rectifier tubes, AND THE BALLAST tube! This receiver is definitely about the nicest "unserviced" one I've ever seen.

It does play though S meter response seems to be down from what I'd expect. But then I didn't have a lot of antenna on it (5 feet of wire). I figured that since the man I got it from had powered it, up a quick checkout wouldn't hurt anything. BUT, it won't be powered up again till I have gone through it end to end with a fine tooth comb, replaced the capacitors (especially electrolytics) and checked all the resistors etc.

The CV-979 Case: DEFINITELY a class act. It is as shiny as the day it was pulled out of the box (which I understand wasn't all that long ago). Not a scratch on it that I can see. I was told it was a CV-929 but then none of our eyes are what they once were ;-) (Is there even such a critter as a 929)?

I REALLY think that this one is going to have to be a "keeper". I've said that before but though I've had some nice ones, none of this caliber! It's almost a shame to pull the modules as that is sure to scratch some green paint off the screws <GRIN>.

I may eventually try to swap the Collins Tag (SN 4563) for a '67 EAC tag. Yes, I know it's only a vanity thing. But hey, shouldn't a set of this caliber be "correct" in even the little details? 8^) 73 de Phil, KO6BB

From Forrest Myers" <femyers@attglobal.net Wed Jun 25 21:14:15 2003

Subject: [R-390] Purple Power and Proud Owner

Hello All, I've gone through the R-390A/URR I bought from Don Reaves last Sunday and have learned a lot. The receiver is basically very sound. I have decided not to power it up again until I replace a couple of capacitors in it and am now doing some checking and cleaning. The name plate was missing

and the number 557 was written where the name plate belonged. All the modules I've check are made by Capehart and have an order number of 21582-PC-61 . This includes the IF, AF, Crystal Osc, and Power modules. The PTO and BFO are both made by Progressitron. The two diode tubes are still in the power module. The ballast tube is in place. There is no diode load jack.

>From the above information, I've decided the unit was built by Capehart but have no idea as to when.

I built a 600 ohm speaker yesterday out of an old speaker from a Ford pickup and some scrap plywood. Used a transformer supplied by Don Reaves. I sanded the speaker box to where it was almost smooth and applied lots of gray paint. Doesn't look bad at all. The price was right too.

Today, I decided to clean up the top and bottom covers. Found some stuff called "Purple Power" on the shelf and gave it a try. Really amazing stuff. It cleaned the covers almost instantly with no scrubbing at all. Took off all the dirt and various other marks without a problem. Purple Power is made for removing road tar from cars but does a great job on R 390A covers. Don't know if it will work on Non-A covers or not. Forrest Myers AG4ND

From barry@hausernet.com Wed Jun 25 21:36:38 2003
Subject: [R-390] She's a real beauty!!

wrote: >Well that expected R-390A arrived at my door today.

>EAC stamps on them. The back panel is also EAC and it has a very nice >engraved panel.

Well, Watson, uh, Phil, it would appear that we can safely deduce that this is a receiver of EAC origin.

> So far as I can determine, the entire receiver is EAC >"EXCEPT" for the tag on the front that says Collins. I suspect the tag was >missing and somebody stuck that one on it.

Hmmmmmm.... An old smuggler's trick, perhaps? Easily rectified, but not with a diode.

>The PTO is Cosmos (ugh), everything including the gear train is spotlessly >clean (some dust of course).

Why do you say "ugh"? While not necessarily la creme de la creme, Cosmos PTO's are most prolific. Somewhere around here I have two in a box. Could have sworn there was originally one. Besides, Cosmos PTO's were made in Queens Nooo Yawk.

> It has all the black tube shields (not the

A Stewart Warner '60 turned up on my doorstep recently. No cabinet, but coincidentally had all black IERC shields but no inserts not any of the 3 styles. 26Z5W's silicon rectified out, diode load jack on the front panel and the Navy connector box on the back.

>It does play though S meter response seems to be down from what I'd expect. >But then I didn't have a lot of antenna on it (5 feet of wire).

I have noticed that some radios seem to want an antenna, not my usual test gimmick with the alligator and paper clips. Also, be aware if cheating the C-connector, the Twinax or some BNC jobbie lately paper clips are coming through painted, not plated. These have been made in China for some time now

as the construction plans for standard and jumbo paper clips were somehow lost and they are unable to reverse-engineer the technology.

This particular S-W needed its antenna trimmer trimmed a lot.

> I figured that since the man I got it from had powered it, up a quick checkout > wouldn't hurt anything.

I've heard that before, and when I rely on it, I sometimes get crackle and smoke. I pull the IF and audio decks and check around. Also put the plugin caps on a cap checker and reform them if necessary. The originally C553 (MF killer) was there, but good for now. Surprised that the original tantalum in the audio deck was still intact (not leaked out with an acid trail.) The plugin caps from 1960 made by Pyramid checked perfectly with no leakage. However I was using a Pyramid cap checker. heh heh

> BUT, it won't be powered up again till I have gone >through it end to end with a fine tooth comb, replaced the capacitors >(especially electrolytics) and checked all the resistors etc.

Makes sense.

>The CV-979 Case: DEFINITELY a class act. It is as shiny as the day it was >pulled out of the box (which I understand wasn't all that long ago). Not a >scratch on it that I can see. I was told it was a CV-929 but then none of >our eyes are what they once were ;-) (Is there even such a critter as a >929)?

I have some cases around here, but none of those. 'scuze me a sec. ... WAAAAAAAAAAHHH!!! .. sorry. I dunno, it used to work a long time ago, but alas, still no CV-979

>I REALLY think that this one is going to have to be a "keeper". I've said >that before but though I've had some nice ones, none of this caliber! It's >almost a shame to pull the modules as that is sure to scratch some green >paint off the screws <GRIN>.

First, Phil, you better keep this one, or you're gonna be known as the "wham-bam, thank you mam'" guy of boatanchordom. If you're careful, you won't chip the green paint on the screws. Put some tape on the screwdriver tip. If any chips off, save the chips, grind up, mix with epoxy and replace with a micro-trowel.

>I may eventually try to swap the Collins Tag (SN 4563) for a '67 EAC tag. >Yes, I know it's only a vanity thing. But hey, shouldn't a set of this >caliber be "correct" in even the little details? 8^)

Yup, you can do that later. Meanwhile, remove the tag and reinstall upside down. Enjoy! (Of course, you're gonna turn this one into a beacon lower too, right?) Barry

From redmenaced@yahoo.com Wed Jun 25 22:12:04 2003
Subject: [R-390] Proud owner

I believe it was Randy and Sherry Gutery, can't remember where they lived but I think it was LA or MS.
Joe

From redmenaced@yahoo.com Wed Jun 25 22:52:15 2003
Subject: [R-390] Re: [Milsurplus] demill law H. R. 1588 to affect mil rads.

IT'S BACK!! Let's all make it go away again, this time for good?

From ba.williams@charter.net Thu Jun 26 01:16:39 2003
Subject: [R-390] Proud owner

Right you are. I remembered as soon as I read the names. They are a good couple. Whatever happened to them? Barry

From ba.williams@charter.net Thu Jun 26 01:50:31 2003
Subject: [R-390] Re: BA wife (was Proud owner)

Tom, Wow, that is incredible. You saw the pictures? Impressive!

No, the couple I was thinking of is Randy and Sherry Guttery. Les was right. They had a good website with very good pics. She had a lot of boatanchor tips and advice. His part of the site was good too. I forgot what it was that he got mad about. Maybe I missed that part when I was off the list for about a year. Barry non-Hauser

From ba.williams@charter.net Thu Jun 26 01:52:03 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

I think we lost a lot of good members last year. Barry non-Hauser

From jlap1939@yahoo.com Thu Jun 26 01:52:04 2003
Subject: [R-390] Repaired 390 non a

Friends, The 390 is back in rack, and wonderfully sensitive, (as Dave told me it now was...). I had tested it on a short wire, but on the longwire I have, it is great.. With my mil ex., I can get it, if its out there, with this radio..and thats the truth. I have a new lease on radio enjoyment, as a result..!! To tell the truth, I was, as a non tech. ready to say to H-with it..Now I am alive again... My Regards, John (JLAP)

From ba.williams@charter.net Thu Jun 26 01:53:06 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

I bet we lost 400 of those guys last year! Barry non-Hauser

From Jim Shorney" <jshorney@inebraska.com Thu Jun 26 02:13:18 2003
Subject: [R-390] Strong supporters

wrote: >In that case they'd all have to be "nonA" as their surname isn't "Atchley" >8^)

Can't do that. IBM holds the rights for the lone /A suffix for PS/2 Microchannel interface cards. All non-Microchannel PC cards are non-A. Gonna stack my 390A on top of two PS/2s.... - Jim

From Llgpt1@aol.com Wed Jun 25 18:33:14 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

I don't have a list, but someone told me that 600 members didn't want to read certain posts????? Les

From Llgpt1@aol.com Wed Jun 25 22:33:28 2003
Subject: [R-390] Proud owner

writes: > I believe it was Randy and Sherry Gutery, can't > > Joe

Meridian, Ms. I hear from Randy occasionally. Les Gulfport, Ms....about 170 miles south of Meridian

From Llgpt1@aol.com Thu Jun 26 01:58:52 2003
Subject: [R-390] Proud owner

writes: > Right you are.

Alive and well in Meridian, Ms. about 170 miles north of here. I hear from Randy now and then, he hangs out on a wood radio newsgroup. Les

From Llgpt1@aol.com Thu Jun 26 02:01:07 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

writes: > I think we lost a lot of good members last year. > Barry non-Hauser

Yes we did, many, many of the old regular posters are noticeably absent. I dropped off for awhile, came back and noticed the meager posts. Les

From Llgpt1@aol.com Thu Jun 26 02:01:52 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proud owner)

writes: > I bet we lost 400 of those guys last year!

Is that Barry W/FRR?

From Llgpt1@aol.com Thu Jun 26 02:03:09 2003
Subject: [R-390] Repaired 390 non a

writes:> Friends, > > The 390 is back in rack, and wonderfully sensitive,

Nothing out there that can compare to a R-390/URR.....just my opinion. Les

From redmenaced@yahoo.com Thu Jun 26 02:23:29 2003
Subject: [R-390] Re: BA wife (was Proud owner)

Randy had the submarine tender website, "Tender Tale". Joe

From ba.williams@charter.net Thu Jun 26 02:28:45 2003
Subject: [R-390] Re: BA wife (was Proud owner)

That's the guy. I remember the submarines now. What did he get p.o.'ed about? Barry

From ba.williams@charter.net Thu Jun 26 02:33:39 2003
Subject: [R-390] Repaired 390 non a

> Nothing out there that can compare to a R-390/URR.....just my

Forrest says that Purple Powder won't work on those R-390A beta test radios. Real men have 2 R-390As and at least one SP-600. Barry non-Hauser p.s. found a schematic on the Masco ME-36 amp. This is gonna be a nice one!

From jlap1939@yahoo.com Thu Jun 26 02:47:36 2003
Message-ID: <20030626014736.33836.qmail@web10701.mail.yahoo.com>

Friends, I too am missing so many who gave me encouragement and were wonderfully sharp in electronics, as well as the r-390 series.

I do quit communicating for months on...but I have little of tech value to contribute..I will, however, try to stay more active. I always do read everything...

I am just as worried about some who were more "short timers"..example: friend from a university who was in a problem with poor vision, and was working on braille for the 390...Lost him in my ad. book..Anyone remember him? I cant get the name back in my head..He gave me a dial interior plate..(the one with fingers, as he did not need it for braille), as mine was damaged..

Then there was a Ron, (maybe)? who was just retiring from Lexmark..He around?

And Jerry (Dr. Jerry), who encouraged me about grounds and electrical safety..

And a whole lot more who I remember a bit (Sandy)?..?

Sorry for using time here for simple remembrance, but it meant something to me, and how SOON we forget...I could name many more..perhaps someone else will continue...? One or more might see it and give us a holler.. My Regards, John (JLAP)

From ba.williams@charter.net Thu Jun 26 02:51:58 2003
Subject: [R-390] Repaired 390 non a

Forrest Myers. He bought his Capehart from Don and it looks like a good one. I'm interested in the Purple Powder that he used as he said it cleaned his top/bottom covers without scrubbing. Sounds like good stuff. But, we may need more info on cleaners. I used ammonia recently to clean barn grime off of a chassis. It worked better than anything else. Still, it ain't the best stuff in the world and I need better.

You sound challenged enough already.....(g) Barry non-Hauser

From ezeran@concentric.net Thu Jun 26 03:46:38 2003
Subject: [R-390] Re:df_set

Anyone have info on...BC band/old 2MC Marine band DF set "Cape Cod Navigator" ?? It was built by Submarine Signal Company from Mass which became part of Raytheon. Thank you EdZ

From w7itc@hotmail.com Thu Jun 26 03:52:13 2003
Message-ID: <Law8-F797DB4isePxu00003bda9@hotmail.com>

Beings how I just had a serious error in my brains RAM. Just how many Barry's are on this list? Does anyone know anything about retuning a Collins 20V-2 transmitter to 80 meters. I want to listen to this 1000 pound asteroid on My R390A 8^) Ken de W7 "I"rish "T"errier "C"lub

From jonandvalerieoldenburg@worldnet.att.net Thu Jun 26 04:19:41 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

Thought I'd check in as well Jon AB9AH

From barry@hausernet.com Thu Jun 26 05:21:10 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

Right idea Jon shades' of the 70's. Time for a (fasten your seatbelts) Radio Check! "Radio check! ... radio check!" "You're comin' in four by four good buddy!" <klunk>

BTW - is it allowed to monitor CB on an R-390(x) or would that be some sort of thematic violation, or possibly a satanic abomination or somethin'? Probably doesn't matter. I'm a few miles from the LIE (good acronym for the Long Island Expressway) and there isn't much activity, not that I try often, but comes in handy for checking the 27 MC band. Oddly, Radio Shack still carries an assortment of CB radios, including a retro phony chrome model. What are people using them for? "radio check .. radio check ..." (not to be confused with "Radio Czech", a seller of radios on the e-place.) Barry Non-Williams

From ghayward@uoguelph.ca Thu Jun 26 13:12:15 2003
Subject: [R-390] Purple power and proud owner.

> The name plate was missing and the number 557 was written where the name > plate belonged. All the modules I've check are made by Capehart and have an > order number of 21582-PC-61.

I have a Capehart unit (#505), same order number. When I took the name plate off to rewire the pilot lamps the number was written underneath as well. It sounds like yours is a slightly younger brother! Mine has a Porgressitron VFO and an EAC IF deck. The rest is Capehart. I replaced the electrolytics and the mechanical filter coupling cap before I put any power to the radio. Cheers de Gord (VE3EOS)

From howard@cconnect.net Thu Jun 26 13:29:10 2003

Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

I'm still here - (Howard Rawls, New Bern, NC.). I've been real busy putting 38,000 miles on my '02 Nomad bike. ;-). I do read all the posts and always enjoy the banter! Gotta go, my bike is calling! Going to Greenville to get a new rear tire put on. Howard

From hankarn@pacbell.net Thu Jun 26 13:53:42 2003

Subject: [R-390] Repaired 390 non a

The .99 cent stores here in the LA area have a spray bottle of a cleaner called "AWESOME" and it is an awesome cleaner, easy on the hands, lite odor, spray it on let it soak for a few minutes agitate and rinse off. no residue. Hank KN6DI

From From: (mikea) Thu Jun 26 14:07:41 2003

Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

wrote: > I'm still here - (Howard Rawls, New Bern, NC.).

I'm still here, too, and the R-390 (all-Collins, restoration by Rick Mish) is powered up. Antenna is disconnected from the multicoupler now because of all the T-storms, but It gets hooked up when weather permits, and I still get my ears on. Mike Andrews , Norman, Oklahoma, the heart of tornado country

From jbrannig@optonline.net Thu Jun 26 14:27:59 2003

Subject: [R-390] Repaired 390 non a

I find that "Simple Green" cleaner is good for removing smoke, crud and dirt from panels and chassis. It is mild and does not affect paint, lettering and plastics. Brushed on and rinsed by brushing with distilled water leaves a chassis looking brand new!

For shiny metal parts, "Flitz" is great. It is a low abrasive paste for rack handles, keys, mics, etc. The shine lasts longer than with Brasso or other cleaners. Do not use on stenciled lettering, it will remove it.

Lastly, "Pledge" furnisher polish will bring a shine to plastic/bakelite knobs, meters, Escutcheons. It will take a few coats to work. Jim

From Forrest Myers" <femyers@attglobal.net Thu Jun 26 14:43:27 2003

Subject: [R-390] Purple power and proud owner.

Thanks for the information Gord. Sounds like the serial number of this Capehart unit is 57. Any idea as to when it was made? I'm going to replace the two troublesome blocking capacitors before powering it up. Been cleaning up and waiting on parts to arrive. Made antenna connector and speaker for it. Changed the old and dried out power cord. Still waiting on parts. Cheers, Forrest Myers AG4ND

From Forrest Myers" <femyers@attglobal.net Thu Jun 26 14:53:31 2003

Subject: [R-390] Repaired 390 non a

It's "Purple Power" not "Purple Powder". Comes in a spray dispenser. In the automotive section of Wal Mart. Don't want anyone to be confused between powder and power. Gunpowder equals power though. Forrest Myers AG4ND

From flood@Krohne.com Thu Jun 26 15:20:08 2003

Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

I must confess that the dials on my 390A's (and Drake R8) have been tuned to 27mc for testing reasons only. One thing I have noted is that most of the time that I have tuned in, there is more "Freeband" activity between 27.405 and 28.00 than I ever hear on 10 meters. John Flood KB1FQG

From jlap1939@yahoo.com Thu Jun 26 17:09:16 2003

Subject: [R-390] Travel and see Radios....?

Friends... Takin' off next Tues headin' West on I10..(as I often do), (if I can escape the other half!!) . Will go to Utah, Idaho, Wyoming, Nevada and CAAAAAA...where my sis is (as well as certian list members who will not be mentioned...) (And this depends also on the junker I drive not breakin down...) Last time I prac. "stole" an NRD 515 in Idaho...

If anyone can suggest a collection I could see in that direction, or a supplier I would enjoy going by, please do so..(Surplus and Sal. occurred to me, but may not get up that far)...I have two weeks, and I have to be back to play keyboard for church...)

Hope I did not appear intrusive about prev. list contacts...Had a few nice notes from a few of them.. Is this a great list or what???? Regards to all, John (JLAP)

From redmenaced@yahoo.com Thu Jun 26 17:09:36 2003

Subject: [R-390] Repaired 390 non a

http://www.purpleplates.com/magic_plates.htm

From gfgitz55@orca.cetus.com Thu Jun 26 17:56:17 2003

Subject: [R-390] Travel and see Radios....?

Hi R-390X fans, Since this may be of general interest, it's being sent to the entire R-390 list instead of by private mail.

> wrote about an upcoming visit to the West, and asked about BA collections. A while back I was touring the streets of Virginia City Nevada and saw a sign advertising a Radio Museum. Quite impressive for a private display. Even included an R-390. If it's still there, I highly recommend a visit. Caveat: it's been a few years. Do any list members know current status?

John: if you visit the S.F. Bay Area check out the yellow pages for electronic surplus. Mike Quinn(sp?) near the Oakland airport was jammed with grey panels when I visited years ago. Down here in the San Jose area we have a few surplus parts outfits. One has a fair (no TM infringement intended) collection of

those ancient vacuum tube thingies. Gary, Silly Cone Valley

From djmerz@3-cities.com Thu Jun 26 19:06:18 2003
Subject: [R-390] Travel and see Radios....?

Hi, I think Henry Rogers still has the museum - he's still active in radio. I have contacted him occasionally with questions about some of the details of sets we have in common. He once wrote an article in ARC on the Patterson PR-10 with preselector, and when I found this pair locally, he was nice enough to share some of his experience with it, Dan.

From k06bb@elite.net Thu Jun 26 19:39:02 2003
Subject: [R-390] Relative reliability of various capacitors? BFO Question.

Hi. Today I took a "peek" under the IF deck (EAC S/N 9653) to see what evil critters might be lurking in there. A couple pleasant surprises. FIRST, there are only TWO BBoD's (brown beauties of death) lurking in the IF amplifier. "Most" of the other capacitors are yellow Aerovox units with a scattering of West-Cap metal/glass capacitors. The FIRST thing I did was replace the mechanical filter coupling capacitor (West-Cap) with a 630VDC jobbie and will naturally replace the two BBoD's.

Question: What is the relative reliability of the Yellow Aerovox units as well as the remaining West-Cap Metal/glass jobs? I DID notice most of the Aerovox caps are rated 200 Volts where I tend to use 630 Volt capacitors where they fit.

If the rest of the receiver follows this pattern it may not be a terribly tough job to overhaul. I did notice that the IF amplifier appears to be VIRGIN underneath the chassis!

NOTE: The BFO in this unit is a unit made by some company called F & W Inc. Anybody ever heard of them? 73 de Phil, KO6BB

From jlap1939@yahoo.com Thu Jun 26 20:27:50 2003
Subject: [R-390] Museum

Dan and list, I got a return on> hands@radioblvd.com ..twice Any Ideas?

Thanks to others for nice invites..but don't yet know if I will get past San B./Highland/Redlands area...I will try..Have a few 'phone #'s...Thanx!! (Interesting so many were from CA...!!) My Regards, John

From g4gjl@btopenworld.com Thu Jun 26 21:40:41 2003
Subject: [R-390] Repaired 390 non a

Nothing out there that can compare to a R-390/URR.....just my > opinion. > > Les

'Cept, of course RACAL's RA17 Pete G4GJL

From: (mikea)Date: Thu, 26 Jun 2003 15:45:12 -0500
Subject: [R-390] Repaired 390 non a

Nothing out there that can compare to a R-390/URR.....just my opinion. 'Cept, of course RACAL's RA17

I have a friend in .uk who has, and uses an RA17, and who *lusts* after a (non-A) R-390. He'd settle for a R-390A, he tells me. Mike Andrews

From hankarn@pacbell.net Thu Jun 26 23:00:55 2003
Subject: [R-390] Repaired 390 non a

Now you must also remember the Rhodes & Schwarz EK-07 it beats them all "HANDS DOWN". I have as companions Racal RA-117, RACAL 6790GM, Harris R-350, WJ, R-390, R-390A, R-391, R-389, R-392, SP-600, Siemens E-311A, 75A1. 4ea 75A4, Skanti EB 5000, SP-600 VLF and others. We have 5 totally restored EK-07 units remaining @ \$3,000.00 each plus shipping. Hank KN6DI

From Forrest Myers" <femyers@attglobal.net Fri Jun 27 01:02:28 2003
Subject: [R-390] Shaft Clamps

Hello All, While putting the IF deck back into my R-390A, I noticed that the bandwidth switch shaft could not be tightened enough to not slip. Found that the little shaft clamp was broken. Switched to broken clamp to the BFO shaft and put the BFO clamp on the bandwidth shaft. They both work now. The BFO shaft is much easier to turn so the broken clamp is working on it.

However, I'd like to get a replacement clamp to replace the broken one. Does anyone have an idea where one could be found?

Replaced the two blocking capacitors in the IF deck, re-assembled the rig and fired it up. It still works so it survived the road trip from Little Rock, AR to Jackson, TN OK.

I'm going to have to beef up my work area before getting serious about finishing up work on the rig. My solid state workbench is still shaky and too small. Later. Forrest Myers

From ba.williams@charter.net Fri Jun 27 01:07:57 2003
Subject: [R-390] Missing Persons Report (was BA wife) (prev Proudowner)

You must be pretty near to Al Parker. Barry non-Hauser

From k06bb@elite.net Fri Jun 27 01:14:03 2003
Subject: [R-390] Will it ever be the same?

Hi. Well, today I replaced the deadly capacitors in the IF strip as I wanted to check out the PTO thoroughly and didn't want to risk taking out a mechanical filter. I'm going to have to wait till the first of the month to order all the parts needed to re-cap this set properly, though I had enough to do "most" of the IF strip. (I've been working to too many BA's lately and ran out of new parts).

Anyway, to make a short story long, the endpoint of this Cosmos was off by about 6KHz. I thought, aha! I should be able to pull it that far. WRONG!! I got it to where the error is about 3 KHz and I think the

slug dropped down into the PTO 8^((At least that is the way it appears and the unit "rattles" when I shake it.

SO, now I have pulled the PTO, removed the outer cover and am faced with having to pull the entire unit apart.

I had previously downloaded a LOT (250 MB worth) of R-390 information and found the two files on calibrating the Cosmos PTO. I remember reading about removing a turn from the coil, I just haven't found that "page" yet. I "thought" I had complete teardown/service information on this too but haven't found it yet. Anybody know where that info might be located?

QUESTION; Will this poor thing ever be the same again? I was sorry to see a Cosmos PTO in this receiver and it looks like I wasn't far wrong. All my personal R-390A's to date had Collins PTO's, set the end point and forget it, they worked fine and were well within specs on linearity. 73 de Phil, KO6BB

From mark.richards@massmicro.com Fri Jun 27 01:49:08 2003
Subject: [R-390] Shaft Clamps

Forrest, A very fine fellow, Dave Medley, sold a few of these to me a while ago. He can be reached through: <http://www.davemed.com/> Best wishes! Mark Richards K1MGY

From jlap1939@yahoo.com Fri Jun 27 01:56:15 2003
Subject: [R-390] Re: [r-390 museum] etc..etc.

My Friends, Not proper to miss replying I know, but if I miss anyone forgive me...I have a mess..And my wife keeps wanting to get on to look up Johnny Cash, and the Carters, for heavens sake!! Keeps me mixed up..(She always has, so whats new,...) Loved all your replys and suggestions, and the correction for the Virginia City museum.. Best Regards, John (JLAP)

From jamesmiller20@worldnet.att.net Fri Jun 27 02:19:05 2003
Subject: [R-390] Will it ever be the same?

Yes, and better! I have done that service on a Comos, it's not that bad once you get the can taken off. The slug can be screwed back into the coil when you open it. I have an article on Dave Medley's page <http://www.davemed.com/> showing how I had to completely rebuild a Cosmos. You arent faced with that much however just to remove a turn from the adjustment coil. However if the linearity or tracking is off, adjusting all the little screws can be a daunting task. However, adjusting Cosmos linearity with those screws is far easier (to me) than the linearity stack in a Collins PTO (I have done both). There is some PTO information on this page: <http://www.r-390a.net/Pearls/> Also try <http://www.r390a.com/> 73 Jim N4BE

From ToddRoberts2001@aol.com Fri Jun 27 02:45:01 2003
Subject: [R-390] Shaft Clamps

One source for gear clamps that I have not heard mentioned recently is STOCK DRIVE PRODUCTS/STERLING INSTRUMENT. They have a catalog that has to be seen to be believed. You can look through their parts listings online but I would really recommend you request one of

their catalogs. The one you want is called INCH DRIVE COMPONENTS. They have dozens of gear clamps in different styles, some identical to the ones used in the R-390A and they will accept small orders. Also they will manufacture parts to your specifications. I had often thought about having them make up a number of the Oldham Coupler assemblies. They can make up an exact copy of the part you want but not sure how costly it would be. To see them online go to this address : <A HREF"www.sdp-si.com">www.sdp-si.com. 73 Yours Truly, Todd Roberts WD4NGG.

From ezeran@concentric.net Fri Jun 27 03:06:35 2003
Subject: [R-390] Repaired 390 non a

Now you must also remember the Rhodes & Schwarz EK-07 it beats them all "HANDS DOWN". Hank KN6DI

Hey Hank! How so? In which parameter? I believe you but I've never had a chance to play with an EK long enough to test anything.

From hankarn@pacbell.net Fri Jun 27 04:12:25 2003
Subject: [R-390] Shaft Clamps

Todd, I have the clamps, oldham couplers, locking pins for the 391 and ARR-15, KC/MC knobs and lots of other parts. Hank KN6DI

From wf2u@starband.net Fri Jun 27 04:17:57 2003
Subject: [R-390] Repaired 390 non a

As a happy Rohde & Schwartz EK 07 owner, it does beat the R-390A in performance (I own of course the obligatory 2 R-390A's as well, in completely original, untouched by non-military hands condition - 1 Collins, 1 Motorola). I also had the opportunity to test them side-by-side back in the late 1960's - early 1970's.

Another receiver I own is the competitor of the R&S EK 07 in beating the R-390A, is the Telefunken E104 KW. Same generation and functionality as the EK 07 and just as heavy. No puny work and operating benches here... 73, Meir WF2U Landrum, SC (Heavy receivers spoken here...)

From hankarn@pacbell.net Fri Jun 27 04:14:43 2003
Subject: [R-390] Repaired 390 non a

Ed, All you have to do is trot your bug wagon up here and set down and play with any and all of them. Hank KN6DI

From ezeran@concentric.net Fri Jun 27 05:19:54 2003
Subject: [R-390] Repaired 390 non a

>All you have to do is trot your bug wagon up here and set down and play >with any and all of them.

Hank, Thanks, I'll try to do that! How about the old '64 GMC pickup or '62 Volvo PV544 (BoatAnchor Mobiles)? 8^0 I'm headed to Ottawa next week then Tokyo and Rome but should be home in mid/late August.

From k06bb@elite.net Fri Jun 27 05:26:04 2003
Subject: [R-390] Cosmos PTO end point coil

Hi. Earlier I tried to set the end points on this unit. I got it within 3 KC at which point the slug dropped into the PTO.

SO, I bravely pulled the PTO and carefully opened it up. I didn't observe any unusual escape of nitrogen gas as I pulled the inner shield 8^). Anyway, I reinserted the slug, removed 1 turn from the end point coil (it had 3 turns) and reassembled the PTO.

NOW IT'S WORSE THAN EVER. Best I get is within about 10KHz, that with the slug turned fully anti-clockwise. The 100 KHz markers are 1000 and 1990 KHz at the ends indicating that exactly 10 turns of the tuning dial are tuning further than 1MHz. I only removed one turn but that appears to have been too much. HOW MANY TURNS DOES THIS COIL TYPICALLY HAVE IN A CORRECTLY SET UP UNIT? I wonder if someone previously removed turns? Stupid Cosmos PTO's! 73 de Phil, KO6BB

From ezeran@concentric.net Fri Jun 27 05:32:09 2003
Subject: [R-390] Repaired 390 non a

>As a happy Rohde & Schwartz EK 07 owner, it does beat the R-390A in >performance

I do not doubt the EK RXs are fine, just never had time to really get comfortable with them. Hank Arney who is only an hour or so away just made an offer to let me come up and play with the sets. I want to take him up on it but it will have to be in a couple of months 'cause my job will have me gone quite a bit. The last '390s I have are a 1959 Stew Warner and 1960 EAC, both keepers, the others were traded or given away to local friends. The '390s design time was late '40s- early '50s, I believe,with the EK being a bit later???? Not sure on EK history but if it is later It should be a better set, developments and all. Again, I'm ready to learn a "new" radio...too much fun!

From jlkolb@cts.com Fri Jun 27 07:14:29 2003
Subject: [R-390] Repaired 390 non a

How about the old '64 GMC pickup or '62 Volvo > PV544 (BoatAnchor Mobiles)? 8^0 I'm headed to Ottawa next week then Tokyo > and Rome but should be home in mid/late August. >

Hey Ed, Which one are you going to drive from Ottwa to Tokyo? ;)

From Barry Hauser <barry@hausernet.com> Fri Jun 27 08:10:35 2003
Subject: [R-390] Repaired 390 non a & schmaltz

What's all this hubbub about some kind of foreign made box ... a (hit-the) Roadie & Schmaltz EEEK-07 or whatever? Hmmm R & S ... RS ... Radio Schach .. I knew it!

I saw a pile of 'em still in crates when I was in Regensburg, not far from Munich, a few years ago. Guy wanted something like 300 DM's apiece for 'em when DM's were about two bits. I would offer only 175 after all ... they're Non-R-390 Non-USA. Heck, I went to look it up on the 'net and found the following likely story:

Der Empfaenger EK 07 von Rohde & Schwarz (Hier in der Version EK 07D) Der EK 07 wurde ab Mitte der 50er Jahre von Rohde & Schwarz in Muenchen gebaut. Der RX deckt in 12 Teilbereichen das Band von 500 kHz bis 30 MHz ab. Die Kurzwelle von 3 - 30 MHz ist dabei in 9 Bereiche von je 3 MHz Breite aufgeteilt. Das Lineal der Grobskala ueberstreicht diese Teilbereiche, sie sind in 100 kHz Abstaenden mit Strichen versehen. Die Feinabstimmung hat eine Strichteilung von 500 Hz, die eingestellte Frequenz ergibt sich aus der Summe der Einstellungen von Grob- und Feinskala. Unterhalb von 6,1 MHz arbeitet das Geraet als Einfachsuper, darueber als Doppelsuper. Es beherrscht die Betriebs-/ Modulationsarten A1 und A3, es eignet sich also nur ueber den (vom E 566 bekannten) Trick mit dem BFO zum Empfang von SSB. Man kann die erste und zweite ZF (3,3 MHz und 300 kHz) entnehmen um Zusatzgeraete anzuschliessen: Das NZ10 erlaubt auch die professionelle Demodulation von SSB, das NZ07 ermoeeglicht den Empfang von Funkfernschreibsendungen (RTTY) und den Anschluss eines - mechanischen - Fernschreibers.

What a bunch of hooey! All I have to say is Alle ist ganz unmöglich! Machts nichts! The thing looks like a pizza oven.

Then it's got this slide rule dial that goes nearly the full width of the panel. Not as good as a true-blue Veeder Root counter and not digital. Probably like sitting right up front at center court at a tennis match. True, you can get wristitis with R-390's, but that's no where as bad as a crick in your neck. Letsee now, where am I tuned at am Links nein, am Rechts ...? Meters are too big and probably don't even have any radium in 'em.

Here's a 5 point test comparison --

- a. Can you download a manual for it in English?
- b. How many dedicated websites are there for it?
- c. Is there a reflector list for it?
- d. Does Chuck Rippel have a 2-volume video cassette how-to for it?
- e. Does some guy on the West Coast make a whole bunch of new manufacture high quality covers, knobs, clamps, etc. for it and provide powder coat refinishing of its front panel?

Hmmmmmm.. wait a minute, better not post this ... ooops!

From hankarn@pacbell.net Fri Jun 27 11:50:17 2003
Subject: [R-390] Repaired 390 non a & schmaltz

Lets see this is tooo the Baarry in Noou Yoak out dat long neck of land.

The facts being if take the specs in German and run them through our American tweaked filter it comes in Plain ENGLISH as "ONE FINE RECEIVER". You can go to Ostermans 3rd edition on page 369 and read all about it in English. your test:

- a. no we have a hard copy comb bound with all foldouts in English
- b. No
- c. No
- d. he no speaka German and would need at least 10 VHS taps and a crane to get it on his work bench

and the the learning curve of dealing with the flawless workmanship and quality of the product..
e that be me Hi.

As far as any in Germany I know of 19 units that with luck might come up with 10 working units. I bought all of the spares and units in Aachen when I was there a little over a year ago. My friend is looking for parts at the big HAMfest near Lake Constance, Germany this weekend. Hank KN6DI

From jamesmiller20@worldnet.att.net Fri Jun 27 14:14:37 2003
Subject: [R-390] Cosmos PTO end point coil

If you have the slug fully counter clockwise, you may need to run it in clockwise more. The adjustment is an iterative process. See Dave Medley's procedure at <http://www.davemed.com/pto.html>

From jamesmiller20@worldnet.att.net Fri Jun 27 14:22:14 2003
Subject: [R-390] Cosmos PTO end point coil

One more nit... just be sure you put the inner can cover back on the PTO.
If the cover is off it will be way off. The proximity of metal can does affect the tracking.

From ToddRoberts2001@aol.com Fri Jun 27 15:07:38 2003
Subject: [R-390] Repaired 390 non a & schmaltz

Let's see - the EK-07 - at least 25 tubes and big enough to bake a pizza inside! Can you say that about the R-390A? 73 Todd WD4NGG.

From k06bb@elite.net Fri Jun 27 16:47:38 2003
Subject: [R-390] Cosmos PTO SUCCESS!!

Good morning folks. Well, after sleeping on it all night (figuratively speaking ;-) I jerked this PTO out first thing this morning having decided to rewind the coil This coil originally had three turns when I first opened it, though it appeared to have been "violated" before. I dug through my junk coil tray and found a slug tuned coil that looked like it had the same gauge wire on it (close as I can determine via eyeball). I stripped a few inches off it and tinned one end. I then re-wound the end point coil (Yes, it was the end point coil, somebody inquired if I had the correct coil). I put three turns on it, just like it had when I started. Close wound and nice snug turns. I then gave it a light coat of clear nail polish to hold the turns in place and "cooked" it under a light bulb for a short time.

Upon re-installing it and setting the starting point to 1000 KHz I checked the upper end. With the slug all the way counterclockwise it was 2.5KHz off end to end. (BEST I could get (before I dropped the slug in) was about 3 KHz. A couple clockwise turns of the slug brought it dead on to 1000 to 2000 KHz, Plus/minus 100 Hz! Time will tell if it stays good! I really don't know why it wouldn't tune up with the original coil (also 3 turns) but it wouldn't! The only thing I can think of is that the coil was rather loosely wound and sloppy, perhaps by a previous "tweaker".

NOW FOR LINEARITY: In checking across the 100KC points I see about 2KC worst case. I

don't have a frequency counter but I intend to use my Yaesu digital radio in SSB mode and tune each of the screws for "zero beat". Should be good for getting it within 100 CPS. 73 de Phil, KO6BB

From cbscott@ingr.com Fri Jun 27 17:03:20 2003
Subject: [R-390] Cosmos PTO SUCCESS!!

Phil, The radio was simply reminding you who is in charge. "Hmmm, sensors indicate the human is attempting to enjoy the radio without having produced any angst. Expectations of being able to place the radio in the rack and "plug-and-play" must be quashed immediately." MSG: R390A-TO-PTO. Change endpoint setting +3kc. If attempts are made to modify, change endpoint setting to +4.1kc regardless of slug settings. Hold setting for 36hrs. Revert to original setting. EOT Barry(III)-nonHW - N4BUQ

From k06bb@elite.net Sat Jun 28 01:43:43 2003
Subject: [R-390] Stinkin' PTO !!

Good afternoon all.

Well, the odyssey of the Cosmos PTO lives on. I repaired the end point coil this morning and was able to set the end points F.B.

However, earlier when I checked the linearity at the 100KC points it looked 'pretty good, running typically 200 CPS to 1 KC off. However, the 600 KC point was OVER 2 KC out and I figured I could correct this with the correction adjustments. WRONG!

Taking my time and after tuning on this thing for perhaps 3 hours in a radio room with an ambient temperature of 95 degrees (WITH the Air Conditioner on full bore) I got up to the frequency of +570 KC (that is with adjustment screws centered in the window). Up to this time the tuning had gone pretty good with most adjustment screws only requiring a turn or two in one direction or the other. At this point the PTO tuning became very stiff and the adjustment screw had NO affect on frequency when tuned either way.

I even backed the adjacent screws off to make sure they weren't binding or dragging. So I checked the next frequency, same way for the next couple steps.

Stiff tuning and the corrector has NO affect! At this point I stopped and threw in the towel. (The screws adjusted earlier were rechecked and are still good).

As I said before, though it looked nice on the outside, this PTO was no virgin, at least around the end point coil. I suspect that either the Teflon disk or the "screw disk" is damaged. That or there is another problem in that area. I have no intention of going that deep into the PTO. The man I got the R-390A from said he has another PTO and I'm going to give that one a try.

In the meantime, I have the time to pull the RF deck and check it out thoroughly. 73 de Phil, KO6BB

From k06bb@elite.net Sat Jun 28 05:22:55 2003
Subject: [R-390] Autopsy of a bad PTO.

Hi. Hi. Since there is another PTO coming I went ahead and took this one apart all the way down to the corrector disk to see if I could determine the failure mode (not sure I can get it back together correctly 8^). Anyway, I was right. The 48 tuning screws are rotated one by one past a round spring loaded thingy made of spring steel that has a small piece of steel that looks kind of like a "footbridge" spot welded to it. As the screw for a particular segment of the frequency range (25 KHz steps) walks over the "footbridge" it presses down on it and pushes the slug under it further into the coil.

The "footbridge" was damaged in two ways. First it had a BIG dent in it on one side that would make screws riding on that side of the bridge (they're staggered) not press down as hard on the bridge. Secondly, the spot weld that holds one end of the bridge is broken loose so that it has lost some of its "stiffness" and positive action.

In trying to fix the "dent" in the bridge I'm afraid that I also weakened it some more as spring steel doesn't take kindly to dents and trying to straighten them out.

The third problem I found was that some of the screws had apparently been turned "counterclockwise" too hard, spreading the slot and screw too wide to thread down into the disk far enough to reach the damaged bridge. These are the culprits that probably had no adjustment affect as they wouldn't reach the "footbridge". These are very tiny screws that are really only a screw shaft with a "slot" in the end and a flat head on the backside to "walk across the bridge".

NOTE: A couple articles that I read said that there was a flexible Teflon ring that these screws rode on forming kind of a cam. This one had no such ring, only the spring steel thingy that the screw heads walked across. 73 de Phil, KO6BB

From jlkolb@cts.com Sat Jun 28 05:39:05 2003
Subject: [R-390] Stinkin' PTO !!

wrote: However, the 600 KC > point was OVER 2 KC out and I figured I could correct this with the > correction adjustments. WRONG!

I should repeat a tale I've relayed once or twice before -

I once had a National HRO-500 which was rather beat up.

Some previous owner had adjusted the tuning linearity until it was perfect NOT. Indeed it was on on the 100 kHz calibrator points and 25? 50 kHz? However between calibration points it was as much as 5 kHz out. Looking at the slotted end plate of the tuning cap, it was bent up to look like a saw blade /\ /\.

To tweek it back into shape, I built a neat little crystal calibrator box. Starting with a 4 MHz crystal oscillator, I went through a chain of divide by 10 digital dividers, with a switch to select a tap on the chain, and then a chain of divide by 2's, also switch selectable. Thus I could select 4 MHz, 400, 40, 4 kHz, or selecting 400 kHz switch in divide by 2's to get 200, 100, 50, 25, 12.5 kHz or selecting 40 kHz, get 20, 10 5, etc. This gave me a real multitude of spot frequencies to check the dial at.

A perfect square wave would have only odd harmonics in the output. If you instead of a square wave out of a crystal calibrator, generate a very narrow pulse, the odd and even harmonics will be almost even in amplitude. The narrower the pulse, the higher higher frequency output/ Using 74S logic, the output went to almost 100 MHz before starting to fall off.

With as many adjustment screws as the Cosmos PTO has, it's necessary to check at freqs other than the 100 kHz xtal calibrator spots. Such a unit as I've described would be ideal. With the high speed digital logic available nowadays, it could be made flat to very high freqs indeed. John

From barry@hausernet.com Sat Jun 28 12:28:18 2003
Subject: [R-390] Autopsy of a bad PTO.

Hi Phil & gang:

I dunno, there was a time there would have been several posts with detailed "been-there-done-that" posts to assist you. I've held back on replying simply because I've never been that deep into a Cosmos. Soooo.. .in the absence of any experienced replies (maybe some were off-list?)

Somehow, I'd also assumed that with all the downloading you mentioned you had certainly come across Dave Medley's pages or another site with Jim Miller's "A JOURNEY THROUGH THE COSMOS (PTO)".

The direct URL on Dave M's site is <http://www.davemed.com/cosmos.html> This includes detailed photos, though there's something wrong with one or two of the photos.

Gonna try to shed some light on this, but again, bear in mind that I have no hands-on, so take it for what it's worth.

>Since there is another PTO coming I went ahead and took this one apart all >the way down to the corrector disk to see if I could determine the failure >mode (not sure I can get it back together correctly 8^)

Somehow, I'm not surprised. I always take your "quit" and "throw in the towel" declarations with a grain of salt. (about the size of a football ;-). While you were tearing into that PTO, I was probably searching for that web article (or copping some Z's).

>Anyway, I was >right. The 48 tuning screws are rotated one by one past a round spring >loaded thingy made of spring steel that has a small piece of steel that >looks kind of like a "footbridge" spot welded to it. As the screw for a >particular segment of the frequency range (25 KHz steps) walks over the >"footbridge" it presses down on it and pushes the slug under it further into >the coil.

The web site photo shows this. The spot welded piece looks more like a triangle, so I'm not sure what you mean by a footbridge. (Maybe like the ones in Japanese gardens and Central Park?) Check out the photo for what the shape of it should be.

>The "footbridge" was damaged in two ways. First it had a BIG dent in it on >one side that would make screws riding on that side of the bridge (they're >staggered) not press down as hard on the bridge. Secondly, the spot weld >that holds one end of the bridge is broken loose so that it has lost some of >its "stiffness" and positive action.

>In trying to fix the "dent" in the bridge I'm afraid that I also weakened it >some more as spring steel doesn't take kindly to dents and trying to >straighten them out.

>From the photo, it would seem that bridge is supposed to be rigid, not flexible, even if it's made of the same spring steel as the ring. (Just a manufacturing convenience, vs. a solid piece of something, also

avoidance of dissimilar metals. Also, spring steel is fairly hard and less prone to wear.) Wouldn't it be solid if that other weld weren't broken?

>The third problem I found was that some of the screws had apparently been >turned "counterclockwise" too hard, spreading the slot and screw too wide to >thread down into the disk far enough to reach the damaged bridge. These are >the culprits that probably had no adjustment affect as they wouldn't reach >the "footbridge". These are very tiny screws that are really only a screw >shaft with a "slot" in the end and a flat head on the backside to "walk >across the bridge".

Can't you turn them back down again while it's apart, to make sure they'll make it through? Sounds like what you are describing is a false bottoming out of the adjustment screws. The "no adjustment" effect might also be due to the "bridge" being out of shape, partly flattened and flexing flatter due to the broken weld on one end and/or the dent. Actually, if that bridge or arch was flexing, that would have messed up your linearity adjustments and may have contributed to the other problem.

>NOTE: A couple articles that I read said that there was a flexible Teflon >ring that these screws rode on forming kind of a cam. This one had no such >ring, only the spring steel thingy that the screw heads walked across.

Was that a Cosmos PTO in the articles? May have been a different mfr.

Again, keeping in mind the nature of the source, (not been-there-done-that) here's some partially lame advice:

>From the photo, it looks like the bridge should be solid, not flexible. I imagine the screws should just catch the bridge on the rise, not at the base near the spot welds. If so, then you should be able to repair the thing with epoxy, or perhaps a solder repair, if the spring steel will take soldering. One way would be to fill the void in the bridge basically an "arch support". Reshape the arch as best as possible, using the photo or another unit as a guide. Cut the corner off a piece of sheet metal -- aluminum to make a small triangle support with a slightly rounded apex to fit the underside of the bridge and secure the whole business with epoxy, using a small clamp to hold in place until it sets. Basically an orthothic shoe insert.

Then fix the screws somehow, if they actually need fixing. The photo on the website shows that quite a few screws are either not present or in the fully backed out position.

There's another thing. I was a bit confused as to how this setup could work if the screws are riding up and down the arch, with gaps in between, causing reciprocating action. That would mean that it would be nearly impossible to have smooth action in terms of degrees rotation to frequency. The key is that the adjacent screws are straddled so that the tip of the bridge/arch is always riding on a screw or none at all.

But what that means is that the screw setting should end up with reasonably smooth transition from one to the next. If there were too much of a differential from one (or a pair) to the next, it could jam or cause roughness. I would think that extreme differences between adjacent screws might be indicative of a problem elsewhere worn lead screw or something.

Also does it seem possible to run a screw down far enough to actually crush the bridge piece (or snap a weld)?

The photos on that site are of fairly high resolution. I blew up the side view of the "bridge" and it certainly appears to me that it should be fairly or completely rigid, not flexible, if both welds are intact.

It's basically triangular in shape, but with a smooth bend at the apex. With one weld broken, it will flatten under pressure and you won't get a reliable adjustment. That's my theory anyhow.

Of course, as I'm typing the last of this speculative tract, Phil is waiting for the epoxy to cure or soldered the thing, or maybe hand carved a new ring and "footbridge" out of some spring steel in his junk drawer. "Throw in the towel" yeah, right. We know you better than that. ;-) Barry

From barry@hausernet.com Sat Jun 28 12:39:57 2003
Subject: [R-390] Autopsy of a bad PTO.

There is also a fine article on the Cosmos by John Harvie on Chuck R's website:
<http://www.r390a.com/html/PTOS.htm> Speaking of the "role call" anyone hear from John lately. YO!
John! Barry

From jbrannig@optonline.net Sat Jun 28 12:52:09 2003
Subject: [R-390] QSL book

The June 29, 2003 NY Times Book Review, "Books in brief" section has a review of "Hello World: A Life in Ham Radio"

A nice short article, I took exception to one statement. "Instant messaging and e-mail have made Ham Radio virtually obsolete....." Not true, I said!, not true!, but then again, you are reading this where? Make some Field Day contacts this weekend... Jim

From jamesmiller20@worldnet.att.net Sat Jun 28 13:38:23 2003
Subject: [R-390] Autopsy of a bad PTO.

I just noticed some of the photos in my Cosmos PTO article on Dave's page have become corrupted. If anyone's interested, the original article is at the following url. Copy anything you want.

<http://home.att.net/~jamesmiller20/cosmos.htm>

I tried emailing Dave but his email bounces. I guess I like the Cosmos over the Colling PTO because it appears to be relatively easier to linearize despite Phil's nightmare. I spent over a week (couple of hours a day) going through the stack (trial and error) in a Collins PTO, taking the cover off, tweaking, putting the cover back on, over and over. I can see why the inventor of the Cosmos approach thought he had a better idea. Sounds like someone in a past life got heavy handed with a screwdriver and jammed some of the little screws.

From jamesmiller20@worldnet.att.net Sat Jun 28 13:58:15 2003
Subject: [R-390] Autopsy of a bad PTO.

By the way Phil's experience and Barry's theory with the PTO getting ough to turn at one point jog's my memory. This happened to me whenever I accidentally ran one of the screws too far in or out. A sudden jump in the height of adjacent screws did cause some jamming as I recall now. The transitions should be fairly smooth from point to point. If a screw is run too far in, it can also depress the flexible ring into the body and possibly crimp it. Also found that some of the screws tend to get very tight and won't always

turn easily without some effort. They sit in a threaded teflon or plastic ring. I never saw any stripped threads in the one I worked on, but I suppose this could happen leaving some screws in permanently high or low positions...thus the binding effect. Maybe better luck with the "new" one!

From barry@hausernet.com Sat Jun 28 14:28:06 2003
Subject: [R-390] Autopsy of a bad PTO.

Hi Jim: Sorry ... I didn't notice your earlier post(s) in reply to Phil. Thanks for the new URL. Those missing photos help make it clearer about the action with the "footbridge" riding and straddling adjacent screws. The overlap/staggering of the linearity screws is intended to avoid jumping which could otherwise cause up-down variations in frequency as the unit rotates. (and how an abrupt jump from one screw to the next could cause problems.) The photos on your site seem to be clearer and larger as well. Even clearer to me that the little ramp or bridge should be rigid, not flexible. If the metal will take to soldering, Phil could solder the broken weld and perhaps fill the void under the bridge (no boat traffic) with more solder. Of course, it would have to be reshaped as well as possible first and the final result deburred and lubricated with a small amount of non-running grease. Barry

From jamesmiller20@worldnet.att.net Sat Jun 28 14:56:40 2003
Subject: [R-390] Autopsy of a bad PTO.

I don't want to sound too negative, but if that bridge is broken, I'm afraid it's time for plan B (new PTO). That is spring steel which won't solder well at all. Even if repaired, it may never be as smooth and repeatable as an undamaged one. Jim

From barry@hausernet.com Sat Jun 28 15:19:20 2003
Subject: [R-390] Autopsy of a bad PTO.

You're probably right about Plan B, and a replacement is on the way. Since the present one would be a goner anyway, it might be worth experimenting with epoxy as I first suggested. The entire space under the bridge would have to be filled to increase the surface area of the bond. The surfaces getting the epoxy - top of ring under the bridge and underside of bridge would have to be roughened up to provide grab. Most epoxies are fairly heat resistant. Wouldn't take much to try it.

If you are going to try to fix that one, Phil, I would suggest pre-setting any of the 48 linearity screws to remove any "cliffs". A key question has to do with how well you were able to reshape that bridge. The flex would be fixed with the epoxy. I suppose you could dress up the surface of the bridge if there are some bumps and ruts in it.

You could try re-spot welding it maybe with a high current battery and a couple of makeshift electrodes. Or maybe not. ;-) There's always Plan B. Barry

From k06bb@elite.net Sat Jun 28 16:31:20 2003
Subject: [R-390] Autopsy of a bad PTO.

Hi Jim, Barry et al... I'll try answering all the messages posted here at once.

First, thanks Jim for providing the alternate URL for the file download. Yes, I had previously

downloaded that one along with a gazillion files on the R-390A and the Cosmos in particular.

That "Journey" was one of the factors that motivated me to dig deeper into the Cosmos at hand. However, as you discovered, the picture I really needed of the "footbridge", perhaps more correctly called an "arch" was corrupted and unusable here. (I still think that "footbridge" is a better description as the screws march across it in succession).

NOW, the bad news. As I mentioned, this unit's "arch" had been "crushed", probably by some ham handed "mechanic" who thought everything needed to be torqued to 50 ft/lbs 8^((Why else would some of those screws been spread out like they were? Instead of a nice arch or ramp, what I have here is a ramp that has been crushed, with a severe "crink" on either side of the peak, a rather flattened peak with a deep dimple (comparatively speaking) on the inner half closest to the shaft. All this plus the broken spot welds on one side makes for a very rough and unreliable ride for the screw heads.

Now, if the ramp was intact and just had broken spot welds I could probably fill the entire area under the "bridge" with JB Weld or similar and it'd be rigid and good forever! The only way to fix this one would be to fill said void with JB Weld or similar and then rebuild the ramp and shape it with some more JB weld. However, I don't think that would be a very reliable long term "fix" as the JB is an adhesive, not designed to use as a "bearing". The constant (and I do mean constant) friction with the screw heads would wear it down quickly making for a continuous change in linearity!!

No, I'm afraid this one is destined to be an "organ donor" unless I can eventually find a replacement for the spring steel ring.

ONE ADDITIONAL NOTE: This also explains the Frequency "jumpiness" that I experienced while trying to set the linearity screws. I didn't mention it but I kept seeing the frequency "jump" back and forth erratically while setting the various screws. This got worse as I progressed up the band, though I'm not sure why that would be except that perhaps the linearity coil has more affect at one end of the band than the other (makes sense to me). I really thought maybe it was the "shaft grounding" though I had cleaned it. 73 de Phil, KO6BB DX begins at the noise floor!

From k06bb@elite.net Sat Jun 28 18:59:20 2003
Subject: [R-390] A question of covers.

Hi. I have just one quick question here. When I get the overhaul of this R-390A finished, probably in a couple weeks when the PTO and parts for re-cap have arrived and are installed, I plan on putting this unit back in it's CV-979 cabinet.

Yes, I know that you remove the covers prior to installation and store them safely away (as I have already done). What about the Utah plate? On this unit the plate was removed (yes I did get it). It 'seems' to me that leaving the plate on would prevent dust and dirt that filters down through the top vents from settling in the coils and that part of the mechanism while I wouldn't think it would allow much if any heat buildup since there are only a few tubes in that area of the receiver. Are there any thoughts on the subject? 73 de Phil, KO6BB

From DAVEINBHAM@aol.com Sat Jun 28 19:02:14 2003
Subject: [R-390] purpleplates

What good are purpleplates without a rabbit foot, a four leaf clover or mo-jo ? Will purpleplates restore

the 26z's in my 390A ? Dave

From k06bb@elite.net Sat Jun 28 19:07:30 2003
Subject: [R-390] Stinkin' PTO !!

Hi John. Yes I have a similar box that I built, perhaps a little more elaborate. Mine is in a double shielded box and generates markers at 10. 5, 2 and 1MHz as well as 200, 100, 50 and 25KHz, switch selectable via a rotary switch the actual switching done through CMOS switches so I can run just DC control lines into the "inner sanctum". The output level is variable by a Potentiometer that feeds a 10dB pad to insure a pretty decent match (20dB return loss minimum) to 50 Ohm receiver inputs. It has aligned many a receiver! Right now I think I have a one or two bad CMOS switches as some ranges don't work, although I can get 25 KHz out of it indicating all dividers are working properly. Luckily all IC's are socketed! The thing works surprisingly well!

However, to align a PTO it is much easier to use a counter (best) or "standard" receiver as the PTO is a generator in its own right. 73 de Phil, KO6BB

From jlkolb@cts.com Sat Jun 28 19:15:11 2003
Subject: [R-390] Stinkin' PTO !!

wrote: > Mine is in a double shielded box and generates markers at 10. 5, 2 and 1MHz > as well as 200, 100, 50 and 25KHz, switch selectable via a rotary switch the ... > However, to align a PTO it is much easier to use a counter (best) or > "standard" receiver as the PTO is a generator in its own right.

Indeed you are right - the counter is easier. I did the HRO-500 about 20 years ago, when counters were rare and expensive beasts :) Even today, not everyone has one. John

From hankarn@pacbell.net Sat Jun 28 20:06:01 2003
Subject: [R-390] A question of covers.

Phil, I would install the Utah plate as it "MAY" cut down on stray RF from running around. Hank KN6DI

From barry@hausernet.com Sat Jun 28 22:16:07 2003
Subject: [R-390] A question of covers.

I agree install the Utah cover, but I have additional reasons as I've put a lot of thought into this issue:

1. Keeps not only dust out of the coils, but also potential spillage or squirtage.
2. Avoids loss of cover which is small and flat and could hide somewhere in a safe place forever.
3. Keeps essential information, silk-screened on top and bottom, close at hand. The rx needs that info to keep track of which coil is which, otherwise it may get confused and go out of mechanical synch spontaneously.
4. Pays respect & gives due recognition to the great state of Utah.
5. Further ensures that R-390A owners will know the outline of at least one state out of 50 at all times, which could come in handy in case of a pop quiz.

There ya' go from the sublime to the ridiculous in only five easy steps. Barry

From jlap1939@yahoo.com Sat Jun 28 23:27:25 2003
Subject: [R-390] Demise of Ham Radio??

Friends... To agree with Mr. Brannigan, I will have to see it to believe it...Radio Communications forever....!! I still await the day that mankind discovers how FOOLISH are all his wires, when the "aether" is open and ready...if he will only develop the necessary equipment to properly manage it...for ANYTHING - ANYTIME - at no charge,.. Oh let it BE, and get us out of the nonsense of wires and optics and cables...Get mankind back to the oatmeal cans and spark gaps and.??...opps, got carried away...sorry...comes with age....and memory... John (JLAP)

From redmenaced@yahoo.com Sun Jun 29 00:02:22 2003
Subject: [R-390] QSL book

What ever happened to the R-390 Required Reading list? Joe

From ba.williams@charter.net Sun Jun 29 02:06:20 2003
Subject: [R-390] A question of covers.

I think shielding is a good reason. That chassis is on the order of rolling stock for a reason. It isn't for structure, like the bottom plate of a SP-600.

It also isn't for being used as a convenient place for beverages or ashtrays or tools or hamburgers/potato chips Barry (non-Hauser) do radio waves actually reach Utah?

From ba.williams@charter.net Sun Jun 29 02:09:00 2003
Subject: [R-390] QSL book

First, it was the NY Times. Duh. Internet ain't radio. It's Internet. Radio is radio. Barry (non-Hauser)

From mahlonhaunschild@cox.net Sun Jun 29 02:05:12 2003
Subject: [R-390] Wanted: PTO endpoint adj. cover

All of this PTO talk reminds me: I need a PTO end point adjustment cover screw/gasket for a Progressitron PTO (but that might not make any difference). If someone has one that they can part with, please let me know. regards, Mahlon - K4OQ

From jbrannig@optonline.net Sun Jun 29 02:23:39 2003
Subject: [R-390] QSL book

The book was written by a coupla' fellas who found a box of QSL's at a West Side flea market. It is a good read about Ham Radio.....The Times made the comment in their review.... Jim

From chacuff@cableone.net Sun Jun 29 03:09:49 2003
Subject: [R-390] Repaired 390 non a

I think a fairer comparison would be to stand the restored 07 up against a restored 390A. My understanding is that the Mish or Rippel "massaged" R-390A performs very differently than a stock surplus R-390A. Those guys know how to tweak the last bit of performance out of those radio's.

I know there are more than a few guys on this list that can attest to that fact! Cecil...

From wf2u@starband.net Sun Jun 29 03:53:41 2003
Subject: [R-390] Repaired 390 non a

My EK 07 is not restored. I bought a stock 07 receiver in Germany 3 years ago, in absolutely mint condition, and I'm comparing it against my 2 mint stock R-390's, as well as their specs on paper.

The superior performance of the EK 07 notwithstanding, it's much more difficult to service, troubleshoot and properly align than the R-390A. It doesn't fit a standard 19" rack and probably won't take the abuse the 390 family can take in a military environment. The EK 07 was designed for fixed locations. 73, Meir WF2U

From jamesmiller20@worldnet.att.net Sun Jun 29 03:51:40 2003
Subject: [R-390] Autopsy of a bad PTO.

What Barry said about presetting the screws woke up another brain cell in my fading memory. I recall reading in one of the other articles (Harvie's maybe) that the first thing you want to do before starting the linearity alignment is to preset the 48 screws equally about half way in or maybe a little less. There is a reason for this... If the screws are already pretty well cranked in before you start aligning, then at some point you may run out of adjustment range on the "upper" screws, which will bottom them out and start them grinding into the "bridge".. The hard part to me is presetting them all the same, you have to turn them fully in and then back off about half the turns (or is it fully out?). I don't recall the exact number of turns. While you have that bad PTO open with access to the disc you might use it as a learning aid to see how many turns can be expected on each screw to get a feel for the range of adjustment possible and how far to back them out to preset them. This is a real hard introduction for a new 390a owner, but once you have accomplished the PTO initiation, you will be a true member of the fraternity. Good luck!

From k06bb@elite.net Sun Jun 29 04:11:36 2003
Subject: [R-390] Autopsy of a bad PTO.

Jim et al...

> This is a real hard introduction for a new 390a owner, but once you have > accomplished the PTO initiation, you will be a true member of the > fraternity. Good luck!

Well, this is R-390A number either 5 or 6 (you tend to lose count as you get older) that I have had and overhauled here (one belonged to a friend). In fact, come to think of it, over the years this one may actually be number 7 overall. That doesn't include one Junker that was parted out and an R-391 autotune unit that I obtained and sold without repairing it. I just can't stay away from the things!! When one arrives at the house one way or another and I show it to my wife, she just looks at it and says, "Yep,

another big gray radio".

This is just the first one that I EVER had this many problems with the PTO. All the others except one had Collins PTO's. The lone exception was an EAC belonging to a friend. That one had a Cosmos PTO which, after a little tweaking lined up on the end points and the 100 KHz calibration spots were in tolerance (didn't check the 25 KHz points). So, I've done a few of these critters. 73 de Phil, KO6BB

From jamesmiller20@worldnet.att.net Sun Jun 29 04:18:22 2003
Subject: [R-390] Autopsy of a bad PTO.

Sorry. I assumed incorrectly you were new to this addiction. Yeah 5-6 or so is a good go at it. I have 3 here, one basket case, one "nea"r Collins, one Stewart Warner, 2 more than I really needed. I always dread the PTO work.

From hankarn@pacbell.net Sun Jun 29 05:40:15 2003
Subject: [R-390] Repaired 390 non a

Cecil, I can assure you that since your are the 1051 GURU in the world hands down, The line up of the R-390 world is a lot different. First and foremost for the "NON-A" Dave Medley is at the top of the pile. I would then put Dick Wallser (SK) as the overall GURU on the R-390-A as the foremost and longest in the business of depot overhauling and rebuilding. Then Walter Wilson for probably the best and least problem restoration and least inflated price in the business. Sorry to hear that he is considering backing out due to not being able to get the price for his time and effort.

Matt Parkinson and I will put-up our restored R-390-A's against anyone in the business as far as performance, cosmetics and cost to any and all comers in a shoot out in So. CA.

And along with that shoot out, Alex Samson and I will outperform any and all of them with the R&S EK-07. HANDS DOWN. using the same antennas. Hank KN6DI using the same antennas for any and all bands

From wewilson@knology.net Sun Jun 29 13:33:03 2003
Subject: [R-390] Repaired 390 non a

Hank, Thanks for the vote of confidence. But your statement about me "considering backing out due to not being able to get the price for his time and effort" is not really correct. Yes, I am slowing down the pace of restoration work, and my waiting list is currently closed. But that's because I decided to stop the waiting list until I work off some of the backlog (which was about 16 months when I closed it). I've always done the R-390A restorations primarily for the enjoyment and satisfaction of bringing an old receiver back to life. I had allowed myself to accept too many restorations at too fast a pace, and some of the enjoyment was fading. So I've slowed down a bit, spending a little longer to complete each restoration, scheduling a little time for restoration of my own receivers, as well as having more time for other activities. I'm currently working on an R-391 I picked up from Don Reaves. I've been enjoying the work on the autotune mechanism, and I think I've solved most of the "problems" with this rig, although there is still a total restoration in its future.

The fascinating thing about this old receivers (R-390A, R-390, R-391, etc) is that they are a lot of fun to work on, can almost always be brought back to life, and each one seems to hold its own challenges.

Some need PTO work, others have AGC problems, others have bad components or even bad cabling, some have had unknown modifications performed, there's always a few out-of-spec resistors, and various other challenges. To be honest, I actually enjoy the more challenging restorations because the satisfaction at the end is much higher than if I started with a unit that was already in good shape. Walter - KK4DF "Do what you enjoy, enjoy what you do."

From jlap1939@yahoo.com Sun Jun 29 15:13:55 2003
Subject: [R-390] Re: Repaired 390 non a

Friends, I believe when you are at the level of professional equipment, basically mil spec made for a purpose in constant and daily use, which outperforms may mean many different things, including the use the rec/trans set-up is put to...

While the 390a came into being in a conf. setting with a commit, in a move to cut the cost of each unit, it would seem that some desirable features did in fact go missing, and such is in fact the case. Yet in other areas the changes were successful.

The improved rf tube does not attain the level, in my opinion, of the dual tubes in the non a, but, along with a few other changes, did make the radio less susceptible to very strong transmissions in the area..which I believe was one of the aims in the changes.

The "a" sure runs a lot cooler....

But in fact, you will NEVER get your 390a to sound as "nice" as the 390 non a...But it is even better than the 390 for SSB, if you follow my method...Thats simply a result of the mech. filters...right??

It was an attempt to duplicate the 390, that the RA17 came into being (I think, rt?)...Is it a better radio?

I NEVER liked any telefukens (? how do you spell that?) I used. But they will perform. But I used a custom Harris in a field prob, and it was great as well..

In addition, when the Germans designed the EK-07, they did it based on an early PLL unit, a big plus, it would seem to me, (except maybe for you techs, when you have to "fix" one...). I do know that the people that have experience with the EK-07 swear by it...but...how do you keep it running, if you have trouble..

So whats the best radio? You might remember that E.H. Scott was designed to prevent ALL emission from a rec, with its wonderful thumbscrew covers on everything. It must have worked pretty well...they supplied a lot in the really "old" days..

So whats the best radio? Can you kick the newest from the great manu. of ham radio gear? Some swear by Omni...

I'm just "blowin in the wind" here, but do believe for my use when I was in, the 390 AND 390a were great radios for gen. purpose...After all you could even entertain the troops with them..(Many advocate the point that that is what they were really intended for, with the line output and amps. commonly used with them in general listening..) (Anybody know for sure...?? I don't...) Still believe this list is the best...
Regards, John (JLAP)

From hbreuer@debitel.net Sun Jun 29 15:46:28 2003
Subject: [R-390] Re: Repaired 390 non a

wrote: > > I NEVER liked any telefukn (? how do you spell that?)

The company name has nothing to do with the four letter word which I hear at least once per minute if I watch a movie on HBO etc. while I am visiting the US. The company name is Telefunken and FUNK which is WIRELESS is part of the name, but I guess you already know this. 73 from Germany Heinz DH2FA, KM5VT

From Forrest Myers" <femyers@attglobal.net Sun Jun 29 15:49:20 2003
Subject: [R-390] R-390(A or non A) entertainment

While stationed in Germany in the American Army in the early 1960's we always had a 390 connected to the PA system and tuned to AFN. AFN was the forerunner of AFRTS. The radio was tuned to AFN during the day and changed to Radio Luxemburg at night. At the time, Radio Luxemburg played the popular music of the day that mostly consisted of English Liverpool type of music.

Anyway, the R390 did provide good entertainment for the troops in those days. Entertainment was not it's main function though. We had so many r390(A and non A) around that they were really the most readily available and easy to hook up to the PA radios we had. Forrest Myers AG4ND

From hankarn@pacbell.net Sun Jun 29 16:48:04 2003
Subject: [R-390] Repaired 390 non a

Walter, Seems that I missed or did not get all of the facts with regards to your slowing down. Sorry about that. Hank KN6DI

From wa4jqs@mikrotec.com Sun Jun 29 19:47:27 2003
Subject: [R-390] need roller

well started digging thru the crates of boxes that had been setting for 30+ years in the old storage building that i tore down. found a 52j 3 i think will have to check it out more. has a cab with it but it had to be a rack mount at one time. got it years ago from K4AVL (SK). put it on the bench kinda of dirty in side drum lettering is coming off in places missing the name tag and bottom covers but it works. noticed that i have to offset the band switch a slight bit to get some of the bands to play. guess some of the cam's are out of alignment ugh. guess the first thing i need to do is find a book on this . need the left back side roller and screw and bottom plates also a new drum dial sheet where can i find these ? btw found an r 390a in another box but ran out of time so ill check it out this week. 73 Tony

From keng@moscow.com Sun Jun 29 21:09:46 2003
Message-ID: <3EFEE51A.20853.3BD06A8@localhost>

Well...if all goes well, I will become the owner of an R-390A soon. My R-389 was getting lonely. Since you turkeys are so full stuffing...er...uh...information, I hope to request your assistance in the near future. Thank you. Ken Gordon W7EKB

From Forrest Myers" <femyers@attglobal.net Sun Jun 29 21:48:15 2003
Subject: [R-390] "New" R-390A...

Sounds like you need to plan on getting a R-388 and a R-391 to round out your collection. Have fun,
Forrest Myers AG4ND

From hankarn@pacbell.net Sun Jun 29 23:40:21 2003
Subject: [R-390] RE: MAWIE DU1RC

Mawie in answer to your email today it bounces as fatal. A copy is being sent to Alex FYI.
alex_samson@excite.com Send him an email direct. Sorry for BW but is for R-390 people. Hank
KN6DI

From g4gjl@btopenworld.com Sun Jun 29 23:43:12 2003
Subject: [R-390] R390A AFGain Pot Repair

I had noticed a marked deterioration in the Audio quality and level of a Blue Streak 390A I have here.
When I renovated the receiver I never changed any of the pots, spending most of the time on the
cleaning and re-capping of the modules.

Any how I measured the AF Gain pot, and found that it had soared to more than 8k-ohm in value. I had
to get the DVM on the bench, as I did not believe what my AVO-8 was telling me!....Both were in
agreement in the end, so I changed the pot for a 2500 ohm one from the junk box as an initial
replacement.

The result was perfect audio and lots of it too! This pot is in one of the audio stage cathodes and, I guess
mine had just worn away with use.

Anyone with weak and distorted audio would do well to check the value of the pot before launching into
a more detailed diagnosis! 73 to all Pete G4GJL

From keng@moscow.com Mon Jun 30 01:24:09 2003
Subject: [R-390] "New" R-390A...

> Ken. > Gobble Gobble, er, congratulations. Lots of good help on this list.

I know. I have been lurking (and enjoying) the banter and info here. Excellent job, fellows. Ken
W7EKB

From howard@cconnect.net Mon Jun 30 04:14:52 2003
Subject: [R-390] R-390(A or non A) entertainment

Forrest, I agree with you. I was in the Radio Repair section at Herzo base in the late 50's and we always
had a R390A or non A tuned to AFN Bremerhaven. Being from the South, I always enjoyed the
"HillBilly Gasthaus" programs and still have a tape from there that I occasionally enjoy playing. Really
brings back good memories! I remember one day that we mounted a large horn type speaker on the roof

and aimed it across the street at the EM club. With the volume cranked up, the sound bounced off the front of the club and no one could tell where it was really coming from. Everyone got a good dose of country music that day! Howard "Rainman"

From w7itc@hotmail.com Mon Jun 30 08:53:18 2003
Subject: [R-390] Vacuum tube question

When looking at the spec's for a tube what is more important as an indicator of it's output, plate dissipation, or grid dissipation?

From r390a@rcn.com Mon Jun 30 11:52:31 2003
Message-ID: <E19WwGt-00002u-00@smtp01.mrf.mail.rcn.net>

Looking for the meters for the subject RTTY demodulator. This is the one used with the R-392 in the AN/GRC-46. Would also be interested in a complete CV-278.

Here are the NSNs if that helps: 6625-00-580-1901 6625-00-580-9579 73, /dave N9ZC

From keng@moscow.com Mon Jun 30 16:20:30 2003
Subject: [R-390] Vacuum tube question

> When looking at the spec's for a tube what is more important as an indicator of it's output, plate dissipation, or grid dissipation?

Of its output capability? Plate dissipation. Grid dissipation only comes into play if you are running it very heavily Class C and driving the snot out of it.

For most tubes, you can raise the power output by increasing the plate voltage (and current).

For a tetrodes or pentodes, you can increase power output by raising screen voltage, even at lower plate voltages. However, screen grid dissipation comes into play and one must be careful of that especially in various linear modes.

For pentodes, suppressor grid dissipation can become important if you are running positive voltages on it. Most circuits call for the suppressor grid being connected to the cathode, so then it doesn't become an issue. Ken Gordon W7EKB

From ba.williams@charter.net Mon Jun 30 17:01:02 2003
Subject: [R-390] R-390(A or non A) entertainment

> Forrest, I agree with you. I was in the Radio Repair section at Herzo base > in the late 50's

Howard, Herzo base? I took a train to Erlangen one Friday evening in 1975. I couldn't believe the sheer numbers of college aged girls wiggling and oozing down the street. My girlfriend told me that the women-to-men ratio was about 9-1 due to the female schools in town. I believe it too!

We sort of did the same thing in the barracks with stereo systems, not R-390As, when we got tired of the

disco junk booming down the halls. I had a pair of Bose 901 speakers hooked to a big stereo system that probably put out over 200 watts. A buddy across the hall had almost the same system except for a new digital speed control turntable. We set our speakers out in the hall and I put on The Best of Merle Haggard on my turntable. My buddy would synch his turntable speed to mine with the same song, remove his headphones, and flip the speaker output switch on his system. We probably cranked out over 400 watts of Mama Cried, etc. A few nights of this and the disco music stopped altogether. We went outside one time and the cobblestones were rumbling from those 2 stereo systems. The whole barracks building was shaking. Barry non-Hauser

From jlap1939@yahoo.com Mon Jun 30 17:37:46 2003
Subject: [R-390] R-390 and "headin west.."

Friends, Quick note so you won't think I am crazy, when you see more postings...WON'T GET to head west now...med. prob must be addressed first. Just found out..Maybe can go in Sept, and will stop and see a few who invited me..will write later..

Also thanks to Forrest Myers and H.D. Rawls, for support (and memory factors) for the use of the 390 series..It is as I exp. it...as well as surveillance (in my experience field probs).I saw them used w/outbd conv. for VHF as well, but don't know anything about The setup .. Anyone?? Used them in "second" person as NCOIC for a few probs, one in Watertown..(Guess you don't want to get back on that, huh?) (I was in Armor, and for a short time, so never went overseas..was in reserves the longest of my time, which was where I did field probs for Summer and special assignment..I was NOT Sig. Corps.)

Forgive me for ref. to mil. use a lot...(I still have my list of correspondants about their exp. that we messed around with a few yrs ago...), but mil. use was, after all, "first cause.." It still is of interest to me..Don't know as much about other units, like the 392 as I need to know..Am running off material now on the 392..Mean to get one sometime.

Have a new picture of a Ft. Mon. console I found, but don't ask for it as I have no scanner..Has a Halli. and a 390 non a visible...Another I found has a, what I believe is the Halli. version of the SP 600. (and I forget the mil. designation for those radios..my mind is getting old ...) It also shows some test equipment..all from Monmouth..

Would like to get a copy of one of the Osterman recv. books, if anyone wants to do away with one..tell me how much, w/ship and I will send..

Like to point out...My 390 is doing great, and the BFO is really "tight" since the re-build. I get within the visual resolution poss. for freq, when someone I am listening to gives his freq. (Speaking here of SSB...) Mine is exact w/BFO plus or minus one K but that may vary a little for different radios..(BFO neut. enters into this I believe)? I am no tech, I leave that to those of you who understand it...

And yes, Cpl. Stone may be related to a Sgt. ... Sorry my "muddlings" are so long.. Thanks for your past help!!! John (JLAP)

From ba.williams@charter.net Mon Jun 30 18:08:17 2003
Subject: [R-390] R-390 and "headin west.."

John, Try tuning the radio per the A -10 manual. I don't know about the nonA manual, but I bet it is the same procedure.

1. Decide on your filter setting (4 kHz for this example)
2. Put the BFO selector to half of the filter setting (example- 2 kHz for USB)
3. Off tune your desired freq by what the BFO is set for (2 kHz up for USB or 2 kHz under for LSB)
4. Example- you want to tune to 6.955 USB with the 4 kHz filter. You would set the BFO to -2 kHz, and tune to 6.957 MHz. This should put you real close to the freq of 6.955. You probably won't need verification of your frequency as this is reliable.

Learn your particular radio. My USB is a few kHz off, so I fudge that error in every time and I get dead on when I check frequencies. I can get accurate logs every time.

If you try it all of the variations you can with tuning/off tuning, BFO adjustments, etc, you will probably find the best audio and very accurate tuning using the -10 manual directions.

Hope this helps, Barry non-Hauser

From Llgpt1@aol.com Mon Jun 30 17:52:11 2003
Subject: [R-390] R-390 and "headin west.."

writes: > ...Another I found has a, what > I believe is the Halli. version of the SP 600. (and I > forget the mil. designation for those radios..my mind > is getting old ...) It also shows some test > equipment..all from Monmouth..
>

Hi John and group, That would be the R-274 or R-274D. The R-274A, B and C were designated for the Hammarlund SP-600 Les

From odyslim@comcast.net Mon Jun 30 23:33:29 2003
Subject: [R-390] rack wanted

Hi Gang, I am looking for a rack to mount some Collins receivers in. If anybody within 25 miles of the Ft Meade area has one for sale, I would like to buy it from you. Thanks, Scott W3CV