R-390 Reflector March ‘04 Edited

From cbscott@ingr.com Mon Mar 1 14:53:17 2004
Subject: [R-390] OT: Can I ask a question?

Would it be okay to ask a question concerning the alignment of an R3000 Zenith Transoceanic radio here? The 3000 is a solid state radio made in the '60s so it is waaaay off topic, but I know there are guys here who may be able to help me. I don't want to get booted off the list, though. Thanks, Barry - N4BUQ

From w5or@comcast.net Mon Mar 1 17:14:36 2004
Subject: [R-390] OT: Can I ask a question?

It's a matter of perspective, I suppose.

Imagine a fellow looking for R-390 information, just now subscribing, and imagine he sees a long thread in progress about TO's. Solid state ones, at that! He will be sorely disappointing thinking this isn't the list he wants. Its likely he will go away. (I've seen this happen time and again, with long OT threads and new guys subscribing in the middle of them.) OTOH, there are lulls in the normal traffic so it looks like an opening for OT. But it isn't. There are much more appropriate venues for SS TO discussions. Nothing to prevent you from getting help there, or privately. But thanks for asking. Welcome to three new subscribers! Don Reaves R-390 list administrator

From cbscott@ingr.com Mon Mar 1 17:25:55 2004
Subject: [R-390] OT: Can I ask a question?

Okay, thanks, Don. I've been pursuing this on other venues and haven't gotten resolution, but I'll keep looking. "We now return you to your regularly scheduled program already in progress..." Barry(III) - N4BUQ

From cbscott@ingr.com Tue Mar 2 14:01:49 2004
Subject: [R-390] OT: Can I ask a question?

I kept working at the problem and I fixed it last night. Thanks for all who volunteered to help! Barry(III) - N4BUQ

From k0ire@yahoo.it Tue Mar 2 14:04:05 2004
Subject: [R-390] INFO NEW E_MAIL

Who can supply the new E_mail to me of Rick Mish "Miltronix" in Toledo , Thank you Frank

From mikea@mikea.ath.cx Tue Mar 2 14:11:57 2004
Subject: [R-390] INFO NEW E_MAIL

New? I got mail from him last Friday, and it was from the same address he's been using all along: "Radiomon" <radiomon@accesstoledo.com> Mike Andrews

From r390a@bellsouth.net Thu Mar 4 20:43:19 2004
Subject: [R-390] Record Price for R-392??

You know where to look. Gee, my Western Electric was NIB too, but it was only $50, bearing in mind that was many many years ago when I bought the thing.
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item 3081803664

From k0ire@yahoo.it Thu Mar 4 13:47:35 2004
Subject: [R-390] ALIGNMENT Of T-207 R-390a

WISH TO KNOW the ALIGNMENT Of T-207 R-390a (1ST CRISTAL OSCILLATOR" THE PROCEDUR OF AS HE MUST BE EXECUTED. Tnx Frank

From tetrode@comcast.net Fri Mar 5 04:17:42 2004
Subject: [R-390] Record Price for R-392??

From Craig.Anderson@saintpaul.edu Mon Mar 8 18:54:31 2004
Subject: [R-390] R-390A "Dial Lock" assembly needed

Does anyone have a "Dial Lock" assembly from a parted out 390A that they can part with? I acquired a '63 contract Imperial (Teledyne) and unfortunately it only has a hole in the front panel where the dial lock mechanism used to be located. I have a couple of "Zero Adjust" assemblies to trade in case anyone needs one. W9CLA

From WC4G@aol.com Mon Mar 8 21:39:39 2004
Subject: [R-390] R-390/URR Part Request

Hi Gents,

I have a parts request for a receiver I am working on. I have found an open resistor in the Voltage Regulator/Audio module. It is R623 which is the large 18K 10 W wire wound that is mounted by a large screw and nut to the chassis side. If anyone has a deep junk box and could help me out maybe I could come up with a ballast tube for you... 73 Don Heywood WC4G, Charleston SC

From flood@Krohne.com Mon Mar 8 22:10:33 2004
Subject: [R-390] R-392 parts needed / FS was Record Price for R-392??

The R-392 that I found last week (working on most bands) still had both tube pullers, spline wrench, and the right angled Phillips screw driver in the holders. Does that mean that I can sell it for megabucks? While we are on the subject, does anyone have a power connector they want to sell. Also, I have a direct replacement meter scaled 0-100 that was in the radio available FS / trade now that I have replaced it with an original from a junker. It will also fit the R-390A as far as I can tell. I thought that I would mention it here before it went to E-xpensive Bay John Flood

From W. Li" <wli98040@earthlink.net Sat Mar 6 23:18:03 2004
Subject: [R-390] Re: Puyallup hamfest

Guys:

Just got back from our annual WA State big hamfest (Puyallup). 40,000 square feet of stuff! Missed out on a nice R-390, but did snap up a very clean Capeheart R-390A with original glow-in-the-dark meters. At first glance, it appears that most of the modules are Capeheart. We shall see once I get it on the bench. Also, it came with the Navships 0967-063-2010 manual. I had never seen an original before. Of course, our Y2K ver. 2 manual is factually more useful, but this particular manual is a nice piece of history to have nevertheless. My thinking is that at this late date, the only clean unrestored recvr's will be from estate sales, as this one is reputed to be from. There was also a junker R-390A for $100 less which I passed up, as I already have two complete working A's (gasp) of an earlier vintage, as well as misc spares bought from Chuck Rippel years ago.

Saw some nice R-388's and a SX-71 too. Usual collection of Tek scopes, and a lot of Tek 400's. Someone had the guts of a URM-25D for sale, no case... weird. Best deal there: O-ringed flashlights powered by 3 AA's and a nest of four bright white LED's. Boy are they bright! Just the thing to have in the shop & garage! W. Li Mercer Island, WA

From terryo@wort-fm.terracom.net Tue Mar 9 14:21:24 2004
Subject: [R-390] Cleaning out R-390, R-390A and R-392 parts

I haven't rebuilt a boatanchor in probably five years, so I'm clearing out all my R-390, R-392 and R-390A parts. In the interest of fair access (as opposed to obsessive e-mail checkers getting the goods), I put them all on eBay with $1.00 minimum bids. It's gears and couplers and greasy stuff and much of it has no bidders.

One part I found later is what I think is the oven for an R-392. It says Bliley has a 200 kc crystal. First $3.00 plus $3.20 for priority mail can have it.

It's been fun but I'll be moving off this list. After owning, repairing and rebuilding a couple dozen R-390 and R-390As, one R-391, seven R-392s and a pair of R-389s (not to mention the CV-591s, CV-157s, antennas couplers...) they'll be no more 80+ pound blocks of low noise floors and wasted filament energy in my house. 73 Terry O' WB9GVB

From rdavis24@carolina.rr.com Wed Mar 10 02:25:00 2004
Subject: [R-390] Anyone going to Charlotte, NC Hamfest?

Hello
I am going to Charlotte, NC Hamfest this weekend with the intend of selling my Capehart R-390A. I have a buyer that is hopefully going to buy it there. I feel like I can not spend the time needed to restore my collection of radios. Plus as many of you know, I do not have the skills needed to do the work correctly. I have two more R-390A's, and two R-392's that I am going to sell. I have a Tek 465M Scope, URM-25 signal generator and some misc parts for the R-390A's. If anyone is interested in me bringing any of these items to the hamfest please let me know, since im already going it will not be a problem. I regret selling off the stuff but would rather someone on the list get the items, then having to go the *bay route. I am open to trades of newer HF rigs, QRP equipment and maybe some other items. Please email

if your interested so I can get the stuff ready. Email with questions at rdavis24@carolina.rr.com Thanks Ronnie ke4vpn

From r390a@rcn.com Wed Mar 10 02:26:45 2004
Subject: [R-390] Cleaning out R-390, R-390A and R-392 parts

Leaving the flock, eh?

The R-390 gods are fair, but vengeful. Don't be too surprised if your R-390A T-Shirt spontaneously combusts one day...

From terryo@wort-fm.terracom.net Wed Mar 10 05:11:01 2004
Subject: [R-390] Cleaning out R-390, R-390A and R-392 parts

Hey Dave, I'd tell you to lighten up but that's the wrong thing to say to a guy who collects R-390s. The R-390A shirt is pretty worn out from the bear hugs required to lug all that receiver tonnage around anyways. I'm more worried about a vengeful EM pulse ripping through fragile silicon first mixers. Fortunately spare mixers can be had cheaper than a spare 6DC6. 73 Terry O' WB9GVB

From plcntn@jumpy.it Wed Mar 10 21:26:13 2004
Subject: [R-390] info

I am searching spares parts for Collins R-388/URR. Can You help me? Antonio Pilichi Italy

From ross@hypertools.com Mon Mar 15 02:37:35 2004
Subject: [R-390] none genuine without these numbers...

390folks - This reflector has been entirely too quiet lately. Against Hank's advice, I will now try to separate the flys??t from the pepper.

The 1960 Collins General Catalog states, on page 82, under the category "TUBE SHIELDS", "Collins 66J Heat Reducing Tube Shields can lower bulb hot spot temperature rise above ambient to as low as 55% of former values".

The catalog further lists:

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Collins Shield Type Number (includes Shield shield, corru- gated liner & base liner)	Equivalent JAN Shield No.	Height of	Tube Size
66J-1	TS-102U01	1 3/8	7 pin short
66J-2	TS-102U02	1 3/4	7 pin medium
66J-3	TS-102U03	2 1/4	7 pin large
66J-4	TS-103U01	1 1/2	9 pin short
66J-5	TS-103U02	1 15/16	9 pin medium

66J-6 TS-103U03 2 3/8 9 pin large
****

Anyone seen any tube shields with this "66J-?" designation? No doubt now worth millions on egad...
Dave Ross N7EPI

From ToddRoberts2001@aol.com Mon Mar 15 03:28:44 2004
Subject: [R-390] PEARL Tube Coolers

Hi All, Dave Ross's recent question reminded me that I wanted to ask the group if anyone has had any experience with the PEARL tube coolers? I see they are popular with some of the Hi-Fi crowd. Supposed to be even better than the IERC type shields at dissipating heat. They look kind of like a flexible accordion tube that slips over the glass envelope and snaps tight with rubber O-rings. The black accordion-like ribs act like small fins to dissipate heat away from the glass envelope. They are not designed to electrically shield the tubes but I have read that most tubes in the R-390A do not require electrical shielding or grounding of the shield. Thanks for any comments! 73 Todd Roberts WD4NGG.

From eldim@att.net Mon Mar 15 09:17:30 2004
Subject: [R-390] none genuine without these numbers...

I was wondering what the 66J number was stamped into the top of the tube shield! Now we know the rest of the story. 73, Glen KA7BOJ Tacoma, WA

From hcjoel@direcpc.com Mon Mar 15 15:37:19 2004
Subject: [R-390] Tube Heat Shields

Having followed the ongoing discussion re: heat shields, may I offer this:
For the first three years as electrical engineer I worked for GE (AEG Germany) applicance division. There is had to perform heat related measurements on many of their products. Thermocouples were used almost exclusively to take readings. The small size of a thermocouple junction was an advantage. Drawback was the need to keep the reference for the thermocouple wires in an ice-water jar. A millivolt meter and the calibration chart was all to take very accurate temperature measurements. Now Thermistors could be used for the same purpose. Comparing the efficiency of the various tube heat shield designs could be done using a bead thermistor attached to a heatshield.

The effect of contact area (with the tube envelope), black or shiny shield color and other mechanical choices could be compared. It seems that with the preponderance of solid state devices, the developement of better heat shields for vaccuum tubes has not been on the front burner in the industry. The demand does not justify the cost of research in this area.

(with a 392 sitting on my work bench waiting for some TLC) I am encouraged by the ongoing discussions in this forum)

From R390rcvr@aol.com Tue Mar 16 02:14:02 2004
Subject: [R-390] RBM-3 receiver info?

Good evening all:

I am trying to find some information on this receiver. I have done multiple searches for it on the web. The other number associated with it: CCT-46076. It is a 200-2000 KC receiver, probably WWII vintage. This particular one was built by Stromberg Carlson. Any info or leads would be appreciated. Thanks Randy Stout

From Barry Hauser" <barry@hausernet.com Tue Mar 16 03:36:04 2004
Subject: [R-390] RBM-3 receiver info?

Hi Randy (and gang) What info do you need?

There was a site with more on it than these, but try 'em anyway.
http://www.globalconstruct.com/projects/AA8A/articles/rbm.shtml
http://www.antiqueradio.com/vinmilequip_Oct-00.html

The RBM -1 through -5 were very similar. There is the 200-2000 KC version and it's 2-18MC twin. While they're built like WWII aircraft receivers -- black wrinkle finish on lightweight aluminum sheet, but they were supposed to be for rough use, so came in a formed aluminum transit case that fit the two side-by-side with a sealing lid that fastened down with a bunch of thumbscrews. Lots of accessories rectifier unit, control unit (for switching between the two), dynamotor unit meant to be run from storage batteries - with 2 dynos in it one for each rx. Also a separate transit case with a spare dynamotor and lots of room for parts similar to the radio transit case, but not as deep. Also, the transit case came with 3 legs.

The earlier units came with a scroll type notpad unit on the upper right. Later ones replace that with a holder for separate pieces of paper or cards.

One of the two sites above shows the system set up. These were WWI all right. But most I've seen appear to have been unused. I suspect by the time they mounted the three legs, fastened them, unscrewed the umpteen thumbscrews, dropped the lid (which formed a kind of desk), hooked up the jumpers from each radio to the control box which didn't fit in the case ran the two cables to the dyno box (after unscrewing it's thumbscrews - back and front, I think), hooked up the batteries to the dyno, rigged the antenna, plugged in the headset the campaign was over and it was time to pack it all up again.

Not a great deal on the WWW, but the usual sellers have the manuals. You may have to work from a different book. Some of the manuals are combined -- RBM-1, -2, -3 in one volume. If I'm not mistaken I've seen one that covers all five editions. Not aware of any downloadables.

So search under RBM-1 through -5

While we're waiting for some other thread to develop, I could provide a few thousand words comparing the RBM's to R-390's. But, then again, maybe not. ;-) Barry

From bipi@comcast.net Tue Mar 16 04:39:46 2004
Subject: [R-390] R390 Clutch/Differential Gear Assembly Details

Hi All,

I am working through a rebuild of my R390A RF deck including a complete teardown and cleaning of the gear train. Everything was going fine until I decided to clean the split gears on the clutch/differential gear assembly. The 2 split gears were froze together.

I should know by now when disassembling something to leave it in one orientation. Well, I didn't and turned it and all of a sudden I have a handful of spring shims without a clue on how to reorient them upon assembly. Here is a picture of the sping shims - notice the names of the JPG picture files :-)

http://home.comcast.net/~bipi/miscpix/booboo1.jpg

I pulled apart the rest of the clutch assembly and did my best to keep everything in its original orientation as shown in the next 2 pictures.

http://home.comcast.net/~bipi/miscpix/booboo2.jpg
http://home.comcast.net/~bipi/miscpix/booboo3.jpg

My best guess for spring shim orientation is shown in the next 3 pictures. But they could easily be oriented the opposite way (hell, maybe it doesn't matter).

http://home.comcast.net/~bipi/miscpix/booboo4.jpg
http://home.comcast.net/~bipi/miscpix/booboo5.jpg
http://home.comcast.net/~bipi/miscpix/booboo6.jpg

Anyone on the relector here have some first hand knowledge of their proper orientation?

I have reassembled the unit and it appears to function as before (best I can tell without having it in the receiver) but I don't trust a guess and would sure like to get this confirmed before I completely reassembly the RF deck. Here are pictures of it reassembled.

http://home.comcast.net/~bipi/miscpix/booboo7.jpg
http://home.comcast.net/~bipi/miscpix/booboo8.jpg

While I'm at it, if anyone knows the order orientation of the brass spacers shown previously in pictures 2 and 3 so I can confirm their positions that would be great too.

Anyone have a current e-mail address for Scott Seickel? The one listed in his gear train pictures no longer works. Thanks in advance for the help. 73 de Mike K7PI Mercer Island, WA

From ezeran@concentric.net Tue Mar 16 13:14:52 2004
Subject: [R-390] RBM-3 receiver info?

I suspect by the > time they mounted the three legs, fastened them, unscrewed the umpteen thumbscrews, dropped the lid (which formed a kind of desk), hooked up the jumpers from each radio to the control box which didn't fit in the case ran the two cables to the dyno box (after unscrewing it's > thumbscrews - back and front, I think), hooked up the batteries to the dyno, rigged the antenna, plugged in the headset the campaign was over and it was time to pack it all up again.

Then you had to unpack the TX and its generator ~8^0. Maybe the unused looking ones are just that....unused....and the used ones got left in the Pacific. EdZ

From cbscott@ingr.com Tue Mar 16 14:20:29 2004
Subject: [R-390] R390 Clutch/Differential Gear Assembly Details

Mike,

I think I did the same thing. If I recall, I put the side with the "sharper edge" toward the harder material. Other than that, I don't think it really matters. It is just a spring that pushes the same in either orientation. I could be wrong, though.

I went to the trouble of polishing the bronze (brass?) clutch disks. I was having problem getting the disks to slide freely and tried a bit of oil. Big mistake. The oil made the disks stick together. I'd suggest leaving them dry. Regards, Barry(III) - N4BUQ

From roy.morgan@nist.gov Tue Mar 16 20:26:23 2004
Subject: [R-390] PEARL Tube Coolers

wrote: >Hi All, Dave Ross's recent question reminded me that I wanted to ask the >group if anyone has had any experience with the PEARL tube coolers? I see >they are >popular with some of the Hi-Fi crowd.

Todd, <Spoof mode ON>

Yes, get them for all your tubes. They increase the sound stage image immeasurably and add a definite sense of presence and airy ness to the sound while removing a sort of graininess found in lower quality equipment. While you are at it, get some Cocobolo wood pyramids to mount your equipment on.. it reduces interference from the dreaded intergalactic noise field and cannot be done without. Only six hundred dollars a set of four. And have you heard of the cryogenically treated hospital grade 20 amp outlet sockets? None better. You have to try them to understand the improvement.. Only $40 each. The accompanying cryogenically treated power cord is a mere $150. ...

<Spoof mode OFF>

in my opinion: Those tube coolers might work a bit better than IERC or similar tube shields in cooling the tubes*, but if I were you I'd spend my money** on spare tubes and normal heat dissipating tube shields, and a FAN!

*For a dissertation on their performance, including a very interesting bibliography on the topic, see: <http://www.pearl-hifi.com/06_Lit_Archive/01_Audio_Notes/PEARL_Tube_Coolers.pdfv> By the way, this reference shows a chart of tube temperature vs. cooling air velocity for a number of tube shields, including the shiny chrome ones and the black IERC ones.

**It appears that you can get Pearl tube coolers for small tubes at about $6 each. See: <http://sphl.audiogon.com/cgi-bin/buy_cl.pl?accstube&1083100833> Roy

From dlvnstru@netins.net Wed Mar 17 15:51:14 2004
Subject: [R-390] Balanced Lines

Can someone tell me what the RG# or Belden# or something similar is for the cable used with the balanced antenna jack for an R-390/R-390A. I would like to try feeding it with a trap-dipole that I have cut for the International Shortwave bands. I have the connectors I need for it. It is a two-conductor cable with shield. Thank-you Dan

From stevehobensack@hotmail.com Wed Mar 17 23:15:21 2004
Subject: [R-390] Balanced Lines

Dan, it is Belden M 9207 1000 ohm twinax. You will have good or better results by just installing two pieces of rg-58 or rg-59 coax in the balanced line r-390 connector. keep both lines EXACTLY the same length. Tie the shields together and bond to rcvr chassis. Tie the shields together at the antenna but do not connect the shields to the antenna, just connect the center conductors to the antenna each side the of the center insulator. The rg-58 will have less weight and a lot less cost. I've seen the Navy use either the twinax or two pieces of rg58. 73.....Steve...KJ8L

From stevehobensack@hotmail.com Wed Mar 17 23:21:28 2004
Message-ID: <LAW9-F53BadJR9ELOcM0002b3ef@hotmail.com>

Dan, it is Belden M 9207 1000 ohm twinax. You will have good or better results by just installing two pieces of rg-58 or rg-59 coax in the balanced line r-390 connector. keep both lines EXACTLY the same length. Tie the shields together and bond to rcvr chassis. Tie the shields together at the antenna but do not connect the shields to the antenna, just connect the center conductors to the antenna each side the of the center insulator. The rg-58 will have less weight and a lot less cost. I've seen the Navy use either the twinax or two pieces of rg58. 73.....Steve...KJ8L

From garylandsusanawebb@prodigy.net Thu Mar 18 05:31:30 2004
Subject: [R-390] Balanced Lines

My R390A (Motorola) came from another Ham and has an adaptor for the balanced line. Basically a wideband transformer with a Twinax on one side and a BNC on the other. It works fine. Gary L. Webb NI9V

From W. Li" <wli98040@earthlink.net Wed Mar 17 15:11:07 2004
Subject: [R-390] Re: Pearl tube shields

Interesting thread: reducing operating tube temperatures is one maneuver that will definitely prolong their life. Note that there are TWO types of IERC shields, one that merely slips over the the JAN socket, and one that actually mates mechanically to a special add-on sleeve bolted to the socket. The latter has an advantage in that a large area thermal connection is made to the chassis for conduction of heat away from the tube. This arrangement makes the most sense for those tubes below the chassis in the R-390 series, and not all that advantageous for those above the chassis. As Roy correctly points out, a fan is far more important to dissipate heat away from the tubes. On the market today are 80cm ball-bearing fans that are incredibly quiet that can be mounted strategically to dissipate heat... most useful for those of us that have the unit housed in a cabinet. My preference would be to mount the receiver in a ventilated rack with both top and bottom covers OFF.

Stictly speaking, this group (of all groups) ought to take the trouble to actually document operating temperatures of our units in a scientific way. After all, we are compulsive types, and prefer to pay attention to detail. Inexpensive battery operated LCD temperature monitors can be acquired from shops that sell customized computer case accessories for around $16-$22. These come with small temperature sensors that can be mounted anywhere on (or inside) a shield. Such results would be an interesting post

for the ambitious members in this group....

Another point that has been brought up earlier, is to leave the unit on all the time, not only for temperature stability, but to avoid power surges through thermally vulnerable portions of our tubes. My own practice is to use a Variac to power up, with a thermal delay for B+, as described by another list member. W. Li Mercer Island, WA

From r.tetrault@comcast.net Thu Mar 18 16:39:41 2004
Subject: [R-390] Re: Pearl tube shields

A final note for those interested in fans: Those ball bearing jobs are also available in 220V versions, and when run on 110 are **absolutely** silent. Sure they move much less air but still plenty. Bob Portland, OR

From tetrode@comcast.net Thu Mar 18 20:20:28 2004
Subject: [R-390] Re: Pearl tube shields

Bob, do have a specific vendor in mind or a URL handy for these? thanks, John

From ba.williams@charter.net Sat Mar 20 01:45:27 2004
Subject: [R-390] Re: Pearl tube shields

You may find it easier to buy one of the hand held RC plane temperature 20 sensors. They run about $25 and are used to get the temps of running 20 engine parts. It should be fairly accurate if held around the tubes at 20 various spots. Barry non-Hauser

From ba.williams@charter.net Sat Mar 20 03:03:36 2004
Subject: [R-390] not so much off topic

I have a bit of a problem and thought I would see if anyone on the list could help. I used to have a lot more bookmarks for mining frequency info on the FCC and NTIA sites, but I lost most of them a while back. Don't ask how I did it, but it happened.

I joined a RC club a few weeks ago. A friends plane is set up for 72.550 mHz. Two of his planes (2 differenct a/c receivers) got hit by stray signals that day. I just spoke to him and his radio/transmitter was checked and tuned 3 months ago. Another thing, which may mean nothing, is that my radar detector blipped the other day right in the vicinity where he had the problems. It was on K band, and I forget whatever gHz that is, but it is the best detector on the market. I was not really paying attention driving to the field when I got the warning. I drove down the road looking for antennas on the houses/shacks and didn't find any. The detector rarely falses and I always pay attention when it gives a warning. So, one plane was hit by a few seconds of a stray transmission on takeoff, and another was hit as it took off and made an uncommanded left turn into the woods where it was obliterated into several hundred pieces.

Does anyone know where to find the info in that slice of the spectrum to find out what all is authorized to transmit? Maybe that would help in locating whatever was propagating to the flying field. Any other ideas? Thanks, the other other Barry

From k0jd-l@seboldt.net Sat Mar 20 14:22:12 2004
Subject: [R-390] Hi to list

Greetings to all, just saw the list on the qsl.net list of lists and thought I'd say hi. Have been playing with an R-392 for about 2 years now, in fair condition, and working pretty well with only a little workout of the switches. Got all the manuals in .pdf from various online sources, so someday may open it up further. Only annoying quirk is that it cuts out completely on occasion, and can be brought back to life by tapping on or near V204. I know it's not the tube since I've swapped it, and a squirt of Caig DeOxIt in the socket doesn't help either. Haven't yet had the courage to figure out how to get into that top deck area, and have only done a cursory reading of the manuals to figure out how - looks kind of involved. Someday... meanwhile some discreet tapping is enough. John Seboldt K0JD Milwaukee, WI

From Barry Hauser <barry@hausernet.com> Sat Mar 20 15:31:07 2004
Subject: [R-390] Hi to list

Hi John: Welcome aboard! We need some new action around here.

Well, y'see, the R-392 was made for rough service to ride on the back of a jeep alongside it's companion transmitter. It's also waterproof even in use, with the proper caps and connectors in place. One listmember tested this in his bathtub a couple of years ago. The good news they float. The bad news face down.

Anyway, the thing is designed to be jostled around, so if you mounted on the back of your jeep, you'd never notice the intermittent as the "tapping" action would be automatic.

Seriously though, many of these are in very good shape because they either didn't see much use and/or they're fairly well sealed and clean inside. That in addition to the heavy dose of MFP coating has kept them well preserved. It seems as though your intermittent is either a failed solder connection or a loose screw or one where there has been some light corrosion or chemical reaction due to dissimilar metals, etc. The solder connection can be good to start not a cold solder joint however trace amounts remaining impurities or rosin inside the joint can cause it to go intermittent, open up, or even turn into an accidental component resistor, capacitor or even a semiconductor (diode, not LSI chip) as one listmember reported. Refreshing the joint is the fix.

Also, many have traced such problems to basic hardware screws 'n nuts particularly those that have grounding tabs and tube socket mounting points which are often used as grounds. I don't know if that module has captive nuts (pressed into the aluminum) or separate ones. What you might try doing is gently backing off the screws that mount the V204 socket - so that you don't lose friction if there's a separate nut & starwasher under them, then tighten firmly. Might also be another screw nearby. Worth a shot.

If that doesn't do the trick, the next most likely thing is a solder joint. Also try unplugging and replugging any connectors. I assume you cleaned the other tube sockets as a tap in one spot can affect something a few inches away and be somewhat deceptive. Hope this helps. Barry

From drewmaster813@hotmail.com Sun Mar 21 00:54:48 2004
Subject: [R-390] Tube Shields/Temperature Instrumentation

Wei-i Li wrote: >Strictly speaking, this group (of all groups) ought to take the trouble to >actually document operating temperatures of our units in a scientific >way. After all, we are compulsive types, and prefer to pay attention to >detail.

We also tend to be compulsively, shall we euphemistically say, frugal; which leads to....

>Inexpensive battery operated LCD temperature monitors can be >acquired from shops that sell customized computer case accessories >for around $16-$22.

Mal-Wart sells an indoor/outdoor digital thermometer for less than $10.

>These come with small temperature sensors that can be mounted anywhere on >(or inside) a shield.

The somewhat bulbous plastic encapsulated remote sensor of the unit I mentioned has some usefulness as is. For compactness, the plastic could be whittled down some. Drew

From drewmaster813@hotmail.com Sun Mar 21 01:29:27 2004
Subject: [R-390] Re: Not So Much Off Topic...

wrote: >I joined a RC club a few weeks ago. <snip> So, one plane was hit by a few seconds of a stray transmission on takeoff, and another was hit as it took off and made an uncommanded left turn into the woods where it was obliterated into several hundred pieces.

It was intermod, I tells ya, intemod! Never woulda' happened if the receiver in question had a 6DC6 front end and a tracking tuned IF section:) Then again, the plane would have stayed safely weighted to the ground...

>Does anyone know where to find the info in that slice of the spectrum to find out what all is authorized to transmit? Maybe that would help in >locating whatever was propagating to the flying field. Any other ideas?

The 72-76 MHz slice is jammed in between television channels 4 and 5. Along with Citizen's radio service class C (radio -controlled devices of many more types than just aircraft) it is also allocated for land mobile communication and pager services (some of which run quite high power).

Once the aircraft gets any kind of altitude at all, it is open to invasion by these sometimes strong signals. The altitude need not be very high; note the great increase in TV or scanner signal strengths encountered when raising the antenna from, say, 10 feet up to 20 feet.

I don't know of a specific place on the 'net to find the allocation information (maybe Roy knows?) Drew

From ba.williams@charter.net Sun Mar 21 03:18:17 2004
Subject: [R-390] Re: Not So Much Off Topic...

Drew,

Thanks a lot for the starting place info here. I saw the sliver jammed between ch 4 & 5. I found 2 references to this as being diversity, mobile, and fixed use. That's about all I found so far, so your additional info helps out. I saw a CB antenna on a truck today about 1/4 mile from that end of the grass

strip. It looked like one of those places where the linear is cranked way up, echo boxes installed, and a maybe a screaming guy inside. Okay, maybe I'm being a bit prejudiced here, but you know what I mean, right?

The first time was on the ground, on the takeoff roll. The other time was in the same spot right as the plane lifted off. It never had a chance and did that screaming left climb up and then down at full throttle. It barely missed a house. Nothing happened today and we flew about 5 hours without any problems. Maybe the CB guy was sleeping.... Hey Roy, wake up.... Barry nonHauser

From ham@cq.nu Sun Mar 21 12:38:53 2004
Subject: [R-390] Tube Shields/Temperature Instrumentation

Hi, A few observations:

Thanks to a twenty year old decision to stock up on tubes by our favorite pack rat government agency the world is awash in tubes for the R-390, R390A and a bunch of other stuff. Most of us have enough tubes to re-tube each of our radios a couple of dozen times.

Tubes are easy to replace. I have actually done it my self under a variety of less than optimum conditions *and* without any test gear at all. Tube swapping is a *lot* easier than any of the other maintenance procedures on one of these radios.

There are a couple basic parts of a tube as far as heat is concerned. You have the glass bulb, the seal between the glass bulb and the pins, and all the stuff inside. Each of these parts is affected by heat in a different way. They are also affected by a tube shield in a different way.

The glass bulb will melt if it gets to hot. I have seen a lot of weird things happen, but melting glass on receiving tubes is not one of them. The amount of power required to get the glass that hot simply isn't available. The glass does not seem to be terribly forgiving when exposed to a drop onto a concrete floor

The glass to metal seals on the tubes at the tube pins are an issue in terms of tube life. The glass and the metal have different thermal expansion coefficients. As temperature changes the seal is stressed. If the seal cracks even just a little you get a leak. Air inside a vacuum tube is not a good idea. I have seen tubes fail due to gas inside the tube. I'm not sure that the gas came from a seal leak though. The tube pins are heat sunk by the tube socket. They do not seem to be affected by the tube shield at all.

The guts of the tube do all the work and they are what usually fail due to heat. The filament obviously gets nice and warm in order to make the tube work. Hopefully nothing we do cools off the filament to much ... The rest of the parts get nice and hot and then cool down. Eventually the heat cycles make some of the grids sag or wires break. When they do the tube doesn't work as well as it might.

All of the magic tube shields cool the glass bulb. That's fine, but the bulb isn't the problem in the first place. The guts of the tube are the problem. The guts cool by radiation rather than by conduction or convection. It all gets down to a wonderful concept called emisitivity. Black tube shields are a good idea for radiant cooling. The only trick is they have to be black at infrared. Simply cooling the guts of the tubes does not cool the radio at all. the heat is still inside the radio. You haven't even moved it around much. The rest of the parts in the radio are still nice and hot. They are what you need to worry about. They are what's going to fail. They are what will be a real pain to replace.

Back in the good old days tubes cost a lot and the rest of the stuff was cheap. That included the labor to

find a dead resistor. Times change ... The cost of that carbon comp resistor is a bit high now that they are no longer manufactured.

Forget about the tube shields. Buy fans. Buy lots of fans. Un-stack the radios. Open up the back door on the rack cabinet. Heat kills the rest of the parts in the radios. A single fan will do far more for a lot less money than a couple of fancy tube shields ... Enjoy! Bob Camp KB8TQ

From bill@iaxs.net Sun Mar 21 17:26:57 2004
Subject: [R-390] Tube Shields/Temperature Instrumentation

Don't forget that a 5% drop in line voltage is a 10% drop in power.

Try an adjustable line voltage and see where the set begins to loose sensitivity. Could we get a report from those who use a Variac to gently start their radios?

Dig out a six (or 12) volt 2 amp filament transformer and buck that line voltage back a bit. Add a fan and the shields won't matter. The R-390 series was designed for a wide range of line voltage. The heat-removing shield is only required at the high end. Thoughts for a cold spring day. Bill Hawkins

From k8rj@hotmail.com Sun Mar 21 17:40:04 2004
Subject: [R-390] Balanced Lines

Hi Dan, Try Allied 1-800-433-5700 for Belden type 9207 Their catalog # 216-0364 at $36.27 for a 100 ft roll in my two year old catalog.

Or, if you like to pay more a little or maybe don't like Allied, try Mouser 1-800-346-6873 their catalog # 566-9207-100 for the same cable at $54.25 for 100 ft. 73 Bob K8RJ - proud owner, restorer and protector of three R390A/URR receivers.

From vk2abn@batemansbay.com Sun Mar 21 18:23:12 2004
Subject: [R-390] Tube bulb temperatures

The best and most convenient way to measure tube bulb temps is with a Infrared thermometer they are quiete cheap and very accurate and u dont have to make contact with the glass I measured the temp of the radiator on my 4cx1000a which is 3000 volts above earth the other day, and heat sinks are also easy to measure ,the unit contains a Laser pointer and electricians use them to measure the case temp of transformers on power poles without climbing the pole regards to everyone 73 s VK2ABN

From kgordon@moscow.com Sun Mar 21 19:00:24 2004
Subject: [R-390] Tube heat and glass to metal seals

I was under the (properly informed) impression that the metal used for tube glass to metal seals was specifically chosen because its coefficient of expansion was identical to that of glass, so that leakage from this source was essentially non-existent. I have forgotten the trade name of this metal. Comments from the peanut gallery? Ken W7EKB

From jmerritt2@capecod.net Sun Mar 21 19:52:45 2004
Subject: [R-390] Tube heat and glass to metal seals

Yes, this is true. How else can one explain how vacuum tubes that were made 80 years ago still function perfectly. This is an obvious problem in the design of vacuum tubes, and was worked out a long time ago, most likely by the people at Western Electric, but maybe much earlier. After all, the mechanical characteristics of vacuum tubes are based on the design for the lightbulb. Suspects like Tom Edison come to mind. Chuck N1LNH

From ham@cq.nu Sun Mar 21 20:12:42 2004
Subject: [R-390] Tube bulb temperatures

Hi, The gotcha here is that glass is more or less transparent. A good infrared thermometer is calibrated for an emisitivity of around 95%. That's a nice black surface, but not quite perfect. Depending on the characteristics of the glass at infrared you may or may not see it at all. If you do see it then you need to know what it's emisitivity (wish I knew how to spell that ...) is at the magic wavelength your thermometer is measuring.

One way around the whole problem is to grab a "known good" can of flat black paint and spray everything in sight with a couple of coats of it. Then you can assume you are seeing the paint and your readings are uniform.

How to make sure your paint is "known good" - carbon black is pretty much the standard of comparison. Spray a surface with your paint and then smoke a portion of the same painted surface. If you can see a temperature difference between the smoked area and the paint then try another brand of paint.

The worst thing to go after is anything with gold plating on it. Gold is a crummy infrared emitter. If you really want to give your paint a work out spray it on any gold bars you might have lying around the house. You should get a nice contrast between the painted and unpainted areas. I would be happy to confirm your measurements if you send me the gold bars after you measure them ...

The whole "black paint isn't black" thing is the basis for the "better" performance of the IERC heat dissipating tube shields. The black varnish on the competitors parts wasn't black enough at infrared to make them work as well ..... Take Care! Bob Camp KB8TQ

From bill@iaxs.net Sun Mar 21 20:43:02 2004
Subject: [R-390] Tube heat and glass to metal seals

Yes, the metal and glass have the same coefficients of thermal expansion, but they don't have the same coefficients of thermal conduction. The metal is not necessarily at the same temperature as the glass. Consider the heatsinking property of the socket and its wires.

The largest difference probably happens at startup.

Steel chemical reactors are sometimes lined with glass to prevent rapid corrosion of the steel. The glass must not crack. Temperature control schemes for an external heat exchanger jacket must not allow the difference between the jacket and the contents to be more than about 30-50 degrees C. Bill Hawkins

From David Hallam <dhallam@rapidsys.com> Mon Mar 22 12:48:33 2004
Subject: [R-390] MFP

The modules in my R-390 are marked MFP. I thought that had something to do with Motorola since Motorola manufactured my receiver. After reading some exchanges here, I am not sure. What is the significance of the MFP markings on the modules? David C. Hallam KC2JD

From bill.riches@verizon.net Mon Mar 22 13:10:06 2004
Subject: [R-390] MFP

I think it means that the modules have been fungus proofed. 73, Bill Riches WA2DVU

From Barry Hauser" <barry@hausernet.com Mon Mar 22 14:00:15 2004
Subject: [R-390] MFP

It means Mildew-Fungus Protection or Moisture-Fungus Protection or "preventative" and it's basically an amber/yellow/golden varnish with some nasty ingredients, like mercury compounds. (Remember mercurichrome, the painless iodine?) Basically seals out the flora and includes some micro-weed killer mixed in. So, don't eat the stuff or breath it in. (Yeah, and you radio-fetish folk best not lick or sniff these things.) Treat it as you would that contraband bottle of chlordane you kept in the garage for some future occasion.

It's necessary to scrape or wire brush it away when soldering joints, so be careful when doing that. Most of this stuff has remained intact, but can flake if corrosion manages to develop underneath it. If necessary, use a vacuum (with filter bag, not bagless) to clean off any loose coating and leave the rest of it alone. Barry

From cbscott@ingr.com Mon Mar 22 15:29:53 2004
Subject: [R-390] Signal Amplifier Needed

When I use my signal generator, I usually connect my frequency counter to the output to monitor and accurately set the generator's output. I know this is generally not needed, but for some things, accuracy is necessary.

The problem I have is the counter needs a fairly strong signal whereas the circuit in question may need a very low signal so I end up switching the output level up and down. It can get pretty annoying, especially when a very loud signal suddenly comes through the radio!

Is there a simple circuit I could build, perhaps an op-amp or two, that could amplify the signal going to the counter while, at the same time, leaving the signal generator at the low levels needed for the radio? For example, I may need the generator set to 1mV, but the counter needs about 100mV to drive it.

I'm not a EE design engineer, but I think a simple circuit could accomplish this. Are there op-amps that perform in the 100kHz to 30mHz range that could be used in a simple circuit for this? Am I dreaming to think this is a simple endeavor? Thanks, Barry(III) - N4BUQ

From r390a@rcn.com Mon Mar 22 15:44:30 2004

Subject: [R-390] MFP

I have a Motorola R-390A which has MFP applied, but none of my EACs from late contracts have MFP. I don't recall seeing MFP on any units made in the 60's which makes me wonder if they stopped using it at some point.

From rbethman@comcast.net Mon Mar 22 17:28:18 2004
Subject: [R-390] MFP

Dave, The modules MAY not be marked, BUT there may be or may have been an MFP stamp on the chassis. My '67 EAC has a stamp on the back of the radio, although it is very faint. Bob - N0DGN

From cbscott@ingr.com Mon Mar 22 18:58:47 2004
Subject: [R-390] Signal Amplifier Needed

List, I've gotten a few suggestions. Apparently it is possible to build an external amp to get enough gain. It became glaringly obvious, however, that the best solution is to use the "high-power" output on the signal to drive the counter while using the attenuated output for the radio. I was thinking the "high-power" (2V) output was not 'ON' all the time, but apparently it is and this is one of its best uses. Being a neanderthal, I don't always know a wheel when I sees it. Thanks again, Barry(III) - N4BUQ

From roy.morgan@nist.gov Mon Mar 22 20:41:55 2004
Subject: [R-390] Signal Amplifier Needed

wrote: > ... use the "high-power" output on the signal to drive the counter while using the attenuated output for the radio.

Barry, The X200K one.. oh yes. You didn't say you had a URM-25 (I assume you do.) It appears to me from the schematic that both the X200K output jack and the attenuator have signal when the output switch is in either of the X200Kpositions (10 kc to 300 kc or 300 kc to 50 mc.)

Note, however, that the connection from the high level output to the counter, and then inside the counter can/will leak a lot of signal... so if you are doing low level sensitivity measurements, do not use the high level output and cap it off. With even moderate leakage, it's possible to "measure" receiver sensitivities that are unbelievably low! (Leaked signal travels from the high level output and wire and counter to the receiver input and adds to the very low signal from the generator attenuator. Roy

From cbscott@ingr.com Mon Mar 22 21:11:44 2004
Subject: [R-390] Signal Amplifier Needed

Roy, Don't have a URM-25. This is the General Radio GR1001A. It currently has a plug in the hi output connection. (Shhhhhh! Don't tell anyone how I get those great sensitivity measurements...) Barry(III) - N4BUQ

From cbscott@ingr.com Mon Mar 22 21:19:45 2004
Subject: [R-390] Signal Amplifier Needed

A quick look at the schematic for the GR1001A reveals the 2V output is not on all the time; however, it is much easier to switch to it to get the counter's reading and then back to the attenuated output for the "real" signal. A lot easier than building an amp. Barry(III) - N4BUQ

From drewmaster813@hotmail.com Mon Mar 22 23:20:58 2004
Subject: [R-390] Re: Tube Bulb Temperatures

Hello All, On the subject of tube temperature vs failure:

There is a temperature-dependent outgassing of the tube elements to consider. Tubes are baked before and during evacuation to drive out residual gases but that takes time and time is money. Manufacturers hence will tend to bake as little as possible. We as users then bake the tubes by simply using them. The hotter we run them the greater the outgassing and no vacuum pump for removal.

Nolan's Zippo trick can revive some of these casualties by reactivation of the tube's getter.

Water vapor is a particularly egregious offender, bombarding the cathode and causing deterioration. The getter is not effective in trapping those trace amounts of water.

On emissivity, that which emits also absorbs. Place a hot surface (the envelope) in proximity to another (the anode) and the latter will run at a higher temperature than it otherwise would.

Count me in as a real "fan" of the idea of forced convection cooling!

Yes, as Bob said, we are awash in tubes. With the severe paucity of younger membership in the boatanchor hobby the supply to demand ratio for tubes will only improve as we oldsters die out. New carbon composition resistors (Xicon) were still available from Mouser as of recent. Drew

From drewmaster813@hotmail.com Mon Mar 22 23:40:39 2004
From: drewmaster813@hotmail.com (Drew Papanek)
Subject: [R-390] RE: More Tube Shields/Temperature

wrote: >Try an adjustable line voltage and see where the set begins to lose >sensitivity. Could we get a report from those who use a Variac to >gently start their radios?

I run the R-390A at the far end of a long circuit and with a space heater also occasionally on that circuit I measure 100v . Not really a variac per se, just a heavily bled series resistance , I guess.

Under the aforementioned conditions I measure 4.6v on the 6.3v (nominal) tube heater bus. Voltage that low could cause tube cathode deterioration.

Per my unscientific evaluation technique, sensitivity does not seem to be affected, but maximum audio output level is significantly reduced. Drew

From drewmaster813@hotmail.com Mon Mar 22 23:57:27 2004
Message-ID: <Law9-F97kC6oiatlqK30000ba45@hotmail.com>

On sources of balanced antenna feedline, Robert Jarnutowski wrote:

>Try Allied 1-800-433-5700 for Belden type 9207 Their catalog # 216-0364 at $36.27 for a 100 ft roll in my two year old catalog.

>Or, if you like to pay more a little or maybe don't like Allied, try Mouser >1-800-346-6873 their catalog # 566-9207-100 for the same cable at $54.25 >for 100 ft.

If you want to go balanced on the real cheap, you might try CAT-5 networking cable. A member of this forum tried that and reported good results a while back.

Wei-i Li showed great wisdom in his decision to compile and categorize our postings into "Pearls of Wisdom." That document can be found at r-390a.net . Recounting of antenna experiences like the aforementioned appears under the document's "Antenna" heading. Drew

From schluensen@freenet.de Mon Mar 22 17:01:38 2004
Subject: [R-390] MFP

I also have a 67 EAC (Serial 2283) - there is no "MFP-Stamp" - but this coating is well known by old army stuff... 73, Frank, DK1LX

From jmiller1706@cfl.rr.com Tue Mar 23 05:27:13 2004
Subject: [R-390] Sticky Carrier Meter

I have a practically new carrier meter that tends to stick around 60-90 on the scale. It was purchased NOS in original sealed envelope. Tapping it lets it move all the way. It is one of the kinds that has the glowing calibration marks. Is this a sign that some of the coating has flaked off and is jamming the meter movement? What are the suggestions? Jim N4BE

From bill.riches@verizon.net Tue Mar 23 13:30:33 2004
Subject: [R-390] Test equipment repair

Any idea of a person that repairs Tek scopes. I remember seeing a name of someone in the Midwest?? 73, Bill Riches, WA2DVU

From BRingwoo@csir.co.za Tue Mar 23 14:27:45 2004
Subject: [R-390] Test equipment repair

Hi, If you fancy doing it yourself, see TekScopes@YahooGroups.com Look for "Stan Griffiths" on Google. The older Tek scopes are nice to work on and have really good manuals. I don't know if yours is old or new. Hope this helps - Bryce

From stevehobensack@hotmail.com Tue Mar 23 22:21:36 2004
Subject: [R-390] Audio cuts out

The audio cuts out to a low level on my '62 Imp/Tel intermittently. It is difficult to troubleshoot because it may work fine for an hour or more. It stays at the low volume state for less than a minute. Turning the

unit to standby and back will correct it, or a loud static crash will correct it. I swapped audio modules, no joy. The s meter/dB meter stays steady during the trouble. It seems the trouble is after the s meter circuit and before the audio amp. I think I remember a reflector post during the past year about bad diode load coax? Any ideas? Thanks. Steve.....KJ8L.....CTR '67-'70

From jmiller1706@cfl.rr.com Wed Mar 24 00:14:33 2004
Subject: [R-390] Audio cuts out

I had exactly the same problem and, yes, in my case it was bad coax from the IF module back to the diode load terminals and then up to the front panel. Good luck.

From wa9vrh@mtco.com Thu Mar 25 18:15:31 2004
Subject: [R-390] FS R390A Chuck Rippel Videos

R390A Video 7 hours in length done by Chuck Rippel WA4HHG new list $109.95 R390A Addendum Video 3 hours and 40 minutes also done by Chuck Rippel WA4HHG new list $49.95 Like new. Both for $110.00 plus shipping from 61559 Postal money order preferred. Thanks Larry WA9VRH

From windy10605@juno.com Thu Mar 25 20:55:15 2004
Subject: [R-390] R-390A comparison

I've checked and can't find a source for comparison data between a R-390, R-390A, and SP-600 JX?? which lists pros and cons, specs, etc. I realize this group may be a little biased <grin> but they are all excellent radios and I have a very nice late serial number EAC R-390A which is great. There is also an opportunity to purchase a SP-600 JX-14. The SP-600 has a very easy to tune dial system if the desire is to "scan up and down the band, SWL, etc". Any good facts out there ? 73 Kees K5BCQ

From wa9vrh@mtco.com Thu Mar 25 22:08:07 2004
Subject: [R-390] Fw: FS R390A Chuck Rippel Videos SOLD!

Hi all, The videos are sold. Thanks for all the replies. I have 2 people in que in case the first buyer doesn't work out. 73 Larry WA9VRH

From polaraligned@optonline.net Thu Mar 25 22:32:37 2004
Subject: [R-390] MORE Chuck Rippel Videos!

I have both R-390A videos currently for sale on that E-place. I also have the SP-600 video for sale there. Scott

From ba.williams@charter.net Fri Mar 26 02:05:46 2004
Subject: [R-390] R-390A comparison

Hello Kees, Actually, most of us have SP-600s around here...or a lot did last year. There has been quite a lot of SP discussion in the past, so feel free to ask and discuss.

If that JX-14 is in good shape and has a good price then buy it. They are fine band cruisers. They aren't as sensitive as the R-390 family, they don't have the sharper filters, sometimes they drift a little, but the fantastic audio makes up for most of all that. I know that I love my JX-26.

I hope that you have found a good deal with the radio. There are many people here who can help you along with getting comfortable with it. the other other Barry

From pulsarxp@earthlink.net Fri Mar 26 03:02:55 2004
Subject: [R-390] R-390A comparison

Well, I missed out on Larry's (WA9VRH) offer to sell his Hi-Res Chuck Rippel videos on the R-390A. I would like to buy both of them plus Chuck's video on the SP600JX. If there is anyone out there wanting to part with their videos, I sure would be interested in hearing from you. Thanks for reading this. Lee Bahr w0vt Houston

From windy10605@juno.com Sat Mar 27 20:01:10 2004
Subject: [R-390] Painting a SP-600

I acquired one of these with a really bad (good ?) "dunking" of that anti-fungal stuff or whatever it is and several adhesive residues on the front panel. There were a number of chipped places, some of the front panel was sticky, you get the idea. After trying some of the usual soap, solvents, etc it just got worse. I read the R-390A articles you guys have posted on repainting and decided that was the only way.

Surprisingly easy !! I know you guys who have done this before are probably laughing, but it really was easy to strip the panel with chemical stripper, sand with 400/600 wet/dry, good water flush clean, and paint it. Next comes filling in the lettering with antique white. I checked at Home Depot and the closest I could find is a "pewter" Rust-O-lium paint which has minimal gloss, a slightly textured finish, and is slightly darker (but not nearly as dark as some restorations I've seen) than original. Looks good .....so far. 73 Kees K5BCQ

From kc8opp@yahoo.com Sun Mar 28 11:36:10 2004
Subject: [R-390] R-390/A Rescue

Hello group, This is one of those stories that had I not been involved with would be a bit hard to believe, But what follows is the absolute truth.

A week back while finishing up an AM QSO on 40M, A ham from KY called me and said that he had been listening to the conservation about R-390s. He had delivered his to a local ham for repair a while back. The radio was deemed "beyond economical repair" so he had told the repairing ham to dispose of the radio. He passed along his name and telephone number and of course I gave him a call.

When I called to see if the radio was still available, there was a short pause on the line. The R-390 was available, but to dispose of it he had tried to put the radio out for the trash man and was told that it was to big and bulky and would have to be in smaller pieces to be allowed in the trash. So he proceeded to dis-assemble the radio by taking out all of the modules, removing the front panel and controls, and taking apart the main chassis and he was about to take the VFO apart. He said he would stop taking it apart if I was interested.....DUH!

Well 630 miles and $25 later there is now a Stewart-Warner #1858 R-390/A in the basement shop. The only thing missing is the antenna relay, which had been replaced with some yet to be determined hay-wire so-239's. Came complete with original meters and ID tag, plus all the tubes covered with IERC shields.

Some assembly is required, but should not be to difficult. Most of the cut wires are still long enough to make the connections. The frame is back together, front panel now has the harness and all controls and should start making the connections this weekend. Did I mention that he also included the operations and maintenance manual.

The VFO is a cosmos, but all of the modules are Stewart-Warner. The RF deck mech alignment has slipped, but overall looks OK. Initial plans are to re-assemble, repair and align.

This is the first 390/A here, but should fit in OK with the three non A's already in service. I may have some questions for the group regarding particulars of the A model as this project moves along.

I do have some pictures of the pile of parts and am taking more as the re-assembly moves along. A friend has a web site so will see if we can put some info and pictures there.

Sorry about taking up so much bandwidth with the long winded story, but I will try to keep ya'll posted as things move along.

Gary, WB8BEM came along for the ride and will back me up on this rescue story, like I said in the beginning, almost un-believable. 73's Roger KC8OPP

From g4gjl@btopenworld.com Sun Mar 28 12:20:15 2004
Subject: [R-390] MFP

I have EAC 68 #2033 and there is no MFP on the set any where Pete G4GJL

From ezeran@concentric.net Sun Mar 28 13:50:45 2004
Subject: [R-390] R-390/A Rescue

.....and close to April 1 too! ~8^ Good luck and Happy BoatAnchoring!!!!

From Barry Hauser" <barry@hausernet.com Sun Mar 28 16:06:03 2004
Subject: [R-390] R-390/A Rescue

Hi Roger I, for one, do not doubt your word.

Recollections, tho' foggy suggest that this was probably not the most improbable '390 tale. There are some members of the DDD Dumpster Diver Department who have made interesting prior briefings. Also reports of drive-by's, whereby the listmember or close affiliate was innocently driving along, spotting an R-390() sitting on the curb, (or yard sale table) awaiting pickup (so they did). These do not include the tales of yore wherein mint '390's were acquired for chump change near the end of swapfests as the sellers didn't want to lug 'em back home, etc. These are difficult to believe out of context of the eon in which they occurred. (A little bit like looking at the Roman viaducts many of which still work and thinking "How'd they do that?!". Ans.: Cheap labor, lots's of time, stone and brick and high quality

concrete as opposed to the new stuff that cracks after a couple of years. But, again, as with the '390's, I guess you had to be there.)

Don't worry about bandwidth. Reclamation of otherwise doomed relevant artifacts is of keen interest around here. Hmmmm. Seems as though the Internet and the e-place are not sufficient protection against current uniformed disposal. We'll have to start making up those photocopied signs with photos saying "Have you seen me?!. If so, Please Call XXX-XXXX or email XXX@XXXX." And if that's not enough, we'll have to go with the milk cartons, too.

In case you missed a sideways reference in a previous post, I have taken over the remaining ATC inventory of R-390A parts, which includes wiring harnesses (cut off), antenna relays, filters, back panels, etc. There are other sources for parts, but from the sound of what was done, I might have the right combination of stuff. These parts came from about 200 R-390A's that were stripped down many years ago. <sigh>

Lemme know if you are missing pieces. Prices are as/was (and still are) on the ATC website. good luck Barry

From tetrode@comcast.net Sun Mar 28 16:48:36 2004
Subject: [R-390] R-390/A Rescue

Great story Roger, it helps make up for the all too common tales of mindless R-390 destruction that one hears. And that was some chain of events leading to your catch; you definitely deserve "Hero" status for saving another great old radio from the landfill. I guess that repairman never heard of Ebay!

With your background you should have no problem with repairing the "A", it's construction is a lot more straightforward than it's predecessor. John

From mjmurphy45@comcast.net Mon Mar 29 14:00:51 2004
Subject: [R-390] I Eat R390's

Not Really ! I just wanted to wake you guys up. I am Mike Murphy WB2UID and I am new to the list but not new to surplus fun. 20

I am going to be working on a 1960 Stewart Warner R390A and a TMC CV591A SSB Converter and will be sharing my thoughts and looking for help along the way. Both have been limping along in the shack for too long now and they both need the "treatment". Mike

From Barry Hauser" <barry@hausernet.com Mon Mar 29 15:57:46 2004
Subject: [R-390] I Eat R390's

I knew you must be kiddin' us. They're waaaaay tooo crunchy, even after soaking in warm milk or boiling chicken broth. Barry

From tetrode@comcast.net Tue Mar 30 00:02:58 2004
Subject: [R-390] I Eat R390's

> I knew you must be kiddin' us. They're waaaaay tooo crunchy, even after > soaking in warm milk or boiling chicken broth. > > Barry

Hmm, this might be one of those new Atkins diets, low carb with yummy dietary grease. But you know Mike they say you are what you eat, so be careful or somebody here might want to dissassemble your gear train, stagger tune your IF, or even yank out your ballast tube and replace it with some other gizmo.

But just in case you'd like some documentation to digest, check out these links: R-390 FAQ/info: http://www.r-390a.net/ and BAMA site has a CV-591A manual in the TMC section: http://bama.sbc.edu/ This is the web version but they also have FTP access as well. 73, John

From alexx@techunix.technion.ac.il Tue Mar 30 08:05:41 2004
Subject: [R-390] I Eat R390's AND MORE

If you have such a strong appetite, I can send you some heavy transformers big junk of computers engines and used motor oil to drink. boon appetite alex

From cbscott@ingr.com Tue Mar 30 23:43:47 2004
Subject: [R-390] R390s or other BA sites in Sacramento, CA?

In the area on business this week and wondering if there was anything R390 or other BA-related points of interest here. Regards, Barry(III) - N4BUQ

From theprof@texoma.net Wed Mar 31 02:57:20 2004
Subject: [R-390] Re: I Eat R390's

Sudden flashback... Back in the early 80's the computer that ran the test floor at TI had a rather interesting preventive maintenance item - once a month you had to top off the hydraulic fluid in the hard disk drives head position actuator servos.

From mikea@mikea.ath.cx Wed Mar 31 13:00:16 2004
Subject: [R-390] Re: I Eat R390's

Richard wrote: > Sudden flashback... Back in the early 80's the computer that ran the > test floor at TI had a rather interesting preventive maintenance item - > once a month you had to top off the hydraulic fluid in the hard disk > drives head position actuator servos.

Ah! IBM 2314 disk drives, I'll bet. Probably hung off an IBM 360 'puter. "Stone knives and bearskins" not up to glowbugs yet, or well past them, depending on how you look at it. Mike Andrews

From hcjoel@direcpc.com Wed Mar 31 15:04:48 2004
Subject: [R-390] Info Please

My frustration watching the near daily reporting of casualties by bombing is getting worse! There are knowledgable members on this list that could offer information relating to the ongoing death of US army and civilian personnel in Iraq (to-day: 5 soldiers, 8 civilians).

Fact: Most of the bombs are set off by radio transmission
Fact: Transmitters used are cell phones or R/C toy cars
Fact: A recent TV news clip showed GI emptying a dead terrorist's suitcase and removed two or more R/C toy cars
I have never heard any news comments about the possible use of short range jamming devices in armed forces or civilian vehicles. The frequencies transmitted are known. Question: How much would it cost to built such a jammer? SHould this be a high priority item for the pentagon people? Has anyone heard about such jammers already being used, and if so, why dont they work. Sorry to interrupt the regular scheduled program.

From windy10605@juno.com Wed Mar 31 15:04:01 2004
Subject: [R-390] black beauties

I realize these are notorious and fail and I've replaced many. But, I have a question. If (and I don't know this for sure) the failures are caused by moisture intrusion, like composition resistors changing value, would a unit which has been sprayed with that anti moisture/fungus goop be less prone to 50 year old capacitor failure and having the composition resistors change value ? 73 Kees K5BCQ

From jbrannig@optonline.net Wed Mar 31 15:31:36 2004
Subject: [R-390] Info Please

I share your frustration..... A broadband jamming device could have the undesirable effect of jamming communication frequencies or setting off the device..... Jim

From mikea@mikea.ath.cx Wed Mar 31 15:45:37 2004
Subject: [R-390] Info Please

wrote: > My frustration watching the near daily reporting of casualties by bombing is getting worse!

It's already being done, I'm told. The radio techs have been building jammers for those freqs from spare parts. I suspect that there will be "official" jammers in the supply chain Real Soon Now. I don't know if the cellphone infrastructure is functional in any part of Iraq, but we can expect cellphone-triggered bombs as soon as it is, just like those in Madrid. And yes, it's intensely frustrating to me. Mike Andrews

From Michael Melland, W9WIS" <w9wis@charter.net Wed Mar 31 16:04:50 2004
Subject: [R-390] Info Please

> It's already being done, I'm told. The radio techs have been building > jammers for those freqs from spare parts. I suspect that there will be > "official" jammers in the supply chain Real Soon

True..... but don't hold your breath on the "official jammers". Most of our boys have been without the latest personal body armor (IBA) since their arrival there. The new armor is much more effective, lighter and cooler. It was last promised in December but has yet to be issued to most frontline units.... interestingly some of the USMC infantry units present have been issued vests that are Vietnam veterans, or none at all.... and so it goes <sigh>. Why am I not surprised. Article by Col (Ret) Dave Hackworth here and responses... http://www.sftt.org/cgi-bin/csNews/csNews.cgi?database

Hacks%20Target.db&command viewone&op t&id 63&rnd 694.242155254649 Mike, W9WIS

From goode@tribeam.com Wed Mar 31 16:47:10 2004
Subject: [R-390] Info Please

Jamming is one thing. Detection would be even better. Look for the LO. Jam that freq. Drive by it. Then when the SOBs come out to see why it did not go off. Blow them up! I hope this is being looked at by our army tech people. Steve

From scr287@sbcglobal.net Wed Mar 31 16:48:07 2004
Subject: [R-390] Info Please

Brings up a question Are the R/C car receivers superhets or super-regens? Jack Jack Antonio WA7DIA scr287@sbcglobal.net

From goode@tribeam.com Wed Mar 31 17:01:08 2004
Subject: [R-390] Info Please

I believe the R/C airplane receivers are superhets. I do not know about the R/C cars. A little investigation can find this out along with knowledge of what they used in the past. Steve

From Commtekman@aol.com Wed Mar 31 17:21:55 2004
Subject: [R-390] Jamming the RC frequencies

Been reading the discussion with interest on the setting off of explosives with RC and other RF. I have forwarded some of this discussion to a retired CIA friend of mine for comment. Bob K6OSM