

Premium-Rx Archives

Sept 19, 1999 to Jan 1, 2001

Note: Audio and picture files removed ...

premium-rx-digest Saturday, September 25 1999 Volume 01 : Number 051

Date: Sun, 19 Sep 1999 20:26:12 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Ted Minchin

Gentlemen:

Our newest member send us "Greeting from New Zealand". Ted Minchin lives in the village of Arapuni which is 45 miles Southeast of the city of Hamilton in the North Island of New Zealand. He works in as a bulk electricity dealer and energy market analyst for one of the larger electricity generating companies in New Zealand.

Even though he received his first amateur call in 1967 and presently operates ZL1MT, Ted's major interest is on the technical side of HF RF design and monitoring unique digital signals in the HF spectrum. Presently, his receiver collection consists of many high-grade communications devices including a Racal 1778 which is a variant of the 1772. This radio is fitted with 12 memories and a "spinner" type tuning system that covers from 15Khz to 30 Mhz continuously with 3 tuning speeds. Topping off his collection is a PAIR of RA6790GMs used in diversity mode for the reception of RTTY signals. And why the RTTY signals, well Ted also has a collection of Teletype Corporation printers. Unfortunately, he reports, "there seems to be less and less printable tty on the bands presently." Another interest our newest member has is diversity reception of HF broadcasts and its relationship to propagation.

As a point of interest..... perhaps next summer when many of our List members participate in the Grayland 2000+ Dxpedition, Ted could report on propagation levels from his end of the signal path???

Here is how you can contact Ted:

Ted Minchin ZL1MT Monitoring Service Co-ordinator NZART RD1, Putaruru, New Zealand Phone + 64 07 8835716 FAX + 64 07 8835778 email tedm@xtra.co.nz packet... zl1mt@zl1ux.ham.nzl

Date: Tue, 21 Sep 1999 16:18:01 -0700
From: dma@islandnet.com
Subject: Prem-Rx: Multicouplers

Hi All ...

I recently got a multicoupler that is anything but a microprocessor controlled, solid state premium gadget. Hopefully this won't get me kicked off the list - Greg is a tough listmeister! Anyway, this Collins CU-1688/FRR multicoupler was intriguing because I wondered how it compared in performance to the newer MCs quite a few list members use, and if it had any impact on the overall performance of rcvrs connected to it.

So I ran some comparisons between it and the much newer RCA CU-5069/FRD-10A MC that has been discussed on this list before. The results are in this month's Electric Radio, or at the URL below.

One conclusion I reached was that either MC stuck in front of a high performance receiver degrades performance to some extent. Hardly surprising and not a big issue for me, but if you're milking the last electron out of your antenna, you may want to connect direct.

http://www.islandnet.com/~dma/Boatanchors/cu-168_frr.htm

Jan Skirrow

Date: Tue, 21 Sep 1999 17:30:19 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: List Server Down

Gentlemen:

Evidently, the University's internet server, a SUN computer, was down from approximately 12:00 to 15:00 PDT (-0700), however, the premium List server, "Kahuna", did not crash. This is the second time our List server has been down in 10 months. Not bad assuming you have 37,000 students hammering on it daily.

I noted that Jan's report on the multi-coupler (16:18) was posted to the List membership so the servers were operating at that time. If you posted to the list during the down time, please repost.

Greg.

P.S. Jan's comment in his post about me being a "tough listmeister" should be taken with a grain of salt. Actually, I kinda feel sorry for the guy... you know, up there in Vancouver land, getting colder by the minute, cloudy, some rain, maybe some of that white stuff, nothing to look forward to for the next 6 months.

Date: Tue, 21 Sep 1999 21:31:19 -0400
From: "Pete Ferrand" <pete@vermontel.net>
Subject: RE: Prem-Rx: Multicouplers

> ---
> off the list - Greg is a tough listmeister! Anyway, this Collins
> CU-1688/FRR multicoupler was intriguing because I
> wondered how it compared
> in performance to the newer
> results are in this
> month's Electric Radio, or at the URL below.

Hi Jan, just got the magazine today and read the piece, interesting how the two compare. You were looking at sensitivity, which can be important, but I'd be more interesting in things like cross modulation and overload handling, although those can be harder to measure. Tubes are supposed to be better at that than old transistor designs.

Did you get any feel for that?

The multi's I've used have had filters to block out the standard broadcast band, which is understandable since that's where the strong signals are, but not for those of use who use them to listen on the broadcast band...

- Pete WB2QLL Plainfield, NH

Date: Tue, 21 Sep 1999 21:12:46 -0700

From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Joe Talbot

Gentlemen:

Our newest member, Joe Talbot, is located in Red Deer Alberta Canada. Just in case you may have that location confused with another, Joe tells me it is located at 52 deg 16 min 8 sec N, 113 deg 48 min 46 sec W, and is home of the Red Deer Rebels Jr hockey team.

Joe is a Collins 2050 operator, but has been known to tune an RA-17, and a 51-J in the past. He reports he has some QMs friends in the Canadian regular Army. He reports that he has "asked them to search out the 'reported' 800-900 HF-2050s and parts "moth balled" by the Canadian military. The HF-2050s are out of service in Canada and have been stored at 2 Canadian Force Bases (CFBs). They have told me that when equipment is taken out of service in Canada it is placed in 'war stores', in the event of war it would be used to equip an enlisted military."

Joe is "nearly retired" due to a work related injury. He has travelled throughout the world while working in the oil industry. He lists Africa as the country of his love and interest.

Welcome to the List Joe. Keep us posted on the 2050 findings.

Greg

Date: Wed, 22 Sep 1999 07:52:28 -0600
From: "John Fallows" <john.fallows@home.com>
Subject: Prem-Rx: Multicouplers

Further to the discussion on multi-couplers, I am one of those people who has used hand-selected cable-tv splitters with some success above 5MHz. Now, am planning to build a proper multicoupler..

I was thinking of using the Mini-Circuits PSC-4-3. This is a four-way splitter, with a range of 250 kHz to 250 MHz and typical isolation of 30 dB. The specs look pretty good, but I was wondering if any of you had experience with this or a comparable device.

Would also like to add some 6-10dB of gain ahead of the splitter - could anyone suggest a good modern monothic amp? I don't do much building anymore, so my data books are a bit dated - I could always use the trusty MPF102.

73, John Fallows

Date: Wed, 22 Sep 1999 08:43:19 -0600
From: "John Fallows" <john.fallows@home.com>
Subject: FW: Prem-Rx: New Member- Joe Talbot

Hi, Joe. Welcome aboard. It's nice to meet another Alberta neighbour (I am in Calgary). Interesting comment on the "war stores"; I often wondered how our modern forces would scale themselves in the case of a sudden situation. I hope they don't have another 500 senior bureaucrats in storage, too!

73, John VE6MBA Creative Express Corporation creativexpress@home.com
<http://members.home.net/creativexpress/>

Date: Wed, 22 Sep 1999 10:02:13 -0700
From: dma@islandnet.com
Subject: Prem-Rx: RE: Multicouplers

At 09:31 PM 9/21/99 -0400, Pete Ferrand wrote:

- > Hi Jan, just got the magazine today and read the piece,
- > interesting how the two compare. You were looking at sensitivity,
- > which can be important, but I'd be more interesting in things like
- > cross modulation and overload handling, although those can be
- > harder to measure. Tubes are supposed to be better at that than
- > old transistor designs.

Writing articles is difficult - to make them understandable to the intended audience and to keep them from growing too large. Cross mod and overload characteristics were things I chose not to pursue in this piece, but I shall at some point.

At great risk of spam, I would think that a tube design should be better in a number of ways! That said, though, I'm not sure a modern tube designer (is there such a thing!!) would use the Collins approach.

One related point I didn't make in my article is that the noise performance of the first circuit after the antenna is absolutely critical, as the noise added here is amplified down the line. So a low noise triode should give optimal performance and be better than an old fashioned transistor. But the laws of physics being what they are, some degradation must occur no matter what active device is used. This relates to the recent thread on preselectors. Good to have if you live in a high level RF environment, but will add noise, and the kind of performance degradation Chuck Rippel noted in a recent post would be inevitable.

- > The multi's I've used have had filters to block out the standard
- > broadcast band, which is understandable since that's where the
- > strong signals are, but not for those of use who use them to
- > listen on the broadcast band...

Indeed! The RCA MC is rather unique in not having the < 2 rolloff. Unfortunately the Collins MC rolloff is a function of the baluns used throughout, and thus not fixable without redesigning the whole thing!

Thanks for your note.

Jan

Date: Wed, 22 Sep 1999 17:48:14 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Multicouplers

Does Mini-Circuits have any low noise amps?

I seem to remember they used to have a line of amps that weren't TOO expensive. All my stuff is still in storage from my recent move so I don't have my data books or boxes of RF stuff.

Q-bit also made some nice amps but they were somewhat unaffordable unless gotten surplus. I've seen some designs on the web but not being a heavy RF type I don't know what kind of noise factors I should be looking for. I haven't seen any nice clean explanations like "a noise factor of xyzyz db will allow a 0.3uV receiver to receive a 0.05 uV signal" or anything like that.

I would also guess that the first amp has to be resistant to intermod and overload, or be after some LC filtering, like the Harris RF-551B preselector.

Date: Wed, 22 Sep 1999 17:51:12 -0400

From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: RE: Multicouplers

Oh, I thought of a stupid question.

If it is possible to put a preamp before a receiver and improve its performance, why don't the manufacturers do that? Why do all the good receivers have similar sensitivity specs? Is there some sort of limit here that can't be gotten around? If so, are we all wasting our time?

Date: Wed, 22 Sep 1999 19:16:17 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: Multicouplers

John & the Group,

The Mini-circuits splitters are probably a good place to start. Also, there are plans for making your own in the SWL section of my website. Mine are two-way so you'd need to use three for a four way split. They're flat down below 100KHz but give up at about 60MHz. The same ferrite "binocular" cores I use for the splitters, could also be applied to some amplifier circuits that appeared in Ham Radio Magazine some years back. You need an amp that is low-noise low-distortion and can deliver about a watt or two to head off overload. I'll dig up the references if you're interested.

73, Al

Date: Wed, 22 Sep 1999 18:27:26 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: John R. Leary

I noted in this morning's local newspaper that John R. Leary of the Leary SP600 fame died on 9/20/99 at age 77 in Fortville, Indiana.

Date: Wed, 22 Sep 1999 19:27:55 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: RE: Multicouplers

Peter et al,

The sensitivity specs are similar, because that's about all you usually need in an HF receiver connected to a decent antenna. All you want is for your front-end noise to be below the galactic noise. More gain exacerbates intermod problems. It's a trade off.

Al

Date: Wed, 22 Sep 1999 22:57:28 -0400
From: David Clark <davidclark@home.com>
Subject: Prem-Rx: [Fwd: [R-390] Collins CU-168FRR Multicoupler]

Jan's article is on page 4 of the Sept/99 issue of Electric Radio.

It's reproduced with very nice colour pic's on his website as specified below.

**73 - Dave -
Jan Skirrow wrote.**

Hi All ...

I got one of these awhile back. It was used with R-390s and R-390As (as well as with other radios) and might be of interest to the list. I wrote an article about it which is in this month's Electric Radio, and it is also on my website. The URL below should get you straight to the article. If not, use my homepage URL in the signature bar and go to the articles section.

http://www.islandnet.com/~dma/Boatanchors/cu-168_frr.htm

Jan Skirrow, VE7DJX

Jan,

You may also want to collect a CU/872 antenna coupler. ASA used these things by the rack full. One CU/872 accepts one input to 8 outputs. They were for receive only. Three couplers could be run in series to fan one antenna out to 4000 receivers. We never done that. but we would get three deep using one coupler at the master rack to fan one antenna out to 8 bays and then one or two in the bay racks to fan the antenna out to 8 or 15 receivers in the bay. There were 15 man 30 receiver ditty bays. and 15 man 30 receiver tty and voice bays.

The CU/872 had 20 each 9 pin dual triodes. All the tubes were the same kind. It had a low pass filter at 2Mhz. This could be bypassed by changing the coax BNC connectors in the bottom of the chassis. The top end also had a filter at 30 Mhz. Not having a receiver that went over that we never saw a need to by pass it. One output port equaled the input port. So the gain was 8 for the unit. As the unit used output hibred transformers, It was often wondered if a couple of outputs could be added to get a gain of 2 or 4 from the couplers.

Roger KC6TRU San Diego

Date: Wed, 22 Sep 1999 21:03:37 -0600
From: "John Fallows" <john.fallows@home.com>
Subject: FW: Prem-Rx: Multicouplers

Thanks, Al. Yes I would appreciate the references, and I will visit your web site this weekend when I can clear the affairs of work out of my mind!

And, a note to Peter's comment on preamps and effects, if you have (access to) a copy of "Solid State Design for the Radio Amateur" (Hayward, DeMaw) their treatment of the subject is well done, particularly the discussion of gain distribution at HF. (See "Advanced Receiver Concepts" chapter.)

I think the optimum design approach depends on where your listening post is located. Out here in western Canada, sensitivity is more important than dynamic range, because we just don't get signals *that strong* out here as a matter of course. Simple low-pass filtering on an up-converting front end works fine without tunable preselectivity, as long as you don't live at the very south end of a city. (All the AM stations are south of cities in Canada because their night patters force a cardioid to the north to avoid us interference.)

But if I lived in Europe or near Sackville NB, my design criteria would change.

Cheers, John

Date: Wed, 22 Sep 1999 20:20:37 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: FW: Prem-Rx: New Member- Joe Talbot

At 08:43 AM 9/22/1999 -0600, you wrote:
> Joe is a Collins 2050 operator, but has been known to tune an RA-17, and

> a 51-J in the past. He reports he has some QMs friends in
> the Canadian regular Army. He reports that he has "asked them to
> search out the 'reported' 800-900 HF-2050s and parts "moth balled" by
> the Canadian military. The HF-2050s are out of service in Canada and
> have been stored at 2 Canadian Force Bases (CFBs). They have told me
> that when equipment is taken out of service in Canada it is placed in
> 'war stores', in the event of war it would be used to equip an enlisted
> military."

To Joe and the group. The 2050's are NOT out of service. As recently as July, I have seen racks of these radios still being used. As for the moth-balled fleet, I doubt very much. In my research, I have tracked down the whereabouts (or disposal) of approximately 700+ out of the run of 1154 or so radios, so no way can there be 800 or 900 mothballed. Having many contacts in the CF supply system confirms that, rather than possessing war reserves, the exact opposite is happening in the system. There is a major move to downsize the supply system, and replace items as needed from the commercial sector. There is even talk of the entire supply system being privatized in the near future!

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

Date: Wed, 22 Sep 1999 23:31:57 -0400
From: bryantm1@us.ibm.com
Subject: Prem-Rx: Questions on WJ - HF1000

Hi guys,

I am trying to find out about the various versions of the HF1000. Are there any groups of radios to watch out for or any that could not be upgraded to the latest firmware if desired? Thanks for the help on this.

Thanks

Regards,

Mark L. Bryant

Ogilvy&Mather -- Media Intelligence New York City 914.456.9948 - Mobile (Primary Number) 800.946.4646 - 146 7343 ### Page 800.946.4645 - 146 7343 Text Page

Date: Thu, 23 Sep 1999 00:36:04 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: FW: Prem-Rx: Multicouplers

John Fallows wrote:

> Thanks, Al. Yes I would appreciate the references.....
One of the articles is "High Dynamic Range Receiver Input Stages" by Ulrich L. Rhode, Ham Radio, October 1975, pp 26-31. He give details of a push-pull wide-band HF amp using inductive noiseless feedback around 2N5109 transistors. The latter were designed for CATV distribution amps. Don't substitute unless you know what you're doing. I built a single ended version of this circuit using Amidon BLN-73-202 cores and was quite happy with the results. One of these day I need to ante up and buy Rohde's book on communication receiver design.

Al

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Thu, 23 Sep 1999 00:47:45 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Joe Talbots Address

Gentlemen:

I goofed, I have been trying to include the e-mail address of our new members as they are introduced. As one of the members noted, I dropped the ball and forgot to include Joe Talbot's address. Here it is: "joe talbot" <n52w113@hotmail.com>

Have a great weekend all.

Greg

Date: Thu, 23 Sep 1999 13:20:03 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: Weekly Drake R-7 parts quest query and Sherwood 7SP Mk3 ???'s

Thanks to a swap with a fellow list member, I've now a nice, pretty, Drake R7 that will soon hit the bench for installation of a Sherwood 7SPMK3 <http://www.sherweng.com/7spmki.html>

Although Bob sells this primarily as an IF speech processor for the TR7 I've found that the reduction of filter blowby on my TR7 makes a night vs day difference in weak signal work.

I'm hoping to get a second 7SP installed in the newly acquired R7 after some more listening for baseline.

Is anyone using the 7SP with R7?

Usual disclaimer. I don't know Bob personally, doubt he knows me, but expect a big discount on my next purchase in exchange for this promotional message :-)

Now the R7 parts. In addition to the 'nice' R7 I have a '3 legged dog' example. Need (in order of priority) pto buffer/audio board power supply board (rear) bandswitch assembly incl knob and all hardware minus the two filter boards and the smaller switch board (I need the board with the relay). meter (have found source but who knows...)

Will buy a complete but dead as a post R7 to obtain these parts.

- -bob

Date: Fri, 24 Sep 1999 18:52:31 -0700
From: Ben Wallace <bwallace@sd.cts.com>
Subject: Prem-Rx: JRC's New Receiver??

JRC NRD-371 ?

<http://www.ticon.net/~davez/nrd371.html>

Date: Fri, 24 Sep 1999 22:08:55 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: FW: Prem-Rx: Multicouplers

Hi All,

I have a multicoupler made by "Delta" for uncle I suspect. Has 2N5109 or similar. Will post the print if anyone wants.

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Fri, 24 Sep 1999 23:54:00 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: Harris 590A noise blanker?

I finally dug out my manual from my latest move and decided to revisit the noise blanker question. The control line for the NB goes to the preselector A19 on J10 pin 1. Unfortunately my manual does not have the schematic for the preselector. However, I opened mine up and found that this line goes directly to the J9 "test" connector which has nothing connected to it.

Now, the Noise Blank control line is driven by the PIO chip on the control board so, since the firmware drives it, the firmware knows when it is on or off so potentially can do other things. I could not find (perhaps I missed it) a description of how the noise blanker works in this unit but in my unit I can't hear any difference whatsoever no matter if it is on or not and I am beginning to come to the conclusion that there simply isn't one.

I had initially made a comment on this subject and there were some responses, but I have lost my saved mail and don't remember the details.

Does anybody know what the real story is on this?

Date: Sat, 25 Sep 1999 01:09:36 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Harris 590A noise blanker?

Hi,

Switch on mine keys NB light, but don't have board. Have heard that this option is rarely seen. Your idea of using line to control other functions is a good one; perhaps use switch to bypass presel by keying appropriate relay in A19. Haven't looked to see if this is new burn in ROM or hardwired line.

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Sat, 25 Sep 1999 09:38:26 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: Harris 590A noise blanker?

Peter Gottlieb wrote:

> I finally dug out my manual from my latest move and decided to revisit

- > the noise blanker question. The control line for the NB goes to the
- > preselector A19 on J10 pin 1. Unfortunately my manual does not
- > have the schematic for the preselector. However, I opened mine
- > up and found that this line goes directly to the J9 "test" connector
- > which has nothing connected to it.
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- > control board so, since the firmware drives it, the firmware knows
- > when it is on or off so potentially can do other things. I could not find
- > (perhaps I missed it) a description of how the noise blanker works
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- > matter if it is on or not and I am beginning to come to the conclusion
- > that there simply isn't one.
- > I had initially made a comment on this subject and there were some
- > responses, but I have lost my saved mail and don't remember the
- > details.
- > Does anybody know what the real story is on this?

Here's what I said about the noise blanker question the last time around. The noise blanker is an optional add-on that isn't present on any 590s I've heard about so far. The price for this add-on is \$2000, that quote is directly from Harris. The noise blanker mounts beside the preselector, and the wiring to the preselector has the noise blanker line with it, however, the blanker line isn't hooked to anything unless the blanker is installed.

The noise blanker works by detecting a noise pulse and blanking the IF line for the duration of the pulse. The circuits are fairly sophisticated and include another mixer (sometimes), IF noise amplifier with noise AGC, detector, high pass filter, pulse detector and IF line blanking circuitry.

You can tell if your 590 has the blanker installed by looking at the configuration number on the side of the receiver. If you are lucky, and have the blanker installed, there will be a 1 in the 4th digit of this number, otherwise there will be a zero there.

All 590s have the noise blanker switch installed, and the LED lights up when it is pushed. However if you don't have the optional blanker, nothing happens when you push the button.

John Reed

 Date: Sat, 25 Sep 1999 17:37:31 -0400
 From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
 Subject: Re: Prem-Rx: Harris 590A noise blanker?

OK, I traced out the logic board in my preselector and figured out the mod necessary to do this. I will test it after dinner tonight and report back exactly how I did it and how it worked out.

 Date: Sat, 25 Sep 1999 21:55:50 -0400
 From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
 Subject: Re: Prem-Rx: Harris 590A noise blanker?

- > Switch on mine keys NB light, but don't have board. Have heard that this
- > option is rarely seen. Your idea of using line to control other functions
- > is a good one; perhaps use switch to bypass presel by keying appropriate
- > relay in A19. Haven't looked to see if this is new burn in ROM or
- > hardwired line.

It comes off the PIO chip. The switch and indicator LED are, like most others, I/O from the processor.

I wonder if there is anything going on in the code. I lost my eeprom reader/programmer and dump from the old prom so it may take me some time before I can get into the code again.

Date: Sat, 25 Sep 1999 23:36:56 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Harris 590A noise blanker?

> Your idea of using line to control other functions
> is a good one; perhaps use switch to bypass presel by keying appropriate
> relay in A19.

I actually don't think this was my idea, at least not that I remember.

But that won't stop me from running with it and working out the mod because I think it is a wonderful idea!

I have to get some (of all things) 1N4148's tomorrow to do the mod. It involves using a spare section of one of the ULN2003 darlington drivers and a couple of diodes to force two of the relays on and two others off. I can't give meaningful component designations as I reverse engineered the board. If someone has the real schematic and could fax (914-478-2162) or email it to me then once I fully test it I could describe to others how to do it (or sketch a diagram).

Peter

premium-rx-digest Sunday, October 3 1999 Volume 01 : Number 052

Date: Sun, 26 Sep 1999 18:10:45 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: Harris 590A noise blanker bypass modification

I have made the modification to the preselector to allow the Noise Blank control line to force the preselector into bypass. This modification involves installing 3 components; no trace cutting is required.

The mod as I designed it works properly. There is a SIGNIFICANT increase in sensitivity in many bands when the preselector is bypassed. I don't have any big antennas up yet here so I can't comment on when the preselector is really needed.

Anybody who wants to know what I did, let me know.

Date: Sun, 26 Sep 1999 21:31:58 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Harris 590A noise blanker bypass modification

To everyone who wants specifics on my preselector mod, I have determined that there are at least two very different versions of the preselector. Please be patient while I work out the mod for the newer version. When it is complete and tested I will post complete specifics of mods for both versions.

...Peter

Date: Sun, 26 Sep 1999 22:36:21 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>

Subject: Re: Prem-Rx: Harris 590A noise blanker bypass modification

In the newer version of the preselector the logic/LPF board uses another set of relays to select which of two different adjustable LPF sections to use. Most of the design differences are related to the signal path rather than the control logic, so my mod is pretty much the same for either board version.

I'll give more specific information in later posts, but here is the capsule description.

The first relay is used as an input overload protect and grounds the downstream signal path whenever an excessive signal is present on the input. No mods here. Then there are 2 or 3 "nested" sets of relays until the output. The first set selects whether the preselector is bypassed or not. These two relays must be forced to the energised state to bypass the preselector and are controlled by section 3,14 of the ULD2003 driver chip that is nearest the edge of the PC board. The next inner set of relays determines whether or not to use the LPF and these must be forced to the deenergised state. They are controlled by section 4,13 of the same driver chip. The newer preselectors have one more set of relays to select which of two LPFs to use and we don't care what state these relays are in during bypass.

The noise blanker signal line is a logic high (about 3.5 volts) when the NB is supposed to be on. I use this to turn on a spare section (7,10) of the driver chip and with two diodes, force one set of relays on and the other set off.

Follow the NB signal line from J11 pin 1 and you will find that it passes through a feedthrough right near the middle of the PC board. Connect a 2.2k 1/4w resistor from that feedthrough to the ULN2003 chip nearest the edge of the PC board, pin 7. Use teflon sleeving on the resistor leads and be careful not to solder bridge the chip pins together. Tie the cathodes of two 1N4001 diodes (not critical, any good diode will do) and connect to the ULN2003 pin 10. Connect the anode of one diode to pin 14 and the anode of the other diode to pin 4.

I would have preferred two separate spare drivers, but on the newer preselector the second spare is used for the extra set of relays. The LPF enable relays may still engage with this (do you REALLY want to know why?) but the preselector will otherwise be bypassed when you turn on the noise blanker. This is an easy mod and easy to remove, but be sure when removing the RF cables that you don't mix them up and when reinstalling the A19 module that you don't pinch any cables and that the control and power cables are on correctly. Don't even think of doing this with the power on.

Date: Mon, 27 Sep 1999 20:19:05 -0700
From: Ben Wallace <bwallace@sd.cts.com>
Subject: Prem-Rx: Harris RF-590

I have an excellent condx Harris RF-590 for sale with manual and power cable. Please contact me direct for details.

bwallace@sd.cts.com

73 -- Ben WB8HUR San Diego

Date: Tue, 28 Sep 1999 18:54:27 -0700
From: Ben Wallace <bwallace@sd.cts.com>
Subject: Prem-Rx: Harris RF-590

I have withdrawn the RF-590 from sale.

Thanks,

Ben WB8HUR San Diego

Date: Wed, 29 Sep 1999 15:52:57 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Harris 590, For Sale Notice

Gentlemen:

A number of you have inquired (off List) regarding the "for sale" notice posted by Ben Wallace, and its subsequent "not for sale" notice that soon followed.

I am not sure why Ben decided to withdraw his receiver, but as far as the List commercial guidelines are concerned: 1) it was a Preemie receiver, 2) he suggested individuals contact him off List, and 3) no \$ value was mentioned. I think this fulfills the quasi established guidelines we accepted some time back. So if others have premium-rx devices or associated pieces and want to make an announcement, go for it.

As most of you know Ben, Mike Murphy, and I live in the America's Finest City (San Diego). Because of this fact, I often give Ben a hard time on the List. In fact next to our Canadian group, affectionately known as the Oak Leafers, Ben typically is in my number two target position. :-). Ben works for Qualcomm, the company that almost broke the \$200 per share price barrier yesterday on Wall St. As the project manager of the Globalstar project (Qualcomm's satellite telephone system), he is one of the major players that makes possible the amazing \$200 number. Some guys have all the luck.... stock options, receiver collections,

Greg

Date: Wed, 29 Sep 1999 17:44:29 -0700
From: Ben Wallace <bwallace@sd.cts.com>
Subject: Re: Prem-Rx: Harris 590, For Sale Notice

Thanks Bailey -- oh friend of mine

Now that you've guaranteed that I will never get a bargain from anyone on the group.....

I have an idea that I would like to propose to the group. How about some of us folks on the group participating in "ad hoc" on-line discussions related to receiver or general communications design:

receiver dynamic range DSP filtering, XTAL filtering, Mechanical filtering Synthesizer power supply design antenna active antennas

We could start with one (1) subject -- wear it out -- then proceed to the next. I can guarantee that we will all learn from each other.

Ben

Date: Wed, 29 Sep 1999 20:56:09 -0400
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: Harris 590, For Sale Notice

I think Ben's discussion forum idea, one relevant subject at a time, would be terrific and I think Greg would agree it falls within the context of the intended scope of this List.

/dave clark

Date: Wed, 29 Sep 1999 21:18:21 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Harris 590, For Sale Notice

From: parnass@lucent.com (Robert S Parnass)
Subject: Prem-Rx: ITT Mackay Marine 3031A full specs

FYI, here are Mackay's specifications for the ITT Mackay Marine 3031A receiver. Please forgive the wide formatting and any typos.

Bob Parnass, AJ9S parnass@bell-labs.com

1.3 TECHNICAL SPECIFICATIONS

All performance parameters meet or exceed U.K. Specification MPT 1201. Frequency range 15 kHz to 29.99999 MHz in 10 Hz increments. Operating modes A1, A2, A2H, A3, A3A, A3H, A3J; F1 with optional filter and external demodulator (SSB modes are USB).

I-F bandwidths SWITCH POS. MODE (FILTER) SWITCH 6 dB BANDWIDTH 60 dB BANDWIDTH
8.0 kHz AM 8.0kHz minimum 20 kHz maximum 2.0 kHz AM 2.0kHz minimum 12 kHz maximum 1.0
kHz AM 1.0kHz minimum 6 kHz maximum 0.4 kHz AM 0.4kHz maximum 4 kHz maximum USB USB
< +0.35 & > +2.7 kHz > 0.5 & < +3.8kHz RTTY* RTTY 0.5kHz maximum 4 kHz maximum
Frequency stability 1 ppm 0C to +40C (5 ppm to +50C) with 10% power supply variation; < 1 ppm
peryear aging.
Sensitivity

SENSITIVITY FREQUENCY μ V EMF FOR DUMMY BANDWIDTH RANGE 10 dB SINAD
ANTENNA MODE (kHz) 100-160 kHz 32.0 Ω /220 pF CW 1 1.6-4 MHz 10.0 Ω /220 pF
CW 1 1.6-4 MHz 32.0 Ω /220 pF AM 2 1.6-4 MHz 5.1 Ω /220 pF AM 8 1.6-30 MHz 0.8
50 ohm SSB SSB 4-30 MHz 0.6 Ω CW 2

Sensitivity is reduced uniformly by approximately 20 dB between 100 kHz and 15 kHz. Intermediate frequency Greater than 80 dB. rejection Image rejection Greater than 80 dB.

*Optional; when installed, the filter is centered at 1700 Hz, offset from the 5 MHz i-f. If the RTTY is not installed, the USB filter is automatically switched in when the RTTY mode is selected.

Spurious response rejec- Greater than 80 dB, referenced to tion (external) rated sensitivity (includes image and I-F rejection). Internally generated With the antenna input connector spurious responses terminated in a 50 ohm load and the preselector set to WIDEBAND, the maximum level of internally generated spurious responses does not exceed 0.13 microvolt (-124 dBm) equivalent input level in any marine band, or 0.5 microvolt outside marine bands. Cross modulation (using With a wanted signal of 1.0 mill— 2 kHz filter) volt EMF, an unwanted signal of 32 millivolts EMF (30 percent, 400 Hz modulation and separated by 10 kHz) produces an output at least 30 dB below the output level due to the wanted signal standard output. At separation of 20 kHz, the unwanted output is at least 33 dB below the standard output. Blocking With a wanted signal of 1 millivolt EMF (2 kHz bandwidth), an unwanted signal of 100 millivolts EMF (separated by 10 kHz) causes less than 3 dB change in output; for the 0.10 to 0.16 MHz frequency band, the separation is 5 kHz (1 kHz bandwidth). With a desired signal of 31.6 micro— Intermodulation volts EMF set to give standard out— products put (50 mW), two equal level undesired signals offset +30 and +60 kHz, respectively, do not produce more than standard output when their levels are as specified in the following table: MINIMUM LEVEL (EMF) OF EACH FREQUENCY BAND- DUMMY PRESELECTOR UNWANTED RANGE WIDTH
MODE ANTENNA POSITION SIGNAL 100-525kHz 8 kHz AM 10Ω /220 pF As Tuned 100.0 mV
525-1600 kHz 8 kHz AM 10Ω /220 pF As Tuned 31.6 mV 1.6-30 kHz USB SSB 50 Ω Wideband
68.0 mV

Automatic gain control Range: less than 6 dB change in output for input signal variation from 1' microvolt to 100microvolts (100 dB measured in SSB mode with preselector set to WIDEBAND (50 ohm input), Attack time: 10 milliseconds nominal Decay time: FAST - 150 milliseconds nominal SLOW — 1.5 seconds nominal Audio output Speaker: 2.5 watts into 3.2 ohm load with 3% maximum distortion. Line: adjustable to +10 dBm (10 mV) into 600 ohm balanced load. Spurious emissions The rms voltage present at the antenna terminal of the receiver is less than 10 microvolts into a 50 ohm

dummy antenna. Overload There is no damage to the receiver when an input signal of 30 volts EMF is applied for 15 minutes using a standard antenna. Operating temperature Full performance range 0C to + 50C Operating temperature range: -15C + 55C Relative humidity Up to 95%. Input power 90-130/195-260 volts, 47-63 Hz, single phase. Power consumption 62 watts. Clarifier range + -150 Hz minimum. BFO range Adjustable to a beat note ranging from 0 to > 2 kHz, centered at 1 kHz nominal

1.4 DIMENSIONS AND WEIGHT WITHOUT CABINET CABINET (OPTIONAL) Height 5.25 in 13.1 cm 6.00 in 15.0 cm Width 19.00 in 47.5 cm 19.75 in 49.4 cm Depth 17.00 in 42.5 cm 18.00 in 45.0 cm Weight 30 lb 13.5 kg 18 lb 8.1 kg TABLE 1.1

MAJOR ELECTRONIC COMPONENTS

Front Panel Front Panel Interconnect PC Board Display Decoder PC Board**

Rear Panel Rear Panel Interconnect PC Board

#Preselector Module Preselector PC Board

#Signal Path Module Signal Path Mother Board Front End PC Board 5 MHz i-f PC Board Audio Amplifier PC Board Information Filter PC Board

#Synthesizer Module Synthesizer Mother Board Major Loop VCO PC Board* Major Loop PC Board Minor Loop PC Board Loop Translator PC Board Low Frequency Reference PC Board 87 MHz Oscillator PC Board 5 MHz BFO PC Board

Scan Tune Mechanism Opto-Coupler PC Board

#Scan Tune Module Scan Tune Counter PC Board Scan Tune Encoder PC Board

*Mounted on Major Loop PCB **Mounted on Front Panel Interconnect PCB #Plug-in Module

Date: Sat, 2 Oct 1999 19:37:51 -0500 (CDT)
From: jeffa@ix.netcom.com
Subject: Prem-Rx: Need copy of a page from HF-2050 manual

I was just looking through my HF-2050 manual and discovered that I'm missing page 5-59/60 (and any pages past 5-61/62, if such pages exist). Would it be possible to get a copy of the missing page(s) from a list member?

Many thanks, and best regards,

- - Jeff, WA6AHL

Date: Sun, 03 Oct 1999 19:18:42 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 unknown mod?

My HF-2050 has a tag with the following notation, located on the front of the receiver near the tuning knob:

CANAVMOD 123456 with the 2 X'd out MP79-8

I'm totally unaware of any mods done on this receiver while in service. Anyone have any ideas?

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

RACAL: (1) RA-17C (2) RA6790/GM

RCA: AR-88

RME: Two: RME-6900

Spec.Prod.: SR7-R WWV rcvr -looking for schematic/anything!

Ten Tec: Ten Tec SP-325

TMC: GPR-90

Yaesu: FRG-9600 (two)

WRL/Galaxy: R-530

Date: Sun, 03 Oct 1999 21:22:01 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Ed Sylvester

Gentlemen:

Joining us from America's Greatest City, aka San Diego, California, home of San Diego State University, is our newest member, Ed Sylvester. Our newest member heard about our List from another San Diegian, Ben Wallace. Ed pretty much says it all when he states that he and Ben "are both fanatical about receivers".

Presently Ed is operating a HF-1000A, however, he does have a number of pieces of other hardware. He first started in radio as an SWL operator in 1975, then moving on to getting a ticket in 1978 (presently an advanced, KA6DBY). Ed is a career Naval officer and frequently travels taking a radio with him whenever possible. I'll bet the Navy travel also provides a GREAT opportunity to scrounge for Premium type hardware ?

Best wishes on your travels, and keep us informed if you find an undocumented container ship full of HF-1000s.

Ed can be reached at; Aidehua@aol.com

Greg

Date: Sun, 03 Oct 1999 21:50:29 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- John Green

Gentlemen:

From Weybridge, England, just outside London comes our next member, John Green. I believe John is our 4th or 5th member reading the List from England.

John is employed by a computer software firm, mainly on defence-related projects. He has been interested in receivers since he was in school ("quite some time ago") with his first serious Rx, an AR-88D. Presently he is attempting to rack mount some of his devices.

While it is not policy to list each member's hardware, I am going to make an exception in this caes for two reasons: 1) It appears John may have some information to share for you Racal operators, and 2) I think it is interesting for us in the US to see what types of equipment those of you living over seas may have.

John can be reached at: greenjr@btinternet.com

Nice to have a representative of the British join us....

Greg

>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<

Racal RA1792 x 2 Racal RA 6790/GM Racal RA1786 x 2 Plessey 2280 and 2282A WJ8617A x 2 and a 8617B ACL/Norlin SR-2152

RA17L x 2 RA117E RA117A WJ8718 WJ8730A WJ373A-10 RA153 dual Rx RA1772 x 2 RA2309 + tuning heads R390A R216

I also have a number of add-ons: Racal MA1101 motorised HF preselector for the RA1792 x 2 Redifon RFS11 motorised/manual preselector Reaction Instruments 414 VHF/UHF multicoupler x 2 Raven Research RR 1110-16 HF multicoupler x 2 Racal MA2313E 21.4MHZ IF panoramic display unit Racal MA2232R 1.4MHZ IF tuning aid

Date: Mon, 04 Oct 1999 00:47:43 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: Drake

It should be noted that Drake has advised that it will no longer provide repair service or support for any of its 4 line or 7 line equipment. This also includes the 4245, DSR1 & 2, and its various marine receivers.

Date: Mon, 4 Oct 1999 09:23:32 -0400
From: "Ed Tanton" <n4xy@att.net>
Subject: RE: Prem-Rx: Drake

Sad isn't it?!!!

72 / 73 Ed N4XY email: <n4xy@arrl.net>

webpage: <http://www.qsl.net/n4xy/>

Date: Mon, 4 Oct 1999 12:56:19 EDT
From: Aidehua@aol.com
Subject: Re: Prem-Rx: New Member- Ed Sylvester

Thanks for that fine introduction, Greg. I'll now concentrate on boarding every container ship coming from Gaithersburg, MD for that batch of HF-1000s. Maybe I ought to work for US Customs???

73,

Ed KA6DBY/San Diego

Date: Mon, 4 Oct 1999 20:53:23 -0500
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: HF-1000 : Preselector vs .no-Preselector unit ??

Hi to all,

Pardon me being a bit "green" here.....

Was wondering if anyone here in the group has had any personal experience using the Watkins Johnson HF-1000(A) with a comparison in sensitivity between using it "with" the "pre-selector" option and "without" ??

Does the receiver usually become a bit more deaf when the Pre-selector options are used in premium gear ? I know we are maybe not talking about major change in the sensitivity here, but maybe for "Down in the mud" signals ?

I have been talking with Chuck Rippel, and it seems on this RF590 he was getting about a 6 db loss in sensitivity when the pre-selector unit option was in line.

Can attenuation be expected in most cases when a "preselector" option is used ? Or could this vary depending on the equipment/model of receiver/pre-selector ?

I guess the pre-selector option on the HF-1000 is most useful for MW signal filtering, and for most people is not needed ? Would like to here all sides and any info on this one.....

(Chuck..just trying to get more input on this ..need a bit of education on the subject..hi)

Thanks Dave Zantow

Date: Mon, 4 Oct 1999 22:17:25 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: HF-1000 : Preselector vs .no-Preselector unit ??

I have about the same on my RF-590A, depending on frequency.

By the very nature of the preselector filter there will be some loss. The question is whether any possible benefit you get from the preselector is greater than the loss of sensitivity. I now have my 590A set up with a front panel switch (the old noise blanker switch) to bypass the preselector at will. On some signals it seems there is a slight advantage to having it in line! (I haven't had much time to investigate further)

- > I have been talking with Chuck Rippel, and it seems on this RF590 he was
- > getting about a 6 db loss in sensitivity when the pre-selector unit option
- > was in line.
- > Can attenuation be expected in most cases when a "preselector" option is
- > used ? Or could this vary depending on the equipment/model of
- > receiver/pre-selector ?

Date: Mon, 4 Oct 1999 22:37:20 -0400
From: "Pete Ferrand" <pete@vermontel.net>
Subject: RE: Prem-Rx: HF-1000 : Preselector vs .no-Preselector unit ??

- > 590A set up with a
- > front panel switch (the old noise blanker switch) to
- > bypass the preselector
- > at will. On some signals it seems there is a slight
- > advantage to having it
- > in line!

Perhaps that was one of the reasons they manufactured it. :-)

Seriously, folks, if the preselector is making things better and it's not by eliminating overload, it could be just changing the impedance seen by the radio's front end. As the impedance changes there will be some points at which the signal to noise ratio is improved in a given case, and it's usually slightly

different than with a perfect 1:1 type match - in other words you can wind up tuning for best match on the signal and a slightly worse match to the noise. The presence of a tuned circuit in the line may do this by happenstance.

- -Pete WB2QLL Plainfield, NH

Date: Tue, 5 Oct 1999 22:59:15 +1300
From: "Ted & Linda Minchin" <tedm@xtra.co.nz>
Subject: Prem-Rx: Your thoughts on the Harris RF-550A

Greetings to everyone from the South Pacific....

I am giving some thoughts to the acquisition of a Harris RF550A.... I was wondering if the group could help me with some pointers on how well they go. I am interested in the following points...

How necessary is the preselector and or the half octave filter option to the receivers performance? ie how much is the receiver performance degraded by not having these options

What is the difference in performance between the RF 550 and the RF 550A? I understand that the main difference is that the 550 has mechanical filters and the 550A has Xtal filters.

The next question is somewhat delicate given the nature of the group but suggestions as to where such a receiver can be purchased and how many gold bricks one would pay for it would be appreciated. Quite happy to pay freight to ZL for it.

In short I am interested in comments from others who have owned one of these fine receivers and how they compare with the Racal RA6790GM's that I have here.

Thanks folks for letting me rave on.... vy 73 from New Zealand Ted ZL1MT

===== Ted Minchin ZL1MT Monitoring Service Co-ordinator NZART RD1,
Putaruru, New Zealand Phone + 64 07 8835716 FAX + 64 07 8835778 email tedm@xtra.co.nz
packet... zl1mt@zl1ux.ham.nzl

=== Talk Around the World == Amateur Radio =====

Date: Tue, 05 Oct 1999 08:41:01 -0700
From: John Reed <jtreed@ponccity.net>
Subject: Re: Prem-Rx: Your thoughts on the Harris RF-550A

Ted & Linda Minchin wrote:

- > Greetings to everyone from the South Pacific....
- > I am giving some thoughts to the acquisition of a Harris RF550A.... I was
- > wondering if the group could help me with some pointers on how well they go.
- > I am interested in the following points...
- > How necessary is the preselector and or the half octave filter option to the
- > receivers performance? ie how much is the receiver performance degraded by
- > not having these options

The preselector is only necessary if the receiver is exposed to strong signals in the MW or shortwave bands. Most of the time it will do better if you don't have the preselector.

- > What is the difference in performance between the RF 550 and the RF 550A? I
- > understand that the main difference is that the 550 has mechanical filters
- > and the 550A has Xtal filters.

Did you mean 590 and 590A? Both these receivers are normally equipped with mechanical filters. The main difference between them is in the layout of the synthesizer board, but in performance they are pretty much identical.

> In short I am interested in comments from others who have owned one of these
> fine receivers and how they compare with the Racal RA6790GM's that I have
> here.

Having compared the RF-590 with a Racal RA6793A (close to a 6790) I doubt if you will see much difference in performance. The main difference will be in the way the operating systems are configured. There are some features of the RF-590 that I like, and some on the Racal I also like, so it's pretty much a toss up as far as I'm concerned. The synthesizer on the 590 seems to be quieter than the one on the Racal, having fewer spurs.

John Reed, KA5QEP

Date: Tue, 05 Oct 1999 21:38:11 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Rob Sherwood

Gentlemen:

Our list of interested participants continues to grow with the addition of Robert "Rob" Sherwood. Presently calling his QTH Denver, CO., Rob started his interest in radio in Cincinnati in 1960. His first radio, a 40's vintage receiver that included two shortwave bands, was given to him by his uncle. When he made the decision to take the Novice test, he started practicing his code. Being a little "paranoid of failing" he continued to practice until he could copy a solid 13 wpm (ed. note- talk about overkill!) before he took his exam. Needless-to-say.... he passed.

During his high school days he operated CW down in the 160 meter band, then ran AM via a Ranger, and finally advanced to a R-4 and T-4X in 1965 and 1966. Like most of us, Rob would like to become more active in DXing, but time is limited at present. Hopefully, this will change in the future. He has worked under the following calls: WN8ADB (novice), WA8ADB (general), WB0JGP (general), KC0ZV (advanced), NC0B (extra).

In 1965 Rob earned a First Phone while attending college. To make financial ends meet, he worked at the school's FM station as its station engineer. After graduating, our newest member moved to Denver where he took an 18 year "temporary" job at KOA AM and FM as the chief transmitter mechanic. In 1974 Rob decided that he didn't have enough to do so he started Sherwood Engineering. It was a part time business until he left KOA in 1987, and went full time self-employed.

Rob drives a Racal 6790, a WJ 8777 (mil version of the HF-1000), NRD 545, plus a ton of additional premium stuff!. (Some of this has been "modified" with Sherwood devices. Question, do we allow "Premiums" to be modified and still consider them Premiums?) :-)

His WebSite tells the rest of the story and is a must see: <http://www.sherweng.com/>

E-mail our newest member at: robert@sherweng.com

Greg

Date: Wed, 6 Oct 1999 08:16:07 -0500 (CDT)
From: jeffa@ix.netcom.com
Subject: Prem-Rx: Changing HF-2050 tuning rates

Those who own the HF-2050 receiver know that the receiver's tuning rates are either maddeningly too fast or way way WAY too slow (about the speed of paint drying).

After peering at the HF-2050 schematics for awhile, I've managed to make some mods to the receiver and have changed its tuning rates to the following values:

Dial Mode: Freq.

Fast: From 2 MHz /dial rev. to 1 MHz /rev. Med: From 20 KHz/rev. to 10 KHz/rev. Slow: From 40 Hz(!)/rev. to 1.3KHz/rev.

Dial Mode: BFO

No change

Dial Mode: Channel

No change.

This modification took 6 IC's. The good news is that only one PC trace was cut on the Front Panel PCB (and this mod is easily backed out). There are 9 wire jumpers from my circuit (including power) to the Front Panel PCB. All jumpers go to existing pins or feedthru's, and again, are easily backed out.

IC's required are:

LM339 74HC74 74HC86 74HC151 74HC161 (x2)

In addition, there are two 2N3906 transistors and a handful of resistors. All parts were mounted on a small piece of perf-board, which I will (soon) mount by the Front Panel PCB.

Arguably an embedded controller, such as a PIC type device, could significantly reduce the parts count. But I didn't feel that 6 IC's was overwhelming. Plus, they are easily available to anyone, and no programming is required.

After making this mod and tuning around, I now understand why the slow rate is so annoyingly slow. If you try to speed up the tuning rate appreciably and then tune quickly, the receiver sounds as though it is stepping in 100 Hz steps, rather than the 10 Hz steps of the minimum frequency step size. In other words, tuning doesn't sound smooth (like it would with an analog VFO). Most likely this is due to synthesizer lock issues, and something that I'll have to live with. Fortunately, the artifacts are not nearly as bad as those of the 651S-1!

I'm going to play around with it some more this week and weekend. I can change my "slow" tuning rate in multiples of 2, so I might try some experiments to find the optimal rate.

For those interested in the circuit I'll probably make it available for an SASE. If you're not used to rolling your own digital circuits and modifying others, or if the thought of an xacto-knife poised over the PCB of a VERY expensive receiver makes you a bit squemish (believe me, my knife was poised over the board for a VERY long time while I asked myself if I really wanted to do this!), then you probably shouldn't make the mod.

Best regards,

- - Jeff, WA6AHL

Date: Thu, 07 Oct 1999 02:32:52 -0400
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: New Member- Rob Sherwood

A fantastic addition to our group! You've been busy, Greg. Welcome, Rob. 73 - Dave

Greg W. Bailey wrote:

Gentlemen:

- > Our list of interested participants continues to grow with the addition
- > of Robert "Rob" Sherwood. Presently calling his QTH Denver, CO., Rob
- > started his interest in radio in Cincinnati in 1960. His first radio, a
- > 40's vintage receiver that included two shortwave bands, was given to
- > him by his uncle. When he made the decision to take the Novice test, he
- > started practicing his code. Being a little "paranoid of failing" he
- > continued to practice until he could copy a solid 13 wpm (ed. note- talk
- > about overkill!) before he took his exam. Needless-to-say.... he
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- > DXing, but time is limited at present. Hopefully, this will change in
- > the future. He has worked under the following calls: WN8ADB (novice),
- > WA8ADB (general), WB0JGP (general), KC0ZV (advanced), NC0B (extra).
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- > financial ends meet, he worked at the school's FM station as its station
- > engineer. After graduating, our newest member moved to Denver where he
- > took an 18 year "temporary" job at KOA AM and FM as the chief
- > transmitter mechanic. In 1974 Rob decided that he didn't have enough
- > to do so he started Sherwood Engineering. It was a part time business
- > until he left KOA in 1987, and went full time self-employed.
- > Rob drives a Racal 6790, a WJ 8777 (mil version of the HF-1000), NRD
- > 545, plus a ton of additional premium stuff!. (Some of this has been
- > "modified" with Sherwood devices. Question, do we allow "Premiums" to
- > be modified and still consider them Premiums?) :-)
- > His WebSite tells the rest of the story and is a must see:
- > <http://www.sherweng.com/>
- > E-mail our newest member at: robert@sherweng.com
- > Greg

Date: Thu, 7 Oct 1999 21:25:04 +1300
From: "Ted & Linda Minchin" <tedm@xtra.co.nz>
Subject: Prem-Rx: Fw: Your thoughts on the Harris RF-550A

Greetings once again..... It seems that a case of the dreaded wrong finger disease struck this last message of mine... The receiver I want info on is the Harris RF 590A....!!!! not the 550 as originally stated! Thanks for your patience vy 73 from New Zealand Ted Minchin ZL1MT

Date: Thu, 7 Oct 1999 09:00:55 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Fw: Your thoughts on the Harris RF-550A

- > I am giving some thoughts to the acquisition of a Harris RF590A.... I was
- > wondering if the group could help me with some pointers on how well they
- > go.
- > I am interested in the following points...
- > How necessary is the preselector and or the half octave filter option to
- > the
- > receivers performance? ie how much is the receiver performance degraded by
- > not having these options

Unless you live in a high-RF environment the preselector filter does not help you; as a matter of fact, it's presence actually degrades the receiver sensitivity (I have heard someone mention 6 db. I am unable to test at this time but my ear tells me that is about right).

- > What is the difference in performance between the RF 590 and the RF 590A? I
- > understand that the main difference is that the 550 has mechanical filters
- > and the 590A has Xtal filters.

I have "heard" that the performance is nearly identical. The 590A is current production while the 590 is not. I was told by an engineer at Harris that the 590A has some sections that are more recently designed to reduce cost and improve reliability but that for my purposes it wouldn't make any difference.

- > The next question is somewhat delicate given the nature of the group but
- > suggestions as to where such a receiver can be purchased and how many gold
- > bricks one would pay for it would be appreciated. Quite happy to pay
- > freight
- > to ZL for it.

I have seen the 590 go for as little as USD 2500 and sometimes the 590A can be gotten for 3000. Toronto Surplus sells them both and will ship internationally. They have a web site, search for it as it is a good starting point.

I have a 590A and it is a fantastic receiver, extremely sensitive and you just don't find birdies.

Date: Thu, 07 Oct 1999 05:33:43 -0500
From: John Bryant <bjohn@provalue.net>
Subject: Re: Prem-Rx: Changing HF-2050 tuning rates

Fantastic news, Jeff!

I suspect that several of us will want to do the mod ourselves, while a few others might want to go into a consortium to get someone else to do the parts acquisition and assembly. It would/will be wonderful to have a reversable mod that provides user-variable tuning rates on this otherwise great radio. GREAT WORK!

Could you please give us your snail address so we could send ya an SASE?

Oh goodie, goodie, goodie!

John Bryant

Date: Thu, 07 Oct 1999 15:26:46 -0700
From: dma@islandnet.com
Subject: Re: Prem-Rx: New Member- Rob Sherwood

At 09:38 PM 10/5/99 -0700, Greg W. Bailey wrote:
> Rob drives a Racal 6790, a WJ 8777 (mil version of the HF-1000), NRD
> 545, plus a ton of additional premium stuff!. (Some of this has been
> "modified" with Sherwood devices. Question, do we allow "Premiums" to
> be modified and still consider them Premiums?) :-)
> His WebSite tells the rest of the story and is a must see:
> <http://www.sherweng.com/>

Ultra-premium probably and definitely belong here!

I was very impressed with the two BBC recordings on Rob's website with and without the SE-3. It would be interesting to hear the same comparison on a radio like the Drake R-4C or a well-tuned R-390A!

Jan Skirrow, VE7DJX Duncan, British Columbia, Canada

Date: Thu, 07 Oct 1999 16:36:35 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Prem-Rx: Info on preselectors

I am new to this site, and hopefully I am feeding this info correctly into the reflector.

These was a question on preselectors in reference to the Harris RF590A. The response about it only being helpful if the front end is being overloaded is true. Of course it is difficult to know if ones radio is in overload unless you switch in a pad or a tuner and see if spurious disappears. There was a concern mentioned about possible insertion loss issues. I don't have data on the Harris, but I do have data on the WJ 8711 / HF-1000 preselector which may be of interest to the group.

It is an 11 band octave filter that tracks the radio. Insertion loss measured about 1 dB from 1 MHz to 15 MHz, increasing to 2 dB from 20 to 30 MHz.

The bands are: 1 dB bandpass Att @ 1.6 MHz Att at 50 MHz

0-0.5 MHz 0-0.5 MHz

> 40 dB

> 50 dB 1-2 MHz 0-2 MHz 0 dB

> 80 dB 2 MHz 1.5-3.0 MHz 0 dB

> 80 dB 3 MHz 2-4 MHz 5 dB

> 80 dB 4 MHz 3-5 MHz 15 dB

> 80 dB 5-6 MHz 4-8 MHz 27 dB

> 80 dB 7-9 MHz 6-11 MHz 36 dB

> 70dB 10-14 MHz 8-16 MHz 44 dB 50 dB 15-20 MHz 12-24 MHz 60 dB 28 dB 21-25 MHz 20-26 MHz 80 dB 37 dB 26-30 MHz 23-30 MHz

> 80 dB 27 dB

Attenuation in column 3 is referenced the passband, not the total insertion loss which was covered in the text. (i.e. 1 to 2 dB)

Measurements were made with an HP 141T spectrum analyzer with matching tracking generator. Insertion loss measurements were made using the 2 dB / div scale, and the stop band attenuation was measured using the 10 dB / div scale.

The measurements at 1.6 MHz and 50 MHz were chosen to demonstrate worst case broadcast band attenuation when listening in the 2 - 30 MHz spectrum, and VHF attenuation of amateur 6 meters, Channel 2, FM, etc.

premium-rx-digest Friday, October 15 1999 Volume 01 : Number 054

Date: Thu, 07 Oct 1999 17:05:55 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Re: Prem-Rx: Info on preselectors

> My table formatting is getting jumbled, so this is attempt #2.

- > These was a question on preselectors in reference to the Harris RF590A.
- > The response about it only being helpful if the front end is being
- > overloaded is true. Of course it is difficult to know if ones radio is
- > in overload unless you switch in a pad or a tuner and see if spurious
- > disappears. There was a concern mentioned about possible insertion loss
- > issues. I don't have data on the Harris, but I do have data on the WJ
- > 8711 / HF-1000 preselector which may be of interest to the group.
- > It is an 11 band octave filter that tracks the radio. Insertion loss
- > measured about 1 dB from 1 MHz to 15 MHz, increasing to 2 dB from 20 to
- > 30 MHz.
- > Bands: 1 dB bandpass Att @ 1.6 MHz Att at 50 MHz
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- > 2 MHz 1.5-3.0 MHz 0 dB
- > 80 dB
- > 3 MHz 2-4 MHz 5 dB
- > 80 dB
- > 4 MHz 3-5 MHz 15 dB
- > 80 dB
- > 5-6 MHz 4-8 MHz 27 dB
- > 80 dB
- > 7-9 MHz 6-11 MHz 36 dB
- > 70dB
- > 10-14 MHz 8-16 MHz 44 dB 50 dB
- > 15-20 MHz 12-24 MHz 60 dB 28 dB
- > 21-25 MHz 20-26 MHz 80 dB 37 dB
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- > 80 dB 27 dB
- > Attenuation in column 3 is referenced the passband, not the total
- > insertion loss which was covered in the text. (i.e. 1 to 2 dB)
- > Measurements were made with an HP 141T spectrum analyzer with matching
- > tracking generator. Insertion loss measurements were made using the 2
- > dB / div scale, and the stop band attenuation was measured using the 10
- > dB / div scale.
- > The measurements at 1.6 MHz and 50 MHz were chosen to demonstrate worst
- > case broadcast band attenuation when listening in the 2 - 30 MHz
- > spectrum, and VHF attenuation of amateur 6 meters, Channel 2, FM, etc.

 Date: Thu, 7 Oct 1999 19:37:43 +0100

From: "Bob Duckworth" <wb4mnf@atl.org>

Subject: Prem-Rx: Pioneer S-8 sideband adapter documentation and Drake AL-4 loop antenna sought.

The message about the Sherwood AM detector reminded that I am looking for documentation on a Pioneer Electric S-8 sideband adapter. This unit features exalted carrier DSB, takes up 1/3 of a 72" rack, and was obtained in inoperative condition, sans docs.

Also looking for a Drake AL-4 loop antenna.

- -bob

Date: Thu, 07 Oct 1999 17:21:56 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: New Member- Rob Sherwood

> At 09:38 PM 10/5/99 -0700, Greg W. Bailey wrote:
>> Rob drives a Racal 6790, a WJ 8777 (mil version of the HF-1000), NRD
>> 545, plus a ton of additional premium stuff!. (Some of this has been
>> "modified" with Sherwood devices. Question, do we allow "Premiums" to
>> be modified and still consider them Premiums?) :-)
>>
>> His WebSite tells the rest of the story and is a must see:
>> <http://www.sherweng.com/>
> Ultra-premium probably and definitely belong here!
> I was very impressed with the two BBC recordings on Rob's website with and
> without the SE-3. It would be interesting to hear the same comparison on a
> radio like the Drake R-4C or a well-tuned R-390A!
> Jan Skirrow, VE7DJX
> Duncan, British Columbia, Canada

I'd be very interested in knowing what the SE-3 can do for the 2050!

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM
CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033
Collins R390A, JRC NRD535D, and the Kenwood R5000.

Date: Thu, 07 Oct 1999 18:46:30 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Re: Prem-Rx: Info on preselectors

Aidehua@aol.com wrote:

> So in conclusion, would you recommend the pre-selector? I have the HF-1000
> w/out pre-selector. Thinking about adding it.

Reply: If the price of the preselector is not an issue, then it would be desirable. But if \$600 to \$1000 (or whatever it costs) might be kind of hard to justify, then you have to look at your RF environment. The preselector doesn't affect undesired signals within the octave passband. Since the wide spaced 3rd order intercept of the radio is between +25 and +30 dBm, the front end can handle at least a total RF input of -30 dBm (5 mV) before you start getting 3rd order IM generated in the front end. If you have a large antenna, and if you tune in every strong signal between 10 kHz and 30 MHz and read its level in dBm on your signal strength meter, you can make a guess whether you are in jeopardy. If you find you have AM BC stations that run greater than -20 dBm, then you probably need it. If you have a ham or CB neighbor that is in the -20 dBm or greater signal level, then you probably need it.

If you hear signals that you suspect are spurious from receiver overload, punch in your 15 dB attenuator. Assuming the spur is at least 20 dB above the noise floor, and if applying the 15 dB eliminates it, or drops the spurious 30 dB or more, then you are being overloaded. If punching in the 10 dB preamp makes the spurious go up by at least 20 dB, then you are in overload. If the overloading signal is NOT inside the octave bandwidth of the preselector, then it would be desirable to purchase the additional front end selectivity.

> Also, what would you recommend for the R9000.
> See my web site. www.sherweng.com. I have a 9000. I love it. I think the
> spectrum display is fantastic, and useful. (I also have the transceiver
> version, IC-781. Its great.) The two weak points of the radio are: Poor

- > choice of AM filters, and no sync detector. We offer both. With our filter
- > mods you will have 12, 9, 6, 4, 3, and 2.7 kHz AM bandwidths to choose from.
- > By adding our down converter, you can take the 10.7 MHz IF of the radio and
- > feed our SE-3 and have the best sync detector on the market.

73, Rob, NCOB.

- > Thanks,
- > Ed

 Date: Fri, 8 Oct 1999 16:05:51 EDT
 From: Daiungoed@aol.com
 Subject: Prem-Rx: br communications 3 path receiver

Hi, list, Has anyone got any ideas what a BR COMMUNICATIONS 3 path receiver is? It has two units, a receiver in a 4U 19" rack mount, and a control unit about twice that size. It was made in USA. Any ideas? Thanks, Dave

 Date: Sat, 09 Oct 1999 13:56:39 -0700
 From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
 Subject: Re: Prem-Rx: New Member- Rob Sherwood

At 06:59 PM 10/7/1999 -0600, you wrote:

- > Reply: If the 2050 does not have an IF output, probably nothing. The WJ 8711
- > or HF-1000 synthesizes a 455 kHz IF output using the DSP which allows external
- > devices, such as our box, to detect the bandwidth-filtered signal. (i.e, IF
- > output is pre-detection, but filtered, not broadband.). Most DSP radios do not
- > offer that feature. NRD-545, KWZ-30, etc. are examples of DSP radios that
- > cannot, to my knowledge, ever be used with an SE-3.

Robert, page 2-5 of my manual states the following:

IF monitor (J3): 50-ohm, BNC type connector. -20-dB output at 3.0 MHz IF frequency.

Further comments? I'm especially interested as the 2050 does not have a notch filter, nor synchronous detection modes.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

 Date: Sat, 9 Oct 1999 18:21:57 -0500 (CDT)
 From: jeffa@ix.netcom.com
 Subject: Prem-Rx: More on changing the HF-2050 tuning rates

I've finally finished playing around with my modifications to the HF-2050 to change its tuning rates to something more reasonable (as reported in a previous posting this last week).

Again, the mods consist of a small daughterboard of 6 IC's mounted just above the front-panel PCB (I used two standoffs on two of the screws in the area between the speaker and mid-board). One trace must be cut on the front-panel PCB, and 9 jumpers connected between the daughterboard and the front-panel PCB.

The mods only affect the "Frequency" tuning rates, not "BFO" or "CHANNEL." The rate changes are:

Fast: From 2 MHz/rev. to 1 MHz/rev. Med: From 20 KHz/rev. to 10 KHz/rev. Slow: From 40 Hz/rev. to ~ 1.5KHz/rev.

I'm working on a description of these mods, which will consist of a schematic on an 11" x 17" sheet (B size, drawn with Orcad) and a writeup detailing the mods and the theory behind them. Unfortunately, the package will be a bit too large to fit into an SASE, so I'll mail them out in manila envelopes. If you'd like to receive a copy, please send \$1.00 (to cover postage, the envelope, etc.) to me at:

Jeff Anderson 1607 Bonita Ave. Mountain View, CA 94040

Now, a couple of caveats...

1. There is no PCB layout - you'll need to figure out where and how you want to mount your components.
2. With the tuning rate change made to the "slow" rate, tuning will sound "steppy" when tuning quickly across signals (especially noticable on CW). As it turns out, this steppiness is caused by the HF-2050's frequency update rate, which only seems to be roughly 5 times / sec. You can determine this yourself by watching the rate that the frequency on the front panel changes as you tune. It's quite a bit slower than my RA6790 or R-3030A (their numbers change much more quickly, and the tuning sounds very smooth).

For example, if my new tuning rate is 1.5 KHz / dial revolution, and I tune at a rate of 1 dial rev / second, then, assuming a frequency update rate of 5 times / sec, my tuning will sound as though it is stepping in 300 Hz steps, which is very noticable. (Of course, when I slow down the "steps" become much smaller).

Unfortunately, there ain't alot I can do about the frequency update rate. This is software, and I have no way to change it. Clearly Collins did not design this receiver to be used for casual tuning. (If they thought they had, then someone really screwed up!)

Nevertheless, the "steppiness" I find much less annoying than the incredibly slow tuning rate of this Collins design.

Again, if you are interested in receiving the mods, please send \$1.00 to my address listed above. Also, if you could, I would appreciate an e-mail in response, too, so I can get an idea of how many copies to make.

Best Regards,

- - Jeff, WA6AHL

P.S. By the way, if 1.5 KHz / rev. seems to fast or slow for you, it's fairly easy to modify the mods to change this rate to be either faster or slower, depending upon one's preference. This procedure will be discussed in the writeup, too.

Date: Tue, 12 Oct 1999 11:09:29 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Harri Sillanpaa

Gentlemen-

Harri Sillanpaa is now reading our List from his QTH in Lahti, which is 100 km north of Helsinki, Finland.

Our newest member is a design engineer for a local electrical company that employees 180 people. His area of interest is in automation and controls, including PLCs, control systems in programming logic, processor programming systems, etc. His company's website is WWW.LSK.FI.

Harri got started in radios while in the army as a CW/radio operator where he operated Sunair, Racal, and R&S devices. Presently he operates a Drake R-7 line and a Racal 6970. He has been licensed for over 19 years and can be heard on the air using the call OH3PC.

(Ed Note- Harri mentions a number of things in his letter, far more than there is space for me to share, HOWEVER, an item not to overlooked.... he has a 6 element beam on 21 MHz located on a 25 meter (about 80 feet) tower).

Of major interest to our member in Finland is information on diversity reception systems and construction of a receivers.

Give Harri an e-mail hello at: Harri Sillanpää [harsil@sci.fi]

Another member, another country.....

Greg

Date: Tue, 12 Oct 1999 14:02:42 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Seeking your Opinion-

Gentlemen:

I scan E-Bay every day to determine what receivers are being sold and what they are bringing in dollars. Today, being no different from others, I found a WJ 8718A being offered. This is not the first time I have found Premium class receivers on the "Bay", including 2 or 3 copies of the 2050s.

I have been reluctant in commenting about these items for two reasons:

(1) on the negative side- one of our members may be the bidding party and the last thing he wants is to have 15 other members informed about the item so they can start bidding against him.

However on the positive side-

(2) if you are looking for a WJ or other Premium-Rx, you may miss the item thus a "heads up" reminder would be a valuable "service" of our List. Additionally, if you are proposing to sell a receiver, knowing the E-Bay value would give you a benchmark as to the what your gear is worth.

Presently our policy about selling items on the List is in an "evaluation phase" until November the 25. It should be noted, thus far I have not received any complaints about our trial period. Having said that, I would like to propose another change in policy, specifically to add "reflecting" to our List. I am proposing to invite members to "bounce" E-Bay information on Premium-Rx hardware like Racal, WJ, Collins, Harris, R&S, Eddy., etc to our List. One of the goals of this List is to be a forum for exchanging information about Premium devices, and bouncing "when and where" such a device is available is the policy I am proposing we adopt.

Naturally, approval of this policy change will take a majority. . . Your Thoughts. . . .

Greg

Greg W. Bailey Electrical Engineering San Diego State University

Date: Wed, 13 Oct 1999 12:26:49 +1300
From: "Ted & Linda Minchin" <tedm@xtra.co.nz>
Subject: Re: Prem-Rx: Seeking your Opinion-

Hi Greg and all, Good question. Another reflector to which I belong, (Greenkeys) is all about ancient Teletype machines. There is an unwritten code of ethics there, (I guess we all have those, and only find out about them when we transgress!!) that says that one Greenkeyer shouldnt knowingly bid against another Greenkeyer on Ebay..... That is quite a good idea except for 1) How de we know each other.... I havent a clue as to the total membership and 2) it does inhibit collecting this stuff a bit!! I dont really know what the correct ethical answer is.... I know that if I know the person who is bidding then unless

it something I really, really, really want, then I will take a 'bye' on it. I wonder what others think. The WJ on Ebay at the moment is safe from me.... It is for Stateside punters only! It is nice to be kept up with what is there though and saves me trawling through it all! 73 from New Zealand Ted ZL1MT

===== Ted Minchin ZL1MT Monitoring Service Co-ordinator NZART RD1, Putaruru, New Zealand Phone + 64 07 8835716 FAX + 64 07 8835778 email tedm@xtra.co.nz packet... zl1mt@zl1ux.ham.nzl

=== Talk Around the World === Amateur Radio =====

=====

Date: Tue, 12 Oct 1999 18:06:46 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: Seeking your Opinion-

At 02:02 PM 10/12/1999 -0700, you wrote:

- >
> Gentlemen:
> I scan E-Bay every day to determine what receivers are being sold and what
> they are bringing in dollars. Today, being no different from others, I
> found a WJ 8718A being offered. This is not the first time I have found
> Premium class receivers on the "Bay", including 2 or 3 copies of the 2050s.

Yep. I do the same thing, but only when I have the time, and I have missed a few. Jan Skirrow often reminds me of "good" items on eBay, for which I am always very grateful. Having you look at eBay for a broader range of premium receivers is a real plus in my books, and let's face it, the list is not overly busy!

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

Date: Tue, 12 Oct 1999 22:47:11 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Seeking your Opinion-

I wouldn't be upset if I heard of interesting and relevant ebay items here. I don't keep up with ebay.

- Gentlemen:
> I scan E-Bay every day to determine what receivers are being sold and what
> they are bringing in dollars. Today, being no different from others, I
> found a WJ 8718A being offered. This is not the first time I have found
> Premium class receivers on the "Bay", including 2 or 3 copies of the 2050s.
> I have been reluctant in commenting about these items for two reasons:
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> the last thing he wants is to have 15 other members informed about the item
> so they can start bidding against him.
> However on the positive side-
> (2) if you are looking for a WJ or other Premium-Rx, you may miss the item
> thus a "heads up" reminder would be a valuable "service" of our List.
> Additionally, if you are proposing to sell a receiver, knowing the E-Bay
> value would give you a benchmark as to the what your gear is worth.

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> received any complaints about our trial period. Having said that, I would
> like to propose another change in policy, specifically to add "reflecting"
> to our List. I am proposing to invite members to "bounce" E-Bay
> information on Premium-Rx hardware like Racal, WJ, Collins, Harris, R&S,
> Eddy., etc to our List. One of the goals of this List is to be a forum
> for exchanging information about Premium devices, and bouncing "when and
> where" such a device is available is the policy I am proposing we adopt.
> Naturally, approval of this policy change will take a majority. . . Your
> Thoughts.
> Greg
> Greg W. Bailey
> Electrical Engineering
> San Diego State University

Date: Wed, 13 Oct 1999 09:55:13 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: 8KC filter in R7 opinions sought

While we're seeking opinions...

I'm curious as to whether anyone is using the Drake SL8000 (8kc) filter in their R7 and wonder how it sounds. Other subjective and/or objective comments welcome.

- bob

Date: Wed, 13 Oct 1999 10:37:00 -0400
From: "Einstein, Fred (F.J.)" <feinstei@ford.com>
Subject: RE: Prem-Rx: 8KC filter in R7 opinions sought

I reply to Bob Duckworth's query:

I use this filter in my Drake R4245 (the commercial version of the R-7A) with a Sherwood SE-3 synchronous detector. The received audio on strong signals is pretty comparable to the sound achieved when doing the "resistor as a wide filter" trick. However, using the SL8000 does have the definite advantage of allowing you to nominally use the passband tuning to avoid interference. The "resistor as a wide filter" trick sort of eliminates the effectiveness of the passband tuning. I would recommend adding this 8 kHz filter for high quality broadcast listening with the Shure SE-3.

Bob asked:

I'm curious as to whether anyone is using the Drake SL8000 (8kc) filter in their R7 and wonder how it sounds. Other subjective and/or objective comments welcome.

- bob

Date: Wed, 13 Oct 1999 09:38:24 -0700
From: dma@islandnet.com
Subject: Re: Prem-Rx: Seeking your Opinion-

Hi All ...

Greg poses an interesting question. I guess it comes with being a pefesser!

Alerting people to eBay stuff is a no-no on the other lists that I'm part of, and can get you kicked off! I can understand why - one list used to have a guy that flooded us with messages about this or that available wherever. It grew to be a real pain to all. OTOH, I recently came across a couple of things that I know people would be very interested in - but unless I went to the trouble of searching for their emails, I couldn't alert them.

I'm not enthusiastic about the idea, but think in the interests of not appearing too retro, maybe we should give it a trial - as we have with selling - and see what happens.

Jan Skirrow, VE7DJX

<http://www.islandnet.com/~dma/Boatanchors/>

Date: Wed, 13 Oct 1999 13:42:15 -0400
From: bryantm1@us.ibm.com
Subject: Re: Prem-Rx: 8KC filter in R7 opinions sought

I have the Drake SL8000 running on an R7A through a mixer into an MS4 with very good results. The mixer is "in the mix" so to speak to provide very easy pathing to either a MiniDisk recorder, sound card for streaming to the net (still working on that) or if I want to load in two channels at the same time.

If I take out the mixer, the R7A has very nice audio with the MS4 speaker.

Regards,

Mark L. Bryant IBM Global Services -- Media Industry

+++++ Project Coordinator / Systems Analyst Ogilvy&Mather -- Media Intelligence New York City 914.456.9948 - Mobile (Primary Number) 800.946.4646 - 146 7343 ### Page 800.946.4645 - 146 7343 Text Page

Date: Thu, 14 Oct 1999 14:50:35 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: Eddystone receivers

Hi, from a too-infrequent list contributor. Does anyone have any experiences of using Eddystone receivers, particularly the 1650 series, or the 1837 series of all solid state receiver. I have one of each, and would be interested to know how they rate compared to the opposition. Any comments most welcome, Dave MW1DUJ

Date: Fri, 15 Oct 1999 08:28:49 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: Eddystone receivers

Daiungoed@aol.com wrote:

> Hi,
> from a too-infrequent list contributor. Does anyone have any experiences
> of using Eddystone receivers, particularly the 1650 series, or the 1837
> series of all solid state receiver. I have one of each, and would be
> interested to know how they rate compared to the opposition. Any comments
> most welcome, Dave MW1DUJ

I don't have either one of these models, but do have an Eddystone EC958/3 that may have some features common to the 1837 series. I noticed in "Shortwave Receivers, Past and Present" that the

second IF of 100 kHz is the same, and the bandwidths of the filters are very close, so I expect the filter setup is common to both. Also the first IF is variable and the two receivers may both use the Wadley loop scheme of conversion.

I've done some testing of the Eddystone, comparing it to several other receivers. In general, the Eddystone is not at the top of the list in performance. The LC filters at 100 kHz are not as good as crystal or mechanical filters, and the Wadley loop tuning is prone to overload next to strong signals. At higher frequencies the sensitivity drops off.

Both Harris receivers, RF590 and RF550 are better, and two analog tuned receivers, Sylvania R1414/URR and SAIT MR1411 are also better.

The Eddystone is an excellent LF receiver, however.

Hope this gives you some comparisons that are useful.

John Reed, KA5QEP

premium-rx-digest Saturday, October 23 1999 Volume 01 : Number 055

Date: Sat, 16 Oct 1999 20:50:40 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: HF-2050s remain at crime scene.

Gentlemen:

The earth shook this morning. It is amazing how a house can "dance", it kinda emits a sound unique to the occasion. Soon after things stop moving on their own, each of us does a cursory inspection for damage hoping to find none. But someday.....

At 0700 today member Mike Murphy went to his store to make his inspection. No telling how many pieces of gear had taken the plunge from shelf to floor. Maybe even a Premium or two. Upon arriving he noted the side door had been physically crow bared open. Glass from a display case littered the area. It was obvious that something more than a 7.0 had hit the place during the night.

Gone were the pieces of night vision equipment that were in the case. Yet there, less than 3 meters away were three 2050s stacked like cord wood, with two WJs in the next stack. I tried to talk him into letting me carry them out the door so he could claim them as missing. No deal. I figured we could use them as the door prizes at the First Annual Premium-Rx Convention.

Just for the record, all seems to be okay in this part of the state. Murphy's door is pretty banged up, but as I left the store he was smiling. You know, maybe it wasn't an earthquake after all.... perhaps it was just the vibration caused by the IQ-2 burglar trying to get Mike's door open.

Greg

Date: Sun, 17 Oct 1999 00:01:34 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: HF-2050s remain at crime scene.

I am sorry to hear of this.

It is always nasty to be violated like that.

Date: Sun, 17 Oct 1999 21:03:45 +1300

From: "Ted & Linda Minchin" <tedm@xtra.co.nz>
Subject: Re: Prem-Rx: Eddystone receivers

Dave, I am the proud owner of an Eddystone 1837/2.... and in a word they are, to say the least. odd. Actually they are somewhat of a curiosity, I have never run across a similar VFO stabilizer in any commercial gear, although I have made a vaguely similar one for an old Marconi receiver that I have here. There is a similar system discussed in "Radcom's" "Technical Topics" from time to time and the heading "The Huff n' Puff VFO Stabilizer". For everyone's interest, the VFO stabilizer works by measuring a change in the sum of 2 oscillator signals and using the resultant error signal to change the frequency of the first oscillator to compensate. This is done in a digital counter which is a fairly complex beast, and the counter clock is provided by a xtal oscillator in an oven. When "lock" is selected the stabilization is as good as 5 hz a day and is real good when you consider that we are dealing with L/C oscillators. However it makes the receiver a bit strange to tune, as the digital display updates at a fairly slow rate so it is easy to 'outrun the counter' so to speak. The tuning rate is somewhat higher than we are used to with our Racals etc!!! Frequency coverage is from 100KHz to 31MHz in 9 bands. Personally, I dont much like the receiver to use except that it is WONDERFULL for LF work. They were designed as a maritime shipboard receiver and as such they were designed to work LF with a shortened antenna.... which makes them excellent to use for LF with our antennas that we have on small lots..... It is also very quiet RF wise due to its lack of a synthesizer. I just dont like its tuning rate much, it is not easy to tune sideband after you have been using a modern RX!!!

There is a description and picture of this RX in Ostermans book....Page117. If you should need it, I have a complete workshop manual for this receiver which I am happy to copy for anyone for copying and postage costs only.

Hope that was some use to you, Dave vy 73 from ZL Ted, ZL1MT

===== Ted Minchin ZL1MT Monitoring Service Co-ordinator NZART RD1,
Putaruru, New Zealand Phone + 64 07 8835716 FAX + 64 07 8835778 email tedm@xtra.co.nz
packet... zl1mt@zl1ux.ham.nzl

=== Talk Around the World == Amateur Radio =====

Date: Sun, 17 Oct 1999 09:27:00 -0400
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: New Member- Rob Sherwood

Not sure if I missed a response from Rob to your point, Walter. As you point out, the HF-2050 has a 3 MHz IF output, suggesting an SE-3 could be used if a 'downverter' to 455 kHz were to be available. What's the latest on this?? 73 - Dave

Walter (Volodya) Salmaniw, MD wrote:

- > At 06:59 PM 10/7/1999 -0600, you wrote:
- > Reply: If the 2050 does not have an IF output, probably nothing. The WJ
- > 8711
- > or HF-1000 synthesizes a 455 kHz IF output using the DSP which allows
- > external
- > devices, such as our box, to detect the bandwidth-filtered signal. (i.e, IF
- > output is pre-detection, but filtered, not broadband.). Most DSP radios
- > do not
- > offer that feature. NRD-545, KWZ-30, etc. are examples of DSP radios that
- > cannot, to my knowledge, ever be used with an SE-3.
- > Robert, page 2-5 of my manual states the following:
- > IF monitor (J3): 50-ohm, BNC type connector. -20-dB output at 3.0 MHz IF
- > frequency.

- > Further comments? I'm especially interested as the 2050 does not have a
- > notch filter, nor synchronous detection modes.
- > Walter R. Salmaniw, MD email: salmaniw@home.com
- > Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using
- > CANADA premier radio receivers: Collins HF2050,
- > (250) 592-1033 Collins R390A, JRC NRD535D, and the
- > Kenwood R5000.

Date: Sun, 17 Oct 1999 09:56:25 -0400
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: New Member- Rob Sherwood

Esteemed colleagues: I have experimented with an interesting lash-up here that works very well. I feed the 2050's 3 MHz IF output to the RF input (antenna) of my Kiwa-modified 535D. Thence it passes easily to the SE-III that sits downstream of *that* receiver, among the many other optional processing paths available to me here at the Whitby Giraffe Farm. Since the output of the 2050 is rather high I have a switchable pad in there to knock the signal back by about 20 dB or so. I can then tune the 2050's IF with 535, and experiment at will with myriad filter combinations. Yes it works. Yes it works well. The audio is great, though I have yet to see a situation in which it gave me greater intelligibility than by simpler methods. The 535D straight to the SE-III is *very* hard to beat. However anyone with a rig running to the inestimably valuable SE-III can try the same trick before deluging Bob with requests to make them a 3 MHz converter. (G)

You should understand that around here 'Signal Recovery' means me trying to remember how I had all the patch-cords connected yesterday....

Tony (VE3NO) NYAA StarFest On-Line

tonyward@home.com tward@spanit.com <<http://www.interlog.com/~nyaa/>>

Only the lead dog sees fresh scenery ...

Date: Mon, 18 Oct 1999 18:05:02 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: RACAL RA-1792

Hi, list, I have had a small fault with my 1792, which I decided to repair today, incidentally, fixed ok, but here is my query, during the course of trying to locate a part, I was asked for the serial no. and the letters contained in the OPTIONS label. How do you decode these serial numbers and options codes? I have the workshop manual and operators one, but I can see nothing here. I have often seen adverts in mags wanting RA1792 with ser.no. after XXXXXX, but am none the wiser. My serial no. is 20071, and options GP S2 S D 5 A , it is a later one, backlit and with BITE. Any offers on the decoding, all replies gratefully received, thanks, Dave

Date: Wed, 20 Oct 1999 17:43:24 EDT
From: Daiungoed@aol.com
Subject: Re: Prem-Rx: RACAL RA-1792

Dear list, sorry to post this to the list, but I was unable to get John's e-mail address from his reply to me.

Dave Jones 50 New Dock Street Llanelli Carmarthen South Wales England SA15 2HB

Dear John, Many thanks for your reply about the codes on the serial number plate of my RA-1792. My receiver is in first class condition, and has the same filters as the one you are using. The only thing that bothers me about them is that they are STC filters, I was hoping for the COLLINS ones, but I also have an RA-6790/GM, which is fitted with filters of exactly the same bandwidths, but they are COLLINS. I find the set with the COLLINS ones slightly easier on the ear, but I cannot put my finger on the reason for this. I suspect that the STC filters are crystal ones, and not mechanical like the COLLINS ones. I prefer the 1792 to the 6790 as I find it has the edge in pulling in the weaker stations, this is, I suspect, due to the RF amp. fitted to the 1792. Somewhere in the 6790 handbook it mentions that the RF amp is available for this set too, but I have yet to come across anyone who has one fitted, I can see no power takeoff for the unit either. I have always wanted a 1792, and when I bought it, the thought was to keep the better of the two, and sell the other, but I like them both, so it is staying. I may still swap the filters over though. The 1792 is a wonderful set, here in England we rarely see sets such as the HF2050, or those from the Watkins-Johnson stable, so I think realistically that they are the best sets available to us. I have also got a JRC NRD545 DSP set, but the 1792 knocks spots off it in almost every area, in fact all areas except the amount of channel memory and sweep features. I would be most grateful for the decoding info. but I would be more happy if you would make some kind of charge for it, money is not that easy to get, and I do not want you to spend yours on me! Incidentally, is it in the workshop manual, as I have this, but cannot see it there. Al the best for now, Dave Jones

Date: Thu, 21 Oct 1999 09:12:44 EDT
From: DAVEI NBHAM@aol.com
Subject: Re: Prem-Rx: RACAL RA-1792

Hi Dave, In my RA6790GM manual (change 4, 11 September 1984) on page 1-4 it says there are options available for RF Amplifier for greater receiver sensitivity; LF/MF/HF low frequency- 10kHz to 30 mHz ; and Broadband IF output. Unfortunately, these options are not further detailed in the manual-- ie no schematics or instructions.

Do you or anyone else on this list have any more information on these options or know where we might get them ? I would be interested in having all three of them for my 6790.

Dave Holder Birmingham, Alabama

Date: Thu, 21 Oct 1999 11:56:07 EDT
From: CGT01@aol.com
Subject: Prem-Rx: RE: Premium Rx 6790 info

Hello All:

Re: Dave Holder's request for 6790 info ...

I can shed a little light on the subject ... I was fortunate enough to have both receivers (1792 and 6790) on the bench for general work and measurement.

The pre amp was installed in the 1792 -- with a jumper to disable. Clearly the pre-amp did a number on 3rd order (from the + 30dbm down to + 5dbm maybe. The 10 db gain was too much -- in my opinion -- remember the rule on pre mixer gain ! However the minimum discernible signal (MDS) was better --- about .2uv -- vs .3uv (without preamp) -- The 1st mixer on the 1792 was a carefully selected quad bridge of FET's -- (I remember BFY94) --- the 6790 was sealed up (secret) -- later production 6790's used SD5000 quad DMOS FET array, like the Racal 6830's I have here.

So if you really need a pre-amp -- I would look for 1792 parts -(quite a few 1792's are breaking loose in the UK) -- I am unaware of a US 6790 preamp source ...

In practical use both receivers perform very well -- still my favorite.

On the subject of 6790 frequency coverage -- I can help you ... I have pretty good EPROM burning capability here. So not a problem for 6790 upgrades. -- or other sets for that matter !! --I will need to work offline on this subject.

Hope this helps ...

Colin Trass N1KYX

Date: Thu, 21 Oct 1999 11:24:22 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: RACAL RA-1792

DAVEINBHAM@aol.com wrote:

- > In a message dated 10/20/1999 4:45:02 PM Central Daylight Time,
- > Daiungoed@aol.com writes:
- > << Somewhere in the 6790 handbook it mentions that the
- > RF amp is available for this set too, but I have yet to come across anyone
- > who has one fitted, I can see no power takeoff for the unit either.
- >>

- > Hi Dave,
- > In my RA6790GM manual (change 4, 11 September 1984) on page 1-4 it says
- > there are options available for RF Amplifier for greater receiver sensitivity;
- > LF/MF/HF low frequency- 10kHz to 30 mHz ; and Broadband IF output.
- > Unfortunately, these options are not further detailed in the manual-- ie no
- > schematics or instructions.

I can give you some information on the LF-VLF option. Bill Bowers' 6793 had this option installed. There's a lot more to it than different firmware. The first mixer board had many changes, also the synthesizer board had been changed. The price (from the bill of sale that Racal sent Bill) was around \$3500 for this option.

In comparing this 6793 to a 6790 without the option, the sensitivity was about the same down to around 500 kHz, then the option started to show up. The 6790 lost sensitivity below this while the 6793 maintained the same sensitivity right on down to VLF. When Bill bought his 6793, he asked about the second LF option that is good down to a few Hz. Racal wouldn't sell him this one. It may be for military use only.

I worked on Bill's receiver to correct the loss of sensitivity he was seeing over the whole RF spectrum. The problem turned out to be bad DMOS FETs in the sealed mixer box. I had to unsolder the box and replace the FETs (4 Siliconix SD-215DE). This fixed the problem. The receiver must have suffered a nearby lightning strike at some time. After fixing it, this receiver is still not as sensitive as the Harris RF-550 or 590.

John Reed

Date: Thu, 21 Oct 1999 17:15:51 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Collins HF-2050 Manual available!

My lucky day today. Received a complete original tech manual for our beloved HF-2050. Up to now, all I've had is a rather incomplete copy, but now I would like to share my good fortune. I am considering reprinting the whole manual in a semi-professional manner, and distributing them to anyone who requires one. I'm not sure yet how much it would be, but I assume it would be dependent

on the number of copies I order. There are *lots* of fold-out schematics. The binder is approximately two inches thick, to give you an idea. I'm hoping and expecting the price to be in the ballpark of \$25 to \$50 postpaid in North America. Once I know the amount of interest, I'll go and price it more definitively and let everyone know.

For now, please let me know as soon as possible how many copies you would like, and if you know of other 2050 owners not on this list, let them know as well. No, it is not my intention to make a killing on this deal, just a public service!

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

Date: Thu, 21 Oct 1999 19:21:43 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: More on the 2050 manual

Thanks so far to those interested. It's a good beginning. Thought you would like to know the rest of the story. I've been trying for about a year to get an original manual. No one could help as long as the 2050 was still in active service aboard one of HMC ships. Well I did find out that they were removed (about 14 all told) about two months ago. My shipboard contact promised to give me the manual when he no longer required it, but recently informed me that he was unable until he was authorized to do so. "Call my boss, I'm on course", he tells me last night, so I did this morning. Busy signal at 0800. Try again at 11:00, and he tells me, "too bad you didn't call earlier. I just threw out a bunch!". Apparently, the base library/archive wasn't interested, and they don't think about returning the manuals with the receivers, so....out they go. "Where's the garbage?", I ask. I'm willing to get a little dirty, even with my stethoscope around my neck, but he didn't remember. For the rest of the story, there's obviously a happy ending, for there was one more copy aboard Her Majesty's Ship, which a very nice Master Seaman donated to me. "They'd just be tossed out anyways." And now you know the rest of the story. Perseverance sometimes pays off. Now to locate those hundreds of phantom 2050's (or as the military prefers, the R-5099).

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, JRC NRD535D, and the Kenwood R5000.

Date: Thu, 21 Oct 1999 23:35:23 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: More on the 2050 manual

I'd love to get a copy of the manual, but first, I'd love to get one of those missing receivers!

Date: Thu, 21 Oct 1999 23:41:59 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: RF-590A PC control panel

I just wrestled with VB6 for a couple of days and made a Windows control panel for my Harris rig. Before I finish it off, I was wondering if anybody had any suggestions for features. When it's done I'll send a copy to people on this list who have one of these receivers.

P.S., Someone a while back asked me if I could modify the 590 firmware to use any filter in any mode. After examination of the setup, it appears that the filters are already used in their fullest capacity, at least in my unit, so I'm a bit unsure of what extra I could do. Anyhow, I lost my EPROM reader/burner so can't make any mods for the time being.

Date: Fri, 22 Oct 1999 01:36:02 -0400
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: Collins HF-2050 Manual available!

Walter - however you accomplished finding it, great work!!

Please accept this note as my firm order for 2 copies of the proposed manual reprint. Many thanks.

/dave

Walter (Volodya) Salmaniw, MD wrote:

- > My lucky day today. Received a complete original tech manual for our
- > beloved HF-2050. Up to now, all I've had is a rather incomplete copy, but
- > now I would like to share my good fortune. I am considering reprinting the
- > whole manual in a semi-professional manner, and distributing them to anyone
- > who requires one. I'm not sure yet how much it would be, but I assume it
- > would be dependent on the number of copies I order. There are *lots* of
- > fold-out schematics. The binder is approximately two inches thick, to give
- > you an idea. I'm hoping and expecting the price to be in the ballpark of
- > \$25 to \$50 postpaid in North America. Once I know the amount of interest,
- > I'll go and price it more definitively and let everyone know.
- > For now, please let me know as soon as possible how many copies you would
- > like, and if you know of other 2050 owners not on this list, let them know
- > as well. No, it is not my intention to make a killing on this deal, just a
- > public service!
- >Walt.
- > Walter R. Salmaniw, MD email: salmaniw@home.com
- > Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using
- > CANADA premier radio receivers: Collins HF2050,
- > (250) 592-1033 Collins R390A, JRC NRD535D, and the
- > Kenwood R5000.

Date: Fri, 22 Oct 1999 09:06:02 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: RF-590A PC control panel

Peter Gottlieb wrote:

- > P.S., Someone a while back asked me if I could modify the 590 firmware to
- > use any filter in any mode. After examination of the setup, it appears that
- > the filters are already used in their fullest capacity, at least in my unit,
- > so I'm a bit unsure of what extra I could do. Anyhow, I lost my EPROM
- > reader/burner so can't make any mods for the time being.

One thing that several people have asked me is if more of the filters could be used in CW mode. Now we are limited to a maximum bandwidth of around 1 kHz, and it would be nice if we could use the wider AM filters (3.2 and 6 kHz) for ECSS reception in CW mode.

John Reed

Date: Fri, 22 Oct 1999 10:52:17 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: RF-590A PC control panel

I can better answer that if someone tells me the difference between a 2.8 KHz USB filter and a 3.2 KHz AM filter (besides the difference between 2.8 and 3.2 KHz). Until I investigate further, I am thinking that the USB filter bandpasses on the upper side of the IF and the AM filter passes on both the upper and lower sides of the center (IF) frequency. If this is so, then would using USB mode be the same as CW mode with a 2.8 K filter? Would AM 6 K passing the extra sideband be a problem?

Date: Fri, 22 Oct 1999 11:41:16 EDT
From: DAVEINBHAM@aol.com
Subject: Re: Prem-Rx: RE: Premium Rx 6790 info

Hi Colin, Thanks for the offer to help. I have already solved the EPROM problem. My 6790 will now tune down to 0.000000 Hz. Problem is the sensitivity falls off dramatically below about 400kHz. The radio is totally silent below about 11 kHz. It appears to me, the mixer components must be different in the 6790's equipped with the LF/MF/HF option. I was hoping someone on this net might have the schematic and parts list of that option. If I had them, it would be a starting place to upgrading my radio. Again, thanks for your offer to help. Dave Holder Birmingham, Alabama

Date: Fri, 22 Oct 1999 09:01:12 -0700
From: Jerry Gardner <jgardner@peri.com>
Subject: Fwd: Prem-Rx: Collins HF-2050 Manual available!

> I am considering reprinting the whole manual in a semi-professional manner, and
> distributing them to anyone who requires one. I'm not sure yet how much it would
> be, but I assume it would be dependent on the number of copies I order. There are
> lots* of fold-out schematics. The binder is approximately two inches thick, to give
> you an idea. I'm hoping and expecting the price to be in the ballpark of
> \$25 to \$50 postpaid in North America. Once I know the amount of interest,
> I'll go and price it more definitively and let everyone know.

You *are* getting the permission of the copyright holder before you do this, aren't you?

- -- Jerry Gardner | Periphonics Corporation Senior Project Manager | email: jgardner@peri.com

Date: Fri, 22 Oct 1999 12:19:36 EDT
From: CGT01@aol.com
Subject: Prem-Rx: Premium Rx 6790 sensitivity drop off ...

In a message dated 10/22/1999 11:43:40 AM Eastern Daylight Time, DAVEINBHAM@aol.com writes:

Dave wrote ...

> Problem is the sensitivity falls off
> dramatically below about 400kHz. The radio is totally silent below about 11
> kHz.
> It appears to me, the mixer components must be different in the 6790's
> equipped with the LF/MF/HF option.

Dave:

I have worked on quite a few 6790's and none have exhibited your problem -- I only experience drop off lower than 50kc. sort of expect that.

Could be one of two things -- the front end LPF has been misadjusted -- factory set ! -- (now acting like a BPF) -- or the front end is different -- depending on serial number. My experience is with units above ser # 4000. I often DX down in the 160 - 200kc area -- sensitivity is excellent. If you wish to work in the 10 - 50 kc area then you will need the VLF option. You will probably have to trade in-up -- our friend in Georgia has occasionally had a 6790 with the VLF option -- but they are very rare.

Sincerely,

Colin Trass

Date: Fri, 22 Oct 1999 17:07:18 EDT
From: CGT01@aol.com
Subject: Prem-Rx: Racal 6790 continuing dialog and info

Ref: Thread on Dave's 6790 R & D project ...

1. Serial numbers -- ? it's pretty common to remove serial tags ... long security story about contract numbers !! The front tag is generally missing - -- the rear tag is by the earth lug sometimes -- my software dev unit is 5560 with a date stamp above of Sept 83 -- see if you can find date stamps in your unit ?
2. Frankly, I still think your drop off problem is the LPF unit (in a cylinder assem.)
3. The VLF EPROM set from Allen Bond is OK -- but missing the AGC Level Return feature (signal level interrogation via serial port) -- however you do get 1/100/1000 cycle stepping rates. (preferred by some ...)
4. The Official upgrade EPROM set RAGM01 provides below 500kc (with some degradation) -- down to 50kc -- per the manual. and AGC Level Return. -- but stepping rates stay at 1/30/1000. As previously mentioned the degradation is minimal in my experience.
5. The VLF version is quite a different beast including a separate VLF antenna connection. (good luck on the retrofit ... hopefully you will share your efforts ...)
6. The 6790 can be a cranky receiver -- however once it settles down (burn in) they will go for years. Each time you pull a board, change a battery, swap filters, -- you risk random problems, BITE errors, and dead boards. -- from personal experience. Also, the keypad to control board is particularly delicate if disturbed.

We got off the subject a little but hopefully this is of general interest to 6790 owners and prospective owners !!

Sincerely,

Colin Trass

PS: Still enjoy valve receivers (no -- not the R390 !!) ... Marconi's, Eddystones and a GPR90 soon !!

Date: Fri, 22 Oct 1999 17:28:26 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: Antenna for VLF ?

What's the best antenna to use with a 50 ohm input receiver (RF-590A) for DX VLF?

Hopefully something I can build.

Date: Fri, 22 Oct 1999 17:41:25 EDT
From: Aidehua@aol.com
Subject: Re: Prem-Rx: Antenna for VLF ?

How low did you want to go? There are several antennas for BCB available commercially. Some of them, such as the Palomar, have VLF attachments. Loops work well, too. If you have several meters of horizontal space, that changes things completely! Let us know!

73, Ed KA6DBY

Date: Fri, 22 Oct 1999 15:12:20 -0700
From: Jerry Gardner <jgardner@peri.com>
Subject: Fwd: Prem-Rx: Antenna for VLF ?

> What's the best antenna to use with a 50 ohm input receiver (RF-590A) for DX
> VLF?
> Hopefully something I can build.

For VLF, unless you have acres of land, an active antenna is your best bet.

- -- Jerry Gardner | Periphonics Corporation Senior Project Manager | email: jgardner@peri.com

Date: Fri, 22 Oct 1999 18:41:36 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: RF-590A PC control panel

Peter Gottlieb wrote:

> I can better answer that if someone tells me the difference between a 2.8
> KHz USB filter and a 3.2 KHz AM filter (besides the difference between 2.8
> and 3.2 KHz). Until I investigate further, I am thinking that the USB
> filter bandpasses on the upper side of the IF and the AM filter passes on
> both the upper and lower sides of the center (IF) frequency. If this is so,
> then would using USB mode be the same as CW mode with a 2.8 K filter? Would
> AM 6 K passing the extra sideband be a problem?

I think what they have in mind is passing the extra sideband. What is wanted is the ability to use both sidebands (like AM) only with local carrier insertion. With very weak signals that are fading it helps S/N to have both sidebands along with a receiver generated carrier as in CW to help fading.

John Reed

Date: Fri, 22 Oct 1999 20:09:41 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Antenna for VLF ?

> How low did you want to go?

I'm not particularly interested in BCB. I would like to see how many of the aviation NDBs I can receive.

> Loops work well, too. If you have several meters of horizontal space, that changes things completely! Let us know!

Yes, I do have some space available. Indoors I have a 30 foot (E-W) by 25 foot (N-S) L-shaped attic. Height at the peak is about 6 and a half feet.

> For VLF, unless you have acres of land, an active antenna is your best bet.

I *wish* I had acres, but around here land goes for about a million an acre, so no dice. I have a little more than a quarter acre, but there are some pretty tall oak trees that I could shoot an arrow (with monofilament line) over to pull something up. I'm good at building things so an active antenna is doable if someone could be so kind as to point me at some plans so I don't have to reinvent the wheel.

Peter

Date: Fri, 22 Oct 1999 20:29:12 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: RF-590A filters

Well, alright. I suppose if I simply figured out how to allow any filter in any mode then it would be up to the more sophisticated user to select what was appropriate.

The determination of what is allowed in what mode is made by the micro based on the settings of a DIP switch. There is not enough detail in the manual as to how to set it. It is likely that I will have to go back into the firmware to make a mod for this. I don't want to decompile the older version again now that I have a newer version (I have 208N at this point, originally I played with 208C but that code is lost due to a crash of my PC) and I don't want to be without a radio to send out the EPROM so I will have to borrow a reader/burner before I can do this.

If I got into the firmware again I would do it in a big way and see if I can't make the radio do some new tricks (like scan with freq limits instead of by channel).

By the way, I've done a few more of the preselector bypass mods and have settled on using my own darlington switches instead of using (sometimes) spare sections of existing chips. This way the mod is uniform across the various revs of the presel assy. The mod consists of adding two 4.7k resistors and two MPSA03 transistors, no etch cuts.

> Peter Gottlieb wrote:
> I can better answer that if someone tells me the difference between a 2.8
> KHz USB filter and a 3.2 KHz AM filter (besides the difference between 2.8
> and 3.2 KHz). Until I investigate further, I am thinking that the USB
> filter bandpasses on the upper side of the IF and the AM filter passes on
> both the upper and lower sides of the center (IF) frequency. If this is so,
> then would using USB mode be the same as CW mode with a 2.8 K filter? Would
> AM 6 K passing the extra sideband be a problem?
> I think what they have in mind is passing the extra sideband. What is wanted
> is the ability to use both sidebands (like AM) only with local carrier
> insertion. With very weak signals that are fading it helps S/N to have both
> sidebands along with a receiver generated carrier as in CW to help fading.
> John Reed

Date: Fri, 22 Oct 1999 21:00:54 EDT
From: KE2WG@aol.com
Subject: Prem-Rx: Lowe and Collins filters available

Dear Group:

I have stumbled on a source for some new & demo Lowe gear and some filters, Collins, Icom, Kenwood, etc. (Stateside) The prices seem very reasonable. Not an unlimited supply I am told. Should anyone have an interest, shoot me a note directly, and I can forward to you the Email address of the seller. His lists are on two Excel spreadsheets. (xls). It is then up to you, to deal with the seller and negotiate on what you want. Nick ke2wg@aol.com

Date: Fri, 22 Oct 1999 21:20:48 -0600
From: "Shaun P. Merrigan" <smerriga@compusmart.ab.ca>
Subject: RE: Prem-Rx: Antenna for VLF ?

> I'm not particularly interested in BCB. I would like to see how many of the
> aviation NDBs I can receive.

Peter,

I have had wonderful success with a 5 foot outdoor rotatable loop. I use it exclusively for NDB dxing with a WJ-357 and very narrow audio filters, and narrow (< 10hz) notch filters.

Plans for such a loop, as well as much other valuable information can be found here:
<http://www.lwca.org/library/rcvg-lib.htm>

Good listening.

Shaun

- -- Shaun P. Merrigan Edmonton, AB, Canada 53.55 N 113.47 W

Date: Sat, 23 Oct 1999 14:42:12 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Fwd: Prem-Rx: Collins HF-2050 Manual available!

The Martians who land on my toolshed every night told me it was OK if Walt copies the manuals.

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Sat, 23 Oct 1999 13:22:20 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Re: St. Helena

At 12:36 PM 10/23/1999 -0700, Paul B. Peters wrote:

> In moderate QRN, Radio St. Helena became audible for me at 1930. Signals
> still way down, but I can copy the station.

At my QTH, a repeat of previous years. Nothing noted until 1927, with faint audio. Still, compared to previous years, pretty lousy reception. I can hear the music, barely, but unable to ascertain what the announcer(s) are saying. Well a few hours to go yet, so the signals should pick up within the hour (presently 2015 UTC), the normal pattern for the Pacific northwest. Conditions are not great with very high A indices. Latest SF I have is 160, with an A index of 54 :(, and a K index at 1500 of 4, geomagnetic field unsettled to active. For the 390 group, my 390A is just not cutting it with RSH. Miss

the SSB performance of the 1051. For the premium-receiver group, my Collins HF-2050's are performing admirably, compared to all of my other receivers (fed by a multicoupler), which are essentially hearing nothing.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

premium-rx-digest Friday, October 29 1999 Volume 01 : Number 056

Date: Sat, 23 Oct 1999 15:32:23 -0500
From: "Jon & Valerie Oldenburg" <jonandvalerieoldenburg@worldnet.att.net>
Subject: Prem-Rx: Re: [sthelena] Re: St. Helena

Hi

I'm Jon Oldenburg KB9VFD . I'm located in Appleton WI (north central WI) Reception be came copible here at 1940 on my R-390A and has been staedily improving. I'm currently listening on a Collins R-388 and reception is very good very little propagation flutter and quite a nice signal overall. Going to try some of the other recivers next (R-392, R-390/URR & BC-779) 73's Jon KB9VFD

Date: Sat, 23 Oct 1999 14:12:15 -0000
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Re: St. Helena

Fade in in Beaverton at 1924 on the RF590A, then followed by R7, HF1000A without SE3, then HF1000A with SE 3(in SSB) by 1928 then 2050 and Cubic 3030A at 1930 along with NRD545. Signal is weak but listenable starting at 2100 (now!)

Date: Sat, 23 Oct 1999 17:22:42 -0400
From: bryantm1@us.ibm.com
Subject: Prem-Rx: St. Helena

Reception of St. Helena here in the Hudson Valley has improved greatly in the past couple of hours. Using an antenna splitter I have S9+ 20 for the HF2050, WJ8711 and of course strong signals and drift from the Drake R7A. Fade in was at 1910.

Regards,

Mark L. Bryant IBM Global Services -- Media Industry
+++++ Project Coordinator / Systems
Analyst Ogilvy&Mather -- Media Intelligence New York City 914.456.9948 - Mobile (Primary
Number) 800.946.4646 - 146 7343 ### Page 800.946.4645 - 146 7343 Text Page

Date: Sat, 23 Oct 1999 14:26:50 -0700
From: "Paul B. Peters" <pbpeters@telus.net>
Subject: Prem-Rx: St. Helena reception

Hi, this is Paul Peters VE7AVV. I'm located in Cobble Hill, BC on the southeastern coast of Vancouver Island, Canada. Reception has (in keeping with previous years) steadily improved from 1930 UTC onwards. Now at 2122 UTC, the signal is in the clear and I would describe it as good. Just listened to

the lady from the PO talk about the new issue of stamps. - -- Paul V E 7 A V V Paul B. Peters
StoneyGround Station Cobble Hill, B.C., Canada (48.68N x 123.60W) - -
<*><*> || <*><*> || <*><*> || <*><*> || <*><*> - Receiver: Kenwood TS-850SAT
Antenna: 180 foot base fed "Inverted L" at a height of 90 feet

Date: Sat, 23 Oct 1999 15:20:36 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Re: St. Helena

Great improvement rather suddenly in signal strength at 21:50 UTC. Now listening at almost armchair quality, and as always thoroughly enjoying the program. Even my venerable Racal RA.117 is doing a good job with reception. I would rate the signal now about S5, not quite as nice as those of you on the east coast, but still very intelligible. Again, pretty much following the pattern of previous years. Thanks again, Radio St Helena!!! Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Sat, 23 Oct 1999 17:30:38 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: Prem. Rx-R. St. Helena

Very faint audio on HF1000 about 1911, but inaudible on 2050 and 7030+ . High QRN. Gradual improvement to about 1940 when able to copy on all 3 receivers. Have been recording from 2000 & thereafter for 1 hr. each on each receiver. With same antenna, HF1000 most sensitive, followed by 2050, then 7030+ . At 2200 with marginal antenna system, signal was S5 on HF1000. Audio quality on HF1000 and 2050 about the same, although it is nice to be able to open the 1000's bandwidth to 4.0 kHz in usb. The digital audio in both receivers tends to render the QRN as somewhat harsh.

Jon L. Williams Indianapolis, IN

Date: Sat, 23 Oct 1999 18:48:05 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: ST Helena

Hi, list, Surprisingly, at 23:45 BST, I am receiving ST Helena at S6+ here in South Wales, England, on 11092.5 USB. Using a RACAL RA 1792 and 60 foot wire. Anyone know the e-mail adress or postal adress for QSL cards? All the best, Dave MW1DUJ

Date: Sat, 23 Oct 1999 20:06:42 -0400
From: "Pete Ferrand" <pete@vermontel.net>
Subject: RE: Prem-Rx: Re: St. Helena

I heard St. H. better than I have in years, here in Western New Hampshire. Using just the 60' end fed receiving wire the signal started out at S8 at the start of the broadcast.

This broadcast exactly coincided with my normal sleep time after coming home from work, not the time to play with radios, so I set up a cassette recorder...and just used the Bearcat/Uniden DX-1000 and MFJ preamp for a radio. Woke up in time to hear the last half hour live, which was easily 10 over 9.

You'd think there would be some hobbyist on the island who could find a place for the old transmitter, power connection, and antenna to rig for once a year transmission in the future. Or they could take up a collection for a ham rig of some kind.

- -p

Date: Sat, 23 Oct 1999 19:08:46 -0400
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)
Subject: Prem-Rx: Re: [R-390] Re: St. Helena

I have to reply to your message Walter, because I had a Racal perking also - an RA-17C, along with a 51S-1 in the other room. Nice signals here in Vermont, the Racal is just on a small portable whip antenna screwed on the back, still signals were a very copiable S-1, very steady and consistent from when I tuned in just before 21:00 Z.

The 51S-1 faired much better, being out the outside 80-mtr dipole, even though it is currently down and rolled up on my back porch. Steady S-6 signals, sometimes peaking higher. The stability of this radio amazes me, too - I've never done a thing to it, yet it received the signal right at 11.092.5, right between the calibration marks - and it *stayed* there! The Racal wandered a bit, but only a few cycles. That's one sweet radio too.

This was my first attempt at catching Radio St. Helena, and I had absolutely no trouble. I wonder now how much better they would have sounded if my antenna situation was better? I have some catching up to do....

I heard mention of an email from a blind magician in Michigan....could that be W8DBF?

I thank Mr. Roth for the reminder msg, I had forgotten until checking my email. This was a fun event, I sure do hope they work something out for a better transmitter next year. Hell, I'd even go help haul into the building!

73, Todd/'Boomer' KA1KAQ

Date: Sat, 23 Oct 1999 17:58:04 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: ST Helena

At 06:48 PM 10/23/1999 EDT, you wrote:

- > Hi, list,
- > Surprisingly, at 23:45 BST, I am receiving ST Helena at S6+ here in
- > South Wales, England, on 11092.5 USB. Using a RACAL RA 1792 and 60 foot wire.
- > Anyone know the e-mail adress or postal adress for QSL cards?
- > All the best, Dave MW1DUJ

Dave, the e-mail address is tony@sthelena.se, or radio@sthelena.se. The postal address, as I recall it, is:

Radio St. Helena Jamestown Island of St. Helena South Atlantic Ocean.

They appreciate return postage, and last year's batch just arrived this month!

..... Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Sat, 23 Oct 1999 18:01:01 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Re: [sthelena] Prem. Rx-R. St. Helena

At 05:30 PM 10/23/1999 -0500, Jon L. Williams wrote: Audio quality on HF1000 and 2050 about the same, although

- > it is nice to be able to open the 1000's bandwidth to 4.0 kHz in usb. The digital
- > audio in both receivers tends to render the QRN as somewhat harsh.
- > Jon, and fellow 2050 drivers: I too miss not being able to choose bandwidths for SSB with our beloved 2050s. There is a way to cheat, however, which was discussed some time ago, and that's to use the CW option, and play with the BFO. Then you can choose whatever bandwidth you wish, with quite pleasant results. Now, I wonder if any of you computer whizzes could figure out how to make the bandwidth selection work on SSB as well!!

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Sat, 23 Oct 1999 23:03:38 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Fwd: Prem-Rx: Collins HF-2050 Manual available!

They just told you that because they want a copy also.

- > The Martians who land on my toolshed every night told me it was OK if Walt
- > copies the manuals.
- >

Date: Mon, 25 Oct 1999 22:13:14 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 Manual offer

Hi folks! Here's an update on my project to reprint some manuals for those interested. As always there's good news and there's "less good news"! First of all the project of reprinting is bigger than anticipated. I was turned down at several shops due to all of the large schematics, but finally found a very high quality printer who is willing to do the job. Just to make sure everyone understands, this is the Technical Manual for the 2050, known in the military as the Radio Receiver R-5099/U, R-5099A/U, and R-5104/GRC-508. English language only. Publication number C-51-534-000/MS-001, dated 1988-04-15. It's a BIG manual, 301 regular pages, plus 26 11 X 17 fold out schematics, and 41 11 X 22 fold out schematics. This company will reprint the manual in high quality, collate, fold, bind, and cover the manual.

Now, the price is quite a bit more than what I had originally thought, so for insured Air delivery anywhere in the U.S.A, or by Xpresspost anywhere in Canada (works out to be about the same), I will be charging \$70.00 U.S. Internationally, the rates vary widely with the destination.

My plan is to gather the orders over the next week, then approach the publisher. This will be a one time offer. I'll then probably dispose of any extras on eBay. At this time, please do not send any money. All I need is your hard commitment. I'll be back in touch within a week or so if this flies. Sorry for the low initial guess, but I have never done anything like this before.

.....Walt.

PS: Again, if you know of anyone who might be interested, have them contact me. Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia CANADA

Date: Wed, 27 Oct 1999 17:08:11 +0200
From: KuD-BS@t-online.de (KD Elektronik GmbH)
Subject: Prem-Rx: Service manuals for HP Signal Generator 8640B

Hello everybody, my badly needed HP Signal Generator 8640B is defect. The service manual is no longer available from HP. Does anybody have the service manual or has access to one? I would like to borrow it for copying.

While we are at it, I would like to have the following service manuals too: 8554L Spectrum Analyser, RF-Section 8552A " ", IF-Section 8444A Tracking Generator, .5 - 1300 MHz 141T Display Section

best regards Hans-J. Kneisner

kud-bs@t-online.de

Date: Wed, 27 Oct 1999 11:56:02 -0600
From: John Miles <jmiles@pop.net>
Subject: RE: Prem-Rx: Service manuals for HP Signal Generator 8640B

Ed Matsuda, at ematsuda@earthlink.net, can get you some very nice copies of the HP8640B manuals. He will need the first two digits of your serial #.

-- jm

Date: Thu, 28 Oct 1999 06:17:53 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Christer Bergstrom

Gentlemen-

Our newest member, Christer Berstrom, lives in Viker, a small village just northwest of Örebro in Sweden. He tells me it isn't a big town or easy to find so for those who need a little assistance with your map, you will find it at N 59 deg 27 min / E 14 deg 53 min. Oh yes, Christer and his wife make up 2 of the town's 30 residents.

He is presently interested in the area of frequency synthesizers and their application to receiver design. This interest brought him to our WebSite via the key word "HF-2050" used on a popular search engine. Presently, Christer is operating a Standard Radio & Telefon CR91, however, in addition he also operates a Rhode & Schwarz EK11-10 and others.

Living in such a remote area has its positive sides, he states his only limitation on the number of antennas and their size is his wife. In fact he has found there is a direct correlation between erecting a new antenna and the justification for a new receiver connected to it. (Ed. note, what a wonderful concept... unlimited space and an understanding wife!).

Although Christer shares our interest in receivers, he does not generate any RF. In good weather he can be found soaring, which is his second hobby. Unfortunately, life can't be all fun, and during those times he works as a Quality Assurance Engineer at Bofors Missiles AB.

I think Christer is our first Standard Radio operator and probably is the most northern List member we have. Give him a welcome at:

christer.bergstrom@adsum.pp.se

Greg

Date: Thu, 28 Oct 1999 09:47:38 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Musings, Rationalizing, Decision

Gentlemen:

Musings: Be advised I have not been slacking off these past few weeks. The justification for my non-activity is that I have changed computers at the university and thus am going through the problems of getting Mr. Gates' "Plug and Pray" software to work. I was a Netscape/WordPerfect type operator, but the University has decided we SHALL embrace Mr. Gates so I am presently on the learning curve of Internet Explorer and Outlook. The portion of the curve I occupy is just above Dysfunctional and below that of Dangerous!. The lesson I have learned from this is: (A) do not accept the offer of a flashy new P3 computer when the old 286 machine seems to be working, and (B) age and learning ability are inversely related.... I am 58.

Rationalizing: I have just forwarded to your attention the notice of our newest member, Christer Bergstrom in Sweden. Although Christer has been reading the mail for the past three weeks, I am late on his intro, my apology to all.

Decision on E-Bay: Prior to my digital debacle I posted a question as to whether the List should include items of Premium-Rx interest that are being offered for sale on E-Bay. The majority of those that replied to the List were positive, however, those responses directed to my personal mailbox were negative.

Summarizing the majority viewpoint: (1) many said their time was limited and it would be a good service, while (2) others said their knowledge of E-Bay was limited and it would be of interest. The minority stated, (1) E-Bay is typically not an open topic on other Lists because item announcements generated "debate" and dissention as well as consumed bandwidth. Additionally (2) some of our members use E-Bay to supplement (or as a source) of their income and do not want additional competition in the form of an "early warning system" of List announcements.

My thoughts- I think announcing this information will enhance our knowledge (albeit financial versus technical) of Premium-Rx devices. I do not agree this will overly encumber bandwidth as our membership is not known as active candidates for the Pulitzer Prize. On the other hand, the use of the university's server and its relationship with the Premium-Rx List is borderline "justifiable". However, reflecting E-Bay and its potential to cause financial loss to a member/s cannot be justified. In addition, two of our members, as noted in their introductions, are openly in the business of selling Premium-Rx equipment. Reflecting E-Bay on this List, and denying equal time to our members, would be unjustifiable and a discredit to our purpose.

I fully acknowledge those posting to the List were in the majority versus those who contacted me directly were in the dissenting minority. However, considering our use of the server and weighing this decision's positive and negative impact on individuals, I am going to ask that this item be tabled and perhaps revisited at a later date. This is not to say or deny that there will be times when an interesting piece of Premium hardware becomes available on E-Bay and IS so noted on this List, but only that the proposed daily or bi-weekly announcements should be avoided as they have been in the past.

Greg

Date: Thu, 28 Oct 1999 22:34:18 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: Loop antenna sensitivity?

I just built a 6 foot octolop with 64 turns, balanced output.

I placed the thing on my second floor porch and brought the shielded & balanced cable in to my receiver. As a quick and dirty test (since I haven't built an amp yet), I connected the shield and one side to ground and the other side to the 50 Ohm receiver input.

Well, now I know what WWVB is like.

However, the sensitivity is not all that great. Aviation NDBs which I can easily hear on a 25 foot long wire are not to be found or very weak. The noise level is VERY low (much higher if the shield is left to float). Obviously an amp would help, but is this an expected result for just the antenna?

Date: Fri, 29 Oct 1999 08:04:14 -0700
From: John Reed <jtreed@poncacity.net>
Subject: Re: Prem-Rx: Loop antenna sensitivity?

Peter Gottlieb wrote:

- > I just built a 6 foot octoloop with 64 turns, balanced output.
- > I placed the thing on my second floor porch and brought the shielded &
- > balanced cable in to my receiver. As a quick and dirty test (since I
- > haven't built an amp yet), I connected the shield and one side to ground and
- > the other side to the 50 Ohm receiver input.
- > Well, now I know what WWVB is like.
- > However, the sensitivity is not all that great. Aviation NDBs which I can
- > easily hear on a 25 foot long wire are not to be found or very weak. The
- > noise level is VERY low (much higher if the shield is left to float).
- > Obviously an amp would help, but is this an expected result for just the
- > antenna?

Bill Bowers and I did a lot of experimenting with loop antennas. They were all amplified, and also resonated. The resonance is what makes them sensitive. Put a capacitor (air variable or voltage controlled diode) across the loop so that it's resonant at the frequency you want to receive on. You'll see a big difference.

John Reed

Date: Fri, 29 Oct 1999 09:38:28 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: Loop antenna sensitivity?

John is quite right, you'll probably need to resonate the antenna with a cap. A preamp may or may not be necessary. Try a one-turn coupling loop to the receiver. I can just about guarantee that 64 is way too many turns for the NDB band. The challenge becomes rotating and tuning the loop remotely. You might consider moving RX and loop to an upstairs room instead.

Incidentally, as you move down in frequency to VLF, the atmospheric noise levels become so high that even a non-resonant loop antenna will work OK. Hence your success with WWVH.

Shield loop really are one of the best solutions for LF/VLF reception. I was able to hear the SAQ Alexanderson alternator from Sweden last year on a 40" untuned Octoloop with preamp. Nothing else even came close.

73, Al

John Reed wrote:

- > Peter Gottlieb wrote:
- > I just built a 6 foot octoloop with 64 turns, balanced output.

- - Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Fri, 29 Oct 1999 09:03:58 -0700
From: Jerry Gardner <jgardner@peri.com>
Subject: Re: Prem-Rx: Loop antenna sensitivity?

At 10:34 PM 10/28/99 -0400, you wrote:

- > However, the sensitivity is not all that great. Aviation NDBs which I can
- > easily hear on a 25 foot long wire are not to be found or very weak. The
- > noise level is VERY low (much higher if the shield is left to float).
- > Obviously an amp would help, but is this an expected result for just the
- > antenna?

The benefits of a loop are directivity and the ability to null noise and competing stations, not sensitivity.

You will notice a big difference if you resonate and amplify the loop.

- - Jerry Gardner | Periphonics Corporation Senior Project Manager | email: jgardner@peri.com

Date: Fri, 29 Oct 1999 18:12:12 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Prem-Rx: Loops

I have had some experience with loops on 60 kHz (WWVB), 850 kHz (KOA), 160 meters and 75 meters. All except the KOA loop were 3 feet in diameter 1 inch copper tubing, with a box at the bottom to hold the resonant circuit. The KOA loop was octagonal, and made from two 10 foot pieces of electrical conduit.

The VLF and BC band loops were fixed tuned for the one station they were expected to pickup. The VLF loop has 30 turns, and is resonated with two 7200 pF mica caps, one from each end of the wire to ground. Then to pick off the signal, it has a 0.039 uF film capacitor in series with one of the 7200 caps to ground. This provides a low Z tap of approximately 50 ohms to feed a dedicated WWVB receiver.

The signal level at the tap point is 700 uV peak to peak, which is over 60 dB stronger than the WWVB comparator needs. Of course the station is only 60 miles away from my QTH in Denver! WWVB has been going through major upgrades for the past year, and since it has had so many outages, I have a scope across the antenna input to the WWVB receiver to monitor the signal. When my chart recorder goes nuts, I turn on the scope to verify that the signal is really gone. With a Tek 7A22 set to 100 uV / division, it gives 7 divisions of signal on the high side of the time code modulation. (The scope plugin is set for a low end of 10 kHz and a high frequency cutoff of 100 kHz. Works perfectly to monitor the actual RF signal.)

The KOA loop has 5 turns, (100 feet of wire), and has a one turn loop for the pickoff. It has a lower loaded Q than optimum, since it was used to monitor other stations in Denver besides KOA. If one wanted to load the loop down less with the radio, and were not interested in off frequency signals, then a capacitive tap greater than the 25:1 ratio provided by the 1 turn pickoff would be better. A loop is nominally supposed to have less than 0.08 wave length in total wire length. The 850 kHz loop was just a bit too long, and the 60 kHz loop was considerably shorter than the recommended maximum.

In the old days on 160 meters, we only had a 25 kHz segment, so fixed tuned was OK there, too. So a five turn loop (3 feet in diameter) with a capacitive tap or a 1 turn pickoff loop was satisfactory for one 25 kHz segment. Now with 200 kHz available, some kind of motorized tuning is required.

On 160 meters the loop did not prove useful since my tower and beams (top loaded vertical) were nearly resonant on 2.0 MHz, so everything either nulled or peaked on the tower, not the incoming signal direction. The problem went away on 75 meters, but I never pursued using it much on that band other than to prove the re-radiation problem of the self-resonant tower was not an issue on the higher band.

The advice provided by other RX members that the loop needs to be resonated is certainly correct. Once it is resonated and inductively or capacitively tapped properly, you may not need a preamp if the length of wire is near the 0.08 wavelength maximum. But I would not count on that. A 10 dB broadband preamp like the one in the Drake R-7 would be helpful. I would be interested to hear how much preamp gain others have used on loops for general purpose listening, as opposed to more or less fixed tuned examples above.

Date: Sat, 30 Oct 1999 00:10:20 -0400
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Loops

Oops. OK, so I see that I made a few slight errors and omissions.

First of all, I used way too many turns. Using that 0.08 wavelength max length rule puts my 5 foot 64 turn octoloop at the length limit right around WWVB. So, fewer turns for me. I had thought, the more turns the better. (But, Noooooo0000)

Second, I need to resonate the thing. I had tried putting my only available variable cap in parallel across the output of the loop but nothing happened at all. It is probably 100 - 1500 pF. I initially thought that I had negligible Q due to the radio input impedance but I am probably way too low in capacitance also.

Third, amplification. Directivity and selectivity are wonderful - I love those in an antenna! But there must also be enough signal to hear. The S/N of this loop seems great so far. I tried putting an old MiniCircuits 0.05 - 130 MHz amp in line but apparently it is meant more for power apps (+ 29 dBm rated output) and has way too much noise to be of any use. I get 10 uV of noise just about everywhere when the input is disconnected, and while I can definitely hear more stuff in there, this situation is clearly unacceptable. Has anybody built the preamp shown on the octoloop site? Is it worth the time, or is there a cheap and better commercial alternative (why re-invent the wheel...).

TIA, this has been quite an educational experience!

premium-rx-digest Saturday, November 6 1999 Volume 01 : Number 057

Date: Fri, 29 Oct 1999 23:03:34 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Last call for HF-2050 manuals

Last call for those willing to commit to one or more of the technical manuals which I will arrange to be professionally reproduced for the Collins HF-2050 DSP receiver. I will be going to the publisher Monday, and need firm orders by Sunday at the latest. Cost will be \$70.U.S. postpaid in North America. More details later.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Fri, 29 Oct 1999 23:07:46 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Collins HF-2050 for sale

Thought I would give the fine folks on the premium receiver list, as well as the Collins reflector first crack at this fantastic receiver, which is now surplus to my needs. I've used this receiver for a year. It's in great shape, fully functional in every way, without problems. Before I go the auction route, perhaps someone on the lists may be interested. Please e-mail me privately with offers, etc.

..... Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia
DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050,
(250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Sun, 31 Oct 1999 19:46:57 -0700
From: John Miles <jmiles@pop.net>
Subject: RE: Prem-Rx: Musings (and a stealth FS notice)

This sounds like a reasonable compromise to me. I am not opposed to ebay listings myself, but unfortunately, lists and newsgroups often seem to fill up with objections from people who are opposed to auction listings. At one point, one Usenet group I follow had more than twice as many anti-ebay diatribes on it, than it had actual auction notices. Definitely a polarizing issue!

Not coincidentally <ahem>, I am looking to prune my own collection somewhat over the next few months, in preparation for a move next year. I have a couple of Prem-Rx's that are not being used as they should be, due to lack of both antenna space and operating time. I would like to find new homes for them both, preferably with active listening/monitoring enthusiast(s) as opposed to "hide-them-in-the-closet-along-with-everything-else" collector types. I am already in danger of joining the latter ranks myself, which is what's prompting the sale!

Both of these items are Rockwell-Collins rigs, and both are fully-functional. Complete factory documentation is included.

The first item is a very nice HF-2050 with 30-channel memory. Front panel is near mint; other surfaces show wear consistent with normal and reasonable use. This HF-2050 with operating and service manual is offered at US \$1,800.00.

The second item is definitely an unusual example, being one of a very few Collins 95S-1A receivers in private hands. The 95S receiver architecture is of no small historical interest, being the very first commercially-produced DC-to-daylight receiver based entirely on DSP technology after the first mixer. It is a compact (19" rack-mountable, about 2" high) PC-controlled receiver which offers a total of 75 DSP-derived bandwidths for continuous FM/AM/CW/SSB coverage between 5 kHz and 2 GHz. The 95S-1A is a current production model at Rockwell-Collins, with a more complete set of specifications at <http://www.collins.rockwell.com/government-systems/products/pdfs/comm/95.s.pdf>. I am asking US \$5000 for this receiver in CCA Mint condition.

I'll be glad to answer any questions anyone has about either of these two units.

thanks -- john KE5FX

Date: Mon, 01 Nov 1999 11:50:36 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 manuals

Sent the tech manual to the printers this morning, and let everyone who ordered them know. Just in case there were a few stragglers, I ordered several extras, not too many, since they are VERY

expensive to reproduce. I continue to offer them for the next few days at the same price, ie \$70 US. postpaid to the US and Canada. After that, I'll likely send any extras to, bite my tongue, eBay! Notice that some fella in Japan offers the manual copy at \$79(for openers) plus shipping and handling!

.....Walt. Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia
DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050,
(250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Mon, 1 Nov 1999 20:42:08 -0700
From: John Miles <jmiles@pop.net>
Subject: Prem-Rx: 95S-1A spoken for; HF-2050 still available

Thanks to all who indicated interest in the receivers I offered for sale recently! A new home has been found for the 95S-1A, while as the subject line indicates, the HF-2050 is still available at the stated price. I will hold off for another week and then place it on ebay, in all likelihood.

- -- john

Date: Mon, 01 Nov 1999 23:06:36 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 and HEAT, Chapter 3

Some time ago there was a great discussion about the power supply inefficiency causing a great deal of heat build-up, and the absolute necessity to use fans to correct this problem. Since acquiring my first, and now second and third 2050's, I have had a great interest in experimenting with heat dissipation. I wish to now share my results with you:

Question 1: What is more effective on internal cooling. Top, or bottom mounted fans. Answer: Bottom mounted.

Results: Top mounted:

94,94,99,99,104,98,106,101,101,102,101,98,86,95,93,95,105,106,100,96,98,101 Bottom mounted:
83,82,86,83, 84,85, 90, 86, 89, 88, 85,89,81,81,81,84, 88, 88, 84,82,83, 83 Ambient temp:
64,63,66,67, 69,65, 70, 66, 68, 70, 67,72,67,66,67,68, 68, 70, 65,64,65, 66

Top: 97, 96,110 Bottom: 85, 84, 88 Ambient: 68, 67, 71

Discussion: Two 2050s were compared side by side. Each with three(though unfortunately not identical) 24 VDC fans, running at 18 to 20 VDC. Temperatures were measured internally using a temperature probe inserted approximately 1" into one of the predrilled side holes for slide rack mounts. These temperatures were then compared to the ambient temperature and recorded. Results clearly show the superiority of bottom mounted fans pushing air upwards, as opposed to the existing set-up pushing air down into the receiver.

The average of the 25 readings yields 99 degrees for the top mounted fans, 85 degrees for the bottom mounted fans, an improvement of 16 percent. Ambient temperatures averaged a cool 67 degrees. Note that there is a consistent correlation between ambient temperatures and internal temperatures. Lesson: Keep the radio shacks as cool as possible! At my house, located in the Pacific northwest, I leave the windows open all year around. Even in the middle of winter, the room is comfortable without external heat when the receivers are humming!

Experiment two:

I thought that a more sophisticated approach was necessary for this phase. My recently acquired third 2050, without fans provided an ideal environment to further test my hypotheses. This time, with the top cover removed, I placed three temperature probes in the power transformer area (my temp gauge

has three channels). Channel 1 was placed in the forward compartment, under the front power supply casing. Channel 2 was mounted midway, halfway down the power supply casing, on the outer surface. Channel 3 was mounted at the rear behind the power supply casing.

Initial measurements were made with no cooling. Then, a tiny 40 X 20 mm 12 VDC CPU fan at 7.5 CFM was superglued to the bottom cover blowing air forward at a slight angle. Next a 12 VDC brushless fan was added to the bottom, blowing air up through the receiver. For the third part of the experiment a second bottom fan was added, this one a 220 VAC fan, using 115 VAC. Finally, a top larger 12 VDC fan was added to draw warm air from the receiver, ie "sucking" air upwards. This fan is rated at 64 CFM. Here are the results:

No cooling: Internal CPU fan added: Internal + 12VDC bottom fan:

Ch 1: 94, 109, 131, 136, 139. 137, 134, 134. 124, 123. Ch 2: 89, 99, 122, 127, 130. 115, 114, 114. 95, 94 Ch 3. 74, 78, 95, 98, 101. 102, 101, 101. 95, 93

Internal + 2 bottom fans: Internal + 2 bottom + 1 top fan:

Ch 1: 109, 97 93, 89 Ch 2: 94, 90 88, 88 Ch 3: 93, 90. 88, 88.

Discussion: After a 90 minute warm-up from cold start, the average temperature without cooling was 123 degrees. Adding the tiny internal fan dropped the temperature a respectable 6 percent to 116 degrees after 45 minutes, especially noted in the middle section, a bit in the front, but no difference in the rear, where it is mounted! Adding a single bottom fan drops the temperature from start by 16 percent (to 103 degrees) after a further 30 minutes. Adding a second bottom fan cools the unit by 25 percent from start (92 degrees). Finally added the top fan cools the unit to 88 degrees, a drop of 28 percent after 15 further minutes. Whereas the top cover was hot to touch, especially in the front, the covers are now just slightly warm.

Since Saturday, I have continued to run the same setup, but with the 12VDC fans running at only 6 Volts. Very quiet. The 220 VAC runs at 115 VAC. This was a surplus item from the Boeing Surplus Store in Seattle. Also very quiet. I have continued to measure a single internal temperature versus ambient. Here are the results:

Internal temperature: 77, 84, 88 Ambient temperature: 60, 66, 66.

The surfaces continue to remain cool. Further temperature improvements have been shown to be made by using a variac and powering the 2050 at about 100 VAC, with no apparent degradation in receiver ability.

Conclusion: By all means, cool the receiver. This is an absolute must. Failure to do so will result in your very expensive piece of equipment rapidly becoming a worthless probably next to impossible to repair ex-receiver. Fans are very easy to install, cause no apparent increase in receiver noise, and are highly effective in keeping the electronic components cool. I recommend bottom mounted blower fans, but for maximal efficiency both top and bottom mounted fans can be installed to work synergistically. A tiny internal CPU cooling fan helps, but is insufficient, in my opinion, to provide sufficient cooling. I know others have experimented with squirrel cage fans. I have yet to do so, and so cannot comment on their value. I would love to see the results of others! Part of the fun of owning these exotic receivers!

Walter Salmaniw, MD Victoria, BC, Canada.

Date: Tue, 02 Nov 1999 08:52:51 -0800
From: John R Bookout K7JB <k7jb@uswest.net>
Subject: Prem-Rx: HF-2050 and Fluorescent Lamp fom ALL Electroincs

Hi HF-2050 Operators:

I just finished installing my fan mod to cool the Power Supply and called "All Electronics" to buy 2 fluorescent lamps to light the display in my HF-2050. The people at "All Electronics" told me that they no longer have any stock on these lamps! Boy I didn't know how fast these would sell out!

I was hoping someone might have bought extra stock that I could buy for my Collins HF-2050 receiver. I only need 2 lamps and a supply, but, I would appreciate it if someone could accommodate my needs.

Thanks John K7JB - -- Best 73's

John, K7JB Amateur Radio Since 1958 Asst Dir NW Div ARRL Collins Collectors Association
MEMBER QCWA LIFE MEMBER

Date: Tue, 02 Nov 1999 12:50:12 -0600
From: John Bryant <bjohn@provalue.net>
Subject: Re: Prem-Rx: HF-2050 and HEAT, Chapter 3

Great Work on the heat study, Walter. I really appreciate you checking the CPU fan idea. I was going to see if one of those would do it at all well and you have saved me the trouble. I really appreciate you checking the blowing up vs. blowing down, too. After looking at the power supply configuration, I was "pretty sure" that blowing up was the ticket, but its nice to have a direct comparison.

John Bookout: Sorry, but I'm short one mini fluorescent, myself! Nuts

John Bryant

Date: Tue, 2 Nov 1999 12:01:54 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Steve Share

Gentlemen-

Steve Share is our newest member. Located in San Francisco area, Steve is a co-owner in a company that designs portable/rechargeable power systems, high density power supplies, and similar products. His clients are typically based in the Asian countries so he is usually on the go.

When home Steve operates a WJ HF 1000 A (with preselector). He also takes advantage of a Sherwood SE-3 outboard detector (Ed. Note: Hey Sherwood- if we mention your product/s on the List does that mean you have to send all members a sample unit to evaluate?). In addition to the HF 1000, Steve often listens to a R9000, WJ RS-160, and a number of tube types including a R&S EK 07.

You can drop Steve a note at: sas@dnai.com

Greg

Date: Tue, 02 Nov 1999 12:09:09 -0800
From: earthlink <cloudhopper@earthlink.net>
Subject: Prem-Rx: Fluorescent lamp source for HF-2050 modification.

For the "in the dark" 2050 operators:

I remembered seeing some fluorescent lamps in the Jameco catalog, since they are only down the road from me I gave them a call this morning to confirm stock on their p/n 146157 lamp.

Specs: start volt 850, lamp volt 345, intensity (nt) 2400, lamp current 5.0 ma., size 6.3X.12 inches. \$12.95 ea. They had at least ten in stock as of this morning. They also have a nice little power supply that will most lithely work with the lamps, p/n 142252 @ 14.95. call them at 1800-831-4242.

I performed this backlight mod some time ago on one of my HF-2050's and I have been very happy with it. Hope this helps out those who wish to do this modification on their 2050.

Regards Dennis W6DEN

Date: Tue, 2 Nov 1999 12:42:15 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Ed Cantelon

Gentlemen-

Ed Cantelon has joined our group. Ed's main interest in the area of Premium-Rx devices is "modifying the circuitry to improve weak signal reception in order to measure the parameters of distant Broadcast stations". When not working on his receiver, he can be found generating RF under the call of W8CV (old call W8RMH) from his home in Oakland County, MI.

Presently he drives a Premium Racal 6790GM and a WJ 8617B.

Perhaps it is worthy of noting Ed's rather unique background in amateur radio: First SSB station on the air in Michigan. First TV station (432MHz) on the air in Michigan. First SSB in world on 144 Mhz (per QST). First RTTY station on the air in Michigan.

You can drop Ed a post at: ecant@flash.net

Greg

Date: Tue, 2 Nov 1999 13:19:12 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Karl Konefsky

Gentlemen:

Carl Konefsky, operating under the call sign of W9TAD, has joined our List. Carl is located in Beverly Shores, Indiana which is located at the very southern of tip of Lake Michigan.

Although he is presently using a newly acquired Racal 6790GM, Carl's hobby is collecting and selling military radios, and vehicles!!!. As a retired person, Carl states his "hobby" provides him with pocket money for the important things.... premium radios.

Presently he is putting together a Harris 1310 exciter and a Harris RF 124 amplifier.

Carl looks forward to reading the mail and finding out more information about his 6790.

Greg

Date: Tue, 02 Nov 1999 15:44:31 -0600
From: Carl Konefsky <cameraman@niiia.net>
Subject: Prem-Rx: Thanks Greg

First I want to say thanks to Greg for letting me join your group hope to find out more about the "Good Stuff". Thought i would share something with you all. When I got my 6790 I wasnt to happy with the audio as I am a bit hard of hearing so I took a pair of Computer Speackers (NEC) that I picked up at a Hamfest (new 15.00) had to put together a power supply they needed a 15+ 15- supply (leave it to NEC). I then put a Radio Shack DSP inbetween the radio and speakers an now it really has very good audio and a little extra for notch filtering. Radio Shack quit selling the DSP about 2 years ago when I

found it out I was only able to find one (13.00) works good look around you might find some. Would like to find a couple more. Carl

Date: Wed, 03 Nov 1999 05:53:15 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Bill Townsend

Gentlemen-

Bill Townsend, generating RF since 1967 under the calls of W8ULO, is our next member. Bill complains that limited time has terminated most of his transmitting activity and now he typically can be found monitoring foreign DX. Located in Cincinnati, OH, our newest member owns TES, Inc. a consulting firm specializing in mechanical vibration in automotive and aerospace vehicles. Bill reports that he read about our List in the Rascal@QTH via a message from member Bob Parnass.

Currently, he drives a RA6790/GM which gets used daily, 3 R309As, (sic?, obviously a typo on Bill's part, but if Rippel reads this he will suffer a coronary) and a R392 which is also used regularly. The 6790 is operated via rs-232 from his desk with software he wrote a while ago, Its line audio comes back over another pair in the serial cable to a sound card in the computer (this is so he doesn't have to get up to turn down the volume while using the phone...). At the moment, Bill is looking to acquire another high-end receiver, probably a Mackay Marine 3031A, although he has been tempted by the Cubic R3030, as well as a couple of Harris boxes. Perhaps a member can help in this decision making process???

You can contact Bill at: wlt@tesnet.com

Greg

Date: Wed, 3 Nov 1999 17:05:19 +0100
From: KuD-BS@t-online.de (KD Elektronik GmbH)
Subject: Prem-Rx: service manuals for HP test equipment

Dear friends, on October 28 I sent out a call for help because my HP 8640B signal generator was defect. I received 5 answers almost immediately, offering to loan the manuals or giving advice where to get the manuals. Jan Duncan sent some data about the transformer so that we could design a replacement. I think that the response I received is quite impressive and I want to thank all who are involved. All others please note that the premium-rx group is really alive and working.

A few news about the receiver KWZ 30: As you might know my company has designed and produced the DSP-Receiver KWZ 30. After the demonstration at Universal Radio and the test report in Passport to World Band Radio I had an extensive correspondance with some friends. I received a lot of suggestions about desirable modifications. A new test report will appear in the next edition of the WRTV Handbook. The publisher granted an award for outstanding performance and design, or so. I have not yet seen it, but only received an e-mail with the announcement.

Right now we are working on a contract for a transceiver for the frequency range 1.8 -30 MHz in transmit and 6 KHz to 30 MHz in receive using the technology of the receiver, or most of it. The output power is 20 Wp_{ep} and the unit is portable. In this process we also will do a redesign of the receiver and will have a new model in about 6 months, hopefully. We may be able to incorporate some of the suggested modifications. Comments and suggestions are still welcome.

All for now. I will keep the group informed about any progress.

Best regards Hans-J. Kneisner

Date: Thu, 04 Nov 1999 06:50:26 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Paull Patterson

Gentlemen-

Allow me to introduce Paull Patterson, our newest member. Unlike many of us who use the radio as a hobby or diversion, Paull works as a "R and D" engineer at the Sandia National Laboratories in Albuquerque, NM, specifically in communications. His area of interest is the design of bandwidth enhancement of measurement systems making use of the properties of the Fourier Transform.

Paull's interest in receivers started in the "territory" of Alaska in the early 50's. There, without the distraction of television, he operated his dad's home made SSB receiver. Joining the Coast Guard as a radio operator, he learned the code and picked up a general class ticket (wb6cfr). But like so many of us, outside distractions and demands created a time sink and he let his license expire.

Paull, associated with his work, drives a number of interesting receivers, at home he can be found in the company of a few Collins, Icoms, and some Ten-Tec gear including the 330B.

You can drop Paull a note at: paull.patterson@merkin.com

Greg

Date: Thu, 4 Nov 1999 08:52:56 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member Jim Pruitt

Gentlemen-

Jim Pruitt, reading the mail at Central Washington University in Ellensburg WA. is our next member. Jim is a computer jockey at the University, and uses his radio as his hobby. And when enjoying his hobby, he can be found working a Racal 6790GM as well as a number of other receivers.

Jim has been generating RF for the past 32 years, using CW and packet radio as his venue. He enjoys listening to HF broadcasting, but admits it isn't his major interest in the hobby.

For all you Racal drivers, here is another opportunity to gather around a binary Boole expert and program the 6790.....

Jim can be reached at two addresses: wa7duy@eburg.com ***and/or *** pruittj@cwu.edu

Greg

Date: Thu, 04 Nov 1999 17:32:53 -0800
From: Ben Wallace <bwallace@sd.cts.com>
Subject: Prem-Rx: Cubic Announces Lower Cost Receivers

Very interesting. See:

<http://www.cubiccomm.com/products/lcr.htm>

Date: Thu, 4 Nov 1999 21:42:42 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Prem-Rx: RACAL repair service note

Racalphiles,

The attached note, posted today on the Racal mailing list, is of interest Racal receiver owners on the premium-rx list.

=====
Copyright 1999, Bob Parnass, AJ9S parnass@bell-labs.com Locate & identify transmitters in your area with a color RadioMap(tm) <http://www.megsinet.com/~parnass>

Subject: [Racal] Hello all...(6790 Info)
Date: Thu, 04 Nov 1999 15:40:28 -0500

>
> From: Shawn_Crossland@racalcomm.com
> To: racal@qth.net
> Well,
> After monitoring the traffic for about 2 weeks, I guess I should "reveal"
> myself. My name is Shawn and I work for Racal Communications in Maryland.
> I work in the Engineering Department. Shameless plug: www.racalcomm.com.
> I have only been working for the company for about 1 1/2 years so I don't
> know the older product line. I am more familiar with our current products
> (MSHR, MBITR, RACAL 25, TASS, etc).
> From what I understand, Racal dropped sales and support of the 6790
> several years ago. So, an enterprising tech from here opened a garage
> business of repairing, sales, and servicing of the R2174, RA6790 and
> RA6790GM.
> His contact info:
> Gary Wingerd
> 9107 Jordan Rd.
> Fairplay, MD 21733
> (301) 582-2424
> He does not have an Internet address or access to email.
> I hope that helps a few people.
> -Shawn
> Shawn Crossland
> Racal Communications Inc.
> (301) 987-1322

Date: Fri, 05 Nov 1999 10:07:00 -0800
From: dma@islandnet.com
Subject: Re: Prem-Rx: Cubic Announces Lower Cost Receivers

At 05:32 PM 11/4/99 -0800, Ben Wallace wrote:
> Very interesting. See:
> <http://www.cubiccomm.com/products/lcr.htm>

Innteresting - but I didn't see a price? Doesn't our listmeister have contacts at Cubic?

Jan Skirrow, VE7DJX

<http://www.skirrow.org/Boatanchors/>

Date: Fri, 5 Nov 1999 18:48:37 -0700
From: "Shaun P. Merrigan" <smerriga@compusmart.ab.ca>
Subject: RE: Prem-Rx: Cubic Announces Lower Cost Receivers

Cool!

One of these units, the LCR-2000 is a "black box" receiver meant solely for computer control. The software they mention on the data sheet is called "VIRTCONT-01" HF Virtual Control Software. I wonder how this compares with other programs like VisualRadio or SHOC?

Does anyone have anymore information about this software?

Shaun

-- Shaun P. Merrigan Edmonton, AB, Canada 53.55 N 113.47 W

Date: Fri, 05 Nov 1999 20:52:52 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Cubic "New Receivers"

Fellow Listees:

Cubic Communications and I share the same return address (at least the city part). It is for this reason that a few of you asked me to check into the cost of the "new receivers" that Cubic is offering.

I called Brad, the director of marketing, and was given the following information: Basically, it is the web site and/or its presentation that is new, the radios have been on the market for over two years. The serial controlled HF "pizza" radio, LCR-2000, and the front panel controlled, LCR-2400, are in the 5-7K\$ ballpark. The UHF version, is slightly more..... about 12K\$. Naturally, if you want to have one of these delivered by Fed Express, you should call Brad collect.

Now as to the source of the rumor that these were "new radios", well that was generated by the old backyard gossip Ben Wallace. However, we need to understand that Ben was feeling a little light headed this week. Seems Qualcomm's stock went from 215 on Monday's market opening to a "ballpark" \$297 at Friday's close. At this rate Ben is going to need an oxygen tent.

Since Ben's cookie jar is now overflowing, I can only assume he will be reporting back to us on how the Cubic receiver stacks up when compared to some of his other hardware.

Greg

P.S. I know that Ben will respond to this announcement. But don't believe anything he says.... remember, he is suffering. I don't doubt he will probably be asking for donations to his daughter's college tuition next, maybe money for a winter jacket..... it gets cold out this way.

Date: Sat, 6 Nov 1999 09:25:00 -0500 (EST)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Cubic "New Receivers"

So Prof, it sounds like the \$299 group purchase is out?

73,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

premium-rx-digest Sunday, November 14 1999 Volume 01 : Number 058

Date: Sat, 6 Nov 1999 08:06:44 -0700
From: "John Fallows" <john.fallows@home.com>
Subject: FW: Prem-Rx: Cubic "New Receivers"

That is already in place. It's called the RX-320! 73, John
ERGO Radio Software creativexpress@home.com <http://members.home.net/creativexpress/>

Date: Sun, 07 Nov 1999 14:41:23 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Heads Up 2050 Owners

I am bouncing the following post. It was sent to the server by Jon L. Williams at: bengoshi@iquest.net. Jon is a charter member of the List. You may reply directly to him, or via the List.

Much thanks for the information Jon.

Greg
<<<<<<<<<<>>>>>>>>>>>><<<<<<<<<

Some months ago, I attempted to acquire some additional information from Collins on the HF2050. Although initial efforts were met with a response of either lack of knowledge or could not discuss that receiver, I was able to acquire some information which may be of some interest to the group. This information is as follows:

I first called what I thought was Collins in Toronto, Canada, but was referred to Collins in Cedar Rapids, IA. Tel. no. (319) 295-2676. I talked to a Rhonda who indicated that the Canadian Co. office for Collins is now located at 55 Rue Medcalfe St., Suite 1300, Ottawa, Canada. She also connected me with a Joe Murrell who is in Collins Technical Support who is quite knowledgeable about the receiver and had a manual handy to refer to (U.S. version only). Collins has the U.S. version of the manual in stock, and which is stock no. 5230773407--cost is \$575.00. He told me that Collins could not release the Canadian version without Canadian govt. permission, since it is proprietary to Canada. This manual is an intermediate level version. He did advise that one of the engineers on the 2050 project was a Mr. D.H. Church who lived in Toronto when he was with the co., but who is since retired, and they do not know where he is now. There are 2 parts persons at Collins, an Amy Schofield who is at (319) 295-5822, or a Linda Gotel who is at (319) 295-3690. Linda's e-mail address is legoette@collins.rockwell.com.

They also have listed in their parts catalogue the HF-8060 Preselector. Linda said that Collins last sold one about 1 1/2 years ago which was for approximately \$20,000-. She said that the price would probably be higher now, and they are custom made.

Date: Sun, 7 Nov 1999 17:20:19 -0800
From: "Guy Atkins" <dxing@hotmail.com>
Subject: Re: Prem-Rx: Heads Up 2050 Owners

Jon L. Williams, in an understatement, remarked on 11-7-99:

> Collins has the U.S. version of the manual in stock, and which is stock no.
> 5230773407--cost is \$575.00.

Hmmm... perhaps Dr. Walt should reconsider his reprint manual pricing structure? It's really tough to decide between these two sources for the 2050 manuals. < g>

--Guy

Date: Sun, 07 Nov 1999 21:49:28 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: Heads Up 2050 Owners

Greg relayed the following from Jon Williams:

- > Some months ago, I attempted to acquire some additional information from
- > Collins on the HF2050. Although initial efforts were met with a
- > response of either lack of knowledge or could not discuss that
- > receiver, I was able to acquire some information which may
- > be of some interest to the group. This information is as follows:
- > I first called what I thought was Collins in Toronto, Canada, but was

The Canadian operation in Toronto was closed immediately upon completion of this project, despite coming in on budget and on-time.

- > to Collins in Cedar Rapids, IA. Tel. no. (319) 295-2676. I talked to a
- > Rhonda
- > who indicated that the Canadian Co. office for Collins is now located at
- > 55 Rue
- > Medcalfe St., Suite 1300, Ottawa, Canada.

I presume this is just a sales office.

- > She also connected me with a
- > Joe
- > Murrell who is in Collins Technical Support who is quite knowledgeable
- > about
- > the receiver and had a manual handy to refer to (U.S. version only).

The 2050 was produced only in Canada. I continually hear people talk of "American versions", etc, but there is absolutely no evidence that these exist. I'm convinced that, like the reported 100 memory versions, they, in fact, were not acquired by the Canadian military.

- > Collins
- > has the U.S. version of the manual in stock, and which is stock no.
- > 5230773407--cost is \$575.00.

Ouch!

- > He told me that Collins could not release
- > the
- > Canadian version without Canadian govt. permission, since it is
- > proprietary to
- > Canada. This manual is an intermediate level version.

Presumably, the one I rescued from the refuse bin!!!

- > He did advise
- > that one

> of the engineers on the 2050 project was a Mr. D.H. Church who lived in
> Toronto
> when he was with the co., but who is since retired, and they do not know
> where
> he is now. There are 2 parts persons at Collins, an Amy Schofield who
> is at
> (319) 295-5822, or a Linda Gotel who is at (319) 295-3690. Linda's
> e-mail
> address is legoette@collins.rockwell.com.
> They also have listed in their parts catalogue the HF-8060
> Preselector.
> Linda said that Collins last sold one about 1 1/2 years ago which was
> for
> approximately \$20,000-. She said that the price would probably
> be higher now, and they are custom made.

These preselectors were listed as an option, but never acquired by the Canadian military. Wonder who would purchase them?

Slowly, the veil of secrecy is shed away from this lovely, and revolutionary receiver!

.....Walt. Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Mon, 08 Nov 1999 22:25:24 -0500
From: David Clark <davidclark@home.com>
Subject: Prem-Rx: [Fwd: [R-390] CQ Magazine Classic Equipment Series (Nov 99 CQ Magazine)]

Of interest, folks. 73 - Dave - -----

Date: Tue, 02 Nov 1999 07:19:54 -0600
From: "Jerry G. Kincade" <w5kp@swbell.net>
Subject: [R-390] CQ Magazine Classic Equipment Series (Nov 99 CQ Magazine)

Let's all flood the editor at CQ at cq@cq-amateur-radio.com with slaps on the back for finally doing a piece on classic equipment, "Classis Jurassics - Part 1". Maybe they'll hear us and do some more, or even (dare we hope) start a regular boatanchor feature column. Was getting a little sick of nine zillion VHF and packet articles and handi-talkie tests, and was beginning to think they had forgotten there were still real radios being used out here, by real hams. 73, Jerry W5KP

Date: Tue, 9 Nov 1999 17:19:52 EST
From: MStud26073@aol.com
Subject: Prem-Rx: National HRO 600 docs wanted

Good Day: I'm looking for the supplementary technical manuals for this receiver and the Model 601 VFO.

Regards, Mike Student W7MS

Date: Tue, 09 Nov 1999 18:16:39 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: National HRO 600 docs wanted

Mike,

Try A.G. Tannenbaum a <http://www.agtannenbaum.com/> . They are a reliable supplier of manuals, and I know Mike the coowner actually has an HRO-600.

Regards, Al

MStud26073@aol.com wrote:

> Good Day:

> I'm looking for the supplementary technical manuals for this receiver and
> the Model 601 VFO.

> Regards, Mike Student W7MS

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Tue, 09 Nov 1999 20:20:41 -0800

From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>

Subject: Prem-Rx: New Member- Harri Sillanpää

Gentlemen:

Our newest member is from Finland. Harri Sillanpää first contacted me two weeks ago about participating in our List. This was just prior to the rash of Racal operators that recently joined the list..... and unfortunately, Harri's application got buried. So, somewhat tardy on my account, we welcome Harri to the group.

Harri lives in Lahti, a town located 100 Km north of Helsinki. He is employed as an automation engineer (<http://WWW.LSK.FI>) with a company that does PLC, processor programming, and hardware system design. During his service in the Finland Army, Harri was a radio operator working with Sunair, Racal, and R&S equipment.

Harri has held a ham license (OH3PC) since 1980. Presently his interest is in receivers versus transmission. Harri checks in with a Racal 6790, however, he also has a Drake C-line and an older R-7 for backups. He operates a 6 element 21 MHz beam, as well as long wires, a 40M Windom and some magnetic loops.

As Harri states, "I want to made better rx and rx systems than i can buy in shop. (my low > budget). Please don't ask my wife how much is my systems cost. R&S EK 895 cost about 85000FIM which is half new car, hi. So then i found yours list. I search more informations on the diversity reception systems, and found Larrys home page where are link on the list home page".

Harri- we promise not to tell your wife, and we welcome you to the list. I hope those interested in DIVERSITY theory and operation will contact you.

Greg

73 de Harri OH3PC. email: harsil@sci.fi

Date: Tue, 09 Nov 1999 22:23:50 -0800

From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>

Subject: Prem-Rx: Rockwell/Collins HF-2050 manuals

Here is an update on the reprint project for the technical manuals for the HF-2050 receiver. There's been a bit of a delay at the printers. Seems that the manual is more complex than initially thought. I've been told that the project should be done later this week. For those who have already sent payment, thank you. As soon as I have inspected the work, I'll begin to send out the manuals. I should have a few spares, which are still available for \$70 US or Cdn \$105. postpaid anywhere in the US or Canada.

Elsewhere, please e-mail me for details. For those of you who made firm commitments, please forward your payment to me at:

Dr. Walter Salmaniw 1736 St Ann Street Victoria, BC V8R 5V8 CANADA.

By the way, my spare 2050 is now listed on eBay at: <http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=194322061>. For those interested. Thanks for the bandwidth.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia CANADA

Date: Wed, 10 Nov 1999 02:19:54 EST
From: Aidehua@aol.com
Subject: Prem-Rx: WTB: Racal RA 6790/GM

Looking for one of these in good shape.

73, Ed KA6DBY/San Diego

Date: Wed, 10 Nov 1999 02:21:10 EST
From: Aidehua@aol.com
Subject: Prem-Rx: WTB: 3.2 filter & NB for Harris RF-590A

Looking for these! Please advise if you have one or both FS. Thanks.

Ed KA6DBY/San Diego

Date: Wed, 10 Nov 1999 18:19:54 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 manuals have arrived!

The Rockwell/Collins HF-2050 technical manual reprints were delivered today. I am EXTREMELY pleased with their quality, especially with the numerous fold-out schematics! It was definitely worth the wait. I will begin shipping the manuals to those who have kindly sent in their orders starting Friday (tomorrow the PO is closed due to Remembrance Day in Canada).

To the stragglers, a few extra remain to be distributed. I doubt that I'll do this again...a one shot public service, folks. Contact me directly if you would like a copy(ies).

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Wed, 10 Nov 1999 23:46:17 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: WTB: 3.2 filter & NB for Harris RF-590A

I'll get in line for a noise blanker also.

Does anybody have one in their receiver?

I wonder if they're any good.

Date: Thu, 11 Nov 1999 11:38:47 -0000

From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: R-7 filter exchange. I got 8kc I want 500cy and 300cy

Fellow R-7 owners,

Retro comms (CW) appeal more than post modern digital or Hi-Fi AM at this end so I'm offering to swap a 5.645Mc C.F. Network Sciences for Drake R-7. Label says, SL-8000. It's an 8kc wide IF filter. Will exchange for a pair of 8 pole narrow filters. Combos of interest: 1kc and 500cy, 800cy and 300cy, 500cy and 300cy or 500cy and 250cy. Do not need to be Drake part numbered. Prefer steep skirted over low phase shift filters if they are 3rd party jobs. If you are considering adding DSP to your R-7, this 8kc will make a nice passband filter.

- bob

Date: Sat, 13 Nov 1999 03:24:17 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: WJ HF1000/A

Gentlemen:

As many of you are no doubt aware, Watkins-Johnson, manufacturer of the HF1000/A, has been in the process of selling its various divisions. Arrangements for the sale of all divisions are now nearing completion. Concerned of what might become of sales, service, or support of the HF1000/A receiver, I sent an e-mail to a David Shane at WJ, and received the following response which might be of interest to the group, and for which I asked, and received, permission to disseminate:

Dear Mr. Williams,

I appreciate your concern over support and availability of the HF-1000 receiver. Watkins-Johnson Co.'s Telecommunications Group, located in Gaithersburg, Maryland, is in the process of being sold to Marconi North America. This facility's product is not anticipated to change. This facility, the manufacturer of the HF-1000 and HF-1000A, will not accept any orders for the HF-1000(A) after December 31, 1999. The WJ-8711A will be offered as the replacement Digital HF Receiver. We will continue to support the HF-1000 series of receivers. (The HF-1000 series is based on the WJ-8711A Digital HF Receiver. Both of these products use the same mechanicals. The electronics of the HF-1000A are a variant of the WJ-8711A.) The HF-1000 will not become an orphan. For technical questions on the WJ-8711A please contact Mr. David Day by telephone at 301-948-7550, extension 7617, or by return e-mail.

Should you, or anyone, decide to purchase a new HF-1000A, the transaction would be handled by Universal Radio or any other authorized dealer. The dealers establish their own prices. The WJ-8711A is currently available to the general public. For a price quotation on the WJ-8711A, as with technical questions, please contact David Day at the number provided or at wj.helps@wj.com. Feel free to share the information I have provided.

With Best Regards,

David Shane Watkins-Johnson Co., Telecommunications Group

Date: Sun, 14 Nov 1999 15:01:15 -0800
From: jan@skirrow.org
Subject: Prem-Rx: Fwd: VA3SW....Some Shack Digital Pictures!!

Hi All...

I don't normally forward messages...

But this is such an amazing collection of radios that I thought some of you might be interested. There is an HF-2050 in the bunch, so it fits "premium." In every other respect, it's nothing less than awesome.

Enjoy

Jan Skirrow, VE7DJX

From: Robert Ross <robross@odyssey.on.ca>
Subject: VA3SW....Some Shack Digital Pictures!!

> Nothing to sell today.....Just thought you might enjoy a few Photos of
> soem of the "JUNK" Laying aound here in the Shack and the Basement.
> I recently purchased a New Sony Digital Camera.....and even though I
> really don't have a Clue what I'm doing with it....I sure having fun taking
> a Pile of Pictures of Stuff!! I just wnet for a walk thru the Basement and
> took 19 Photos of Misc. BoatAnchors Stuff jst to let you know what I'm
> tripping over here in the Shack. Hope you enjoy some of these Pics
> Let me know what you think of my Toys!! HIHI.
> 73...ROB.
> <http://www.odyssey.on.ca/~robross/Pictures/boat1.jpg>
> Some Fancy Microphones.
> <http://www.odyssey.on.ca/~robross/Pictures/boat2.jpg>
> Dowkey Chrome Bug, with Rotatable Yoke. A Shiney Vibroplex Bug.
> <http://www.odyssey.on.ca/~robross/Pictures/boat3.jpg>
> Some Plastic Broadcast Sets.
> <http://www.odyssey.on.ca/~robross/Pictures/boat4.jpg>
> Harmon Kardon Citation II Stereo Tube AMP, and some more Mics!
> <http://www.odyssey.on.ca/~robross/Pictures/boat5.jpg>
> Scott AllWave 15 Chromed Shortwave Receiver and a early Silver Marshall Amp
> with Copper Chassis and 4 201A Tubes.
> <http://www.odyssey.on.ca/~robross/Pictures/boat6.jpg>
> Clegg 22'er, Clegg Interceptor, 2 RCA "Security" Badges, and a Nice Zenith
> Wall Sign.
> <http://www.odyssey.on.ca/~robross/Pictures/boat7.jpg>
> Collins 75A4, 312-1A Speaker with Hood/Light, Some Tubes, and an HRO 60.
> <http://www.odyssey.on.ca/~robross/Pictures/boat8.jpg>
> Clegg Twins....Interceptor and Zeus Transmitter.
> <http://www.odyssey.on.ca/~robross/Pictures/boat9.jpg>
> Collins 51S-1, Collins HF-2050, Collins 75S-1, and the Clegg Twins again!
> <http://www.odyssey.on.ca/~robross/Pictures/boat10.jpg>
> Stoddart NMA5 ..Now that's a Boatanchor!!, and a Siltronix 1011C.
> <http://www.odyssey.on.ca/~robross/Pictures/boat11.jpg>
> Collins and Heath Junk Piled up in the Back part of the Basement!!
> <http://www.odyssey.on.ca/~robross/Pictures/boat12.jpg>
> A Very Nice Marconi CR-150 Rec'r from Jolly Old England!!
> <http://www.odyssey.on.ca/~robross/Pictures/boat13.jpg>
> A Newly Aquired RCA AR88LF Rec'r...all 110 Pounds of Her!! Sittin' on the
> Floor waiting to be all spruced up!!
> <http://www.odyssey.on.ca/~robross/Pictures/boat14.jpg>
> McIntosh MC-60 Tube Audio Amp.
> <http://www.odyssey.on.ca/~robross/Pictures/boat15.jpg>
> Still More Mics and Tubes!
> <http://www.odyssey.on.ca/~robross/Pictures/boat16.jpg>
> Collins 51S-1, 75S-3 Receivers...both Rack mounted in my "Wall of Shame!!".

- > <http://www.odyssey.on.ca/~robross/Pictures/boat17.jpg>
- > SX-28A with Speaker, RCA Multi-Coupler, Sp-600 and Speaker, and some
- > Collins Junk..all rack mounted!
- > <http://www.odyssey.on.ca/~robross/Pictures/boat18.jpg>
- > RCA Multi-Coupler, SP-600, Nems Clarke 1674 Special Purpose Rec'r., Collins
- > Junk, and a Racal RA17 with VLF Converter..all Rackmounted.
- > <http://www.odyssey.on.ca/~robross/Pictures/Mydog1.jpg>
- > My Fearless Mutt "Vegan"!! Actually...he's not a Mutt...He's a Purebred
- > "Belgian Sheepdog", also known as a "Turveran Sheppard". He looks after all
- > the Toys when I'm away!!
- > Hope you liked the Photos!!
- > 73...Rob.
- > Robert S. Ross VA3SW
- > London, Ontario CANADA
- > Antique/Vintage Radio Enthusiast
- > Amateur Radio Stations VA3SW/VE3JFC

 premium-rx-digest Monday, November 22 1999 Volume 01 : Number 059

Date: Sun, 14 Nov 1999 18:28:57 -0500
 From: "Ed Tanton" <n4xy@att.net>
 Subject: PerhapsRE: Prem-Rx: Fwd: VA3SW....Some Shack Digital Pictures!!

I have been a friend (and occasional customer) of Rob's for years. He's a very good person to deal with, and a great guy in general. I never knew he had some of these things... so it would be fair to say he is also modest!!!

WOW! What wonderful photos these were just to see! The Dow Rotatable-Yoke Bug and the Collins lighted speaker being my own personal favorites!

Perhaps it would be a good thing for each one of us (who wanted to) to do a similar show-and-tell periodically... once a week or whatever. I would certainly enjoy it-as I did this one! And don't leave out any pictures of the PRGD&FCs either! (Premium-Receiver-Guard-Dog-&-Faithful-Companions)

72 / 73 Ed N4XY email: <n4xy@arrl.net>

webpage: <http://www.qsl.net/n4xy/>

**

 Date: Mon, 15 Nov 1999 15:01:34 -0800
 From: "Greg Bailey" <gbailey@mail.sdsu.edu>
 Subject: Prem-Rx: New Member - Jim Garland

Gentlemen:

Our membership is pushing the 100th member with the addition of Jim Garland who found us via the archives. Starting with his novice in 1955, Jim has been collecting ham tickets and equipment over the ensuing years. It is obvious that Jim, presently operating under the Extra class of W8ZR since moving to Ohio in 1970, has far too much equipment (see pix <http://www.muohio.edu/~4cx250b/hamshack.jpg>).

His basic interest is in the mechanical/technical aspects of the hobby. He has built numerous homebrew rigs and accessories. A receiver and two linear amplifiers of his design appeared in several editions of the Radio Handbook, edited by Wm, I Orr. Like many of our other members he enjoys

restoring BA's, including a 390A (I can see Chuck smiling) and a "bunch" of other tube types. However, let's not write him off his premium receiver list includes a Collins 2050 and a WJ HF-1000 (soon to arrive).

Jim lives in Oxford, Ohio, where he and his wife are employed at Miami University (Ed Note: I think software writers are the biggest subgroup of our membership, then technical engineers, with educators being #3). Starting as a physics instructor at Ohio State University, Jim not only has moved from OSU to Miami University, but also from the classroom to the Office of the President. Miami University (www.muohio.edu) is the seventh oldest public university in the US, with approximately 20K students enrolled in 107 bachelor's degree, 76 master's degree, and nine doctoral programs.

Mr. President can be e-mailed at: 4cx250b@miavx1.acs.muohio.edu

I guess with that address there is no question as to what he runs in the final??? Welcome aboard, Jim
Greg

Date: Tue, 16 Nov 1999 05:54:21 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: Watkins-Johnson Co.

Gentlemen:

As a follow-up to my 11/13 e-mail re the WJ HF1000/A, I have excerpted pertinent portions of the information/announcement of the agreement whereby Marconi North America is to acquire Watkins-Johnson. As we all know, Marconi also makes premium receivers and owned Eddystone, the products/support of which I recall reading recently was terminated. Note, however, that Marconi, which is a wholly-owned subsidiary of General Electric p.l.c. in the U.K. is, in turn, in the process of being acquired by British Aerospace to form a new company called New British Aerospace. Thus, Watkins-Johnson essentially disappears. This information is all from the respective corporate websites. For further information on the British Aerospace acquisition, go to:

<http://www.gec.com/gecbae/b68b.htm>

"August 18, 1999

MARCONI ENTERS DEFINITIVE AGREEMENT TO ACQUIRE WATKINS-JOHNSON TELECOMMUNICATIONS GROUP

Marconi North America announced today that it has signed a definitive agreement to purchase the Telecommunications Group of the Watkins-Johnson Company of Palo Alto, Calif.

The Watkins-Johnson Telecommunications Group, located in Gaithersburg, Md., designs, manufactures and services equipment and related processes with applications in government intelligence, signal surveillance and military communications. Once the acquisition is complete, the group will be aligned under the Aerospace Sector as part of Marconi Aerospace Electronic Systems.

This acquisition is part of Marconi North America's growth strategy which includes focusing on core markets; pursuing larger programs; expanding into international markets; and making strategic acquisitions.

The sale is subject to approval of the Watkins-Johnson shareholders and customary regulatory approvals from the U.S. Government...

-MARCONI-

"Marconi North America, headquartered in Rockville, MD, is a \$2.3 billion leading transnational aerospace, defense electronics and information systems company. An element of the Marconi Electronic Systems group, MNA is a wholly-owned subsidiary of the General Electric Company, p.l.c.

of the United Kingdom. With 17,000 employees, MNA designs, develops, manufactures, sells and supports a wide range of advanced products and intelligent electronics systems..."

"British Aerospace plc and The General Electric Company, p.l.c.

Agreement to Create a Merged Global Aerospace and Defence Company and a Major Focused Communications and Technology Company

British Aerospace and GEC announce that they have reached agreement on the principal terms of a proposed reconstruction which will involve the separation from GEC of Marconi Electronic Systems and its merger with British Aerospace. This will result in two focused world class businesses:

New British Aerospace, a combination of British Aerospace and GEC's aerospace and defence activities, forming a powerful new business with leading positions in the global aerospace and defence markets; and GEC, a major focused communications and technology company, with a strong balance sheet to fund growth opportunities."

Date: Tue, 16 Nov 1999 06:01:55 -0700
From: "John Fallows" <john.fallows@home.com>
Subject: FW: Prem-Rx: Watkins-Johnson Co.

Do you ever get the impression we are going to end up with around 50 companies on the planet, each so big that they will never be able to keep track of what they are doing?

Date: Tue, 16 Nov 1999 09:22:55 EST
From: CGT01@aol.com
Subject: Prem-Rx: New Rx to compete with HF1000-WJ8711

Hello All:

I have recently acquired a TenTec 330, and I note that one or two members have this or later models. I am very impressed with this receiver -- 2nd Generation DSP -- Mil. Spec. -- performance matching the best -- my only critique is the std. time base is pretty poor -- (option upgrade available though) -- an external std. from a Racal fixed that.

While speaking with TenTec -- I was informed that within weeks -- a model 340 will be announced. This is a follow on model to the 331 (see web site www.tentec.com) I have their approval for this email (nothing on the web site yet !!) -- it's basically a 331 with controls. Quote "The pricing will be very competitive" with the direct competitor HF1000 and WJ8711. The 331 is \$2750. The WJ demise could be good news for TenTec -- nice products -- pleasant people.

So if you are looking for an upgrade path for your 2050, 590A, 6790 et. al. - -- this could be the way to go. !!

Sincerely,

Colin Trass

1772,6790,6830,330,3200,8500,GPR90,DR33,958,940,2207

Date: Tue, 16 Nov 1999 15:46:00 -0500
From: Robert Ross <robross@odyssey.on.ca>
Subject: Prem-Rx: HF-2050 Manual is Here!!!!

Hello Guys:

Try the following site for the backlighting. I know they do this mod for the Racal RA 6790/GM.

<http://www.mgs4u.com/index.html#company>

Good luck!

Ed KA6DBY San Diego

Date: Wed, 17 Nov 1999 10:22:19 -0500
From: James Goodwin <j.goodwin@sympatico.ca>
Subject: Re: Prem-Rx: HF-2050 Manual is Here!!!!

I second Rob Ross's opinion posted yesterday about the HF-2050 Manual copies now provided by Walt Salmaniw. This quality, Cirlox-bound reproduction is a must-have for anyone who owns the receiver.

James Goodwin Toronto, ON

Date: Wed, 17 Nov 1999 11:05:44 EST
From: Aidehua@aol.com
Subject: Prem-Rx: Filters for the RF-590A

Hello all!

I have a variant of the RF-590A...the R-2368(V3)/URR. It came with only one available slot for filters. I'd like to have the 3.2 kHz BW, since that is not part of the filter compliment. I borrowed a filter from a Racal receiver, thinking it would work with the Harris. I plugged it in and "no joy." Very loose which leads me to believe they are solder-in only. Please confirm.

Also, I need training on how to program this filter if successfully installed.

Anybody have this variant? Comments/Comparisons to the RF-590 or 590 A???

Thanks in advance! Great list!

73, Ed Sylvester KA6DBY/San Diego

Date: Wed, 17 Nov 1999 12:29:01 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Filters for the RF-590A

I don't know much about the differences between yours and the 590A except that they are minor and usually have to do with which options are installed.

Right now I am decoding the latest ROM firmware for the 590A and I will be able to answer all questions when I get through this. There is a lot going on in this firmware, considering remote control, BITE, display, etc so this may take me a while to get through. When I figure it all out I will be adding more filter selection options, scan of frequency range, scan of freq range with storage of active freqs to memory, etc. I already see a bunch of places I could optimize and expand on stuff so I may end up creating a completely new firmware for this puppy.

> I have a variant of the RF-590A...the R-2368(V3)/URR.

Date: Thu, 18 Nov 1999 04:00:04 EST
From: Aidehua@aol.com
Subject: Prem-Rx: WTB: Receiver Multicoupler

Ever since joining this list, there has been major receiver proliferation in my household. I would thus like to enjoy each and every receiver purchased so far, and I think having a multicoupler would facilitate that.

Anybody have an extra RCA CU-5069 they would like to part with? It would go to a very good home!

Thanks, Ed Sylvester KA6DBY/San Diego

Date: Thu, 18 Nov 1999 15:52:34 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Neil Thompson

Gentlemen:

Our newest member, Neil Thompson, is checking in from East Sussex, a county just 55 miles south of London. Neil enjoys boating in the summer, but when winter comes, he gets out the receivers... and from what he tells me, we are talking MANY radios.

Neil's interest in receivers started 35 years ago, however, in the last five he has become more interested in "commercial kit" (his term) . He estimates that he has passed through 75 receivers picking up along the way those by Plessey, Eddystone, WJ, Skanti, Motorola, and Redifon just to name a few. His premium collection includes a Rockwell 2050 and a Harris 590.

At the moment he has approximately 25 radios, mostly Racal and the Df system, a Racal RTA1470 series, 0.15-1000Mhz. In addition he has: 2 RA1792 for the Df, 3 RA1792 for digimodes, 2 RA1792 as search RX (they have a common frequency standard), a Racal MA259, plus ancillary kit. He also has been able to pickup a large number of spares, again mostly Racal including filters, displays, chips etc etc.

Manuals are another interest of Neil, finding them that is. Allan Langer, a friend of Neil's and another List member, have shared projects and receiver interests. Between them, Neil estimates they have a stockpiled of over 300 manuals on various receivers (Ed. Note- . This isn't a stockpile, this is a goldmine!).

Our newest "honorary manual librarian" can be reached at: ra1792@pavilion.co.uk

Greg

Date: Thu, 18 Nov 1999 19:34:01 -0700
From: "Gerald Caouette" <ve6nap@oanet.com>
Subject: Prem-Rx: Manual has arrived

Walter (Volodya) Salmaniw, MD salmaniw@home.com

The manual is a thing beauty I never realised how much was missing from my collection of pages till I saw the real thing..

If asny one has or is considering a HF2050 in thier future they need this

best 73 de ve6nap@rac.ca

Date: Fri, 19 Nov 1999 11:57:11 +0000
From: ra1792@pavilion.co.uk
Subject: Prem-Rx: Welcome

Thanks for the welcome, but I would like the 2050 and 590 rx's to add to my collection, I haven't obtained them yet! Any ideas??? There was one (2050) on eBay but it made very strong money I think. Also a 590, last weekend, didn't make its reserve! Best Regards Neil T

Date: Fri, 19 Nov 1999 18:35:51 EST
From: Daiungoed@aol.com
Subject: Prem-Rx: RACAL RA1792 SPARES

HI, LIST, Does anyone have a spare CPU board from a RA1792 that they feel like selling me, I have an intermittent fault on mine caused by a leaky backup battery. The set is one of the later ones with backlighting and BITE. Also, can anyone point me at any websites with info. or anything really on the RA1795? I would particularly welcome info. on what is needed to convert the set to receive from 520 to 1000 MHz. All information greatly appreciated, Dave

Date: Sat, 20 Nov 1999 14:20:34 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Mike Draa

Gentlemen:

Mike Draa, a fellow San Diego type, is our newest Listee. Mike calls Japatul (hop-a-tool) Valley his QTH. The Valley is located about 20 miles east of San Diego and approximately 12 miles north of the border. Talk about a noise free environment..... Japatul is just this side of the "boonies".

First licensed in 1963, and presently operating under the call sign of KC8CU, Mike has been in monitoring since 1969 starting with the Army Security Agency, then the Naval Security Group, and finally as a civilian with the U.S. Government. His principle interest is utility monitoring, especially the digital signals. I cover the HF, VHF, UHF spectrum.

Presently Mike is operating a Harris RF-590, Racal RA-6793A, RA-6790GM, WJ-8617B17, and WJ-8618B.

You can drop Mike an E-mail at: ramsta@cts.com

Greg

Hello Greg, Thank you for the reply. As for my bio info I am located about 10 miles east of Alpine but retain an Alpine address (Japatul Valley Rd) 2 miles south of I 8. I have been a licensed amateur since 1963, my callsign is KC8CU. I have been in radio communications monitoring since 1969, first with the Army Security Agency, then the Naval Security Group, and finally as a civilian with the U.S. Government. My experience over the years has exposed me to a variety of receivers and receiving systems. It has been a wonderful career which I have thoroughly enjoyed.

Harris RF-590 Racal RA-6793A, RA-6790GM Watkins Johnson WJ-8617B17, WJ-8618B

Sincerely,

Mike Draa/KC8CU PH-619-659-1215 FX-619-659-1245

Date: Sat, 20 Nov 1999 17:32:16 -0500
From: Marvin Born <MBORN@wbns.com>
Subject: Prem-Rx: Multi coupler

I have a rcvr multi-coupler available. CU872A/U if anyone is interested. Tube type of course. Manufactured by Muston Electronics.

MBorn@wbns.com

Date: Sat, 20 Nov 1999 20:55:16 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- George McLachlan

Gentlemen:

From Winnipeg, Canada, George McLachlan is our 95th, and newest member. George heard of our list from a friend after he inquired about a 2050 that he saw on the "bay" (this may have been Walt's?). Our newest member is a civil engineer, happily retired from the Canadian public service. He finished his career in Winnipeg, but he also lived/served in Fredericton (New Brunswick), Edmonton (Alberta), Whitehorse (Yukon) and Ottawa (Ontario).

Presently (since 1994) he has operated a WJ HF-1000. He mostly monitors medium wave off an inverter at a site east of Winnipeg where there is no line power (but half a dozen unterminated beverages). The HF-1000 replaced a NRD-535 and a R-7, which now provide back up service.

You can drop George an e-mail at: ghmcl@escape.ca

Greg

Date: Mon, 22 Nov 1999 18:26:48 MST
From: "joe talbot" <n52w113@hotmail.com>
Subject: Prem-Rx: HF-2050 Manual

Hello Gentlemen,

I hope this message finds you all happy and well. I recently received my reprint copy of the HF-2050 manual. It arrived safely, well packaged and in two days from Victoria.

It is a huge manual to say the least! The manual is extremely detailed and very professionally reproduced. I am very pleased with the manual and I am sure other group members will be also.

I would like to thank Walter Salmaniw for his dedication to this project and for his continuing work on uncovering information on the 2050. Also, I cannot forget John Bryant's work on the HF-2050. So, thank you both, your dedication and love of our hobby does not go un-noticed. We are really blessed to have you on board, that does to all the unsung heroes with us! Thank You All, you make this hobby a pleasure.

I remain very respectfully and sincerely yours, Joe Talbot

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premium-rx-digest Friday, November 26 1999 Volume 01 : Number 060

Date: Mon, 22 Nov 1999 22:06:39 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: HF-2050 Cooling. The final chapter.

As many of you are well aware, the issue of cooling the 2050 has been a pet project of mine since the beginning. My final experiment involves rack mounted 2050s, one on top of another, separated by a rack mounted 8 fan unit purchased on eBay recently. I measured the temperature in an identical spot within each 2050, by inserting temperature probes into one of the screw holes on the side adjacent the

power supply. All of my previously mounted surface and internal fans were not powered up. The rack fan assembly is your standard 4 front and 4 back fans, the front fans drawing cool air in and pushing air up, while the back four removes hot air from beneath and exhausts to the rear.

Results:

Top mounted 2050: 80(surface/internal 78 (2 min after bottom 78 78 79 fans now turned off): fans tuned on):

Bottom 2050 78 " " 122 " " 98 78 78

Ambient temp: 66 " " 64 " " 65 64 64

Discussion: Notice that when all fans are running, in the first column, the internal temperatures are very cool. With the rack fan, the top fan remains cool. No problem. Clearly the cool ambient air is being drawn into and under the top 2050, and is forced upwards thereby effectively cooling the top unit. Notice the bottom unit, however. Ouch, the internal temperature rose rapidly. Clearly drawing warm air off the top of the warm bottom receiver in itself is NOT sufficient to cool effectively. HOWEVER, powering up the bottom surface mounted push fans, on the lower 2050 within only 2 minutes (!), dropped it's internal temperature down from 122 to 98 deg F, and within a very short period of time back to the identical temperature as the top unit. Incidentally, I ran the rack fans at 70 V via a variac to keep the volume down.

Conclusion: I believe this version of my experimentation proves, once and for all, that the superior method of cooling the 2050 is by installing bottom mounted push fans, compared to top surface mounted exhaust fans. A good alternative appears to be the readily available, and relatively inexpensive rack units, but make sure the bottom unit is provided with vertical cool air flow as well.

PS: One thing I have noticed is that one needs to occasionally clean the dust that accumulates as a result of the surface mounted fans. Perhaps the only drawback to actively cooling the 2050.

Comments are welcome. Say, what happened to the planned work on the power supply. ie swapping the existing hot ones, for a better and cooler supply?

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Tue, 23 Nov 1999 09:39:42 -0500
From: "Jon L. Williams" <bengoshi@iquest.net>
Subject: Prem-Rx: 2050 Manual

Gentlemen:

The 2050 Technical Manual has now arrived in perfect condition, expertly packaged in a protective envelope. The reproduction quality is superb! I do not see how this could be differentiated from the original. Many thanks to Walt for his inspiration and effort in getting this accomplished! This manual also adds a further dimension in the appreciation of this receiver--to wit, the collective talent and effort that went into the design and manufacture of this complex receiver, followed by an incredibly detailed manual that describes it all. This is first rate stuff, and anyone owning this receiver should have this manual.

Thanks again, Walt, for your efforts and this accomplishment.

Jon L. Williams

Date: Tue, 23 Nov 1999 10:04:46 -0500 (EST)
From: Steve Stutman <sstut@world.std.com>

Subject: Re: Prem-Rx: HF-2050 Cooling. The final chapter.

Hi,

At the end of the day when using this type of simple cooling it's airflow that tells the tale. If you put your assembly in a wind-tunnel (I wouldn't) I believe that you will find that directing the output of the air mover onto the device to be cooled results in higher flow than is found on the intake side AT A SIGNIFICANT DISTANCE FROM THE AIR MOVER.

If the RX was in a plenum, using the fan on exhaust might work almost as well.

73,

----- Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Tue, 23 Nov 1999 23:17:45 -0500
From: "R. Makul K1XV" <k1xv@nac.net>
Subject: Prem-Rx: RACAL RA 17 RECEIVERS (52pcs) in Australia

- > I have 52pcs (YES 52) RACAL RA17 &17L receivers.
- > All are in original condition, in excellent working order.
- > Prefer to sell them as one lot. Will organize shipment
- > by sea container, due to the weight.
- > Feedback/comments/offers appreciated.
- > 73's
- > Phil VK6RE

Saw this posted in the boatanchors newsgroup a couple of days ago. Wonder what he wants for them.

Ray Makul K1XV

>

Date: Tue, 23 Nov 1999 22:16:59 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Mackay ITT 3031A audio problem

Just picked up a surplus HF receiver, ITT Mackay Marine, model 3031A. Lovely digital commercial rig, with 10 Hz digital readout. Works fine, except for the audio level. I can't seem to get any audio gain from this set. Max volume barely drives the internal speaker. Anyone have any suggestions? Does anyone have a manual I could borrow and copy? Thanks.

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A, Racal RA.117, JRC NRD535D, Kenwood R5000.

Date: Wed, 24 Nov 1999 10:21:41 +0000
From: ra1792@pavilion.co.uk
Subject: Prem-Rx: HMS LONDON EQUIPMENT

List Members, Yesterday I was offered a number of high spec Racal HF and VHF/UHF receiver systems from the British Destroyer HMS LONDON, a type 42 City Class ship which has just been decommissioned. The equipment includes: 3 RA1784s HF receivers with the MA1072 remote control units for each. The 1784s are featured in fellow list member Fred Osterman's book, page 334 and have all filters and I believe, the isb option. They seem to have 100khz IF convertors fitted and are in very good condition. 2 RA2290 series 20-1000mhz receivers with the associated remote and tuner units. The 2290 has a remote unit (MA2305) very similar to the one for the 1784, the radio itself (2310 series), a storage unit (MA2303), and 3 tuning heads (MA2294, 95, 96).

The equipment is all in very good condition as it was in service until 6 months ago. If anyone is interested, please contact me directly, otherwise I will notify the seller that there is no interest and they will be sold locally.

Best Wishes Neil Thompson

Date: Wed, 24 Nov 1999 14:18:07 EST
From: Aidehua@aol.com
Subject: Prem-Rx: Question on Multicouplers

I am trying to plan my "dream" listening post and have a question...

With several receivers, am I better off using a coax switch rather than a multicoupler?? I realize with a multicoupler that I'll be able to listen to different bands simultaneously, but I worry about the loss, AC line noise, and IMD. What do you recommend?? Thanks.

For multicouplers, I am considering the Stridsberg 8 output active multicoupler or the RCA CU-5069 32 output model. Any recommendations/comparisons?

73, Ed Sylvester KA6DBY/San Diego

Date: Wed, 24 Nov 1999 17:01:47 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: Question on Multicouplers

Aidehua@aol.com wrote:

>
> For multicouplers, I am considering the Stridsberg 8 output active
> multicoupler or the RCA CU-5069 32 output model. Any
> recommendations/comparisons?

I have a gov. surplus CU-1280/FRD-10A (by Sylvania) and a house full of 75-ohm coax all fed by a 100ft Skywaves V-doublet antenna. I'm very happy with this setup. If I were really digging for ham DX on 15-meters or such I'd try something else, but this is so simple. I have no strong locals, and I'm not aware of any significant intermods from skywave signals. AC line noise should be a function of your antenna/ground system no matter what. Gain through most of these couplers is generally unity so loss is not really an issue. You can use passive splitters if you only want to feed a couple of receivers. Splitter designs in the SWL portion of my website.

Regards, Al

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Wed, 24 Nov 1999 17:42:24 -0500

From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Question on Multicouplers

Hi Ed,

I use the RCA multicoupler, with 32 outputs, and love it. I've checked the possibility of noise being introduced, and can't measure any. All noise on several receivers seems to be receiver-limited. I don't know what the multicoupler does to the 3rd order IP or other strong-signal parameters, but subjectively I've noticed no problems. I use it with an 240 ft inverted vee antenna.

The multicoupler runs hot, since each of the 32 preamps is biased hard (toward class A) to maximize the strong-signal capability. I run mine off about 105V through a step-down xfmr, but that probably isn't necessary. I ran it 24 hours/day for several months at 120V, with no failures.

73,

Jim Garland W8ZR

Date: Wed, 24 Nov 1999 18:03:10 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Watkin-Johnson HF-1000 Question

Hi Gang,

My "new" W-J HF-1000 arrived today and I've been playing with it. The firmware version (shown on powerup) says 4.01.03, and I'm wondering if there are any later versions? Mine is S/N 1584. Also, does W-J still produce and/or service the radio, or am I on my own? I don't have the preselector with mine, but would love to find one.

Thanks and 73,

Jim Garland W8ZR

Date: Wed, 24 Nov 1999 15:55:55 -0000
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Watkin-Johnson HF-1000 Question

Both of my HF1000A's have version 4.01.03 Serial numbers 1837 and 1849.

You have an older eprom....contact WJ QUICKLY as they are leaving the business (and HF1000A, while "supported", will no longer be made by the new owners, Marconi.

That Preselector you desire is available through order via Universal Radio. It will set you back around \$599. It is very easy to install if you have a chassis that is predrilled, else you'll just have to drill the rear panel (adds hassle, not too difficult, but watch the drill shavings)

Don

Date: Wed, 24 Nov 1999 16:07:58 -0000
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Watkin-Johnson HF-1000 Question

OOPs, make that 4.01.10

Date: Wed, 24 Nov 1999 06:26:13 -0800

From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Question on Multicouplers

Aidehua@aol.com wrote:

- > I am trying to plan my "dream" listening post and have a question...
- > With several receivers, am I better off using a coax switch rather than a
- > multicoupler?? I realize with a multicoupler that I'll be able to listen to
- > different bands simultaneously, but I worry about the loss, AC line noise,
- > and IMD. What do you recommend?? Thanks.

Here's my thoughts on this. I'm kind of a "reactionary technophile" so take it with a grain of salt.

With a multicoupler you will lose at least 6 dB of signal because of the splitting, without amplification. Amplification brings with it a host of new problems among them third order IMD, and worse second order IMD since there are no selective filters in front of the amplifier. I prefer a two pole switch that switches both the RF input and AF output from any of four receivers. I've been using this for quite a few years without any problems. If I hear IMD, I know it's in the receiver, not what's in front of it.

Like I said, just my thoughts on the subject. But then I like analog tuned receivers better than digital tuned ones.

John Reed, KA5QEP

- > For multicouplers, I am considering the Stridsberg 8 output active
- > multicoupler or the RCA CU-5069 32 output model. Any
- > recommendations/comparisons?
- > 73,
- > Ed Sylvester
- > KA6DBY/San Diego

Date: Wed, 24 Nov 1999 17:05:23 -0800
From: Steve Share <sas@dnai.com>
Subject: Prem-Rx: Upgrading HF-1000 firmware

- > My "new" W-J HF-1000 arrived today and I've been playing with it. The
- > firmware version (shown on powerup) says 4.01.03, and I'm wondering if
- > there are any later versions?

The current version is 4.01.10, but upgrading is not a straightforward procedure, based on the information I received from the WJ help line. There are two PROM chips in the receiver, one for the controller and one for the DSP chip. The 4.01.xx that shows in the powerup cycle refers to the controller firmware--the only way to check the DSP firmware is to pull the cover and read the label on the chip. Both PROMs should have labels on them, and are located near their respective processor--the controller is a 68HC11 variant (mine was socketed), and the DSP is the large TI chip (not socketed) towards the rear of the board. The DSP firmware current version is 4.02.07, and WJ says you must have this version DSP firmware if you are using the 4.01.10 controller firmware.

A further complication is that the DSP chip has to be running at a clock speed of 33 MHz or faster for the new firmware. Evidently there were at least two clock speeds employed during the HF-1000's design life, and visual inspection of the DSP chip seems to be the only way to determine what clock speed is in use on your receiver. Typically it's the last two digits on the product number, i.e. xxxxxx33. My own receiver has a 40 MHz. One of the big problems in determining the upgrade path is that the factory has no records readily available that associate serial number with hardware revision, so you are left on your own to gather this information.

A fellow list member was kind enough to provide me with a copy of the 4.01.10 controller firmware, but I have found that I also need to upgrade my DSP firmware to the 4.02.07 version. If anyone has a copy of this available, I would be interesting in borrowing it or otherwise--I do have a PROM copier.

If anyone is running the 4.01.10 controller software with an earlier version of the DSP firmware, I would be interested to hear if that combination works successfully. WJ advises against this combination, but they couldn't tell me why it wouldn't be OK to use. Nevertheless, I have not tried it myself.

Thanks for any information or assistance,

Steve

Date: Wed, 24 Nov 1999 17:38:32 -0800
From: Jerry Gardner <jgardner@peri.com>
Subject: Fwd: Prem-Rx: Upgrading HF-1000 firmware

Before I go to all the trouble to upgrade from 4.01.09 to 4.01.10, can anyone tell me exactly what the differences are? Perhaps it just isn't worthwhile...

-- Jerry Gardner | Senior Project Manager Periphonics, a Nortel Networks Company | email: jgardner@peri.com

Date: Wed, 24 Nov 1999 18:43:10 -0000
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Watkin-Johnson HF-1000 Question

I don't know the history of the various eprom releases. Now is the time to acquire if you desire this upgrade (with WJ sale and HF1000A discontinuance, all bets are off a year from now, maybe sooner). You might as WJ and post this information in the premium receiver group (also information on your upgrade costs, experience, etc). If the latest release is later than mine, I'd be interested in hearing this.

The alluded to passband tuning on SSB isn't on my version. The notch filter on my system is installed and is controlled (tuned) via the "BFO" in all modes except LSB,USB,SSB (where it is used to adjust the offset) and CW where it is used as the BFO control. Is this the notch you were refering to? Or more of an automatic notch such as that found on the Timewave DSP-599zx that handles up to 10 simulataneous tones?

The so called DSP expansion card is listed in the 8 page document on Universal Radio's website but I've never seen one nor heard of anyone that has this option installed (did it ever get built? Cost?) Anyone else on the Premium receiver list have this feature? Comments?

Do you have SAM on your version? IF not, you'll definitely want a later eprom. SAM vs AM is night and day difference in sound quality, even after going through the SE-D(below)

The preselector is a tradeoff -- if you are in a strong signal environment (Europe) you'll probably wish you had this. If you use it you will trade a few dB of sensitivity, so unless you are near a strong transmitter elsewhere in the world you won't need it. Installing it is easy. Bypassing is easy --- it gets fed by the antenna via BNC. An output BNC-coax-BNC jumpers it to the normal receiver antenna input. Bypass by switching the antenna to this port). I subscribe to the "you never know when you will need it" theory, so bought one with and one with out (but subsequently installed the second one myself). Both are bypassed right now, but there was one antenna I put up that was subject to overload from a local transmitter.

I don't use the D-connector output. Instead I have Sherwood Engineering SE-3's tied to the IF output (this is 455kHz post filtering). You should seriously investigate this option. I personally use Timewave DSP-599zx after the Sherwoods (I have also used the MFJ but it did not work as well for me). IF you forgo the SE-3's, then just drive them from the front phono-jack - adjust the output to the trigger point of the DSP using the 2 LEDs on it). Avoid the D-plug for audio output --- its has a reputation for noise (although I have not tried it to see if these later generations have that problem)

NB works very well until 8,9 on my units. Timewave noise correction works even better.

Enjoy your new receiver. Its much better than the others I have on hand - including the Collins 2050, Harris 590A, Cubic 3030A, and JRC NRD545.

YMMV Don

Date: Thu, 25 Nov 1999 07:42:43 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Re: Watkin-Johnson HF-1000 Question

Thanks, Don and Steve, for your helpful information re the firmware for the HF-1000. I'll pull the lid off my radio this evening to check out the DSP firmware version and clock speed. I'll also call the W-J help line on Friday and inquire whether any further revisions to the firmware are contemplated, and if not, verify what the final release numbers are for the existing code. It would probably be a good idea for some of us to stockpile some EPROM copies of the latest version, to provide backup spares and a source for those, like myself, who acquire a radio that hasn't yet been upgraded.

I spent the evening playing with the HF-1000 and familiarizing myself with its features. I used both headphones and a speaker tied to the rear D-connector. I noticed a low-level, low-pitched growling noise, almost a hum, on the speaker that was independent of the volume and squelch. This is presumably the noise that several reviewers have complained about. I didn't find it particularly objectionable, since the level was low.

I didn't hear the same growling on the headphones, but did hear a slight volume-control-independent higher-pitched residual noise on the left headphone (but not the right). Listening carefully, I could hear weak cw and ssb stations in the noise, which made it sound like some out-of-bandpass DSP crud getting into the audio. I'm guessing these problems are a result of crosstalk from the circuit board layout. The crosstalk could undoubtedly be fixed, but probably would require modifying the layout or substituting shielded cables for traces. I vaguely recall talking to a W-J rep at the Dayton Hamvention several years ago, and believe he mentioned a production change to alleviate (but not eliminate) the problem after the early serial numbers. My radio presumably would have these changes already.

I didn't notice any obvious audio distortion coming from the D-jack, aside from the growling noise, but was listening mostly to CW and SSB. Interestingly, the SAM sounds a lot like a BFO when listening to CW. Apparently, it takes a fraction of a second for the injected carrier to lock onto the CW note, and if the CW speed is too fast, it isn't able to do so.

I found the controls generally easy to use and very logical. The exceptions were the passband tuning, which strikes me as too cumbersome to be convenient, and ditto for the notch filter. I'd prefer having a dedicated knob function for each which didn't involve setting specific digits. I also found the BFO adjustment a bit inconvenient. A single variable-tuning control would be preferable, in my opinion, to setting three digits independently.

I made some A-B comparisons of the receiver with my main station ham radio, which is a Yaesu FT-1000D, with a JPS NIR-12 DSP filter. My general impression is that the Yaesu is probably a better radio in terms of basic receiver operation when listening to SSB or CW. The Yaesu has a wider selection of attenuator and preamp options, more convenient passband tuning, and no synthesizer or DSP hash. I also prefer good xtal filters in the IF to DSP filtering (although, with the NIR-12 tied to

the FT-1000D, I can use both). On the other hand, the Yaesu also lacks many of the nice features of the W-J. For SWL use, and certainly for AM listening, the W-J is superior.

In one sense the HF-1000 (and the HF-2050) are very early implementations of DSP technology, and probably represent only a hint of what is to come. Once DSP clock speeds get high enough so that processing can take place at, e.g., 9 MHz (or even 455 kHz), then we should see some really impressive receiver performance.

I hope modern receivers eventually start implementing a more analog "feel" to the controls. I'm reminded of the days when expensive cars featured digital dashboard displays. Now, they've returned to analog displays, reserving digital readouts for functions where they add useful information. Frankly, I miss the old-fashioned analog dial, which conveys an intuitive feel of the frequency band being monitored. An analog dial (like on the Collins 75A-4), in conjunction with a digital frequency display, would give the best of both worlds. With high-resolution graphic LCD displays, it shouldn't be hard to simulate an analog dial.

Regards and 73,

Jim Garland W8ZR

Date: Thu, 25 Nov 1999 13:30:19 -0700
From: "Walt Novinger" <wnovinger@home.com>
Subject: Re: Prem-Rx: Re: Watkin-Johnson HF-1000 Question

Jim,

As a former HF-1000 owner, I highly recommend that you look at VE6MBA's ERGO program as an ergonomically friendly way of driving the 1000 from a Windows computer. Every function is available at the click of a mouse, as well as are many features you might never think of but will love when you try them (e.g., graphical display of signal strength over a sliding 2-minute window).

Go to <http://www.members.home.com/creativexpress/> to see what the program offers and to download trial/full copies.

Usual disclaimers apply...YMMV

Walt

Date: Thu, 25 Nov 1999 13:33:12 -0700
From: "Walt Novinger" <wnovinger@home.com>
Subject: Re: Prem-Rx: Question on Multicouplers

I have used a variety of multicouplers...several hollow-state and the Stridsberg...and can say with confidence that the Stridsberg is hands-down the best unit on the market. Although it has a bit of amplification (making the overall insertion loss essentially zero), I have observed none of the problems John describes. Highly recommended!

Usual disclaimers apply...YMMV

Walt

Date: Thu, 25 Nov 1999 16:26:40 -0500
From: "Kevin D. Murray" <murray@spybusters.com>
Subject: Prem-Rx: HF-2050 Manual

To Walt and the group...

The HF-2050 manual arrived yesterday, and I am very pleased with it. This is obviously a "must have" for every 2050 owner, or potential owner.

Walt, thank you very much for your time, effort and foresight. I hope I will be able to return the favor some day.

Kevin - --

Kevin D. Murray CPP, CFE, CCO, BCFE [Murray Associates] Counterespionage Consultants to Business & Government Eavesdropping Detection Specialists www.spybusters.com

Date: Thu, 25 Nov 1999 17:44:26 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Another happy HF-2050 manual owner

Hi Gang, I'll add my praise to Walt's HF-2050 manual project. At \$70, it's a bargain! Believe me, you won't want to copy one yourself! Now if I could only get a listing of the source code for the radio! (Has anyone ever tried to get it?)

73,

Jim Garland W8ZR

Date: Thu, 25 Nov 1999 15:00:13 -0800
From: John R Bookout K7JB <k7jb@uswest.net>
Subject: Re: Prem-Rx: Another happy HF-2050 manual owner

Hi Gang:

I wrote Walt for a manual, but, haven't heard anything! I hope he reads this here on the reflector and can let me know if he has an extra copy.

73's John K7JB

John, K7JB Amateur Radio Since 1958 Asst. Dir. NW Div ARRL Collins Collectors Association
MEMBER QCWA LIFE MEMBER

Date: Thu, 25 Nov 1999 21:37:44 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Another happy HF-2050 manual owner

I wonder if they would release it. Probably not.

I asked Harris and they said "no way," so here I am, decompiling my 590A rom. It's a big job to do this as it is a 27256 about 7/8 full (and a separate display processor), many thousands of lines of code. This will take me hundreds of hours, but it will be worth it in the end as not only will it be a great learning experience but I will be able to add some features to the receiver. I've already made good headway into the code.

I might someday tackle the 2050, but only if I had one (and the manual).

> Now if I could
> only get a listing of the source code for the radio! (Has anyone ever tried
> to get it?)
>

Date: Thu, 25 Nov 1999 23:50:38 EST
From: Daiungoed@aol.com
Subject: Prem-Rx: EDDYSTONE RECEIVERS

Dear list, I have just acquired three Eddystone receivers, EC958/7E, 1837/1S and 1990R/2. Has anyone any experience, info or web site pointers to share with me, on the above, I am very impressed with the 958 so far. Any comments, Dave

Date: Thu, 25 Nov 1999 21:06:18 -0000
From: "Don" <ulformat@teleport.com>
Subject: Prem-Rx: Anyone have an R590A manual supplement on the ASCII remote?

I have a complete, new R590A manual(a little thicker than the manual Walter just got copied for the 2050), but this does not cover the remote ASCII codes for communicating with the receiver. (although the main manual does tell you how to reconfigure the output to RS232 or 188 or 488 from the existing 422)

The needed ASCII instructions are apparently in:

Harris Part # 10215-0034 this is an ASCII remote supplement.

I'd be most happy to pay copying/shipping charges.

Thanks Don Nelson Beaverton, OR

PS While I have been working with the factory, this is as far as they have gotten.

Date: Fri, 26 Nov 1999 10:27:04 EST
From: WJoeW@aol.com
Subject: Prem-Rx: Looking for RA6790/GM Service

I recall a note recently regarding a Racal service guy who is servicing the RA6790/GM receivers. A friend was asking me about this and I have not been able to locate the note.

Does someone have that info?

Thanks.

Joe W5WBR

Date: Fri, 26 Nov 1999 00:25:06 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: EDDYSTONE RECEIVERS

Daiungoed@aol.com wrote:

> Dear list, I have just acquired three Eddystone receivers, EC958/7E, 1837/1S
> and 1990R/2. Has anyone any experience, info or web site pointers to share
> with me, on the above, I am very impressed with the 958 so far. Any comments,
> Dave

I have an Eddystone EC9958/C. It's what I would call a fair receiver. It is dynamic range limited, due to the Wadley loop tuning. The filters, being LC at 100 kHz, are not as good as good crystal or mechanical filters. If it is aligned correctly the sensitivity is good, but the alignment on mine was way out when I got it. After I aligned it, all bands have good sensitivity except the top one (20-30 MHz).

On that band there is some feedback that causes regeneration and it has to be slightly misaligned to eliminate this.

The receiver is very stable for analog tuning. I changed the speaker switch on mine to turn the Wadley loop circuit off if I want free ranging tuning with the main tuning dial. I find the stability is still adequate without the Wadley loop, and the tuning is much faster.

Dial accuracy is good if you go to the trouble of aligning the dial at the nearest cal point first. It needs a digital readout. One of the EC958 versions has this, but I don't remember which one.

On the plus side, the receiver is excellent on LF and VLF. Very quiet with a loop and excellent sensitivity at LF and below.

There used to be a web page for Eddystone, but it has vanished. The company also was very helpful to private owners, but after being bought out by Marconi Electric this was stopped. Now Eddystone is history, being shut down by Marconi. You can probably expect the same will happen to W-J.

John Reed

premium-rx-digest Monday, November 29 1999 Volume 01 : Number 061

Date: Fri, 26 Nov 1999 17:34:53 EST
From: CGT01@aol.com
Subject: Prem-Rx: More on the Eddystone 958 ...

Re: Eddystone 958 discussion -- some more input ...

The 958 is one of Eddystones finest solid state creations -- (I sometimes think the valve models were even better though ...!)

There are many 958 Eddystone models (analog and digital display's -- on the cusp so to speak !!) -- the Marconi versions (Nebula and model 7) all have Xtal Filters for SSB -- other models used L/C at 100kc (still pretty good !!)

The highly modified Barlow Wadley (BW) design has no relation to dynamic range previously mentioned by another contributor. This is a frequency generation technique without digital chips -- very clever for that era ... circa 1975. Actually, Racal used it earlier .. e.g RA17, 6217 -- also the Yaesu FRG7 !

The support for all Eddystone models is via a subscription user group in the UK -- email me for more details ...

The technical manuals (some of the 958's) -- are available in PDF format (or via mail) From:
<http://www.mauritron.force9.co.uk>

I am a humble admirer of this era -- the American design approach was quite different during this period. They never mastered the smooth analog tuning mechanism. However, some will debate this hypothesis !!

Hope this helps a little.

Colin Trass

Date: Fri, 26 Nov 1999 19:24:01 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Re: Prem-Rx: Mackay ITT 3031A audio problem

Hi Walt,

I have an ITT Mackay Marine 3031A, model 600164-800-012. Sorry the audio on your 3031A is weak.

Do you have the proper connections? There is a barrier strip with 8 screw terminals on the rear panel for audio and muting.

The terminals are marked with white lettering above them. My receiver requires you have these two terminals connected together:

Audio return (3rd from left) 3.2 ohm audio out (4th from left)

I also have an external speaker connected to these terminals:

3.2 ohm audio out (4th from left) ground (6th from left)

Good luck.

=====

Copyright 1999, Bob Parnass, AJ9S parnass@bell-labs.com Locate & identify transmitters in your area with a color RadioMap(tm) <http://www.megsinet.com/~parnass>

Date: Fri, 26 Nov 1999 21:20:07 -0800

From: John Reed <kreed@ponca.net>

Subject: Re: Prem-Rx: More on the Eddystone 958 ...

CGT01@aol.com wrote:

- > Re: Eddystone 958 discussion -- some more input ...
- > Filters for SSB -- other models used L/C at 100kc (still pretty good !!)
- > The highly modified Barlow Wadley (BW) design has no relation to dynamic
- > range previously mentioned by another contributor. This is a frequency
- > generation technique without digital chips -- very clever for that era ...
- > circa 1975. Actually, Racal used it earlier .. e.g RA17, 6217 -- also the
- > Yaesu FRG7 !

This "highly modified" Wadley loop is actually a Wadley loop with a loop filter inserted in the tuned portion of the loop. The tuning is done with VVCs (voltage variable capacitors). The tuning voltage is obtained from a pot on the fine tuning control. Now, VVCs are fine in oscillators where you know what voltages they will be subjected to, but in this application where they will be hit with strong signals from the antenna that have already been put through the RF amplifier there is the possibility for nonlinear effects to arise. In addition there are two of these tuned circuits in the loop filter, probably not enough to protect the second mixer from strong signals. I ran some dynamic range tests on my Eddystone 958 to get some idea of how this Wadley loop circuit is affecting the range. Here are the results:

Two signal generators were used, one a crystal controlled generator. Both generators had -30 dB of attenuation between them and the hybrid combiner to limit generator induced IMD. A third attenuator was placed after the combiner, then the signal goes to the receiver to be tested. I measured third order dynamic range at three offsets, 5 kHz, 10 kHz and 20 kHz on several receivers. One frequency was always at 2.0 MHz and the second was varied.

Eddystone 958/3 Noise floor at 2.0 MHz -125 dBm Dynamic range at 5 kHz offset 62 dB Dynamic range at 10 kHz offset 61 dB Dynamic range at 20 kHz offset 66 dB

For comparison, here are the results for my favorite receiver, a Sylvania R1414 (late 1960s technology with a quad FET ring mixer and crystal roofing filters):

Sylvania R1414/URR Noise floor at 2.0 MHz -134 dBm Dynamic range at 5 kHz offset 70 dB
Dynamic range at 10 kHz offset 91 dB Dynamic range at 20 kHz offset 98 dB

Notice how the dynamic range increases with increasing offset on this receiver. However on the Wadley loop receiver, the range increases very little with offset. I think this is due to the way the Wadley loop works, but I'm not sure. Also the dynamic range on the 958 is never very good, getting only a poor rating at both the 5 and 20 kHz, according to the RDI lab test specs.

Here are a few more IMD tests, in case you're interested:

NRD-525 Noise floor -133 dBm Dynamic range at 5 kHz 77 dB Dynamic range at 10 kHz 87 dB
Dynamic range at 20 kHz 87 dB

Harris RF-550 Noise floor -126 dBm Dynamic range at 5 kHz phase noise limited Dynamic range at 10 kHz 77 dB Dynamic range at 20 kHz phase noise limited

Harris RF-590 (USB mode, preselector bypassed) Noise floor -128 dBm I couldn't get any of the IMD results, they were all phase noise limited. Give me an analog tuned receiver!

Now I know a lot of SWLers tend to not believe the lab tests, and always prefer the listening tests. I've done a lot of these also. If I'm trying to hear a weak station next to a strong one, the R1414 is nearly always best, followed closely by the NRD-525. The Eddystone is usually way down on the list. I don't know if it's the IMD weakness or the filters, but it seems to be overrun with interference that some of the better receivers can get through.

- > I am a humble admirer of this era -- the American design approach was quite
- > different during this period. They never mastered the smooth analog tuning
- > mechanism. However, some will debate this hypothesis !!

Of course! The Sylvania uses a planetary gear drive with all ball bearing anti-backlash gearing. Very smooth. In addition, the oscillator frequency can be locked at 100 Hz points if desired.

John Reed

Date: Sat, 27 Nov 1999 09:56:47 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: First Anniversary, Policy Change Announcement

Congratulations to all List members:

One year ago this weekend the Premium-Rx List was initiated. I remember I was taking Nancy (now my wife) to Santa Barbara for a "bed-n-breakfast" weekend. I left home with the server fired up and when I returned late Sunday the List had its first 20 members. The first was Tony Ward (tonyward@home.com) with Rippel, Clark, K7jb, and Bryant soon following.

Since that time we have had 97 additional members join, two have un-subscribed, making 95 of us at the present time. Probably another 50 individuals have requested membership, but did not meet our "receiver ownership" criteria. I must confess, in reality three have un-subscribed. In the fray of attempting to un-subscribe one individual, I accidentally dropped myself. Rippel is still laughing at me.

Traffic on the List is picking up, and I think the membership has FINALLY attained critical mass, i.e. a continuous flow of information. Seldom a day goes by without a post. I have received only ONE complaint regarding poor List etiquette while in the same period of time dozens of flames on the 390 and Boat anchor Lists have occurred. I think the List is justified as exemplified by many examples where Premium type information has been passed from one person to another, even including a schematic for an HP-8640B to Hans, our only Germany member from Jan, our British Columbia Island dweller.

POLICY CHANGE: Our concerns regarding the posting of personal items available for sale was unsubstantiated. Thus, I would like to announce the adoption of the policy that "items for sale may be announced, limited only that they be personal, premium related, and that price and similar discussions are to be made off List". Just for the record, three items have been announced in the past six months- far from the dozens that many of us feared. This is not to be confused with the proposed policy for "relaying or forwarding" premium items posted on e-bay. This proposal was tabled, and continues such until there is a increase in requests to revisit the topic.

Looking forward to our second year, have a great weekend-

Greg

Date: Sat, 27 Nov 1999 15:27:39 -0500
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: First Anniversary, Policy Change Announcement

Greg: Sincere congratulations on the success of your baby, now approaching full adolescence. Hmmm ... I wonder if that makes me the first zit... fancy the list being a full century old....

I have watched with awe and amazement as talented Premium rig owners joined the list, and their contributions have always been read with avid interest here, though my own offerings have been rather sparse. Allow me to kick the Keep the Collins Cool Can one more time. long-time members may recall the exchanges on this topic that started shortly after a lengthy discussion of the relative merits of Canadian vs (cheaper) Czech hockey pucks for propping up some of our favourite hardware. I have discovered a better unit than the small RS fan I have been using. This is a twin fan 'Just Cooler' housed in a unit designed to occupy a 5.25 inch computer bay to maintain air flow over Hard Drives. Air flow is 80 cfm and noise a truly unintrusive 27 dbA. I gravity mount it on the top of the 2050, which left to its own devices can fry eggs faster than an Arizona highway. The winter ambient temperature in the house is about 21 degrees. When I forgot the fan one day the top case peaked at 53.3 deg C. Switching on the fan reduced this by 10 deg in 5 minutes, and the ultimate stable temperature was 33.7 after 40 minutes. I have seriously considered trying the cpu cooler fans recommended by list denizens, but this would require me to purchase a screwdriver, and abandon my treasured amateur status...

A few thoughts on rigs. yes; I thoroughly enjoy the 2050, and its intelligibility in sideband mode on the tropical band DX stations I chase is excellent. I also love my R7, and the ability to rock across from lsb to usb --- a feature that should have caught on, but never did, though you can sort of fake it with the Drake R8. The performance of my SP600 gives me great pleasure, and with a modern agc circuit would need to apologize to almost no-one in performance. The Harris 505A that I use at school fits the bill perfectly, though I could wish for better filtering --- a narrower AM mode. For what I paid for it, compared with what I would need to put out to get the more flexible 550 or 590 series models, I can put up with its decade-tuning shortcomings.

Top of the totem pole however is my rather modified JRC 535D. Craig Seigenthaler of Kiwa Electronics used this rig to prototype the modifications package that he sells, and it includes a complete rebuild of the oft-criticised JRC audio section, building in of the audio-tilt feature of his MAP unit (which I have also), and a premium 3.5 kHz filter that is the most-used choice by far here. The modified sync detector means I seldom go out of AM mode, whereas I almost never used this position in the 18months of pre-mod. use I made of this rig. I use the speaker and amplifier of the MAP, but seldom find the MAP mode itself enjoyable or useful. Instead I run the IF out to the totally indispensable Sherwood SE III for truly magnificent audio, and further flexibility in pass-band tuning. I can pre- or post- pass the audio through a TimeWave 599 Zx, but use this mostly for the removal of stubborn hets, rather than audio-shaping. The Kiwa/Sherwood/535 combination has yet to be surpassed by anything that I have been able to listen to so far, but I remain fascinated by the discussions of other killer-combinations, and would welcome an end-of-millennium (minus one if you

must) discussion of favourite combinations from list members, who must have just about every high-end rig known between them all.

Antennas? Long wire in the direction you want to hear is hard to beat. I have 7 (I think) creatively draped through a suburban ravine. For less space the Radio Works Super Loops and Carolina Beam are excellent performers. I am very impressed with the compactness and pick-up of the K9AY loop array, which nearly all of us could manage to suspend somewhere, and if everything but one might have to go, it would be the last left here I suspect. I use a Kiwa SW 10dB pre-amp to modestly boost the input to the distribution switch here in the shack. But oh I dream once more of living by the sea in New Zealand with my old 110 foot tower as I did for 5 years in the late 70's.... There is nothing like proximity to the ocean to give a set-up delusions of great grandeur.

Thanks for the fellowship folks. Seldom acknowledged, but deeply felt. I do enjoy the company of men (why no women?) with a passion for excellence...

Tony (VE3NO) NYAA StarFest On-Line

tonyward@home.com tward@spanit.com <<http://www.interlog.com/~nyaa/>>

...I am a few sheep short of a full flock my students tell me

Date: Sat, 27 Nov 1999 17:15:38 -0800
From: "Guy Atkins" <dxing@hotmail.com>
Subject: Re: Prem-Rx: First Anniversary

Hi Greg & the group,

Tony's comment on the Kiwa-modified NRD-535 is an encouraging one for me, since I've acquired a very nice NRD-535GS (the Gilfer modified version), which went straight to Craig for every one of his NRD-535 mods. I expect to have the receiver back from Kiwa before an early December DXpedition at the infamous Rm. #15 of the Grayland Motel, Grayland Beach WA.

It was Tony's favorable comments to me last year that got me thinking about a similar setup with the Kiwa improvements. I didn't expect to find a *Gilfer* 535, but in this case it means I'm starting out with a full complement of mechanical & crystal filters, including the excellent 3.5 kHz bandwidth from Kiwa.

I expect that Don Nelson, who's the "host" of this particular Grayland DXpedition, will have his Watkins-Johnson HF-1000 receivers in tow. It'll be enlightening to compare the "NRD-535GS-Kiwa" to his duo of big guns on trans-Pacific mediumwave and tropical bands.

Guy Atkins Bonney Lake, WA USA dxing@hotmail.com

Date: Sun, 28 Nov 1999 12:02:19 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Prem-Rx: IMD dyanmic range testing

Hi John,

I got a kick from reading your IMD dynamic range tests vis-a-vis the Eddystone.

I had just this morning tested the IMD DR of a new, palm sized DC-daylight multimode receiver I'm reviewing.

It's noise floor was -128 dBm (same as Harris RF-590 you cited), but the IMD dynamic range measured only 49 dB ! (at 14.020 MHz, 20 kHz spacing).

That's consistent with the way it falls apart when connected to a 132' dipole listening to 75 meters at night. Had to add over 40 dB between dipole and radio to calm it down. :-)

=====

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Date: Sun, 28 Nov 1999 05:49:33 -0800
From: John Reed <reed@ponca.net>
Subject: Prem-Rx: Re: IMD dyanmic range testing

Robert S Parnass wrote:

- > Hi John,
- > I got a kick from reading your IMD dynamic range tests
- > vis-a-vis the Eddystone.
- > I had just this morning tested the IMD DR of a new, palm sized
- > DC-daylight multimode receiver I'm reviewing.
- > It's noise floor was -128 dBm (same as Harris RF-590 you cited),
- > but the IMD dynamic range measured only 49 dB ! (at 14.020 MHz,
- > 20 kHz spacing).
- > That's consistent with the way it falls apart when connected
- > to a 132' dipole listening to 75 meters at night.
- > Had to add over 40 dB between dipole and radio to calm it down. :-)

That's a pretty good way to guess about a receiver's dynamic range without making measurements. If the receiver has an attenuator switch on the front panel, there is probably a problem with IMD. The Eddystone has this feature.

John

Date: Mon, 29 Nov 1999 12:25:01 EST
From: CGT01@aol.com
Subject: Prem-Rx: Eddy 958 wrap up ... 2050 next ?

Re: Eddystone 958 discussion ...

The Eddystone 958 was certainly poor in the dynamic range area -- but measurements were not necessary to know why ! The 1st mixer is a single 40673 dual gate MOSFET, preceded by a "Cascode" RF amp. UC734B/3N128. The ubiquitous 40673 mixer was renowned for limited dynamic range, high noise figure, critical drive level, poor burn out level -- however it provided low IM distortion, low drive requirements, and was considered one of the better 1970's simple mixers. The 80's and 90's of course is where all the attention occurred for improving input intercept point of receivers. Another story ...

So, I still disagree that the Barlow Wadley design was the culprit for poor dynamic range although I will concede that the "modified version" could be a contributor.

I appreciate the input and measurements from John Reed and Robert Parnass --- Thank goodness the 958 has better IMD DR than a modern do everything unit ? John, I noticed you went fuzzy on 590 measurements ... Is this a measuring setup issue ? -- or heaven forbid -- the 590 numbers look bad !!

Now, it may be time to move onto the Collins 2050 and look inside the circuitry (you all have nice manuals now !!) -- mixer design to start maybe ? -- any measurements taken ? Does it have an attenuator switch ? -- I am a little curious about this unit --- I was strongly dissuaded for acquiring a 2050 based on measurements by Dallas Lankford ...

Finally, lets put the 958 back in the museum/collection -- Most are out of service now -- a fine 25 year service in Maritime and Coastal Services throughout the World.

Sincerely,
Colin Trass

Date: Mon, 29 Nov 1999 12:26:39 -0700
From: Robert Sherwood <rob@sherweng.com>
Subject: Re: Prem-Rx: Eddy 958 wrap up ... 2050 next ?

Commend from Rob Sherwood about Barlow Wadley and dynamic range:

My understanding of Barlow Wadley is it was an early way to get band synthesis. How the first mixer LO is produced will have no direct bearing on dynamic range. The typical reason a radio will show increasing dynamic range with wider and wider test signal spacing has to do with front end or first IF filter bandwidth.

Front end case: In the case of a Drake R-4C (or Collins S Line for that matter), it will show significant increased wide-spaced dynamic range, especially on the lower frequencies, due to its preselector. So on 160 or 80 meters, the slug tuned RF amp will attenuate the test signals quite a few dB as you start placing the test signals 20, 50, and 100 kHz away. So the reading are better simply because the test signals are being attenuated before they get to the first mixer. (The dynamic range really is better at wider spacing, unlike with a 1/2 octave front end for example.)

First IF filter case: In the case of any radio with a first IF crystal filter, the dynamic range outside the filter will be greater than inside the first IF filter. It does not matter whether the filter is in the HF spectrum (5.645 kHz in the Drake R-4C case) or above 30 MHz as in an up conversion radio. Often the dynamic range at 2 to 5 kHz spacing is 30 dB worse than with 20 or wider kHz spacing. When the test signals are inside the first IF "window" there is often lots more gain all the way down to and including the 2nd mixer. Thus the IMD is usually much higher since we are testing the radio in a much more "real world" setting.

If the up conversion filter is a simple two pole (possibly monolithic) filter, its shape factor may be 4 or 5:1. Thus the 10 kHz, 20 kHz, 50 kHz, etc. dynamic range will gradually increase up to a point, as the test signals are attenuated more and more by the slope of the up conversion filter. Once the full stop band attenuation is reached on the filter, the DR will plateau.

A second cause of changing DR with spacing is IMD produced in the first IF filter, especially in its transition band. When the IMD test signals are down the slope of the first IF filter but not fully in the stop band, is it not unusual to get IMD produced in the filter itself. I have found that monolithic filters often are worse than discrete filters in this respect. Example: Lets say the two test signals are 5 and 10 kHz away from the frequency on which we are listening for the 3rd order IMD product. Assuming a two or four pole filter, the closer test signal may be attenuated 10 dB and the further test signal may be attenuated 25 dB. Since the test signals are not totally outside the active region of the crystals in the filter, they will produce IM products in the filter itself that can land right in the middle of the passband of the filter, and be heard on the same frequency as IM from the tube or solid state mixer or amplifier. The Piezo Technology monolithic first IF filter in the Drake R-4C was between 5 and 10 dB worse in this respect than the discrete filters made by Heath Dynamics, for example. When the test signals are really far removed, one can still get IM produced in the ferrite coils in the filter, though these would usually be lower in amplitude than other active components.

Finally, some test data will be listed as noise limited. This is because its synthesizer is noisier than the IM produced in the radio's mixers / amplifiers. Because the 2 or 5 kHz DR is often 30 dB worse than the 20 or 50 kHz measurements, sometimes we can measure close in DR at 2 or 5 kHz, but cannot measure the DR at 20 kHz. In this example, the IMD predominates at 2 or 5 kHz, the synthesizer phase noise predominates at 20 kHz and then finally the IM again predominates at 50 or 100 kHz.

Note that sometimes it is necessary to make the DR measurements at slightly unusual spacing, and on non-even frequencies. Example: You cannot measure the Drake R-7 at exactly 100 kHz spacing since there are birdies produced that land on top of the IM products. Thus I test an R-7 at 97 kHz. Similarly, I do not test any radio on exact even frequencies like 14.200 kHz. There are often birdies on even frequencies, so I choose to use 14.205 kHz or 15.205 kHz for example. Lastly one must test for IM on both the high side and the low side of the test signals. Usually they are significantly different, often as much as 10 dB. This is usually due to differences in the termination of the first IF filter or the mixer. Reactive termination of mixers and filters affect the IMD produced. So if the tester is getting "funny" readings, move the test signal spacing around a few kHz, plus test both sides and average the data out, or report the "worst case" data. (Assuming you are not the manufacturer who is trying to make his radio look good.)

Enough rambling for now. Cheers. Rob, NC0B.

premium-rx-digest Monday, December 13 1999 Volume 01 : Number 062

Date: Mon, 29 Nov 1999 15:28:52 -0500 (EST)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Eddy 958 wrap up ... 2050 next ?

A fine ramble, thanks.

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Mon, 29 Nov 1999 06:24:11 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Eddy 958 wrap up ... 2050 next ?

CGT01@aol.com wrote:

- > Re: Eddystone 958 discussion ...
- > I appreciate the input and measurements from John Reed and Robert Parnass ---
- > Thank goodness the 958 has better IMD DR than a modern do everything unit ?
- > John, I noticed you went fuzzy on 590 measurements ... Is this a measuring
- > setup issue ? -- or heaven forbid -- the 590 numbers look bad !!

What happens on the 590 is that phase noise from the 590 synthesizer overwhelms the 3rd order response being looked for. This isn't necessarily bad. It just means that the phase noise is larger than the 3rd order response. It could be the phase noise is large or the 3rd order response is small. From other measurements of phase noise on this receiver, it has a pretty low phase noise, so the 3rd order response must also be small (but unmeasurable at 5-20 kHz).

- > Now, it may be time to move onto the Collins 2050 and look inside the
- > circuitry (you all have nice manuals now !!) -- mixer design to start maybe
- > ? -- any measurements taken ? Does it have an attenuator switch ? -- I am a
- > little curious about this unit --- I was strongly dissuaded for acquiring a
- > 2050 based on measurements by Dallas Lankford ...

Sorry, I can't comment on this receiver. I decided that the W-J HF-1000 wasn't all that great (I traded for Harris), and an earlier vintage DSP wasn't worth the trouble and expense.

- > Finally, lets put the 958 back in the museum/collection -- Most are out of
- > service now -- a fine 25 year service in Maritime and Coastal Services
- > throughout the World.

I've still got mine and intend to keep it. An unusual receiver that has many good points. LF and VLF among them.

John Reed

Date: Mon, 29 Nov 1999 06:42:28 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Eddy 958 wrap up ... 2050 next ?

Robert Sherwood wrote:

- > Commend from Rob Sherwood about Barlow Wadley and dynamic range:
- > My understanding of Barlow Wadley is it was an early way to get band synthesis.
- > How the first mixer LO is produced will have no direct bearing on dynamic range.
- > The typical reason a radio will show increasing dynamic range with wider and
- > wider test signal spacing has to do with front end or first IF filter bandwidth.

Yes, I agree completely. The problem isn't the Wadley loop, but the variable IF section that follows the first mixer. That IF has the voltage variable caps I mentioned earlier with two tuned circuits. The Wadley loop is really a neat way to generate a comb of frequencies without the phase noise problems of phase locked oscillators.

John Reed

Date: Mon, 29 Nov 1999 19:11:25 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Heard from Paull Patterson lately?

List Members:

Everytime there is a post on the List I get a print out of the actual post as well as a printout of those e-mail addresses where the post was refused/bounced/undeliverable . . . etc. Typically the "undeliverable" list runs 2-5 names for each posting. I assume this is because the local mail servers are temporarily down? After I make a mental note of what addresses are bouncing, I hit the delete key.

One name that has been showing up on a regular basis is Paull Patterson's. His address is: Paull.Patterson@merkin.com . If you know where Paull has moved, please let me know. Just for the record, I get about one request every two weeks from a member that moves their mail account to a new server and thus needs a change of address.

Lastly, with tongue-n-cheek-- I have noted on the "bay" that one of our new members, and a fellow educator at that, is thinning his herd of a premium Collins device. I once bought a radio from a List member that justified his selling action as "a need to raise money for my daughter's tuition". Hell, I kinda felt sorry for the guy so I bought the radio.

Then, just two weeks ago, it was Mr. "Qualcomm" Ben and Dr. "Gutenberg" Walt hawking their preemies to the highest bidder. I trust this isn't a preamble of destitution on the part of our membership? Maybe just some more tuition?

Greg

Date: Tue, 30 Nov 1999 06:46:10 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Paull Patterson Found!

Paull came out from under his rock and checked in. Seems those Sandia type guys are having a little problem with their computer system (maybe this isn't a subject to joke about) . . . anyway, Paull has supplied me with a new address. Thanks for all those who replied to my call for assistance.

Greg

Date: Tue, 30 Nov 1999 20:01:20 -0600
From: Carl Konefsky <cameraman@niiia.net>
Subject: Prem-Rx: IIT McKay MSR 8050

Hope this request is ok as it is a transeiver. I have aquired a IIT McKay 8050 it is one of the units floating around that was never completed by McKay when the contract was canceled. There has been some demilled units out and around and I am eather looking for one of those or parts that someone may have. If anyone has anything or knows of anything please let me know. Greg hope this was ok but it sure is a premium unit just would like to make it work. Please email me on or off list with info Thanks so much Carl

Date: Wed, 01 Dec 1999 11:30:17 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Watkins-Johnson Update

Hi gang,

I just got off the phone with W-J Helpline (customer rep David Shane) and learned about HF-1000's future. I realize this info won't be news to many of you.

1. Production and Support:

W-J is accepting orders on the HF-1000 only to 12/31/99. Production will continue on the mil version (8711A) for the foreseeable future, even after the division ownership transfers to Marcon early in the year. Continued support of the HF-1000A is promised, since it and the 8711A are nearly identical.

Production of the HF-1000 is being discontinued because sales have dropped to about 20/year, making it difficult to justify the expense of marketing two nearly identical products. W-J believes that people who don't already have an HF-1000 will be willing to pay an extra \$1000 for the 8711A, or will find an HF-1000 on the used market.

There are no plans to implement the Speech Enhancement Unit (SEU) for the HF-1000, given the availability of excellent aftermarket DSP noise and autonotch filters. Similarly, no remote PC software enhancements are planned, since excellent aftermarket software is available.

2. Differences between the HF-1000 and 8711A:

The two radios are fabricated on the same assembly line using identical circuit boards. There are minor firmware changes. The bezels are different and the cabinet is painted (HF-1000) rather than anodized.

3. Firmware Upgrades for the HF-1000:

The latest controller firmware is v.04.01.10. A replacement chip costs about \$130 and requires that the HF-1000 have a controller board labelled 797214 (etched on the board and listed in the manual). The earlier board is part 797012, and the latest firmware it can accept is v.04.01.03 (requires a 33 MHz or faster DSP chip). Upgrading controller boards costs about \$2000 (!)

Fortunately for those of us with the older board, there are extremely minor operational differences between firmware versions 04.01.03 and 04.01.10. Most of the changes were made for manufacturing reasons (to simplify factory alignment, etc.) rather than to enhance performance. The two operational features are minor bug fixes, one associated with receiver muting, and the other with a remote control command that, when issued repeatedly, can cause lockup. Unless one has specifically encountered these bugs in an application (which rarely happens), W-J doesn't recommend shelling out the \$130 for the upgrade chip, even if you have the later control board.

Regards and 73,

Jim Garland W8ZR

Date: Sun, 05 Dec 1999 21:58:43 -0800
From: John Reed <jreed@ponca.net>
Subject: Prem-Rx: WJ-8618

Does anybody have any information on the W-J 8618 receiver? Someone asked me about it, and I don't have any specs on it.

John Reed, KA5QEP

Date: Mon, 13 Dec 1999 22:15:41 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: Still up? And 590A firmware update

Is this list still up?

I haven't seen any traffic lately.

I'm still slogging through the Harris 590A firmware. It's pretty complex, with over 15,000 lines of code. I've learned a lot about the internal workings of the radio. The manual is a decent guide, but I am missing some sections so I will have to make some guesses. For example, I do not have the supplement for the FSK option (nor do I have the actual option), the 2-ISB and 4-ISB, and the preselector. Since I have a preselector I did reverse engineer it, though. I don't feel like doing that for the 2-ISB module (and don't need it for the code).

Anybody have these sections?

I have found a few interesting things. For example, even though there are 32 dipswitch selectable IF filter possibilities, only 10 are actually used.

Here they are:

; BW filter DIP switch to config map ;

All settings are configuration 1 except:

config 00, 00000 9 config 04, 00100 6 config 08, 01000 7 config 09, 01001 5 config 12, 10010 4
config 13, 10011 8 config 18, 11000 3 config 19, 11001 10 config 1E, 11110 2

Switch 1 specifies whether filter 7 is installed Switch 2 specifies whether filter 6 is installed Switch 3 specifies whether filter 5 is installed

Filter IF filter description 1 1 2.80 LSB 2 2.80 USB, FSK 3 0.30 CW, FSK 4 1.00 CW, FSK 5 3.20 AM
6 6.00 AM 7 10.00 AM 8 16.00 AM, FM

Filter IF filter description 2 1 2.80 LSB 2 2.80 USB, FSK 3 0.30 CW, FSK 4 1.00 CW, FSK 5 3.20 AM
6 6.80 AM 7 10.00 AM 8 16.00 AM, FM

Filter IF filter description 3 (same as 1) 1 2.80 LSB 2 2.80 USB, FSK 3 0.30 CW, FSK 4 1.00 CW,
FSK 5 3.20 AM 6 6.00 AM 7 10.00 AM 8 16.00 AM, FM

Filter IF filter description 4 1 2.70 LSB 2 2.70 USB, FSK 3 0.30 CW, FSK 4 5 1.00 CW, FSK 6 6.00
AM 7 3.20 AM 8 16.00 AM, FM

Filter IF filter description 5 1 3.20 LSB 2 3.20 USB, FSK 3 0.30 CW, FSK 4 1.00 CW, FSK 5 3.20 AM
6 6.80 AM 7 8 16.00 AM, FM

Filter IF filter description 6 1 2.70 LSB 2 2.70 USB, CW, FSK 3 0.15 CW, FSK 4 0.30 CW, FSK 5
1.00 CW, FSK 6 6.00 CW, AM, FSK 7 10.00 CW, AM, FSK 8 16.00 AM, FM

Filter IF filter description 7 1 2.80 LSB 2 2.80 USB, FSK 3 4 6.80 AM 5 6 7 10.00 AM 8 16.00 AM,
FM

Filter IF filter description 8 1 2.70 LSB 2 2.70 USB, FSK 3 0.30 CW, FSK 4 0.15 CW, FSK 5 1.00
CW, FSK 6 6.00 AM 7 3.20 AM 8 16.00 AM, FM

Filter IF filter description 9 1 3.20 LSB 2 3.20 USB, FSK 3 0.30 CW, FSK 4 1.00 CW, FSK 5 3.20 AM
6 6.00 AM 7 16.00 AM, FM 8 20.00 AM, FM

Filter IF filter description 10 1 5.00 LSB 2 5.00 USB, FSK 3 0.30 CW, FSK 4 1.00 CW, FSK 5 3.20
AM, FSK 6 6.00 AM 7 10.00 AM 8 16.00 AM, FM

I have config 1, and there is no filter 7 installed. What else is out there? What does everyone else
have?

Filter 1 is the LSB filter, always. It's wired this way. So, ISB uses filters 1 and 2.

My objective is to create a relocatable source code file so I can modify it at will and reassemble. I am
about 3/4 there in doing that and gaining a very good understanding of everything on the way. It's been
very time consuming; I have over 150 hours into it already.

For me, it's kinda like doing a jigsaw puzzle.

...Peter

premium-rx-digest Wednesday, December 22 1999 Volume 01 : Number 063

Date: Tue, 14 Dec 1999 00:07:43 EST
From: Aidehua@aol.com
Subject: Re: Prem-Rx: Still up? And 590A firmware update

Peter:

Beginning to wonder about the inactivity myself! This must be déjà vu because I called Harris today to
get info on installing an additional filter.

In my case, I have the R-2368/URR(V3), built for the Coast Guard and SPAWAR. It is the same as the
RF590A, except it has some of the options as standard. For example, it comes with the digital pre-
selector, ISB, and the following IF bandwidths: CW= .15, .3 & 1.0; SSB= 2.7 only; AM= 6 kHz & 16
kHz; and EFSK= all bandwidths... Trying to add 3.2 kHz to AM and SSB but the engineers at Harris
aren't sure if the firmware can support that. Can you help?

Also, are the filters supposed to be soldered in?

Thanks and 73, Ed KA6DBY San Diego

PS: Also inquired about the optional Noise Blanker....\$750!!! If I get one, I'll let you know. The NB would really complete the radio. It's is very well-built!! A keeper for sure!

Date: Tue, 14 Dec 1999 01:30:17 EST
From: Aidehua@aol.com
Subject: Re: Prem-Rx: Still up? And 590A firmware update--follow-up

Peter:

Decided to "bite the bullet" and not wait for a reply from the engineers at Harris. It's amazing how they've overcomplicated my scenario! I went ahead and disassembled the IF filter board, soldered in a Racal 3.24 kHz crystal filter (same IF though the writing is reversed and the pins do not have threads like the Harris filters), flipped the dip switch S2-1 to "open" (to activate Position #7), then put it all back together.

Ran the BITE, passed BITE, then went to the AM mode. Sure enough, the firmware detected the filter and it works beautifully!!! A happy ending indeed. Still looking forward to your reply. Miss all of the activity on this reflector because there is always good information. CUL.

73, Ed KA6DBY San Diego

Date: Tue, 14 Dec 1999 08:36:21 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: Still up? And 590A firmware update

If you do get the Noise Blanker, I would be interested in a copy of the manual supplement, and also your comments on its performance. Naturally, I would be glad to pay the costs for you to have it copied and sent.

Any of the switches could be made to control it. Perhaps a compound action, such as having the noise blanker switch act as follows:

NB off, presel enabled NB off, presel bypass NB on, presel enabled NB on, presel bypass

There would have to be some sort of display indication as to the NB status.

Any other switches would be suitable also, it's primarily a user-interface issue as to what makes the most sense.

It is also possible to add another switch, but I have a bias against that. There are a couple of open scan positions in the scan matrix, but adding another switch there would require that the switch be electrically close to the front panel board due to interference (in and out) issues. I'd hate to be drilling holes in this receiver. I don't really like the idea of an external switch, but it's a possibility I suppose. I haven't gotten into the rear panel connections too deeply yet so I'm not sure what that would entail.

> Peter:
> Another note...You mentioned something about a mod for bypassing the
> pre-selector, utilizing the NB switch. If I elect to use the NB switch for
> its intended purpose, do you see any other possibilities for utilizing
> another switch (i.e., Remote switch, or an added switch somewhere) for the
> preselector bypass?
> 73,
> Ed

Date: Tue, 14 Dec 1999 08:43:52 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Prem-Rx: 590A filters

Great.

As you discovered, this will work fine and you will get 3.24 kHz on AM. For LSB there is no provision for multiple filters, just the one in FL1. If the firmware was slightly modified you could have multiple USB filters, although this would give assymetrical ISB filtering (like any of us would care about that, though).

Good information about the Racal filter.

I had asked Harris some firmware questions a while back and they were unable to answer my questions despite what seemed like a decent effort. I wonder if the people who wrote the firmware left Harris?

Date: Tue, 21 Dec 1999 20:07:41 -0800
From: John Reed <jreed@ponca.net>
Subject: Prem-Rx: Tracor Receiver

Is anyone familiar with Tracor receivers? Specifically a Tracor 599K. I understand it's an Omega receiver perhaps with coverage into LF.

John Reed

premium-rx-digest Saturday, January 1 2000 Volume 01 : Number 064

Date: Wed, 22 Dec 1999 09:34:56 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Prem-Rx: 10 RF-590s pose for the camera

January 2000 Monitoring Times contains a photo of an Antarctic radio installation showing 10 Harris RF-590 style receivers.

Other premium equipment is displayed though I cannot identify the models.

The photo appears on page 19.

=====
Copyright 1999, Bob Parnass, AJ9S parnass@bell-labs.com Locate & identify transmitters in your area with a color RadioMap(tm) <http://www.megsinet.com/~parnass>

Date: Wed, 22 Dec 1999 10:55:19 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: Tracor Receiver

John anf The Group,

I don't know if familiar is the right word, but I own a 599G w/manual, and have played with it a little. It appears to be strictly a frequency comparator for use as a time/freq standard. I'm not sure that it will

work at all with anything currently on the air unless it has the 60KHz option for WWVB. Let me know if you think I can help.

Best regards, Al

John Reed wrote:

> Is anyone familiar with Tracor receivers? Specifically a Tracor 599K.

> I understand it's an Omega receiver perhaps with coverage into LF.

> John Reed

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Wed, 22 Dec 1999 15:53:39 EST

From: ALanger394@aol.com

Subject: Re: Prem-Rx: Tracor Receiver

Hello John, Al and the group

FYI

I run a Tracor 599J receiver here in the UK

This model covers 3 to 99.95 Khz in 50 Hz steps its aerial is a Austron screened loop model ?

The Tracor 599 G/H models cover 8 to 31.9 Khz plus an option for 60 Khz

The receiver needs a stable frequency standard input of 100 Khz or 1 Mhz to function.

The receiver is then set to a standard frequency transmission, i use Rugby on 60 Khz

The receiver compares the phase of the Rugby signal with that of the local standard

The phase difference in micro seconds is displayed on a counter The secret is to get the counter to move as slowly as possible by adjusting the standards fine frequency control, then a 24 hour plot is done to monitor the relative phase difference.

When set the local standard is fed in to the reference input of a Tracor 527A frequency difference meter. The output of a oscillator under test is fed in to another input and the frequency difference is read directly on a meter

I use it to set the various frequency standards in my receivers and test equipment

My main frequency standard is a Racal MA259 and my backup standard is a HP105B, both are monitored and kept on frequency with the Tracor set up.

I also distribute 100 Khz 1.0 & 5.0 Mhz signal round the shack using a Fluke/ Montronics distribution system, via double screened coax cable

Hope that help a little

Regards

Allan

Date: Wed, 22 Dec 1999 21:05:33 -0800

From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>

Subject: Prem-Rx: New Member- Spencer Bahner

Gentlemen:

It has been really quiet on our List This must be the result of the arrival of Santa or the preamble of the Y2K syndrome!

I would like to take this opportunity to introduce our newest member, Spencer Bahner. Spencer checks in from Seattle where he is presently building a county-wide trunked public safety radio system. Prior to this he managed the wireless comms for Airborne Express.

He claims to have a very tolerant spouse along with two children and a third on the way. "Tolerant" means that she allows Spencer to maintain a 'slush fund' to continue buying those commercial and military radios that just happen by at hamfests and internet sales. Recently he took advantage of this arrangement and purchased a WJ 8618B.

Spencer justifies his radio behavior (BTW he holds a Zoology degree) in three ways: ". . . 1. I Just love lookin' at the stuff (THE COLLECTOR), 2. I like listening to the stuff (This is the 'overpriced shortwave receiver/scanner' problem I seem to have....), 3. I use it professionally (the front ends are so much better than my R8500....)." (Ed note: I like a guy that can rationalize!, why can't he just say he is addicted like the rest of us?)

Presently our newest member is looking for VHF/UHF gear from WJ. I have a few 8615 series units that I need some 'bits' for if anyone has any DOA units floating around.... I also would love a Minicceptor with the FE/HF option if anyone has one!

You may want to drop our newest member an e-mail at: spencer12345@email.msn.com

Greg

Date: Mon, 27 Dec 1999 21:25:48 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: SAQ on 17.2KHz New Year's Day

The last remaining 200KW Alexanderson alternator, at radio station SAQ in Grimeton, Sweden will be on the air January 1st and 2nd to celebrate the station's 75th anniversary and the beginning of the year 2000. The CW transmissions are scheduled for 1200 UTC on 1 Jan 2000 and 06:00 UTC on 2 Jan 2000. The frequency will be 17.2KHz.

Radio Station Grimeton is being preserved as an historical site, and is (very) occasionally put on the air to celebrate special events. See <http://www.telemuseum.se/grimeton/> for more information.

The last time I was aware of SAQ being on the air was May 28th, 1998. That was pretty well into the Summer electrical-storm season and I was just barely able to hear them at my Western, NJ QTH using a 40" shielded loop, a Watkins Johnson 357 receiver, and DSP software on the PC. No one else in the US reported hearing them. This time we get a shot at both a daytime and a nighttime path in the dead of Winter. It won't get any better than this, so grease up the antennas and be ready to listen New Year's morning.

73, Al - -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page: <http://www.webex.net/~skywaves/home.htm>

Date: Tue, 28 Dec 1999 15:44:11 +0100
From: KuD-BS@t-online.de (KD Elektronik GmbH)
Subject: Prem-Rx: SAQ Grimeton station, report by Al Klase

Dear Al, thank you very much for the report and the news that SAQ will be on the air Jan. 1st. I sure will try to record the transmission again. I did record the transmission of May 28 1998. The field strength here in Germany was quite good, but there was a lot of static too, which made it difficult to read. I had all text correct except one persons name. My receiving equipment was the receiver KWZ

30 with an active antenna. The receiver works fine, but the antenna was too low for the purpose, but the combination worked. In September 98 I was in Sweden and took the advantage to visit the station. There are guided tours from the tourist office during the summer season, which ends in August. So in September there were no guided tours. When I drove up to the station, I met two engineers there. At first they were a bit reserved, but when they noticed that I spoke Swedish, the situation changed completely, although my Swedish is far from being perfect. They were very friendly and took the time to give me a complete tour of the station, explaining all details. It helped that I knew the technology and so could ask some more or less intelligent questions. They too ran an acoustic simulation of the station. They have hidden loudspeakers all over the place and can run the simulation from a multitrack recorder. Very loud and very impressive. They told me too that the station was on the air two times in August 98. It is not correct, that the station was not received in the US. The engineer showed me one report on his computer from the east coast, including a sound file, containing the whole transmission of May 28, and some pictures of the receiving station with a loop antenna. But there were more QSLs from almost all over the world. In the Swedish amateur radio magazine QTC I found a note this year that Televerket (the state owned communications authority) is training amateur operators for the station to be able to keep it on the air, as there are only two engineers left, who can run the station. Maybe they were the two I met.

Besides the SAQ antenna, which is also very impressive because it is huge, there are a few other antennas on the site which are quite interesting too. There is a big log-periodic for marine radio and a few others. If you ever get to Sweden, do not miss to visit the station.

I hope that this short note is not only interesting for Al.

Best regards and a happy year 2000

Hans-J. Kneisner

Date: Sat, 01 Jan 2000 09:21:12 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: SAQ Update

VLF'ers,

I didn't hear a peep from SAQ on 17.2KHz this morning. Things were quiet in Western New Jersey, but suspect the path to Sweden was pretty poor. We get another chance at 06:00 UTC.

Here's a report I got from Bengt Swensson:

Hi again AL, I called the station manager Mr Bengt Dagaas and he said that due to snow etc. it took a while until stabilization in antenna current. They transmitted three times 20 minutes at 1200, 1230 and 1300 z. The coils etc had dried at the third transmission. The same procedure tomorrow, with three transmissions of 20 minutes starting 0600 z. - -73, Bengt

Good hunting, Al

- - Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

premium-rx-digest Saturday, January 15 2000 Volume 01 : Number 065

Date: Sat, 1 Jan 2000 21:31:38 +0100
From: KuD-BS@t-online.de (KD Elektronik GmbH)
Subject: Prem-Rx: SAQ reception

Dear Al and all other VLFers, the signal from SAQ today was easy to receive, as there was no static or other interference. Field strength on the S-meter was a steady S3, S/N ratio about 10 dB. Location: Braunschweig, northern part of Germany Equipment: Receiver: KWZ 30 Antenna: active electrical antenna, whip 1 m long, 6 m above ground.

Probably the S-meter reading does not mean much, as the sensitivity of the receiver at that frequency is much lower than above 500 KHz. At VLF the sensitivity is not specified and I have never measured it. Maybe I should.

Best regards Hans-J. Kneisner

Date: Sat, 05 Feb 2000 21:15:11 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: List Announcement

Gentlemen:

Things have been R E A L quiet on the List so I thought I would give it a tweak and see if it still operated.

I will be out of the country for the next three weeks so now would be the time to post all the anti-Greg things you have been brewing over for the past year.

We have one new member, John Collins <jcollins@referencevideo.com>. Unfortunately, I have not had sufficient time to post his bio. John drives a Racal, has a Cubic, and has a familiar last name. . . . so I figured we should include him in the List. John, I promise to get your bio when I return home on the 21st.

Best New Year wishes to all of our List members.

Greg

P.S. I am going to the land of "caning", where I have been warned that Premiums are confiscated upon entering customs, so I am going nude so to speak.

Date: Thu, 6 Jan 2000 11:32:26 -0500
From: "Peter Gottlieb" <peter_gottlieb@email.msn.com>
Subject: Re: Prem-Rx: List Announcement

> Things have been R E A L quiet on the List so I thought I would give
> it a tweak and see if it still operated.

I think everything is just fine with the list, but everyone has been busy with the Christmas/new year related stuff.

I know I have.

But I'm still slugging away on the RF-590A firmware. I have most of the suggestions for changes figured out and am now working on some of my own more ambitious changes. I'm also figuring out the Harris protocol, since many of these receivers still have older firmware versions and need to be controlled this way.

Peter

Date: Sat, 8 Jan 2000 15:08:32 +0100
From: KuD-BS@t-online.de (KD Elektronik GmbH)

Subject: Prem-Rx: SAQ, QSL-list

Dear friends, Al Klase especially, the Grimeton station SAQ has published a list of all people which have sent in a QSL. It can be found in the net under telemuseum.se/grimeton.

There are 3 QSLs listen from the USA: Alan Douglas, Massachusetts Lyle Koehler, Minnesota Dex McIntyre, North Carolina

So the transmission on Jan 1 could be received over there. I am trying to suppress the suspicion that something is wrong with Al's receiver.

Best regards Hans-J. Kneisner

Date: Sat, 15 Jan 2000 23:19:14 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Fault on 2050

Things are awfully quiet with Greg away and all. Thought I'd relate an interesting experience to my fellow 2050 drivers. My favourite 2050 (I have three) began to go a bit wonky with the RF gain not responding to my direction. The BIT on startup passed without incident, but when I ran the operator BIT, I received an A3 Fault, followed by Debug 2-043, Debug 3-0002H, and Debug 4-0003H. A sick feeling overtook me as I saw my prized investment reduced to a parts unit. Evidently the problem was in the IF/Audio stage right next to the power supply on the topside. I didn't expect a heat problem as I have been so meticulous with the cooling. I tried shutting her down for a time and then restarting...Nothing. Resisting the urge to panic, or shout obscenities, I removed the rig from the rack, trekked her downstairs and over supper pondered what to do next. Well I removed the top and bottom covers checked all of the connections, blew out the dust (there wasn't much if any), and repowered her up, and VOILA, she works fine again. I have no idea what exactly happened, although I guess that perhaps the vibration from all of the fans mounted on the rack jostled something loose? Has anyone else any interesting Fault problems on the 2050. I'm keeping my fingers crossed that this is last I'll see of that Fault!

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC NRD 535D, and Kenwood R5000.

premium-rx-digest Sunday, January 23 2000 Volume 01 : Number 066

Date: Sat, 15 Jan 2000 23:22:15 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Intermittent LCD on my 2050

Have another interesting problem on my third 2050. The LCD is intermittent. Not all of it, but only the S-meter line, and the arrow which points to LSB only. The S-meter is chopped rather than a continuous line, and the arrows point fine when on AM, USB, or CW. It has absolutely no effect on performance, but it is a nuisance. All BITs pass fine. Any ideas or suggestions.

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers: Collins HF2050, (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC NRD 535D, and Kenwood R5000.

Date: Sat, 15 Jan 2000 23:27:22 -0800
From: Larry Gadallah <larry@gadallah.com>
Subject: Re: Prem-Rx: Intermittent LCD on my 2050

Hello Walter:

Check the IDC connectors on the ribbon cable going from the A2 board to the display board. I went nuts trying to find a problem which turned out to be an intermittent/flaky connection on one of the outside corner pins on the display board end of this cable. Unfortunately, this is a PCB mount IDC connector and is not typically available. The correct (IMHO) fix would be to replace the PCB IDC connector and/or the whole ribbon cable assembly. The PCB IDC connector is custom or hard to find, and nonetheless requires some very tricky and potentially destructive desoldering from the display board. I worked around the problem by tacking a wire wrap wire on the PCB side on the offending pin of the IDC connector and exposing just enough wire on the corresponding wire of the ribbon cable and soldering the same wire on. No problems seen since then.

Good luck,

Date: Sun, 16 Jan 2000 08:23:44 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Fault on 2050

Hi Walt, Interesting story, with a happy ending. Sounds like your diagnosis of a bad connection somewhere was correct. I had an experience with my 2050, where I had the bottom cover off and tried to operate the radio on its side. After a few minutes, I got a fault indication, evidently because of disrupting the heat flow. It went away after the radio was off a few minutes.

Although I no longer have my 2050 (replaced it with a W-J HF-1000A), I recall that the power supply uses a very standard (if somewhat old-fashioned) series regulator circuit. Had I kept my 2050, my intention was to remove the power supply module and replace it with a small switching unit, rather like the one in the HF-1000A. Since the power supply comes out as a module, the modification would be reversible. Modern switching supplies are dirt-cheap, reliable, and generate almost no heat. Early ones had RFI problems, but not later designs. With a switcher, no fan would be needed, and we could stop worrying about cooling problems!

Regards,

Jim Garland W8ZR

Date: Sun, 16 Jan 2000 05:33:32
From: Jeff Anderson <jeffa@ix.netcom.com>
Subject: Prem-Rx: WJ Performance

I'd like to get the opinion of others regarding the performance of Watkins-Johnson receivers. I have two different WJ receivers (8888 and 8880) that both seem to have excessive synthesizer phase noise. This is especially noticable when tuning off-frequency from a very strong signal.

Has anyone else experienced this?

- - Jeff, WA6AHL

Date: Sun, 16 Jan 2000 08:44:52 -0500
From: "Tony Ward" <tonyward@home.com>

Subject: Re: Prem-Rx: Fault on 2050

Hi Walt and everybody: I reported earlier on my success with cooling via a tray-mounted twin-turbo fan cooler. This is sold to be inserted into a 5.25 inch bay to provide additional computer HD cooling. Subsequent experimentation shows that it maintains a casing temperature of about 2 degrees C above ambient if switched on when the rig is switched on. I only have one 2050 Walt, so I have to take extreme measures. (G) It gravity-mounts on top of the rig, and costs \$C28 up here in the World's Largest Refrigerator. ...Or you could just put the 2050 outside till summer

Tony (VE3NO) NYAA StarFest On-Line tonyward@home.com tward@spanit.com
< <http://www.interlog.com/~nyaa/> >

I am an amateur-crastinator trying to decide whether to go pro-.....

Date: Sun, 16 Jan 2000 17:27:27 -0800
From: John Reed <kreed@ponca.net>
Subject: Re: Prem-Rx: WJ Performance

Jeff Anderson wrote:

- > I'd like to get the opinion of others regarding the performance of
- > Watkins-Johnson receivers. I have two different WJ receivers (8888 and
- > 8880) that both seem to have excessive synthesizer phase noise. This is
- > especially noticable when tuning off-frequency from a very strong signal.
- > Has anyone else experienced this?
- > - Jeff, WA6AHL

I haven't had the chance to check these older receivers, but have tested two more recent versions, the HF-1000 and WJ-8718. These receivers have decent phase noise performance, but the older vintage synthesizers on the two you mentioned may not be as good. Synthesizer performance has improved over the years.

John Reed, KA5QEP

Date: Sun, 16 Jan 2000 19:45:43 -0500
From: "David Pearson (SKYTRONICS)" <skytron@home.com>
Subject: Prem-Rx: Remote Control for Racal RA6790 Receiver with memories

Hi All, As I have two RA6790 Receivers their has always been one thing that annoyed me about them. They don't have any memories. So as a result of my work on a product for the TEN-TEC RX-320, I'm starting to modify the code for the RA6790. Initially it will have at least 70 memories, which save frequency and all settings for each station..

This unit would be identical to the RX-320 controller, but it would not have the batteries to power the receiver. I'm trying to gauge interest in this product to determine if it is worth getting a custom case made.

A enhanced version of the control unit will have Named station storage, Spectrum scanning, as well as a clock. For use with spectrum scanning the RA6790 must have the new version ROM's that send signal strength.

If their is any interest in this unit, please check out my crude web site at www.members.home.net/skytron/

Or E-Mail me at skytron@home.com

Regards, Dave Pearson

Date: Mon, 17 Jan 2000 22:37:05 -0000
From: ra1792@pavilion.co.uk
Subject: Prem-Rx: Collins 5480

Hi all, does anyone know of the Rockwell-Collins PA5480/10 HF Amp? I would like any info available. I understand it is part of a Tx unit matching the 2050. Any help would be welcome. Much obliged Neil

Date: Mon, 17 Jan 2000 20:53:21 -0800
From: "Spencer Bahner" <spencer12345@email.msn.com>
Subject: Prem-Rx: WJ Parts Source?

I have a Watkins Johnson 8615 VHF/UHF receiver that is in wonderful condition. There is only one problem- its missing the card called the 'audio/video' card so is unable to deliver audio output. Is there anyone out there who knows of a source for spares for this series? WJ wants \$2000! The 'usual' sources (Toronto Surplus, Fair, etc...) don't have anything like this. So if anyone can direct me to someone who might have one of these rx's in DOA condition (I KNOW its a SERIOUS long-shot but this seems to be the right list server to ask!), please let me know.

With Watkins Johnson being bought by Marconi, they may close-out some products (I know that they have wanted to stop making this receiver for some time but couldn't for some reason...perhaps a federal contract??)

Thanks all!

Spencer Bahner N7UMO Seattle, WA

Date: Tue, 18 Jan 2000 04:43:17
From: Jeff Anderson <jeffa@ix.netcom.com>
Subject: Re: Prem-Rx: WJ Parts Source?

Hi Spencer,

If you just want audio and if you have schematics for the receiver, you might want to roll your own audio board. I don't know the complexity of the audio board in the 8615, but, if it's similar to those used in the 8888 and 8880, it should be fairly straight-forward. The most difficult part will be creating the card-edge connector, but, with some creativity, even this can be done (I'd look for a surplus PCB with the same style edge connector, and either cut it off or use the PCB (striped of parts) as the foundation of the audio board.

- - Jeff, WA6AHL

Date: Fri, 21 Jan 2000 13:44:44 -0500
From: "Peter Gottlieb" <peter_gottlieb@msn.com>
Subject: Prem-Rx: RF-590A firmware

Just a status report.

I have completed my analysis of the firmware. At this point I:

- 1) Understand the functioning of all subroutines.
- 2) Understand all aspects of the software control of the radio and remote functions.
- 3) Understand all data structures and tables.

4) Have a commented version (well, the best I can do) of the source code, modified to be relocatable and changeable.

5) Can re-assemble this source code to make an identical ROM image.

I will now begin to gather up all the changes suggested and start implementing them.

Peter

Date: Mon, 21 Feb 2000 16:18:49 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: No Premium-Rxs found in Singapore

The subject says it all.

In fact, in 18 hot sticky days of looking, I did not see one stinking antenna on the entire Malaysian Penninsula that looked like it would work below 30 MHz. Police and government building typically have long wires, but I decided not to bang on their door and start asking questions about Premiums-Rxs.

Greg

P.S. Please note: Didn't get caned, ladies are awesome, food is HOT, everyone has a C-phone.

--

Date: Tue, 22 Feb 2000 12:58:41 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: No Premium-Rxs found in Singapore

The subject says it all.

In fact, in 18 hot sticky days of looking, I did not see one stinking antenna on the entire Malaysian Penninsula that looked like it would work below 30 MHz. Police and government building typically have long wires, but I decided not to bang on their door and start asking questions about Premiums-Rxs.

I was informed by the sysop of Kahuna that some "software work" was done on the University's server. It may take me a day or two, but I will see what impact this had on our list.

I also received some requests for changes of address not a panic, give me a sunrise or two and I will make the changes.

Greg

P.S. Please note: For those interested- didn't get caned, ladies are awesome, food is HOT, everyone has a C-phone.

--

Date: Sun, 23 Jan 2000 22:04:35 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Firmware mods for the 590A

Gentlemen:

I often receive e-mail from individual members discussing what they are working on in the area of Premiums. In addition, while the List seems almost "terminally" quiet, I know from my contacts that

many of you are personally exchanging information off line on your work. One such item popped up today which I think will be of genuine interest to you Harris 590A drivers. Peter Gottlieb (peter_gottlieb@msn.com) is a "binary type" in the NYC area. He has been working on the firmware of the 590A and reports the following: _____ " . . . at this point I have completely reverse-engineered the 208N version of the 590A firmware and have relocatable source code for it. This means that I am able to make any modifications I want and reassemble to create custom firmware. I have heavily commented it and made numerous flowcharts. At 16,000 lines of code it is a beast. . . . "

"Obviously I plan on keeping this receiver for a long time! I also know just about every nook and cranny of the firmware. I will soon begin to make the changes suggested in this list (and ones I've thought of as well). I might also write a document describing how to use a PC to control the radio using the native Harris protocol as the Harris specs are more of a general nature and don't describe well how this specific radio is dealt with."

"If anyone else has gotten into this at this kind of detail I would certainly enjoy discussing it... "

Peter, I assume with 30% of our 97 members driving Harris equipment you will get some questions. If you guys have a forum, how about sharing it with the List as it will prove interesting to all.

Greg

premium-rx-digest Monday, February 21 2000 Volume 01 : Number 067

Date: Sat, 5 Feb 2000 13:46:16 -0600
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: Watkins Johnson HF-1000A with Preselector

Hello to all,

(Wanted to offer this first here , before I go elsewhere. However, I care not to ship outside the USA)

I wish to sell my almost brand new "Watkins Johnson HF-1000A" . This sample was mfg. in Sep 1999 (serial no. above 1850) and has the preselector option ,factory installed . It of course is in "New" condition, 100% problem free and with everything that I received with it included. I don't smoke, and the set is covered after using (very picky). I'm the original owner.

Of course drop me an e-mail direct for the details. Dave

Date: Sat, 5 Feb 2000 15:39:05 -0600
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: Watkins Johnson HF-1000A Sold !!

The set has been sold...Thank You...

Dave

Date: Mon, 7 Feb 2000 13:43:06 -0600
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: Speakers.....

Hello to the group,

Well I hope this is not off the "Premium" path here, but I think these are in that "related" scope ?? If not...time to chew me out . These item's are certinally built in the "higher end" class.

A bit of surplus for me. I have a number of Alpha Delta VRC-2 "Die-Cast" Communication Speaker's (without the electronics) that I wish to part with.

Of course contact me directly for the details or questions.

Regards, David Zantow

Date: Mon, 7 Feb 2000 17:58:34 -0800
From: "Mike Taylor" <mvtaylor@voyager.net>
Subject: Prem-Rx: Harris RF-590 Repair

I am looking for someone to do some work on a Harris 590A. I am looking for initial evaluation alignment etc. Yes I know Harris is still in business. Does anyone know what they charge-Ballpark- for such work? Thanks to everyone. Mike Taylor

Date: Mon, 21 Feb 2000 14:53:20 -0600
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: BAE Systems

Hi to all,

Well activity has been very light here on the list of late, so just a FYI here.

Seen this today while surfing the web, WJ's new Telecommunications Division owner (marconi)..BAE SYSTEMS already has the web site in place with products listed. I would think that "WJ's" name will be gone from the equipment ??

<http://www.sigintel.com/ssi/index.html>

"Formerly Watkins-Johnson Company's Telecommunications Group, the Gaithersburg Operations is now a business unit within the Aerospace Electronics sector of BAE SYSTEMS. The facility specializes in radio frequency (RF) electronic products, offering innovative state-of-the-art equipment for applications in communications surveillance, direction finding, and signal processing."

Site worth a peek.

Regards, Dave Zantow

premium-rx-digest Friday, March 17 2000 Volume 01 : Number 068

Date: Thu, 24 Feb 2000 07:43:48 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

Hi Gang,

Thought I'd fill you in on my recent experience in upgrading my HF-1000. I bought myself an Xmas present of the suboctave preselector for my HF-1000, and it just arrived yesterday. (It was special order from the factory). I bought it from Universal Radio, in Reynoldsburg, OH.

The shipping box was huge, and I first thought that Universal had inadvertently shipped me the wrong item. But it was all packing. All the hardware was packed in little zip-lock electronics parts bags, as

was the preselector board itself. The board is housed in an aluminum enclosure, with a single ribbon cable coming out the side.

Installation instructions are in the HF-1000 manual and are a 15 minute job. Basically, one just undoes four mounting screws from an interior circuit board, replaces them with standoff brackets, and mounts the new assembly on the brackets. Plug in the ribbon cable, attach nuts and washers to the BNC connectors, and you're done. It couldn't be easier.

Electrically, the preselector is an 11 band filter bank, switched by PIN diodes and controlled by the microprocessor. It raises the 3rd order intercept of the radio to > 30dbm, which is as good or better than anything on the market.

I was very pleased that W-J is still selling these accessories, given their change in ownership. It's a good sign.

Regards,

Jim Garland W8ZR

==== Website: <http://www.muohio.edu/~4cx250b/web/index.htm> =====

Date: Thu, 24 Feb 2000 08:45:17 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

James C. Garland wrote:

- > Electrically, the preselector is an 11 band filter bank, switched by PIN
- > diodes and controlled by the microprocessor. It raises the 3rd order
- > intercept of the radio to
- > 30dbm, which is as good or better than anything
- > on the market.

I'm curious about the need for a preselector. The HF-1000 already has a pretty strong front end, like many other premium receivers. The preselectors are needed in installations where the receiver is close to a transmitter at a different frequency. On my Harris RF-590, I changed the preselector to be switchable using the noise blanker switch, and I couldn't find any reception conditions that were helped by the preselector. In fact there's a slight degradation in S/N. Do you have a special need for this accessory?

John Reed

Date: Thu, 24 Feb 2000 12:08:17 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

Good question, John, and to be perfectly truthful I'm not sure I have a special need. However, I use a 270 ft inverted Vee antenna on the radio, live only a few miles from WLW, a 50kW AM station, which puts volts of RF on all antennas in the area, and I often run my 1000 Watt six meter station or one of my KW+ hf rigs, while the HF-1000 is monitoring an hf frequency in the background. Also, given the maze of transmitters and receivers, and interconnecting cables, relays, and switches around my station, it's probably only a matter of time before I inadvertently transmit into one of the receivers. All in all, with all that rf floating around, the preselector is just a precaution.

Regards,

Jim Garland W8ZR

Date: Thu, 24 Feb 2000 13:14:33 -0600
From: "Davez" <davez@ticon.net>
Subject: Prem-Rx: Ten Tec RX340

Hello to all,

Just in case you might have missed this, ..Fred Osterman has posted a great color picture of the new Ten-Tec RX-340 DSP receiver today (on the Universal Radio Web site).

<http://www.universal-radio.com/catalog/commrxvr/0340.html>

Yes, Fred please inform all with the specs on this very intresting "Hi-End" receiver when you receive them....I'm almost drooling....??

Dave Zantow

New e-mail address(s) : n9ewo@netzero.net (or) davez2@netzero.net

Web Page now at: <http://www.ticon.net/~joelt>

(After April 14th, 2000 the "ticon.net" address will no longer be active)

Date: Thu, 24 Feb 2000 15:01:35 -0500
From: "Ed Tanton" <n4xy@arrl.net>
Subject: RE: Prem-Rx: Ten Tec RX340

WOW!!! What a great looking receiver. Any idea of what the cost will be?

Ed Tanton N4XY <n4xy@arrl.net>

Website: www.qsl.net/n4xy

"Do what's right. You'll please some people, and amaze everyone else."

Mark Twain

Date: Thu, 24 Feb 2000 15:35:59 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: RE: Prem-Rx: Ten Tec RX340

At 03:01 PM 2/24/00 -0500, you wrote:

> WOW!!! What a great looking receiver. Any idea of what the cost will be?

> Ed Tanton N4XY <n4xy@arrl.net>

From the front panel, it seems to share a lot of common features with the HF-1000. I like the way the tuning steps are selected. It will be interesting to see how the conversion scheme and DSP filtering are implemented, whether it has a built-in preselector, etc. Looks like a neat radio.

Jim Garland W8ZR

Date: Thu, 24 Feb 2000 12:16:53 -0800
From: Jerry Gardner <jgardner@peri.com>
Subject: Re: Prem-Rx: Ten Tec RX340

At 01:14 PM 2/24/00 -0600, Davez wrote:

> Hello to all,
> Just in case you might have missed this, ..Fred Osterman has posted a great
> color picture of the new Ten-Tec RX-340 DSP receiver today (on the Universal
> Radio Web site).

Hmmm... Looks almost like Ten-Tec bought the rights to the WJ HF-1000 and rearranged the front panel a little...

- -- Jerry Gardner | Senior Project Manager Periphonics, a Nortel Networks Company | email: jgardner@peri.com

- - - - -

Date: Thu, 24 Feb 2000 17:28:35 EST
From: Daiungoed@aol.com
Subject: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

Hi, Does anyone have any info. web sites or experience of the above dual receiver ? I have been offered a deal with one, and just wanted to know what I might be letting myself in for. Any replies gratefully received, Dave

Date: Thu, 24 Feb 2000 19:42:10 -0500
From: "Pete Ferrand" <pete@vermontel.net>
Subject: RE: Prem-Rx: Ten Tec RX340

If you could take your eyes off the radio for a sec, the Universal page on the left side says "Under 4K" for price. :-)

Yeah, looks like they're trying for the same class as the WJ and all the other mainstream rig makers. If this means no consumer-type shortcuts it will be a positive step.

- -Pete WB2QLL Plainfield, NH

Date: Thu, 24 Feb 2000 17:00:46 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Osterman, Jeckel, and the CUBIC R-3030A

Hello all: Good to see some activity-

Cubic Communications is located in San Diego's north county, about 10 miles from my QTH. Recently, I have visited the facility a number of times with my students on tours, etc. The majority of their products are for governmental applications so they typically don't advertise or openly talk about their products to the general public.

However, this is not to say they wouldn't (within reason) answer questions you may have on the 3030. I suggest you call Dick Jeckel (858-643-5800) for a summary of the 3030 specs. He may have a spec sheet in his files that could be FAXed to you. As a senior design engineer, Dick is a very soft spoken individual who carries a huge technical stick. Point blank- he knows Cubic's product line inside and out, as well as all the "mods" that were done during the production runs.

Don't be put off if he suggests you call him back. . . . he wears a number of hats and is very busy.

Hope this helps.

Greg

P.S. You may want to check the "bible", ****Short Wave Receivers past and Present**** that one of our fellow List members, Fred Osterman, authors. I am at my office and my copy of the "bible" is at home so I am not sure if it mentioned. Just for the record, Dick Jeckel has a copy of the "bible" . . . on his desk no less!

Date: Thu, 24 Feb 2000 20:06:33 -0500
From: Geoff Greer <greer86@attglobal.net>
Subject: Re: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

At 05:28 PM 2/24/00 EST, Daiungoed@aol.com wrote:

> Hi,
> Does anyone have any info. web sites or experience of the above dual
> receiver ? I have been offered a deal with one, and just wanted to know what
> I might be letting myself in for. Any replies gratefully received, Dave

Hi,

RE: Cubic 3030A

I had one for a while. It is a real Jeckyl and Hyde type radio. The plus points, easy to service with a set of extender cables. Performance is quite good. Sexy looking. the MINUS POINTS: This radio was made to be remote controlled. It has the WORST ergonomics I have ever seen in a radio. I got so mad at it I sold it for what I had paid for it. Cubic is no treat to deal with either.

Geoff Greer Amadeus Surplus

wj8617b@ix.netcom.com greer86@attglobal.net

Date: Thu, 24 Feb 2000 22:27:34 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

Daiungoed@aol.com wrote:

> I have been offered a deal with one, and just wanted to know what
> I might be letting myself in for. Any replies gratefully received,

I got to play with one of these for about a month. The biggest problem is that the key pad is not properly debounced. This is reportedly a problem with all of them and makes the set frustrating to operate.

Also, rough measurements and on-the-air comparisons suggest there is an inherent oscillator-phase-noise problem. I.e., signals down in the noise are hard to hear.

By and large, I'm much happier with my RA6790, which cost less than half of the \$1800 the 3030 sold for.

On the other hand, it is two complete receivers which means you'd be able to swap modules to trouble shoot. Proper PC control software, if available, would relieve the key pad woes.

Anyone else have any experiences?

Al

- - - Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Thu, 24 Feb 2000 23:19:28 -0500
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: Ten Tec RX340

Wow Dave: And it weighs nothing and occupies zero volume. I assume it will also cost nothing? (G)
Any idea of price, as I crawl out of my virtual reality hole here ? ...

Tony (VE3NO) ComputerViz; NYAA StarFest on-line tonyward@home.com tward@spanit.com
< <http://www.interlog.com/~nyaa/>>

The second mouse gets the cheese

Date: Thu, 24 Feb 2000 20:40:14 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Ten Tec RX340

Price on the website indicates < 4K \$. Looks like a targeted pricepoint that the HF1000A used to
occupy. Wonder if they purchased components and repackaged? We'll see....

Don Nelson Beaverton

Date: Thu, 24 Feb 2000 20:48:31 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

I actually own one of these. Its a little cumbersome to use the front panel, and the panel keypads are a
bit flakey (you'll develop a knack for it though... It has one good feature, an LED meter that allows one
to see where the energy of a signal peaks (so you can tune the signal easily, right on frequency). The
receivers can also be used with SE-3's (so can the RF-590A).

I'd rate it as an interesting buy, especially as it is 2 receivers in a cabinet. But you could save a few
more dollars and get a 2050 (in fact one sold on ebay recently for > = 1700\$ while another got 1950\$.
) , or a few more to find a used HF1000A. The 2050 does a bit better in weak signal recovery, and is
easier to tune than the cubic (but the heat!).

Don

Date: Thu, 24 Feb 2000 22:04:51 -0800
From: "Spencer Bahner" <spencer12345@email.msn.com>
Subject: Re: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

I couldn't resist a comment on firms that are 'real treats to deal with':

I just ordered a manual from my favorite receiver manufacturer (I wont say who they are but lets just
say that the company name has the initials WJ as a part of it). I thought the prices I had paid for HP
manuals were high. This one (soft-bound, not even a nice binder) came to \$248. Ouch!

It was a very good manual but had one real flaw- no prints of the parts locations on the circuit boards.

Oh, and the manual took 10 weeks to be 'printed' (photocopied in this case, even though it was for a
current product) and shipped.

At least they took a credit card....

No wonder this unnamed company has now been sold....

Good listening!

Spencer Bahner N7UMO in Seattle.

Date: Fri, 25 Feb 2000 06:49:23 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Ten Tec RX340

At 08:40 PM 2/24/2000 -0800, you wrote:
> Wonder if they purchased components and repackaged?
> We'll see....
> Don Nelson
> Beaverton

I was wondering the same thing!

Jim W8ZR

===== Website: <http://www.muohio.edu/~4cx250b/web/index.htm> =====

Date: Fri, 25 Feb 2000 06:48:02 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

The reviews are correct, Steve. I hear some low-level DSP "gargle" in the HF-1000, and also a low level hum in the audio. This seems to be worse when taking the audio from the D-connector on the rear panel. Of course, I'd prefer that this noise not be present, but it really is at a low level, and not noticeable when actually listening to stations.

That is really the only problem I've noticed with the HF-1000. In every other respect, it's the best receiver I've ever used (though there are many I haven't used, of course.) I find it very easy to use. The ergonomics are very fine, and I can't think of any way I'd improve the controls for the memory selection, AGC, NB, Squelch, etc. The noise blanker and squelch are excellent, by the way. Some of the problems noted with earlier receivers, such as a slow AGC attack time, have been corrected in later firmware revisions. Some early users reported distorted audio (again, from the rear panel jack), but I certainly don't hear that in mine.

There are a few features that would make a nice addition to the receiver. These have been noted before and include DSP noise reduction and autonotch filtering. Apparently, earlier plans to offer an add-on board with these features have been abandoned, in light of the excellent aftermarket DSP boards on the market. All in all, however, it's a heck of a receiver. According to the factory rep I talked to in December, W-J's new owner will discontinue the HF-1000A, but will continue to market its military equivalent (the 8711) and support the HF-1000. The military version costs about \$1000 more, for which you get different front panel and cabinet finish, and a few additional IF bandwidths. I'm not aware of any other electrical differences..

73,

Jim Garland W8ZR

===== Website: <http://www.muohio.edu/~4cx250b/web/index.htm> =====

Date: Fri, 25 Feb 2000 06:57:55 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: CUBIC COMMUNICATIONS R-3030A

- > This one (soft-bound, not even a nice binder) came to \$248. Ouch!
- > It was a very good manual but had one real flaw- no prints of the parts
- > locations on the circuit boards.
- > Oh, and the manual took 10 weeks to be 'printed' (photocopied in this case,
- > even though it was for a current product) and shipped.

Ouch! They ARE approaching HP and Tektronix in manual pricing! Not that I'm defending them, but it is at least a very comprehensive manual, with the exception of the board layout diagrams. I'm assuming you have the "intermediate level service" manual, which I believe is normally supplied with the radio. I wonder if there's an advanced-level manual, that includes board-level repair information, and possibly some info on the firmware? (Incidentally, my preselector also took 10 weeks to arrive, but I attributed the delay to the ownership changeover to Fox-Paine. Maybe not, though.)

Jim Garland W8ZR!

==== Website: <http://www.muohio.edu/~4cx250b/web/index.htm> =====

 Date: Fri, 25 Feb 2000 07:10:43 -0600 (CST)
 From: parnass@lucent.com (Robert S Parnass)
 Subject: Re: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

I think the roofing filter in the WJ8711 is twice as wide as the one in the HF-1000 family.

=====

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 Date: Fri, 25 Feb 2000 08:23:34 -0700
 From: "Paull E. Patterson" <pepatte@sandia.gov>
 Subject: Re: Prem-Rx: Ten Tec RX340

For all inquiring minds; I believe that this receiver is, basically, Ten-Tec's RX-331 with a user friendly interface. Anybody want an RX-330B? (hi hi)

regards, Paull

 Date: Fri, 25 Feb 2000 12:35:10 -0600 (CST)
 From: parnass@lucent.com (Robert S Parnass)
 Subject: Re: Prem-Rx: Watkins-Johnson HF1000A Preselector Option

The Subject field of this message refers to the preselector option, but I was writing about the 40.455 filter in the first IF.

The bandwidth of the 40.455 filter is 30 kHz in the WJ-8711 and 8 kHz in the HF-1000A.

Sorry about the confusion.

=====

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 Date: Fri, 25 Feb 2000 21:26:54 EST
 From: Aidehua@aol.com

Subject: Prem-Rx: WJ HF-1000 Test

Anyone in Southern California have a WJ HF-1000 that they'd like to A/B with mine? Be curious...Just installed the pre-selector.

Thanks,

Ed KA6DBY

Date: Fri, 25 Feb 2000 18:43:18 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: WJ HF-1000 Test

All on the list

I have 2 HF1000a up and running, off a stridsberg multicoupler.

My experiments with the preselector in (eg connected via the jumper coax) and out of the circuit on extremely weak stations indicate that if you don't need the preselector, and you want to DX, leave the preselector out of the circuit of the hf1000a. You'll want it in if you live in a strong signal environment (near a station, or in Europe)

I am listening to R Tanzania on 5050kHz as we speak --- on several premium receivers (HF1000 w and w/o preselector,). Keeping the preselector out of the circuit makes a difference.....

Just my 2 cents and experience.

Don Pacific Northwest of USA

Date: Fri, 25 Feb 2000 19:03:19 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: WJ HF-1000 Test

8:1 active. I like them a lot. They are much better than the TMC 32:1 I purchased as surplus (ex Canadian military gear, used with the collins 2050). You can also purchase 4:1.

No loss. I use them for weak signal dxing off a couple of EWEs, and for use on beverages down at the coast

Don

Date: Sat, 26 Feb 2000 08:28:07 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: WJ HF-1000 Test

Aidehua@aol.com wrote:

> Anyone in Southern California have a WJ HF-1000 that they'd like to A/B with
> mine? Be curious...Just installed the pre-selector.
> Thanks,
> Ed KA6DBY

I could be mistaken, but it seems like you can bypass the preselector by software control. Is this wrong?

John Reed

Date: Sat, 26 Feb 2000 07:58:28 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: WJ HF-1000 Test

Actually the HF1000 and HF1000A don't have a preselector enable/disable on the radio.

Instead, when you attach the antenna, you must either

1) Attach the antenna directly to a BNC going directly to the receiver (avoiding the Preselector circuitry)

or

2) Attach the antenna to the BNC of the preselector, and a very short jumper coax between a Preselector output(BNC) and the BNC going directly to the receiver.

The little jumper coax is included with the radio(regardless of whether you have the factory installed preselector or not) and is included when you buy an add-in preselector)

Don

Date: Sun, 27 Feb 2000 11:40:34 EST
From: KE2WG@aol.com
Subject: Prem-Rx: FS: WJ-1000A / SE-3 Pkg.

Greetings:

I have a Watkins-Johnson 1000-A, serial # 1858 for sale. Delivery of this set from WJ was late Nov 99. WJ completed testing the set 11/19/99, Gaithersburg, MD. Also part of the Pkg. is a Sherwood SE-3 Deluxe. I have of late developed an interest in working dx, hence the WJ must go in favor of a HF Amp. I thought I would advise the group of this item, before going public. For details please email me direct. THANKS Nick in CT

Date: Sun, 27 Feb 2000 17:57:07 EST
From: KE2WG@aol.com
Subject: Prem-Rx: Re: WJ & SE-3 FS

Thanks for all of the cards and letters on the package. The first respondent has decided to take the pkg. Another non-Ebay sale within the Group. THANKS Nick

premium-rx-digest Sunday, March 26 2000 Volume 01 : Number 069

Date: Sun, 19 Mar 2000 08:01:40 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Request for Mackay 3031-A data

Gentlemen:

The List has received a request for some technical information on a Mackay 3031-A, specifically its audio recovery system and quality.

The 3031 is not one of our premium-rx, however, I thought it unique enough that maybe one of our members can offer some assistance.

If you have any background or information you might drop a note to:

Michael Brown at: piggin@mindspring.com

Txs, Greg

Date: Sun, 19 Mar 2000 17:47:19 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Re: Prem-Rx: Request for Mackay 3031-A data

> The 3031 is not one of our premium-rx, however, I thought it unique
> enough that maybe one of our members can offer some assistance.
One correction: The ITT Mackay Marine 3031A is a premium receiver and listed in the table at:

<http://kahuna.sdsu.edu/~premium/premium.html>

Michael and I may be the only two 3031A owners currently on the premium-rx mailing list. I've heard from one or two other 3031A owners, but there aren't many of us.

=====

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Date: Sun, 19 Mar 2000 17:00:10 -0800
From: jan@skirrow.org
Subject: Re: Prem-Rx: Request for Mackay 3031-A data

> Michael and I may be the only two 3031A owners currently
> on the premium-rx mailing list. I've heard from
> one or two other 3031A owners, but there aren't many of us.

One more - Walt Salmaniw. I know 'cuz I repaired it for him.

Jan Skirrow

Date: Sun, 19 Mar 2000 20:14:43 -0500
From: "Ed Tanton" <n4xy@att.net>
Subject: RE: Prem-Rx: Request for Mackay 3031-A data

I also have one.

Ed Tanton N4XY <n4xy@arrl.net>

Website: www.qsl.net/n4xy

"Do what's right. You'll please some people, and amaze everyone else."

Mark Twain

Date: Sun, 19 Mar 2000 21:57:14 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Okay, I goofed. . .

Gentlemen:

I goofed as is evidenced by the number of postings regarding the Mackay 3031A.

Jan Skirrow, Ed Tanton, Bob Parness, (and I assume Dr. Walt if he ever stops listening to his 2050), have notified me that the Mackay 3031A is a Premium device. I know these guys will testify to anything assuming the bribe is sufficiently high, so let me tell you the real source of my inside information. . . .

This morning I had to diplomatically deny Michael Brown's (you will remember he is the young man that sent me the question in the first place) membership in the List because I didn't think the Mackay 3031A qualified as "premium". In my e-mail to him, I said I would ask if anyone on the List had a Mackay and could help him. I copied Mike the post I sent to the List reflector, little did I know that the Jan-Ed-Bob trio would reply announcing the error in my ways.

Mike also responded that he was touring the Mackay factory in 1985 and states as a fact that he saw a number of these units being produced for the Canadian Forces and the USIA. Mike even goes into describing the difference between a commercial version and one specifically produced for the military.

He says, "The MSR 5050 is similar to the 3031A/3041A series except that it has microprocessor control and memories. The MSR 5050A has enhanced computer control and remoting capability. The reason the 3031A/3041A series are now showing up is that they are not interfaceable. The paradigm has changed. The MSR-5090 is the DSP rig Mackay makes, not the 5050. It is possible some DSP equipped 5050s (have been) shipped but probably unlikely".

So, I apologize to our NEWEST MEMBER and Mackay expert, Mike Brown. His bio will be posted tomorrow.

Best wishes to all

Greg

Date: Mon, 20 Mar 2000 01:39:24 -0500
From: "Ed Tanton" <n4xy@att.net>
Subject: RE: Prem-Rx: Okay, I goofed. . .

Good for you Greg!!! I did send Michael an email a little while ago, and really liked his description of '3031As being vibration-tested in paint-mixers. That's a pretty good shake!

I once accompanied a piece of space-flite hardware my employer had designed & built (as I recall, some combination of microwave isolators and circulators) on a quick trip to a lab in Boston where it was mounted onto a 3-axis vibration table, and that too was impressive! It was kinda fun going through the airport inspection line and insisting that anyone looking into the case have a Top Secret-or better-clearance. In the interest of making my flight, I backed down (of course), and allowed a supervisor with a Secret clearance inspect it-she opened the case, slightly lifted the clear-poly-wrapper, and said "PASS".

I can only plea that I was young and foolish, and thought it was fun, having-on the security types. I still think it was funny, the way they were gingerly looking at it-considering the shaking it was headed for.

Fortunately, nobody was upset or anything, just wary.

I like my 3031A. I like its tuning-rate method: 4 PBs just below the RO, and then the main tuning knob almost centered below the RO-each PB discerning the decade-rate you want to tune , and I like LEDs over LCDs. It isn't my RACAL RA6790/GM, but for a quick listen, especially if you want to really scout around-frequency-wise-it does a very nice job.

If anyone wants to see one, I can send a JPG or you can see one at my website, both on the Homepage itself (in a rack) and a larger one in:
Home

> BoatAnchors
> Receivers).

Ed Tanton N4XY <n4xy@arrl.net>

Website: www.qsl.net/n4xy

"Do what's right. You'll please some people, and amaze everyone else."

Mark Twain

Date: Mon, 20 Mar 2000 06:16:21 -0600 (CST)
From: parnass@lucent.com (Robert S Parnass)
Subject: Prem-Rx: Mackay 3031-A brotherhood

It's great to learn of more Mackay 3031A owners! I don't feel as lonesome now :-)

=====
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Date: Mon, 20 Mar 2000 05:03:33
From: Jeff Anderson <jeffa@ix.netcom.com>
Subject: Re: Prem-Rx: Request for Mackay 3031-A data

At 05:00 PM 3/19/2000 -0800, jan@skirrow.org wrote:
>> Michael and I may be the only two 3031A owners currently
>> on the premium-rx mailing list. I've heard from
>> one or two other 3031A owners, but there aren't many of us.
> One more - Walt Salmaniw. I know 'cuz I repaired it for him.
> Jan Skirrow

I'm another!

- - Jeff, WA6AHL

P.S. I'm looking for a manual (or copy, or a manual I can copy) so I can make some very much needed repairs.

Date: Mon, 20 Mar 2000 13:22:34 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Michael Brown

Gentlemen:

Michael Brown joins us from Asheville, North Carolina. He recently earned his BA in philosophy from St. Meinrd College. This fact alone makes him unique, not the degree part, but the fact he is probably our youngest member. Mike proposes to study theology in graduate school with his ultimate goal being a priest in the Catholic Church.

After all the recent e-mailing on the List, there is NO QUESTION that Mike operates a premium ITT Mackey Marine 3031A receiver. He has also been known to drive a Drake R8A as well as a SP-600. He has toured the Mackay factory at Raleigh, NC in the past which automatically makes him our envoy

to ITT. At the time of his tour, the 3031 was priced at \$7,800. From all the e-mail generate recently over the 3031A, I assume that we have a growing subculture of Mackey operators out there?

Best wishes in your studies Mike, and welcome to the group. We need a little youth to wake up our membership.

Greg

Date: Thu, 23 Mar 2000 06:53:57 -0500
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: TenTec RX-340 mystery (update)

Hi Gang,

Universal Radio has now added some interior photos of the new Ten Tex RX-340 receiver to their website writup, and these shed some light on whether the 340 is merely a repackaged HF-1000. The answer is no, at least in most respects. The interior shows several circuit boards, with typical TenTec construction (use of numerous single white wires for interconnects, instead of ribbon cable) and through-hole (as opposed to surface-mount) circuit boards. (From a user point-of-view, I prefer the through-hole boards, which are more easily repairable.) The one exception to the construction appears to be the main logic board, which in the photo appears to be a typical SMT computer-type board; it's hard to know whether TenTec designed it or bought it from, e.g., W-J.

Unlike the HF-1000, The RX-340 uses several small boards, with a modular type construction. In terms of features and design philosophy, the receiver is obviously inspired by the HF-1000, even if it isn't a direct clone. The selling price is \$3950, with delivery next month. Looks like a pretty good receiver. Check out the photos at <http://www.universal-radio.com/catalog/commrxvr/0340.html>

Regards,

Jim Garland W8ZR

===== Website: <http://www.muohio.edu/~4cx250b/web/index.htm> =====

Date: Thu, 23 Mar 2000 09:17:13 -0500
From: Fred Osterman <osterman@dxing.com>
Subject: Prem-Rx: Ten-Tec RX-340

Hi Guys (any girls?): Jim Garland is correct. The Ten-Tec RX-340 is not a clone of the W-J HF1000. In fact, the RX-340 was developed independently of W-J (although designed to similar performance specifications). 73s - -- Fred Osterman E-Mail: osterman@DXing.com Universal Radio Research Web site: www.DXing.com Universal Radio Inc. Web site: www.universal-radio.com

Date: Thu, 23 Mar 2000 09:29:45 -0800
From: Jerry Gardner <jgardner@peri.com>
Subject: Re: Prem-Rx: TenTec RX-340 mystery (update)

At 06:53 AM 3/23/00 -0500, James C. Garland wrote:
> Unlike the HF-1000, The RX-340 uses several small boards, with a modular
> type construction. In terms of features and design philosophy, the receiver
> is obviously inspired by the HF-1000, even if it isn't a direct clone. The
> selling price is \$3950, with delivery next month. Looks like a pretty good
> receiver. Check out the photos at

For that price, Ten-Tec must need to amortize one hell of an expensive software development effort. Either that or it's way overpriced.

- - Jerry Gardner | Senior Project Manager Nortel Networks | email: jgardner@peri.com

Date: Fri, 24 Mar 2000 15:39:43 -0500
From: "Ed Tanton" <n4xy@att.net>
Subject: Prem-Rx: Scientific Atlanta GPD-111 SONAR receiver

Hello Folks... does anyone know anything about CURRENT USN Sonar receivers? I lucked into a trade for a still-current Scientific Atlanta (Govt. Products Div.) GPD-111. A surplus dealer friend of mine got it in a batch of stuff. This is a multimode (AM, USB, LSB, BFO); variable: a) Detector Freq, Signal Threshold, IF Shape; it has selectable: AFC & Squelch; an intelligent 40 Character LED Dot Matrix Alpha-numeric R/O; it tunes 700Hz-> 100KHz with either 10Hz steps, or FAST (whatever that is-I can't really discern the steps) or keypad freq entry.

Initially we were told it was a \$25k rcvr, but when the SA guy returned the call, it was quoted as having a current price of \$35,000. The initial reaction of the guy at SA was: "Where did you get that?! I think it's a current product, and still [highly] classified(!). Before I can give you any info on it, I'll have to consult my boss." Turns out he CAN sell me a manual, but it's \$350. The unit "tunes" straightforwardly enough that I think I can manage w/o one, but I'm still going to ask around.

Pictures are on the website under: Main
> Ham Radio
> Boatanchors
> Receivers
> GPD-111

Ed Tanton N4XY <n4xy@arrl.net>

Website: www.qsl.net/n4xy

"Do what's right. You'll please some people, and amaze everyone else."

Mark Twain

premium-rx-digest Saturday, April 8 2000 Volume 01 : Number 070

Date: Mon, 27 Mar 2000 11:41:15 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member Matt Stutterheim

Gentlemen:

Matt Stutterheim is our newest member; although born in South America, Matt now resides in the New York suburbs with wife and two teenage daughters. If you visit Matt's home you will find 90 receivers in his collection. And just how does he justify so much hardware to his wife? . . . He tells her, "that's only one new radio every four months!" Presently his primary receivers are: RA 6790 and a Skanti 5001.

His career(s) have spanned from being an radio announcer in Washington-Baltimore and New York City, engineering director of a Russian radio network, and chief engineer of several paging companies in the US, Russia, Poland and South America. He is the founder of the "M Street Journal", a radio broadcast industry information source, and he developed in the 1970s one of the early versions of

telephones for aircraft. His radio interests are primarily digital modes, military aircraft, and AM Dxing of European stations.

Matt is one of the "leading contributors" of material to Fred Osterman's book. Fellow listee Fred defines Matt's activities in another way. . . he says "Matt is the number one" contributor. Either way, I think most of us have a copy of the "bible" within reach.

Not one to be single minded or focused, Matt is into music and is currently involved in producing and issuing a CD of music played by Polish-born pianist Maryla Jonas.

You can drop an e-mail to Matt at: Radiomatt@aol.com

Greg

Date: Mon, 27 Mar 2000 12:36:45 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Daniel Robinson

Gentlemen:

Our second new member today is Daniel Robinson. Dan acknowledges what we all know and suffer from. . . . radio addiction. Presently he has a pair (Stereo?) of WJ 8718A's as well as: R8, NRD 525, SP600 21A, a pair of 51J4's, and three HQ-180s.

Dan was a foreign correspondent and 20 year veteran broadcaster of the Voice of America. He was the former Bureau Chief in Bangkok, Thailand responsible for Southeast Asia and East Asian coverage, and former Bureau Chief in Nairobi, Kenya for East Africa. Currently, he heads the VOA's Burmese broadcast service.

He has been listening to SW since the late 1960's when he used an antique Pilot Radio (with the tuning eye in the middle) which he still has.

Originally from Levittown, Pennsylvania, Dan presently lives in Rockville, Maryland. You can contact Dan directly at: Daniel Robinson [darobin1@excite.com]

Welcome to the group, Dan. I assume that we will all start paying better attention when the Burmese news shows up on VOA.

Greg

Date: Wed, 29 Mar 2000 20:25:40 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: My Goof, #2 (I hate it when it happens)

Gentlemen:

It has been pointed out, properly I might add, that I omitted Michael Browns Email address in his introduction. Some have accused me of having a senior moment, others just say I have it in for the elite Mackey drivers???

Not a problem: to placate all you Mackey operators out there, Mike can be reached at: piggin@mindspring.com Please note, I have no idea what "piggin" is all about, and I ain't going to ask!!!!

Greg

Date: Sat, 01 Apr 2000 10:14:26 -0800

From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Paul Bernhardt

Gentlemen:

Paul Bernhardt, KF4FOR, is our most recent member. He holds a PhD in EE from Stanford and did his undergraduate work at UC Santa Barbara (ed note, this is a town and campus worthy of stopping to enjoy if you are driving between LA to SF. The freeway blows right by the place, however, it is well worth the time to stop and smell the flowers).

For the past ten years, Paul has worked for the U.S. Navy at its Naval Research Laboratory in Washington, D.C. Prior to this, he could be found in New Mexico at the Los Alamos National Laboratory. His area of interest is ionosphere research.

Paul is another one of our members that enjoys a large number of receivers. When I asked Paul if I could publish the entire list he gave me the go ahead, with the caveat that it be noted he is always looking for manuals (and I assume willing to assist others?).

If you have a manual for one of those listed as "need manual", I am sure Paul would like to hear from you. He can be reached at: Paul Bernhardt <bern@ppdu.nrl.navy.mil>

Receivers:

Cubic 3030 w/manual Rockwell-Collins HF-8050, HF-8054 w/manuals Rockwell-Collins 651S-1 w/manual Collins 51S-1, 51S-1F, 51S-1B w/manuals ICOM R-71A, R-7000 need manuals RACAL RA-17, RA-17L w/manuals RACAL RA329A need manual RACAL RA3794 w/manuals RACAL RA6217 w/manuals RACAL 6790/GM w/manual RACAL 6793-3A need manual RACAL 6831 need manual HARRIS RF-590A w/manual Rohde&Schwarz EK07 w/manual Siemens E311b w/manual TMC GPR-91RXD w/manual Telefunken E127KW/5 w/manual TEN-TEC RX-330A w/manual Watkins-Johnson WJ-8718A need manual

Current Project: HF-5020 transciever by Harris

Date: Sat, 01 Apr 2000 10:39:09 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Membership List

Gentlemen:

Once in a while I am asked who are the members of our Premium-Rx List. I started to keep and publish such a list, but do to time limitations, I pulled the plug on the project. The last time I worked on this was about a year ago when the membership was less than 50. The results of this work is still on our WebSite.

Members (and only members) can petition the List's unix server and obtain a list of the membership. To do so, send an e-mail to: Majordomo@kahuna.sdsu.edu. Leave the subject area blank. In the message area state: who premium-rx

Greg

Date: Sat, 08 Apr 2000 12:57:53 -0400
From: "R. Makul K1XV" <k1xv@nac.net>
Subject: Prem-Rx: R-390 large scale restoration project forming

Hello Group:

I am trying hard to navigate my way through the waters of the premium receiver list without landing on the rocky shoals of the no advertising policy.

I spoke today to friend-R390/R390A restorer extraordinaire Rick Mish of Toledo Ohio, who did an excellent job restoring my R-390A a couple of years back. Rick has located a large number (about 20) of R-390 (not R-390A) receivers from an estate. He says that are in quite good starting condition. He would like to purchase all 20, fully restore these units, and sell them to appreciative nuts like ourselves.

To go forward, Rick is trying to get the necessary "critical mass" of firm commitments to ascertain if he can go forward. Anyone with an interest or seeking more information can e-mail me, and I will send you Rick's phone number.

Hope I didn't run aground....73

Ray Makul K1XV

premium-rx-digest Wednesday, April 19 2000 Volume 01 : Number 071

Date: Sat, 08 Apr 2000 12:13:37 -0700
From: John R Bookout K7JB <k7jb@uswest.net>
Subject: Re: Prem-Rx: R-390 large scale restoration project forming

You forgot the price Rich wants!

John

Amateur Radio Since 1958 Asst. Dir. NW Div ARRL Collins Collectors Association MEMBER AC99-0989 QCWA LIFE MEMBER "John R Bookout K7JB" <k7jb@uswest.net> "John R Bookout K7JB" <k7jb@ptld.uswest.net>

Date: Sat, 8 Apr 2000 17:43:59 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: R-390 large scale restoration project forming

No, he did the listing correctly.

List etiquette says you contact this individual for further details, offline from the list

Date: Sun, 9 Apr 2000 17:59:17 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: [none]

Question ?? Has anyone found or have experience with a cabinet for the HARRIS 590 series receiver....thank you mac/mc

Date: Sun, 9 Apr 2000 19:46:28 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Prem-Rx: Re: your mail

Hi,

Premier Metal Products has a series called "Trimline" if memory serves. Reasonable appearance at standard rack heights and your choice of nn colors. They also have other series which you might prefer. Pretty well built; rails front and rear for the Harris supplied slides if you have.

I used to have some gear racked in one; no longer have cabinet, but now I have 590.

Have heard that Harris sold a "desktop" case, but have never seen.

Believe that a small (yuck) fan might be useful to promote some convection and exhaust, especially if you get a cab which just fits.

www.premiermetal.com

The guys from Mars who try to abduct me every night own the company and I hold a big stake; when I'm pitching a tent or planting tomatoes.

73,

Date: Mon, 10 Apr 2000 00:22:10 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Fw: mail failed, returning to sender

- > of an outboard ant. relay and a speaker mute of some type...the speaker
- > mute
- > ckt. within the 590 seems to be of a high /lo logic and not conducive to a
- > closed set of contacts that would be actuated during xmit, and open during
- > receive...

A little reed relay should do it.

- > any one know why
- > Harris provided this receiver with so MANY audio output ckts..

My guess is that the 590 is designed to be able to be used as a "system" receiver, remotely controlled by computer and line level audio output. The "system" interface seems as robust as the operator interface.

- > One more question ?? any of you have experience with the optic wheel and the
- > stiff or loose feeling as you tune thru the various freq's

I'm not sure what you're asking; are you saying your tuning wheel feels uneven?

It is a quadrature optical encoder, detects movement only. It should be pretty loose. If yours gets stiff, it could be binding. The shaft might have gotten bent or the bearings might have gotten damaged.

Peter

Date: Tue, 11 Apr 2000 08:30:11 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: List Announcement

Gentlemen:

Two items of interest-

1) Jim Pruitt (WA7DUY) has volunteered to bring our membership List up to date as well as do some digital house cleaning on the website that Larry authored some time back. Jim is a colleague on the

faculty of Central Washington University (<http://www.cwu.edu>) Ellensburg, Washington. I am amazed at his workmanship thus far, in fact he has already assembled a complete list of all the members, and he will be forwarding it to your attention in the near future. THANK YOU JIM!

2) We have lost a member or he has moved to a new server. Our lost member's last mailing address was: wwatson@mmcable.com . If you know the present address for Mr. Watson, please drop me a post.

That is it from here. Sounds like you Harris 590 guys are about to wrap some metal around your receivers. Glad to see the List is working for you.

Greg K6QPV

Date: Tue, 11 Apr 2000 15:39:46 -0400
From: "Mike Taylor" <mvtaylor@voyager.net>
Subject: Prem-Rx: RF 590A cases

I seemed to have missed this whole discussion. Is someone arraigning a buy of cases for the 590A? If they are I would like in for four. two 590A's and two Racal 1792's which I believe will fit.

Date: Tue, 11 Apr 2000 13:16:02 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: RF 590A cases

Mike:

I suggest you, and others interested in the 590A case discussion, contact List member Mac McCullough at: w5hpm@airmail.net

Greg

Date: Wed, 12 Apr 2000 23:45:49 -0600 (MDT)
From: Don Moman <ve6jy@freenet.edmonton.ab.ca>
Subject: Prem-Rx: DX Listening Weekend in Alberta

Just in case someone from Edmonton (or driving distance thereof) is subscribed to this and doesn't already know, we're having our Spring listening weekend in a few days. Pull an overnighter or drop out for a short time and meet everyone. There's still a few unused outputs on the antenna multicoupler so bring a radio and join in.

I've just finished wiring 6 of those nice RCA 32ch multicouplers (most modified for 16 channels to reduce heat, and with auto bypass relays) into a matrix of six 6 way BNC antenna relays, all remotely controlled from each listening position. That will give everyone a choice of either the 4-30mhz log periodic or any of 5 beverage directions.

For premium rx drivers, this may be one of the largest gatherings of privately owned HF-2050's in the world - somewhere in the low double digits expected. With those plus those multicouplers, there will no need to run the furnace - but with the weather forecast of snow and -10C all that heat won't go to waste.

Contact me for more details and a map if anyone is interested.

73 Don Moman ve6jy@rac.ca <http://www.andor.net/ve6jy>

VE6JY Don Moman email: ve6jy@freenet.edmonton.ab.ca Box 127 Lamont, Alberta email forwarding: ve6jy@rac.ca CANADA T0B 2R0 (780) 895-2925

Date: Thu, 13 Apr 2000 13:22:58 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: ITT MACKAY MARINE 3020A RECEIVER

Hi, Does anyone know of a website with a manual or other info for the above receiver, or has anyone in UK got a manual that I can hire to photocopy, all replies much appreciated, as I have just bought a dead one, and would love to get it going. Any replies much appreciated, Dave

Date: Wed, 19 Apr 2000 21:41:53 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: [none]

Well I finally have a TENTATIVE ship date from Harris on the DESK CABINET for the 590 series, and today received several other parts that were ordered at the same time...the cabinet ship date is early this JULY...so after receipt and a little reverse engineering effort I would expect early FALL for follow on cabinet delivery's...I still expect the cost to be in the \$200-250.00 range...and actually we can make several modifications for anything in the 5.250" front panel height, I speak of the depth differences as between the say the 590 and the WJ , or whom ever...so if you have any serious interest lets talk about it and see what we might be really getting into...thanks mac

premium-rx-digest Friday, April 28 2000 Volume 01 : Number 072

Date: Thu, 20 Apr 2000 23:04:12 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Re:2050 Power Supply

Fellas, a while back some of you were going to work on the possibility of updating the HF-2050's power supply to something more upto date and cooler. Has anyone made any progress in this regard? Don (Moman), didn't you volunteer a 2050 in this regard?

.....Walt Salmaniw (owner of three hot running 2050's, and summer's coming!).

Date: Fri, 21 Apr 2000 05:50:35 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Re:2050 Power Supply

Hi Walt, I think I'm the guilty party. Unfortunately, I sold my 2050 before I got around to the project. (Needed to free up some money for a W-J HF1000). If you remind me (again!) about the power supply voltages, I'll check on commerical switching supplies. As I recall, the voltages are +12V and -12V, but they might be +15V and -15V. My W-J receiver uses a commerical switching supply module, which supplies +12V and -12V, so it's possible it might be a drop-in substitute. I'll have to check for sure, once I know the voltages needed by the 2050. In any case, I don't believe upgrading the power supply with a commercial substitute should be difficult. Jameco sells a bunch of switching supplies with different voltages, and they're very inexpensive, so possibly one of those would do.

By the way, my latest receiver project is rehabbing a Drake MSR-2. It's taken awhile, but I've got it working great. To my good fortune, I even rounded up a spare set of circuit boards and nixie tubes for it. I'm not sure how long I'll keep it (I was mostly interested in learning about its design), but I've really enjoyed the project. The MSR2 makes a great LF receiver in the 10-500kHz range, since it has

a separate very high quality preselector for the low frequencies. It divides the 10-500kHz region into 4 separate bands. Neat receiver.

Regards,

Jim Garland W8ZR

Date: Fri, 21 Apr 2000 13:41:13 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- John England

Gentlemen-

If you're in the suburban Chicago area, start looking for a 1939 Lincoln Zephyr Coupe with the license plate reading "Pentode" and you will see John England, our newest member. In fact, his e-mail address is: pentode@home.com. Just so we don't forget the import things here, John also drives a Racal 6790GM and a Collins-Rockwell 2050.

He admits to a "deep personal interest in the history of technology, especially early radio" which is probably a by-product of his vocational area of work and an interest in SWLing since the early 60's. John's background is patent law with special interest in the technical field of communications. He went to DC to become a communications lawyer with the FCC, but after divestiture of "mother" Bell, went into patents and has enjoyed it ever since. Prior to starting his private practice, he worked for AT&T Long Lines, Martin Marietta, Marconi Avionics, NOAA, Motorola, and others for about twenty years.

He was with USACEEIA, i.e. Communications Electronic Engineering and Installation Agency, (ed note: a brain trust in HF) at Ft. Huachuca, AZ. and the US Army Signal Center, Ft Monmouth, N.J. Major interest was over the horizon HF radar work, Wullenweber antenna propagation analysis, RFI, and RFH work.

Like many members of the List, John is a member of the Antique Wireless Assoc. However, I happen to know he has this desire to run his fingers over a Rohde and or one of the later Plesseys. Gentlemen-any suggestions?

Please drop John a note at "pentode@home.com"

Greg

Date: Fri, 21 Apr 2000 15:23:22 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: List Information-

Gentlemen:

- 1) Oops,I goofed- In today's introduction of member John London, I incorrectly stated his e-mail address. John's correct address- pentodes@home.com Additionally, I may have biased his bio a little toward his work as a practitioner of the law, when in fact he is an electrical engineer by training.
- 2) The List should be aware of the work on our web site being undertaken by member Jim Pruitt. Like Larry Gadallah, VE6VQ, who originally authored our web pages, Jim is about to publish its 2nd. I have been privy to his efforts and have already forwarded some of the files to individuals. My thanks to Jim and Larry.
- 3) Jan mailed me from Vancouver, B.C. regarding the guidelines for making commercial announcements. I am sorry there is some misunderstanding on this issue. Basically: If it is premium related and if the price is discussed off line, ... and it is legal, go for it!

4) Have a great weekend

greg

Date: Fri, 21 Apr 2000 22:38:16 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Oooops^2

Often I get a response from a member regarding the content of something I posted to the List. Some of these are off-the-wall funny which I would love to share with you, however, this is a technical forum not one of the many joke threads that are typically passed around. I broke this policy only one time when I posted Steve Stutman's bio, which was a classic. Well, here is number two-

Prologue- When I posted John ENGLAND's bio this morning I incorrectly noted his e-mail address. So, dutifully, I posted a correction of the e-mail address. . . but this time renamed him "JOHN LONDON".

Epilogue- John's reply to me-

Greg: John London is a common twist on my name; also John France, John Ireland, but never United Kingdom.

Regards, John United Kingdom aka England

Just call me- Greg "Oooops^ 2" Bailey

Date: Sat, 22 Apr 2000 17:39:27 -0400
From: Geoff Greer <greer86@attglobal.net>
Subject: Prem-Rx: Inductuner maintenance

Hi,

What's the recommended way of cleaning and lubing the inductuners used in some of the older WJ stuff. I've got the recommended lube Tunerlube by GC (per an old WJ tech I met a couple of years ago). I do remember him telling me to be very careful around the wipers, but I remember what he said about cleaning and applying the lube.

TIA Geoff

Date: Sat, 22 Apr 2000 18:04:03 -0400
From: Geoff Greer <greer86@attglobal.net>
Subject: Prem-Rx: Ooops ^3 Inductuner maint

Hi,

What's the recommended way of cleaning and lubing the inductuners used in some of the older WJ stuff. I've got the recommended lube Tunerlube by GC (per an old WJ tech I met a couple of years ago). I do remember him telling me to be very careful around the wipers, but I remember what he said about cleaning and applying the lube.

TIA Geoff

Actually what I meant to say is that I don't remember what he said about cleaning and lubing the tuners.

Geoff

Date: Sun, 23 Apr 2000 17:11:36 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Almost free offer to 2050 drivers!

Fellas, I had a patient make up a small box of plexiglass tuning knob aids, a la John Bryant's idea, which greatly eases tuning the receiver. I have a few extra, and can offer them first come first served to whomever wants one. All I ask is a SASE be sent (or if you don't have access to mint Canadian stamps 1\$ US). Please email me so that I can reserve one for you before sending anything. Thanks. Just a way of giving something back to a group that has been exceptionally helpful to me.

Thanks to Jim Garland, I've acquired two new power supplies which appear to be perfect for the 2050, and hopefully much, much cooler. Looking forward to retrofitting it into one of my 2050s. More later!

.....Walt. Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia
DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers:

Rockwell/Collins HF-2050 (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC
NRD 535D, and Kenwood R5000.

Date: Fri, 28 Apr 2000 13:57:47 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: Cubic RX Manual

Folks

I just purchased a nice Cubic 3030 receiver---no manual. Can anyone help me out? Will of course pay all repro costs, etc etc.

Much appreciated.

John England

premium-rx-digest Friday, May 5 2000 Volume 01 : Number 073

Date: Fri, 28 Apr 2000 12:08:44 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Cubic RX Manual

Joe I have a CUBIC 3030A manual somewhere - its only a copy so quality of a second generation may be less than you expect. More than happy to have a local Kinkos make you a copy and ship it. Let me know Don -

Date: Fri, 28 Apr 2000 20:58:12 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Cubic RX Manual

Will have to find out.

The manual is about 3/4 inch thick with many many foldout circuit diagrams of size 10 1/2 x 14. It is a ****copy**** of Issue 3 of February 1986 for R3030A and R3030B of the R3000 family (all of this family shared the same specs according to the frontspiece). There may still be copyright issues(?) although I

see no copyright notice. (Can't imagine they'd have a problem with a discontinued receiver...it avoids them dredging up old manuals)

Not sure on postage to Canada..

Any other takers - I can take it down to the local copy shop and see what they will charge - I'll be happy to do it as long as I am reimbursed for your costs (I would expect to see the shop charge a labor cost for unfolding and copying each of the insert pages as well as binding). Some people were surprised at the expense when Walt Salimaw had the Collins 2050 reproduced...about \$70 in cost plus shipping. Its about the 75% of that thickness.

How many others? Don

Note that the pictures on the first few pages may not copy a second time very well...

Date: Fri, 28 Apr 2000 23:42:45 -0500
From: IPAssets <pentodes@home.com>
Subject: Re: Prem-Rx: Cubic RX Manual

Don

Thanks for the kind offer---But does anyone on the list have a first generation that we can get copied-- Don's is a copy, and we will prevail on his good nature if no one can help. Lets hear from y'all. Much appreciated.

John England

Date: Sat, 29 Apr 2000 06:25:39 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Cubic RX Manual

A Professor in San Diego may have one.

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Fri, 05 May 2000 23:52:47 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Paul Wende

Gentlemen:

Paul Wende adds his name to our List. Paul is the fourth List member living on that small island up in the north west called British Columbia (the others being Jan, Walt, and Nick). The last time I announced one of them joining the List I happened to mention he was an "Oak Leafer" versus a Maple Leaf type. My error almost caused an international incident, heck I feared we would witness an invasion of the red coats all over again. Now that spring is upon us, I am sure they have forgotten the entire issue. And to show them there is no hard feelings from those of us to their south, I was thinking we should send them that "I Love You" note that has been circulating recently???

In any event, Paul has been "radio active" for the past 30+ years. He has a technical degree in Telecommunications and has been actively building electronics of all types for 25 years now. However,

he admits his interest in receivers is relatively new. As an audiophile he is specifically interested in the quality of audio available from various radio designs.

Among other receivers, Paul is interested in the ITT MacKay 3021A which he states has an extremely complicated digital synthesizer (mid 70's TTL) with several loops and a very nice RF section. From the archives of our List he notes that many of the members operate 3031A's and wonders if there are any 3021 owners? He has manuals and is willing to exchange ideas.

Paul Wende can be contacted at: pwende@aimtronics.com, or by listening on the bands for VE7KHz
Paul, welcome to the List.

Greg

premium-rx-digest Monday, May 15 2000 Volume 01 : Number 074

Date: Fri, 05 May 2000 23:56:21 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Page Added of Website

Gentlemen:

Just a short note to check Jim Pruitt's work on our Website. He has updated the membership list and added some pictures.

You can see his work at: <http://kahuna.sdsu.edu/~premium/members.html>

Thanks again Jim for your efforts.

Greg

Date: Sat, 06 May 2000 10:59:23 -0400
From: Geoff Greer <greer86@attglobal.net>
Subject: Prem-Rx: WJ 8610A help needed

Hi,

Do any of the WJ people have either an 8610A-1 or 8610A-5 controller? I'm looking for updated Eproms for my 8610A-5. BTW, an 8610A is a controller for WJ 8615/8617B/8618B/8619B receivers. It will control 14 of them.

Regards, Geoff

Date: Sun, 7 May 2000 10:04:08 -0600 (MDT)
From: Don Moman <ve6jy@freenet.edmonton.ab.ca>
Subject: Prem-Rx: Collins HF-2050 memory loss

One of my A-2 control boards for the HF-2050 will not retain any memory information for very long. As short as 30 minutes will do it. A properly functioning A-2 will retain the info for quite a while - some of them still had the military frequencies in when I got them.

My question for the group is how does the unit remember this info? - which hopefully may lead to resolving my problem. I swapped the static ram chip (U-18) from a known good A-2, but no improvement. Is there some sort of capacitor (I see no battery in the parts list) keep alive voltage?

C154 looks like maybe a candidate but the parts list says it's only .1 uf at 5.5vdc. That seems illogical or a misprint - .1 farad would be likely. In fact checking the board I can see a .1F marking on the cap.

Guess I have answered my own question, but will post anyway in case others may have the same problem sometime.

73 Don VE6JY

PS The .1F cap was replaced and the memory held overnight, so that is a good sign.

VE6JY Don Moman email: ve6jy@freenet.edmonton.ab.ca Box 127 Lamont, Alberta email forwarding: ve6jy@rac.ca CANADA T0B 2R0 (780) 895-2925

Date: Sun, 7 May 2000 12:23:44 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Collins HF-2050 memory loss

It's also possible there is a drain on that cap. There may be a leaky bypass cap, dirt on the PC board, or even a leaky isolation diode. These possibilities should also be checked.

Date: Mon, 08 May 2000 08:29:25 -0700
From: John Reed <jreed@ponca.net>
Subject: Prem-Rx: Harris RF-590 Design Flaw

Recently I became interested in the filter rejection on my RF-590. I measure this parameter using an audio frequency spectrum analyzer. When tuning the signal generator into the stopband of the filters, I can see the response of the receiver to the rejected signal. To my surprise the rejection seemed to level off at only about 40 dB down to the same signal level response in the passband. This is very poor rejection. Other receivers showed around 70 dB rejection on this test.

In discussions with Dallas Lankford, who has a spare RF-590A filter board we discovered that the circuits that control the switching diodes for the filters has been changed from the 590 to the 590A. There must have been an error in the design of the 590 IF filter board that was corrected in the 590A.

My solution to this was to build my own IF filter board using relays and a front panel filter switch (installed where the squelch control used to go). This way I have control over all filters in any reception mode. Rejection has improved 30-40 dB with this modification. It is, however a lot of work to build a new board.

If you are planning to buy a Harris receiver, try to find a 590A.

John Reed

Date: Mon, 8 May 2000 08:50:09 -0500 (CDT)
From: parnass@lucent.com (Robert S Parnass)
Subject: Re: Prem-Rx: Harris RF-590 Design Flaw

From: John Reed <jreed@ponca.net>
> Recently I became interested in the filter rejection on my RF-590. I
> measure this parameter using an audio frequency spectrum analyzer...

Where is the AF spectrum analyzer connected?

If you connect it to the audio output, you would be viewing the combined responses of the IF, detector, and audio stages.

Bob Parnass, AJ9S parnass@bell-labs.com

Date: Mon, 08 May 2000 18:05:25 -0700
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Harris RF-590 Design Flaw

Robert S Parnass wrote:

- >
- From: John Reed <jreed@ponca.net>
- > Recently I became interested in the filter rejection on my RF-590. I
- > measure this parameter using an audio frequency spectrum analyzer...
- > Where is the AF spectrum analyzer connected?
- > If you connect it to the audio output, you would be viewing
- > the combined responses of the IF, detector, and audio stages.

When I listen to the radio, that's what I hear, and that's what I want to improve. Do you have another method of measuring this parameter? As far as I can see, the IF amp, detector and audio stages have no way of creating the leakage if it doesn't come through the filter to begin with.

John Reed

- > =====
- > Bob Parnass, AJ9S parnass@bell-labs.com

Date: Tue, 9 May 2000 07:30:41 -0500 (CDT)
From: parnass@lucent.com (Robert S Parnass)
Subject: Re: Prem-Rx: Harris RF-590 Design Flaw

John,

I wondered if your audio frequency spectrum analyzer might have an upper frequency limit high enough to display the receiver's low IF directly.

Then you could quantify the IF and audio stage responses separately.

Hiss, whine, and other noise observed at the audio output can be produced by leakage from sources other than IF leakage, including CPU and display logic, BFO, etc.

I'm not writing specifically about the RF-590 here but receivers in general.

Bob Parnass, AJ9S parnass@bell-labs.com

Date: Tue, 09 May 2000 18:24:55 -0700
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Harris RF-590 Design Flaw

Robert S Parnass wrote:

- > John,
- > I wondered if your audio frequency spectrum analyzer
- > might have an upper frequency limit
- > high enough to display the receiver's low IF directly.

No, it only goes to 50 kHz. I do have an HP 141T system that would do it however.

- > Then you could quantify the IF and audio stage responses

- > separately.
- > Hiss, whine, and other noise observed at the audio
- > output can be produced by leakage from sources other
- > than IF leakage, including CPU and display logic, BFO, etc.
- > I'm not writing specifically about the RF-590 here
- > but receivers in general.

For a bit of background on this problem: We have a local AM station here on 1230 kHz, and I use a weak station on 1240 as a test. All the receivers I've tried on 1240 were roughly the same except the RF-590. It was much poorer. I wanted to find a test that would quantify this problem. I tried measuring in band IMD, phase noise, and any other test I thought might be relevant but this test with the audio spectrum analyzer showed the problem clearly. It also shows the effect of the new IF board. None of the other tests pointed to the problem or its solution. In fact, in band IMD on the Harris is one of the best, and the synthesizer noise is in line with other receivers.

By the way, the best receiver on this test is my NRD-525 with the ESKA plam board. Those two cascaded filters in USB mode make the filter leakage non-measurable on this test. The synthesizer phase noise is larger than the leakage.

John

 Date: Wed, 10 May 2000 06:34:29 EDT
 From: Radiomatt@aol.com
 Subject: Prem-Rx: Lightning protection

We all have expensive radios that should be protected from lightning; even nearby strikes can burn out a front end, which in the case of certain Racals may not even be available.

There's a company offering lightning warning service by pager (if you have an alpha pager you get a message notifying you of nearby strikes...determined by geographic coordinates).

Would hooking your pager to a relay that (1) unplugs the power source (2) grounds the antenna (3) shorts the antenna input provide any sort of protection?

 Date: Wed, 10 May 2000 15:50:15 +0200
 From: KuD-BS@t-online.de (KD Elektronik GmbH)
 Subject: Prem-Rx: lightning warning

Dear friends, I have seen two different systems of lightning warning. One at a medium wave radio station and another at a TV transmitting site with several transmitters, microwave links etc.. Let me describe the two systems very briefly:

1. The system consists of a wire antenna, about 20 m long, 10 m high, well isolated, and an electrostatic voltmeter connected to ground. If a charged cloud approaches, a charged cloud of opposite polarity is in the ground. The charge on the antenna does not change. The voltmeter will show a voltage, which can be several thousand volts. From the reading one can predict whether a stroke will happen or not. The voltmeter can be sensed by photo diodes and can then disconnect the antennas from the receivers.
2. This systems consists of a whip antenna on a tower with a very sharp tungsten needle on top and a vlf receiver. If a high fieldstrength builds up, there will be a discharge at the needle (corona or elms fire) and in the vlf receiver a howling sound can be heard. This signal is very loud and appears abruptly. This signal can be detected somehow and initiate the disconnecting of all other antennas. The needle should be made of tungsten, because all other metals will work only once.

But beware, protection against the damage of lightning strokes is not that easy. In most cases the damage is not done by the direct stroke, but by vagabounding currents in the ground. If a stroke goes down the current flows radially from or to the point of the stroke. The current in the ground causes a voltage drop along its way which can be in the magnitude of a few thousands volts. If this current flows through your house from one side to the other, if there are more than one ground connections, you will have some work to do. I have seen one case, where all power outlets and all cables were blown out of the wall and almost all equipment was damaged completely.

Good luck and 73s

Hans-J. Kneisner

Date: Wed, 10 May 2000 17:36:11 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Brazil

Gentlemen:

I have been contacted by a DX Radio Club in Brazil (Clube DX-ista da Amazonia <http://www.cdxa.cjb.net/>).

I am going to make an "administrative decision" and invite them to join our List EVEN though there is some question as to the "Premium-ness" (NRD545 and R8) of their receiver/s. Although this will be a club, only their club e-mail address will be recognized by our server so their "club membership" will equate to one person.

I trust this action will meet with the approval of the general membership?

Thanks, Greg

Date: Wed, 10 May 2000 21:07:14 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Lightning protection

Seems too complicated. How about an antenna relay, powered by the receiver, that disconnects and grounds when the receiver is off? That should protect against almost everything except a direct hit.

The Harris RF-551B preselector has reasonably decent input protection, they should have put that in their receivers.

Peter

Date: Fri, 12 May 2000 10:25:42 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: Battle of the RXs

Hello Group!

Well this is my first post being a new member and I hope I am not going to knock over a hornets nest. I spent the last few nights reading all of the archived posts and was not able to find any real comparisons of the premium receivers we cherish. I wonder if it a reasonable request to ask the list members' opinions, pros/cons of their favorite RXs. My listening habits include short-wave broadcast and high quality audio recovery from SSB and AM modes in the ham bands. I have yet to do any 'serious' DXing but look forward to it when more time becomes available.

Maybe one of the more senior members could prescribe a format for the reviews.

This review will help formulate my decision on which radio I would like to purchase which is why I have requested some detailed information on them.

Receivers I am considering are:

Racal 6790GM Racal 1792 Harris RF-590 Harris RF-550 Collins 2050 WJ 8711/HF-1000 WJ 8718

etc. You get the idea. By the way, if anyone has one of these or similar for sale, or knows of one, I would like to hear about it please. (off line of course)

Kind regards to the group and thank you for welcoming me into the fold.

73

Paul VE7KHz

Date: Mon, 15 May 2000 08:14:03 -0400
From: "Mike Taylor" <mvtaylor@voyager.net>
Subject: Prem-Rx: ICOM 9000

I realize that this receiver may not qualify; however, I do know that quite a few list members have them. The 9000 has at least one major problem-- It heats up like a toaster with normal use. The folks at ICOM seemed to have given very little time to thermal concerns. I have recently got back from Robert Sherwood my 9000 with a "new" modification which includes a heat sink and an attached muffin fan. The receiver now operates at near room temperature. This is probably the biggest favor you can do for your 9000.

BTW Last year I had the filter mods done and bought a synch detector for the receiver. I can not overstate the value of these mods. Turned a very good receiver into a great receiver.

TNX Mike Taylor

premium-rx-digest Thursday, May 25 2000 Volume 01 : Number 075

Date: Mon, 15 May 2000 14:02:21 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: Battle of the RXs Part II

Hi again group. Thank you those who replied to my query last week.

I have tentatively settled on a RACAL 1792 which I found. I would now appreciate any info that you could pass on to me about this radio, good/bad points, things to watch out for etc. I am still willing to look at others but at this point I really like the 1792 at the price it is being offered at.

Thank you again for helping out.

Regards,

Paul Wende VE7KHz

Date: Mon, 15 May 2000 16:30:29 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: ICOM 9000

At 08:14 AM 5/15/2000 -0400, Mike Taylor wrote:

> I realize that this receiver may not qualify; however, I do know that quite

> a few list members have them. The 9000 has at least one major problem-- It
> heats up like a toaster with normal use. The folks at ICOM seemed to have
> given very little time to thermal concerns. I have recently got back from
> Robert Sherwood my 9000 with a "new" modification which includes a heat sink
> and an attached muffin fan. The receiver now operates at near room
> temperature. This is probably the biggest favor you can do for your 9000.

So, the HF-2050 is not the only receiver with a heat problem! Incidentally, had a look in mine. The power supply comes out easily enough, but I'm somewhat reluctant to experiment with a couple of recently purchased power supplies. I suspect the amperage is inadequate for the job (1 and 6 amps). If someone is really keen on experimenting, I'm willing to share one. Let me know.

.....Walt.

Date: Mon, 15 May 2000 19:42:04 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Prem-Rx: R-9000 test data

Test data on Icom R-9000 run May 15, 2000.

Measurements made at 14.210, 14.215 and 14.230 MHz

Noise floor, 2.4 kHz bandwidth: -131 dBm Dynamic range, 20 kHz spacing, 2.4 kHz bandwidth: 93 dB Third Order Intercept, IP3 + 8.5 dBm

Noise floor, 500 Hz bandwidth: -136 dBm Dynamic range, 20 kHz spacing, 500 Hz bandwidth: 97 dB Third Order Intercept, IP3 + 9.5 dBm

Dynamic range, 5 kHz spacing, 500 Hz bandwidth: 71 dB Third Order Intercept, IP3 -29.5 dBm

Test equipment used to make the above measurements: Signal generator #1: HP 8662A (very low phase noise synthesized generator) Signal generator #2: HP 8663A (very low phase noise synthesized generator) Buffer amplifiers: HP and Mini-Circuits (8447A and ZHL-32A) Signal combiner or coupler: Mini-Circuits (ZSC-2-1 or ZFDC-20-5) Attenuators after combiner: HP 355C & 355D

Tests were run with two tone test levels of 0 dBm, -10 dBm and -20 dBm feeding the HP attenuators. Test results were essentially the same, +/- 1 dB on dynamic range. Highest 20 kHz CW bandwidth dynamic range measurement was 97 dB. Lowest measurement was 95 dB. Both types of combiners work well as long as the attenuation following the combiner was 20 dB or more to provide good termination to the combiner. If a poor match terminates the summing device, the directional coupler appears to provide better isolation than the hybrid combiner.

Date: Mon, 15 May 2000 19:30:13 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: Racal 6790GM vs 1792

Hi group,

It's me again, with one more query about Racal radios. It has been mentioned to me that the 6790GM and the 1792 are more or less the same inside with only a different front panel. I don't want to make any decisions on which radio to buy until I get a little more info on the actual differences in these 2 rigs. It seems odd to me that if they are indeed the same internally, why the large discrepancy in the market price.

Look forward to your replies, and again, thanks for all of the input.

regards,

Paul VE7KHZ

Date: Tue, 16 May 2000 09:43:35 +0200
From: Karl-Arne.A.Markstrom@telia.se
Subject: Prem-Rx: RA1792 and RA6790

Hello gang,

I have both receivers both in my shack and in the HF equipment at my job.

The differences between the two receivers are mainly in the control system, and that the RA6790 has a 1 Hz tuning resolution as standard, and, in the RA1792 LF coverage down to 10 kHz is factory provided

The RA1792 has 100 EEPROM based memories, organized into 10 banks of 10. Also the remote control systems are very different, asynchronous ASCII for the 6790 and synchronous "SCORE" for the 1792.

In the RA1792 LF coverage down to 10 kHz is standard.

Otherwise the receivers are quite similar electrically and performance-wise.

73/

Karl-Arne Markstrom SM0AOM

===== Senior Radio Engineer Maritime Networks Telia Mobile AB
Nacka Strand Sweden Phone +46-8-6017171, Mobile phone +46-70-6636575 Fax +46-8-6017959

Date: Tue, 16 May 2000 06:25:18 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: RE: Prem-Rx: ICOM 9000

Dr. Walt:

Ah, I am in question..... In your last e-mail I got the part about you having purchased some power supplies, and that you are not "keen" about experimenting... BUT I am confused on the part: "I'm willing to share one. Let me know"

My point of confusion is: (1) are you will to share one of the three 2050 or (2) share one of the power supplies?????

Greg :-)

Date: Tue, 16 May 2000 16:31:51 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: HARRIS RF590A

Hi, list, Can anyone offer me any tips, hints, pitfalls, or other things to look for when buying a HARRIS RF 590A, all replies gratefully received, Dave

Date: Tue, 16 May 2000 17:24:45 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: HARRIS RF590A

It's a great receiver. Some people don't think so, but the A version is definitely better than the straight 590. Make sure the display looks good, those VF displays are expensive and difficult to find. Find out if the unit has the filters you need. The preselector is not really necessary unless you live near some big transmitters, as it reduces sensitivity a bit. If you intend on controlling the receiver with ASCII you will need the latest firmware (\$75 from Harris, but there is a \$300 minimum order). If you can, check the receiver for the usual signs of abuse or damage (it's quick and easy to open the covers), and check that it receives.

The military R-2368B is the same unit, but standard options are different.

I've seen the 590A go for as low as \$2500, and I heard one went for upwards of \$5000. I got mine for \$3000 and it is in mint condition. The mil version can be sometimes had for as low as \$2200, look around. Price new is around \$14,000 from Harris, and the 590A is current production. Harris has been very helpful to me and fully supports this radio, even if you're just an individual.

Toronto Surplus (Michael Marchand) and Murphy's Surplus Warehouse (Mike Murphy) are two places that have sold these, both are good and fair people to deal with.

Good luck,

Peter

Date: Tue, 16 May 2000 20:20:31 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: HARRIS RF590A

I'll second Peter's glowing recommendation.

I have the 590A version, purchased from Toronto Surplus. The people were easy to deal with and I had no problems with getting the material from Canada into the USA via UPS. I have no personal usage of either the original 590 nor the variant (one is on ebay right now - do a search). I've also dealt with W.J.Ford with similar excellent results (never dealt with the other place mentioned by Peter)

If you were to purchase, and wished to do the control, I'd be willing to go in to purchase the latest firmware to meet the minimum (with 2 we are halfway there --- if only 2 that's only 150 each out of pocket rather than 300 :-).

I have found that the 590A works extremely well with the SE-3 borrowed off another premium receiver.

Good hunting - its an excellent receiver! Don Oregon - - - -----

Date: Thu, 18 May 2000 16:33:36 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Katsumi Goto

Gentlemen:

I would like to welcome Katsumi Goto to our List. Katsumi is located in Japan and recently was in contact with Jan (member located on Vancouver Island) where he heard of our List.

Katsumi operates a number of pieces of equipment, including a Collins-Rockwell 2050 and a WJ-8716. In addition to his Premium interests, he generates RF under the call letters of JA2DHX.

Please drop Katsumi a welcome note at: gon@my.email.ne.jp

Greg

Date: Mon, 22 May 2000 00:22:29 EDT

From: Daiungoed@aol.com
Subject: Re: Prem-Rx: HARRIS RF590A

Dear list, Many thanks for your replies to my questions about anything to look for when buying a HARRIS RF590A. I have managed to get hold of one now, and although not really familiar with using it yet, am absolutely delighted with it. It has the preselector option, which is a real bonus for me, lots of industrial QRM where I live. It seems a little quirky compared to what I am used to, especially having to move the cursor to underneath the correct digit when tuning, but I am more than willing to learn. I do not think there are many of these in UK as no-one ever seems to mention them. Does anyone know if there is anywhere on the web that I can get a circuit diagram for the preselector, as it is not covered in the manual I had, probably because it is an option, also, the noise blanker seems to be an option, as it is not mentioned anywhere but in the list of options, and does not do anything on my set. Is this correct?? All replies much appreciated, Dave

Date: Thu, 25 May 2000 16:15:06 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Spamming of List

Fellow members:

I have received an inquiry from a member of our List questioning if I, or other List members, have been receiving an increase of SPAM since joining the List?

There are few things in this world that "grind my teeth" more than spam. As a University professor my mail address is listed publicly so I get this QRM by the basket full. SPAM, according to US News and World Report, now takes up about 10% of all bandwidth on the internet. What a waste.

In your opinion, if you have witnessed a increase in SPAM since joining the List, and think it may be related to List membership. . . . I would like to know about it.

Thanks Greg

premium-rx-digest Friday, June 2 2000 Volume 01 : Number 076

Date: Fri, 26 May 2000 01:45:08 -0000
From: "W. Charles Alexander" <chalexand@columbus.rr.com>
Subject: Re: Prem-Rx: Spamming of List

Gerg et al: I have not seen any increase in my "junk e-mail" since I joined the list. I have received a good number of interesting posts, and want to thank all who post here. A good thing to remember is, if you do much in the way of posting to news groups, that is a big way to increase your "SPAM".

=====
73 de charlie W. Charles Alexander E-Mail chalexand@columbus.rr.com Web Site
<http://home.columbus.rr.com/wca/> KC8IKG 39.951 N 83.124 W Monitoring the World from Columbus,
Ohio USA Collins HF 2050, Drake R8B, Yaesu FT-847, FT-100 Alinco DJ-X10, Icom R-2,R10,
Uniden BC-235, Yaesu VX-5R Antennas: 33 Ft Off-Center Fed Dipoles, 45 Ft Longwires Slinky
Dipole, a Dressler ARA 60 Active Antenna and 2 Radio Shack Discones (All In Attic)
=====

Date: Thu, 25 May 2000 22:37:47 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: Spamming of List

No new or ADDITIONAL spam reported here SIR !!!!

Date: Fri, 26 May 2000 11:38:31 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: list members residing in Hawaii

Any Oahu members on the list. We may be moving there and I've got a lot of questions :-) - -bob

Date: Fri, 26 May 2000 10:22:24 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: 6790GM filter questions

Hello Group,

I have a question about the filters in the RA6790GM. I am looking at buying one from a fellow who doesn't know much about them. (which makes 2 of us) I would like to know if one can tell by the LCD display which filters and bandwidths are installed or do you need to go inside and remove the cover? Also, for USB and LSB, are there 2 different filters for this or are both modes shared by a common filter with the LO changing freq to effect USB or LSB? The fellow can't get the cover off of the board but can see under the edge that there are 4 metal cans. The LCD display says 1Khz, 1.8KHz 3KHz, 7KHz and 18KHz.

Can the radio electrically determine which filters are installed, and thus display the correct bandwidth, or is this something the operator programs after installing the known filters?

A prompt reply would be helpful as I am trying to close a deal before he leaves for holidays.

Thanks all,

Paul Wende

Date: Fri, 26 May 2000 17:41:20 -0300
From: Djaci Franklin <djaci@amazon.com.br>
Subject: Prem-Rx: Secrets.

to the users of the 545,

The blockade of listening in the cellular band it is done in the main board of the receiver, and not in the VHF Converter. Does anybody know as unblock this receiver? Would it be necessary to change the ROM? I await contributions.

73's

Djaci Franklin Silva Electronic Engineer and ShortWave Listener WRTH Contributor

Receivers: JRC NRD-545 DSP, Drake R8-B Antennas: Grove Mini-skywire, Electril DF1/160m, VHF whip Tape Recorders: National RQ-2102, Sony TC-1150

<http://www.cdxa.cjb.net> <http://www.amazon.com.br/~djaci>

Date: Fri, 26 May 2000 22:10:08 EDT
From: Daiungoed@aol.com
Subject: Re: Prem-Rx: Spamming of List

Hi, No increase in spamming here, and I would notice, as I almost never get spams, Dave

Date: Fri, 26 May 2000 22:33:50 -0500
From: "Robert Nickels" <ranickel@mwci.net>
Subject: Prem-Rx: Official, at last...

Hello all,

When I first heard of this list a few months ago, list manager Greg kindly offered to let me "stick my nose under the tent", even though I didn't own one of the "premium" receivers...yet...

That deficiency was remedied today, when a Racal 6790/GM (R-2174) arrived. While it isn't perfect, the price was right and so far I'm pretty impressed. It joins the basement fleet of vintage "junk" which includes some other interesting receivers, such as the Mackay 3020A, 3021A, and 3010B, R-390A, 390, and 389, Racal 17 and 6217, ACL SR-502-1, Eddystone 958/C, Dymek DR-44 and Sylvania WLR-6 - plus a bunch of others that come under the general category of "boatanchor"...

I am definitely in need of a replacement for the "mode" (left-hand) LCD display for the 6790 - can anyone suggest a possible source? Also, the fault LED is lit, and I get a BITE failure for "2nd Mixer PLL Unlocked" but since the manual only deals with board swapping, I'd love to talk to someone who knows these receivers and could help me figure out this problem. At first, there was an awful FM-ing quality to the SSB and CW audio, but this seems to have healed itself. And a couple of filters (it's full-up with 7) weren't being recognized, but after running the BITE a couple of times, that seems to have straightened out too.

And since one of my main interests is Low Frequency DX-ing, I'd really like to find someone who could burn me a set for the LF ROMs (or better yet, just e-mail me with the hex files so I can burn my own).

Gee, I think I kinda like these newfangled receivers that test themselves! And especially when they seem to fix themselves too ;-)

73, Bob W9RAN

Date: Fri, 26 May 2000 23:53:45 -0400
From: "Ed Tanton" <n4xy@att.net>
Subject: RE: Prem-Rx: Official, at last...

Hi Bob... you can most likely get one from my friends Bob Garcia and Allen Bond (they sell and service RA-6790s and other surplus goodies.) Allen has a website at: <http://www.mgs4u.com> .

73 Ed Tanton <n4xy@arrl.net> K2# 0057 (FT)

Technical Editor QRP ARCI "QRP Quarterly"

website: <http://www.qsl.net/n4xy/>

Date: Sat, 27 May 2000 17:17:49 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: 600 ohm transformer

Folks, a question that has probably already been asked and answered. I am looking for a source for a high quality 600 ohm to 8 ohm audio transformer, which I am sure numerous of us have serious need for with our rigs. All help much appreciated.

Regards, John England

Plessey 2282A, Harris RF590A, R390A, Collins HF2050, Mackay 3031.

Date: Sun, 28 May 2000 05:44:17 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: 600 ohm transformer

Hi,

Antique Electronic Supply of Arizona; has a good one made by Hammond and used by many.

They are www.tubesandmore.com, I believe. Should be possible to order online.

Fair Radio Sales usually has a smaller one used in speaker for R-392; but it has less power capability and BW.

GL,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Sun, 28 May 2000 11:53:23 +0200
From: Christer Bergstrom <christer.bergstrom@adsum.pp.se>
Subject: Re: Prem-Rx: 600 ohm transformer

Hello John and all others.

Antique Electronic Supply, <http://www.tubesandmore.com/> have those transformers. Pnr: P-T119DA I uses one myself and I am pleased with the performance.

best regards

Christer Bergström Viker Sweden

Date: Sun, 28 May 2000 05:50:05 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: 600 ohm transformer

I have an abundance of these...the little army bracket speaker # and I forget the numbers each has one of these inside rated at 2 WATTS and is a sealed xformer plus the speaker is a 4" PM water proof thing..I have about 50 of these \$13.00 shipped, or if you just want the xformer \$10.00 shipped...the actual xformer is about 1.250 dia. and 2.00 in height and as I mentioned a sealed unit with solder lugs brought out...mac now for the trivia....I use the speaker units [2] on my John Deere mounted up on the ROPS bar and just go blasting along as I mow my yard as most car systems are 8 ohm, the unit sans the xformer and of course painted JD green, they mount real well on the tractor...and as I am a Harris 590 freek , the unit mounted front panel speaker does not give me enough room filling volume so I use the units as additional room filling sound sources as well...remember the 590 has 4 ea. 8 ohm outputs as well as that many 600 ohm outputs....huh , sorry I didn't hear you, the damn volume was up...mac -

Date: Sun, 28 May 2000 06:02:57 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Cabinet update

I forgot to mention that the HARRIS 590 size cabinet has been produced and back here for actual verifying of fit and dimensions..it looks very nice, I will post a few pictures if that is allowed, and assuming the B/W is available from this reflector...so I would guess that within the next 45 days we will be ready to ship cabinets..does anyone want to include any other receivers, i.e.. WJ CUBIC whatever...thanx..mac

Date: Sun, 28 May 2000 07:59:27 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: RE: 600 Ohm Help Crowd

Many thanks to all those kind folks who responded to my query for a 600 to 8 ohm audio transformer. Much appreciated.

John England

Date: Sun, 28 May 2000 11:19:27 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Prem-Rx: RE: 600 Ohm Help Crowd

One more suggestion on transformers: An often overlooked solution to the 600-Ohm output dilemma is the public-adress-system line-to-voicecoil transformer. Typically the secondaries are marked in understandable and useful impedances like 4, 8, and 16. However, the primaries are reckoned in Watts drawn from a 70.7-volt low-Z source. A 10-Watt primary connection is a good match to 600 Ohms. The Radio Shack 32-1031 (\$5.99 anywhere) is such a unit that performs well. (OK, it's not flat down to 20Hz, but neither is the output xfmr in your receiver.)

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Sun, 28 May 2000 11:27:41 -0400
From: "Mike Taylor" <mvtaylor@voyager.net>
Subject: Re: Prem-Rx: RE: 600 Ohm Help Crowd

If I am repeating sorry for the BW. About two years ago the Hammarlund Corporation did a special run of these on request of several members of the R390 group. They were sold by Antique Radio. I have a couple of them around here somewhere. Mike Taylor

Date: Wed, 31 May 2000 06:23:53 -0400
From: Geoff Greer <greer86@attglobal.net>
Subject: Prem-Rx: WJ manuals needed

Hi,

I know this is kind of old for this group, but, I'm looking for the manuals for a WJ RS160 system. It covers 2 mhz to 1 ghz using 7 tuners and some versions could be computer controlled. I especially need the system manual and the SM7301A SDU manual.

Thanks, Geoff

Date: Wed, 31 May 2000 17:37:52 -0400
From: "Mike Taylor" <mvtaylor@voyager.net>

Subject: Prem-Rx: Harris RF-590A AM Filter

I need to know either the Harris or Filtronics part number for the optional 3.2 KHz AM filter in the above receiver. I would appreciate any help offered. Mike Taylor

Date: Wed, 31 May 2000 15:12:28 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Martin Colby

Gentlemen:

Our newest member, Martin Colby, inquired about membership approximately 10 days ago. Being up to my pits in academic alligators (finals and commencement week at the university) I didn't get back to him immediately. However, I finally responded to his request and now find that he lives about 3 wavelengths (low frequency) from me in San Diego. In fact, we can probably have an eyeball from antenna to antenna. Small world-

Martin checks in with a Racal as well as some boat anchor stock. He purchased his Racal approximately two years ago, but only recently has he found the time to fire it off and start to enjoy it. This brought him to our Website, the archives, and the rest is history. Presently his interest in the Racal is limited to SWL activity.

As an "Air Force brat" (that is a slang term for a dependent of the military, in this case the Air Force) Martin has bounced from billet to billet. Including time in Izmir/Ankara Turkey (66-72) as well as Sussex, Munich, Redlands (Norton AFB), Tokyo, London (graduate school), and so on. Mind you, these were not in order, just to illustrate one's ability to be bounced around. He actually claims the state of New Mexico as home, even married a native of the state. Presently, Martin is a computer consultant in such things as SGML, obal/dispersed systems, etc.

I hope some of you Racal drivers of the List will give him a welcome e-mail at : Martin Colby [mcolby@cts.com]

Greg

Date: Wed, 31 May 2000 15:44:35 -0700
From: Martin Colby <mcolby@cts.com>
Subject: Prem-Rx: Radio Shack "Magic Speaker" on clearance! (Good Price)

Greetings Premium-Rx'ers:

Prior to applying to the group, I checked the archives of Prem-Rx group and noted the following message from Chuck Rippel (included below) regarding a recommended comm speaker: Radio Shack model PRO X44AV, cat # 40-2080/2081

I was intrigued so I checked online Radio Shack web catalog (it was not there). To make a long story short, this speaker is discontinued, but available at some Radio Shack outlets on a close-out price. (Apparently Radio Shack is discontinuing their home-brand speakers, replacing them with ones from RCA.)

Close-out price in San Diego is \$19.97 (original price was \$59.99).

They look great to me, so I bought a pair. (I thought the rest of the group might be interested as well.)

Only difference between model numbers is color: #40-2080 is black, #40-2081 is white.

(The RS store on Rosecrans & Midway seems to be the only store in San Diego that has them.)

Note: I have no business interest in Radio Shack (just a customer). Thought I'd pass along the info in case other readers are interested... Hope I'm not violating any rules with this...

The original Prem-Rx message on these speakers (from Chuck Rippel) is included below.

Cheers,

Martin

----- Chuck's Original Message ... - -----

From: "Chuck Rippel" <crippel@erols.com>
Subject: Prem-Rx: Radio Shack "Magic Speaker" back in stock !
Date: Fri, 5 Feb 1999 23:19:19 -0500
Next Article (by Date): Re: Prem-Rx: Radio Shack "Magic Speaker" back in stock ! "Walter (Volodya) Salmaniw, MD"
Previous Article (by Date): Prem-Rx: DSP and Analog receivers John Reed
Next in Thread: Re: Prem-Rx: Radio Shack "Magic Speaker" back in stock ! "Walter (Volodya) Salmaniw, MD"
Articles sorted by: [Date] [Author] [Subject]

Some may remember that about 5 years ago, Radio Shack marketed a 2-way speaker using a driver alignment consisting of a 4" woofer and 1" dome tweeter. There was also a rear panel mounted bass port which I believe to be the secret to this speakers easy driveability at the typical 1-2 watt power levels found in most communications receivers. The combination of the port and use of a 4" low/mid frequency driver (4" drivers disperse the human voice nearly perfectly, according to James B. Lansing Sound, JBL). All were mounted in a black aluminium cabinet 7"(T) X 4-1/2" (W) X 4-3/8" (D including grill). This was the model PRO-7, catalogue # 40-2066 closed out at the price of \$39US.

This speaker was well known as being the top choice when used as an external speaker in combination with about any radio receiver. Unfortunately, Radio Shack stopped marketing this model just after it "caught on" in the radio hobby community.

The speaker has returned ! Radio Shack has re-introduced this exact speaker (as near as I can tell) as the model PRO X44AV, cat # 40-2080.

I removed the grills from both it and one of my older PRO-7's and examined the drivers closely. Both the all important 4" low/mid driver and 1" dome tweeter appeared virtually identical in both the speakers. The rear firing bass port, cabinet dimensions and even the cabinet bolt alignments were also identical.

The only difference I saw was the the older PRO-7 weighs 4-1/2 lbs (2.1 kilos) and the new PRO XV44 weighs slightly more at 4-7/8 lbs (2.25 kilos). The power handling specs have been stated a bit differently with both speakers having a "power handling" of 50W RMS but the PRO XV44 has an additional, "maximum power" rating of 100W (no RMS referred to). Thus, a reasonable conclusion might be that there is a slightly larger magnet in the new PRO VX44 4" driver to accommodate the "additional" power headroom.

I connecting both to my KWZ-30 and R8B, I would say they sound virtually identical.

If you have access to a Radio Shack, I highly recommend one. BTW, they are on sale just now for, you guessed it, \$39.95.

++++
++++

Date: Thu, 01 Jun 2000 14:00:16 -0700
From: jan@skirrow.org
Subject: Prem-Rx: ITT-Mackay KW Transceiver

Hello all ...

I think this qualifies as a premium radio.

If anyone is interested in acquiring a premium kilowatt Mackay station, including the MSR8000 transceiver, MSR-1020 kilowatt Linear, MSR-6212 Power Supply and the MSR-4030 automatic antenna tuner, all cables and manual, send me an email and I'll provide info.

Jan Skirrow, VE7DJX

Please note the new URL for Boatanchor Dreams:

<http://www.skirrow.org/Boatanchors/>

Also, my new e-mail address is:

jan@skirrow.org

Date: Fri, 2 Jun 2000 11:53:50 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: ...with both feet and a hand!

Hi Group!

Well I have done it. I am now a full fledged Pr-RX owner. In the last week, I have done some shopping and have jumped in with both feet. A number of radios are currently in transit to me. Racal RA1792 Racal RA6790GM and my first arrival this morning....my Collins 2050! Yes. I am excited!

I bought the 2050, full well knowing that it was dysfunctional. A mighty brave act I now hear. The fellow said it wasn't working but that the fault light didn't come on. My first thought was the fault LED was burnt out. hi hi Anyway, long story getting shorter....I plugged it in this AM and sure enough it didn't work. I twiddled knobs, pushed buttons etc and managed to get some noise out of it. Everything seems to be working, all LCDs, push buttons cycle thru all functions etc, except it doesn't receive any signals. (a key function in a receiver) Further investigation and a large smile later, I managed to get it receiving the local AM broadcast stations, and quite well I might add. Unfortunately, it doesn't RX much above 2MHz. In fact all WWV freqs are silent. No other stations seem to come in above 2MHz. I have yet to receive a manual but is there something relatively simple whereby the signals are split inside and I might just have a defective RF amp or xstr in the upper signal areas, if there is indeed a broadcast "section"? I'm sure I'll be able to fix it once I RX a manual but until then....any idea?

I really look forward to hearing from you. I have already started my search for a fan and have downloaded most suggestions from the groups' archives.

Thank you and regards,

Paul Wende

premium-rx-digest Saturday, June 10 2000 Volume 01 : Number 077

Date: Fri, 02 Jun 2000 14:36:39 -0500
From: IPAssets <pentodes@home.com>
Subject: Re: Prem-Rx: Radio Shack "Magic Speaker" on clearance! (Good Price)

Chicago area is similar availability; found a pair pretty easily, but all locations are down to display models (unused on shelf). They will ship to you UPS no charge. Go to Rat Shack's web site for local locations, even directions.

John England + + + + + + + + + + + + + + + + +

Date: Fri, 02 Jun 2000 16:13:20 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: HF2050 audio

Folks

I have been trying to pull audio off of J7 on my 2050 with no luck. There are at least four pins of 600 ohm and 8 ohm available according to the drawings, but I am not finding it. What am I missing? Thanks for the aid; feel rather dumb, but do not want to open it up and go spelunking just yet.

John England

Date: Fri, 02 Jun 2000 14:46:06 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: HF2050 audio

At 04:13 PM 6/2/2000 -0500, IPAssets wrote:

- > Folks
- > I have been trying to pull audio off of J7 on my 2050 with no luck.
- > There are at least four pins of 600 ohm and 8 ohm available according to
- > the drawings, but I am not finding it. What am I missing? Thanks for the
- > aid; feel rather dumb, but do not want to open it up and go spelunking
- > just yet.

John, J7 is the preselector control. I don't know anyone who has used it. Why not tap into the audio interface terminal strip?

.....Walt.

Date: Fri, 02 Jun 2000 16:51:18 -0500
From: IPAssets <pentodes@home.com>
Subject: Re: Prem-Rx: HF2050 audio

Sorry for the boo-boo but I meant on a Harris RF-590A receiver; been having too much Collins on the brain. We are talking about J7 on a Harris RF-590A

Thanks again.

John England

Date: Fri, 2 Jun 2000 18:01:22 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: HF2050 audio

I get it on mine. How about TB1? Do you get audio there?

Date: Fri, 02 Jun 2000 20:50:08 -0700
From: Martin Colby <mcolby@cts.com>
Subject: Prem-Rx: Racal RA6790/GM Wisdom Appreciated

Greetings Premium-Rx'ers:

As Greg indicated in my 'intro' message, I've got a Racal RA6790/GM receiver.

Embarassing as it sounds, I've had it for almost 2 years and not done much with it DX-wise (yes, I know).

Upon 'dusting it off', I find that it acts squirrely in starting up. After a few self-tests & some fiddling, it works fine. (I ascribe this to a marginal Ni-Cad 2.4 volt cell in the memory.)

In any case, I'm interested in replacing the [very obscure] GE nicad battery in my RA6790/GM with something more current, as I'm sure that it's 'original issue'.

Would like to replace it with something meeting the following criteria:

1. Provides all necessary power (function fit)
2. Fits in the same place (form fit)
3. Commonly-available unit (sustainable fit ?)
4. Replacement to include compatible socket/holder (maintainable fit?)

Yes, I'm probably fussy, but would like to get a reasonable replacement for the original (& obscure) OEM battery.

Am I nuts? All inputs from you Racal experts most appreciated....

Martin in San Diego

Date: Sat, 3 Jun 2000 10:22:04 EDT
From: DAVEI NBHAM@aol.com
Subject: Re: Prem-Rx: Racal RA6790/GM Wisdom Appreciated

Martin, You are probably right in your diagnosis of squirrely operation on start up being caused by the battery. The easy way to solve that problem is to pop the cover off your radio, remove the board, and unsolder the battery. Take it to your local electronics store and ask the clerk to match it up with something currently being made. There are several exact replacements available. A new battery will cost you about \$6 to \$8. Take your new battery home and install it in your radio and your troubles will likely be cured.

The subject of replacement batteries for the Racal RA6790GM has come up several times on this list in the last year or so. If there is sufficient interest, I could start stocking these batteries but the price would be about double the above what with overhead and postage to contend with. Anyone interested ?

Regards, Dave Holder Biological Instruments, Inc. Birmingham, Alabama

Date: Mon, 05 Jun 2000 19:53:11 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Receiver Website Update

Hi Gang, I've been working on my ham website today (I took the afternoon off from work), and expanded my "receiver" section, which now includes an HF-2050, Drake MSR-2, and several vintage receivers. If you're interested, you can check it out by going to the following URL and clicking on "receivers"

URL: <http://www.muohio.edu/~4cx250b/web/vintage.htm>

Regards,

Jim Garland W8ZR

===== Amateur Radio Website: <http://www.muohio.edu/~4cx250b/web/>
=====

Date: Mon, 5 Jun 2000 19:02:08 -0700
From: "Colin Thompson" <burkec@goldstate.net>
Subject: RE: Prem-Rx: Receiver Website Update

Very nice Web site. I don't think there are many of us with HF2050s that exhibit the microprocessor problems as Jim's unit experiences. Comments?

Colin

Date: Mon, 5 Jun 2000 23:36:27 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: RE: Prem-Rx: Receiver Website Update

Caps in power supply are lose their value over time and become quite leaky resulting in a reduced tolerance to power fluctuations and increased power supply heat Digikey sells good replacements for the electrolytic caps - I have found that simply doing a shotgun approach and replacing all the electrolytic capacitors in the power supply with new units With a cost of under \$40.00 it has reduced the heat generated from the supply and virtually eliminated nuisance shut down, as long as you leave some room for air to circulate thru the receiver.

**Regards Gerald Caouette 9116 - 79 Street Edmonton, Alberta T6C 2R4
de ve6nap@rac.ca**

Date: Tue, 06 Jun 2000 11:51:11 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: Mackay Receiver

Gang

I have decided to sell some of my operating spares. First being a Mackay 3031A fully operational in nice shape. Please contact me offline re same; will offer special terms to members. Thank you.

John England

Date: Wed, 7 Jun 2000 07:54:38 +0100
From: ra1792@pavilion.co.uk
Subject: Prem-Rx: cubic 3030

Hi all, having just acquired a Cubic 3030 dual, I wondered if any member had knowledge of or access to the control software for this radio? Also is this radio current? and finally does anyone have Cubic's address? All help gratefully received! Best Regards Neil

Date: Wed, 07 Jun 2000 08:18:25 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Re: Prem-Rx: cubic 3030

Neil:

Cubic Communication is located in San Diego, California, and is without question active. In response to other Cubic questions on the List, I have published the email addresses of some of their engineering staff.

I am just out the door to a meeting at the University so I can't assist you at present. I will get the data you requested and send it when I get back later tonight.

Be advised, the 3150 presently used by the University is driven by a LabView program Cubic developed.

73

Greg

Date: Thu, 8 Jun 2000 01:47:49 -0000
From: "W. Charles Alexander" <chalexand@columbus.rr.com>
Subject: Prem-Rx: New Web site for HF-2050(Well working on it)

Hello all:

I have registered HF-2050.com and I am working on making a few pages of information for the Collins HF-2050. I also plan on putting some links on it to any pages that are HF-2050 related. So . . . If anyone has any information or links they would like me to put on it , they can E-Mail me. (I will and will naturally credit whoever)

It will take me a bit of time to get it all gathered up, but you have to start somewhere! By the way, as you can tell from my pages that are there I am NOT a Web designer, but it should do.

===== 73 de charlie W. Charles Alexander E-Mail charlie@hf-2050.com Web Site
www.HF-2050.com KC8IKG 39.951 N 83.124 W Monitoring the World from Columbus, Ohio USA
Collins HF 2050, Drake R8B, Yaesu FT-847, FT-100 Alinco DJ-X10, Icom R-2,R10, Uniden BC-235,
Yaesu VX-5R Antennas: 33 Ft Off-Center Fed Dipoles, 45 Ft Longwires Slinky Dipole, a Dressler ARA
60 Active Antenna and 2 Radio Shack Discones (All In Attic) =====

Date: Sat, 10 Jun 2000 14:47:32 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: Yaesu Mark V/FT1000MP

Hi Gang,

This is slightly off topic, but thought I'd mention that yesterday I picked up a new Yaesu Mark V/ FT1000MP transceiver. Although the radio is too new to say for sure, it's design suggests it will likely set the standard for high-end receiver performance. The receiver uses a combination of passive preselectors and front-end filtering, crystal and mechanical filters for the 2nd and 3rd IFs, and DSP filtering for the 4th IF. It tunes 100 kHz - 30 MHz. I added a web page on my first impressions about the radio to my web site, and if you're interested you can check it out at the URL below.

Regards,

Jim Garland (W8ZR)

=====

< bold> < italic> < bigger> New!< /bigger> < /italic> < /bold> < italic> < bigger>
< /bigger> < /italic> First impressions of the new Yaesu Mark V/FT1000MP

<http://www.muohio.edu/~4cx250b/web/markv.htm>

=====

premium-rx-digest Friday, June 23 2000 Volume 01 : Number 078

Date: Sat, 10 Jun 2000 22:54:43 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: WTB 590

Gentlemen-

The List has received a nice note from Howard Ritter (hritter@mindspring.com). He has been looking for a Harris 590 for some time and would like to know if anyone has an extra, or perhaps a lead on where he could obtain such a receiver.

Please drop Howard (N7EXN) a note if you have any information.

Thanks Greg

Date: Sun, 11 Jun 2000 19:50:19 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: 6790GM Dial Lamps

Gang,

Does anyone know the voltage and current for the incadescent lamps in the early 6790GM's? How about a good source? I have a later manual that only shows the LED's.

Thanks, Al

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Mon, 12 Jun 2000 02:12:52 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: WTB 590

I would OFFER ..Toronto Surplus ..I bought recently a good condition unit for the \$2,200.00 price and had the vac/flo readouts changed..and the unit is exceptional..I also bough one of the brand new in the box units that were available for a short time from private sellers and would be hard pressed to show ANY differences between the 2 units...my dealings with Toronto were in April of this year...good luck...mac/mc

Date: Mon, 12 Jun 2000 09:44:51 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: RE: Prem-Rx: 6790GM Dial Lamps

Hi Al,

Just checked my manual and I have an older version. Here is the info you requested.

DS1 thru DS11 Lamp, filament, subminiature Racal # 41019 Type 7720, 18V @ .026 Amp

Hope this helps.

Regards,

Paul Wende

Date: Thu, 15 Jun 2000 12:00:11 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: WTS: <http://www.edebris.com/WJ-9049/>

Sand-State except for displays. Boat Anchor Supreme! Built for Sha of Iran, one of three built, one of one known. Note Farsi on weight warning labels. Nothing in 'Inventory' directory. Will fill as/if time permits. I've come to the conclusion that, while I would love to restore this, it or something else has to go. No manuals but it's all based on WJ's finest as of late 1978. Controller is DEC LSI based and easy to find parts and docs for. Chassis still have WJ seals intact. This gear has not been molested. Linda says she wants to move to KH6 land so <http://www.edebris.com/WJ-9049/> has got to go or one of my other hobbies has to go. \$21k will buy today, including shipping. - -bob

Date: Fri, 16 Jun 2000 08:02:33 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Frank Carcia

Gentlemen:

Frank Carcia is our newest member. Operating a Racal 6830J and a TR-7 as well as a few other boatanchors that would make Rippel happy.

Frank has been a amateur operator since 1966 and is presently working AM under the call of WA1GFZ. When not playing with radios he works for Hamilton Sunstrand in the Systems Engineering Department. You will remember that these are the guys that make the little black boxes that fly around in aircraft?

Frank lives in Enfield, CT. Talk about locations, he presently has a "dream location" about 1,000 feet away from the ocean where he hopes to put up an antenna this year. Let's see, something like an open lot without any buildings, a large salt marsh across the street facing west, and so on.... (Ed note, I live in a condo complex with no antennas allowed. So to speak, I am a closet antenna case).

Other items of interest: he is married, two children a daughter 9 and son 4, AND a basement full of projects sufficient to last many lifetimes.

Frank can be reached at: francis.carcia@hs.utc.com

Greg

Date: Fri, 16 Jun 2000 12:27:38 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: [none]

> Hi Everyone,
> I have a RA6830 with the standard modules. I would like to
> install
> modules from a partial radio that
> have a digital IF with step attenuators on the input board and
> the
> second IF. All of the control signals are
> connect to the processor interface module through the mother
> board.

- > Does anyone out there know
- > if Racal ever produced a model that controlled the digital IF
- > from
- > the processor. This would take the
- > place of the analog AGC. The reason for doing this change would
- > to
- > improve the dynamic range of
- > the radio. It is pretty good stock but can be improved. The WB
- > 6830
- > allowed the control of this
- > attenuator from the front panel input or the remote interface. I
- > don't see any place where the processor
- > control is mentioned. The output level of the IF can be
- > monitored
- > with the Bite signal which is also connected to the processor
- > interface.
- > This would be voltage the processor would monitor to maintain a
- > constant
- > IF output. The AGC attack, hang and release times would be controlled
- > by software timers. My next question is, does
- > anybody have the software or a copy of the source code?
- > I Just want a radio that has more dynamic range than my
- > bread board homebrew machine stuffed in a nice package.
- > TNX,
- > Frank

 Date: Fri, 23 Jun 2000 19:12:01 -0500
 From: "Mac McCullough" <w5hpm@airmail.net>
 Subject: Prem-Rx: Harris antenna tuner help....

Hello all....I am trying / wanting to hook up my HARRIS 601 antenna tuner ..Mike at Murphy's has provided several contacts ..but I am getting kinda desperate...can any of you help and or have a book on this unit that I can beg or copy for a short time..thank you ..mac

 premium-rx-digest Thursday, July 6 2000 Volume 01 : Number 079

 Date: Mon, 26 Jun 2000 08:50:36 -0700
 From: "Greg Bailey" <gbailey@mail.sdsu.edu>
 Subject: Prem-Rx: New Member Melvin E. Parker

Gentlemen:

Melvin Parker joins the List from Dacula, Georgia, a town located about 55 miles north east of Atlanta. Melvin's "Lucent.Com" return address says it all (Parker, Melvin E (Melvin) [mep@lucent.com]), he has been employed for the past 28 year with Lucent Technologies. In addition, many years ago he worked for Federal Electric and its support of the Apollo Program.

Like so many of us, our newest member has been interested in both military and commercial receivers. Presently he has a string of Racals, including a 1796, 6793A-6, as well as a 6790GM.

The Premium-Rx List is composed of approximately equal SWL versus Ham types. Melvin will be supporting the technical SWL half of the team and we are happy to have him with us.

You can contact Mel at the address given above.

Greg

Date: Mon, 26 Jun 2000 09:20:27 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New member- Robert Swenson

Gentlemen:

Robert Swenson, a native of San Juan Capistrano, California (YES, this is the place where the Swallows annually return) is another new member. His QTH is a "great hill", ideally situated for antennas (Ed Note: San Juan Capistrano, the location of one of the original Missions of California, is located in a small valley mid-way between LA and San Diego. It is surrounded by rolling hills, which overlook the Pacific Ocean). His interest in radio started with the construction of a homebrew FM broadcast exciter and its associated linear.

Bob is currently enrolled in the electrical engineering program at California State University (Long Beach) where he is emphasizing in the area of DSP, with some "analog" thrown in for good measure.

Presently, Bob is operating an ITT Mackay MSR 8000, with the accompanying MSR 1020 linear and power supply, and the MSR 4030 antenna coupler.

You can e-mail Bob at: Robert Swenson [swenson@home.com]

Greg

Date: Tue, 27 Jun 2000 11:16:44 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: Racal RA6790 Firmware

Gentlemen,

Does anybody have a handle on the EPROM program used in these receivers. I recently encountered a radio with 100, 10, and 1Hz tuning steps. I'd like to have that feature in my other sets, but the EPROM's don't have extended tuning etc. So here are my questions:

What is the latest known revision of the firmware?

Has anyone hacked the code so maybe we could mix and match features?

Does anyone have source code for the original EPROM's?

I realize there are copyright issues here, but these are 20-year-old machines, and I suspect Racal doesn't really care.

Best regards, Al - -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Tue, 27 Jun 2000 11:24:39 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: Racal RA6790 Features

Looking for documentation for A08070 RF AMP/LPF that installed in my new set in place of the normal A1 LPF.

Is there a noise blanker for these receivers?

Best regards, Al

-- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Tue, 27 Jun 2000 23:33:45 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Thank you all...

Thank you all who have so graciously offered your help and support in helping me get my Harris 601 antenna tuner going...as a BTW Mike and Gene at Murphy's sold and shipped me an exceptional tuner and control head, very very pleasant to deal with....and of course we all know a neat place to visit as well....and that's also where I found the 2 amigos..Ben and Greg..thank you all again...mac/mc

Date: Wed, 28 Jun 2000 17:06:42 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: 590A with 3 pre-selectors??

Gentlemen:

List member Mike Murphy is in Thailand for a two week vacation with his family. He as forwarded me the following question via e-mail:

EVER HEAR OF A MIL VERSION OF THE RF-590A WITH 3 PRE SEL INSTALLED?

Anyone have an answer for the world traveling surplus man :-) ?

Greg

Date: Wed, 28 Jun 2000 21:16:56 -0700
From: jan@skirrow.org
Subject: Re: Prem-Rx: 590A with 3 pre-selectors??

Hi All ... speaking about preselector ...

I just got a bunch of Harris preselectors and not being a Harris insider, I have no idea what radio they were used with, much less exactly what they do.

They are marked

A19 10215-6600 Preselector

Anyone know anything about these???

Jan Skirrow, VE7DJX

Date: Thu, 29 Jun 2000 01:01:16 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: 590A with 3 pre-selectors??

Hi Jan,

Believe you have RF-590 (A) presels.

73,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Thu, 29 Jun 2000 08:04:55 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: 590A with 3 pre-selectors??

Jan follow on...my unit sez the following... nsn 5895-01-289-7939 cage code 14304 mfr p/n 10215-6600 assy preselector contract N00104-92-c-ma92

this is wrapped in an emi foil sensitive bag with a clear vinyl bag overlay....Murphy's has " PLENTY " of them at \$75.00 ea..most of the individual dealers I know are asking \$35.00 ea... as I mentioned these can be retro fitted for a 590 with difficulty bur are a direct fit for the 590A mac

Date: Fri, 30 Jun 2000 01:17:36 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx:

I omitted that of all the 590a preselectors I have seen...all were new and unopened..and that indeed murphy's had ample supply...mac

Date: Fri, 30 Jun 2000 03:01:03 EDT
From: Daiungoed@aol.com
Subject: Re: Prem-Rx: 590A with 3 pre-selectors??

Hi, list, Do these last few comments mean that the preselector was not standard on the RF590A? Mine has one, but it would be nice to know that you had to look inside before buying, as I always do, any comment? Dave

Date: Fri, 30 Jun 2000 09:22:11 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: 590A with 3 pre-selectors??

I guess it depends on what you consider "standard." My understanding from Harris is that most equipment of this sort is ordered on big contracts and each contract is worked out individually in terms of what configuration the receiver will have, then the entire run will be configured that way.

I have seen several different versions of preselector for the 590A but very few receivers without one. That being said, since I have been using the NB switch as a presel bypass, I have not yet found a circumstance where the receiver performance is improved by the presel. Unless you live near some strong signal source, all the presel does is reduce sensitivity by 2 - 6 db.

Peter

Date: Sun, 2 Jul 2000 23:11:02 -0400
From: "Chuck Rippel" <win.308@home.com>
Subject: Prem-Rx: RF-590 Help

Well, my RF 590 has intermittent audio on LSB. The byte test reports back "Assy 05, fault 3" which describes a line level failure. Problem is, it has done that since day #1 and has worked fine.

You can hear a rumbling audio in LSB, there is signal indication as appropriate albiet higher than USB (sounds like an IF or other amplifier operating into an open, unloaded condx).

I have both the military and non-military manuals and went looking.

The LSB path is not well described in the manual. Looks like everything follows a 455 kc path until you get to the product detector and from there, it goes to a processor driven, audio switcher.

It failed yesterday and then just started working again, perfectly. I have a full set of boards but of course, no A5 card. Besides, I'd like to fix this one. This evening, I poked around a boards and the connectors incase there was one that was intermittent. No joy.

Any ideas out there?

- ----- Chuck Rippel

"The two most abundant things in the universe are Hydrogren and stupidity."

Harlan Ellison

Reply to: win.308@home.com - -----

Date: Mon, 03 Jul 2000 08:24:06 -0700
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: RF-590 Help

Do you have the ISB board installed in your receiver? If you do, the problem may be in there. Seems like I remember the LSB going through the ISB channel, and USB going through the regular (AM and CW) channel. When I built my own IF board for the 590, I removed the connection to ISB, and the standard LSB setting no longer worked. I can use LSB just be choosing the LSB filter with my added filter switch and setting the mode to USB (or CW), however.

Later I disconnected the power and control cable to the ISB board and the LSB setting now works (please don't ask me why!).

John Reed

Date: Thu, 6 Jul 2000 08:26:23 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: Fw: Anyone have manuals for Manson MRS400 and/or Manson FRR 'unreadable' see photo

Manson labs. manuals needed.

Hallicrafters name on Vietnam era and later radios? It has been reported that the HT-1 'village radio' (it takes a village to...) was built by them. Well here's some more late model stuff sporting the Hallicrafters name.

| | MRS400 | <http://www.edebris.com/Manson/mvc-003f.jpg> | | FRR 'unreadable' |
<http://www.edebris.com/Manson/mvc-004f.jpg> | | -bob | wb4mnf | | Yes, these are hollowstate
radios, incl the synth. | <http://www.edebris.com/Manson/> | a few additional photos | Apologies for
photo quality. Not enough light in attic. | - -bob

premium-rx-digest Saturday, July 15 2000 Volume 01 : Number 080

Date: Thu, 6 Jul 2000 21:26:34 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Prem-Rx: AOR 7030

Hi All,

Heard some good things about AOR 7030 RX. But unable to A/B against other things like R-390A, RF-590, 6790 etc. I give the greatest weight to actual comparisons. Can anyone on list who has actually used 7030 enlighten me?

Thanks,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Thu, 6 Jul 2000 20:21:02 -0700
From: "Colin Thompson" <burkec@goldstate.net>
Subject: RE: Prem-Rx: AOR 7030

The 7030 Plus is a nice rig that does a very respectful job on DX. The Rippel built R-390As hear better than 7030, for that matter, better than anything I have used. I prefer the HF2050 for SSB although the 7030 is more sensitive. Should you purchase a 7030, send it to Kiwa for the audio mods. Craig's mods significantly improve the audio recovery. Prior to the Kiwa audio mods, my Kiwa modded HF150 had better audio recovery than the 7030.

For every day casual use, I don't believe there is a better RX. My wife loves the remote as do I. If I could have only one, the 7030 would be it. We have it playing 3 to 5 hours every day.

73,

Colin

Subject: Prem-Rx: AOR 7030

Hi All,

Heard some good things about AOR 7030 RX. But unable to A/B against other things like R-390A, RF-590, 6790 etc. I give the greatest weight to actual comparisons. Can anyone on list who has actually used 7030 enlighten me?

Thanks,

----- - - Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."----- - -

Date: Thu, 6 Jul 2000 22:20:52 -0600
From: "SWLDX" <ergo@swldx.com>
Subject: FW: Prem-Rx: AOR 7030

I have compared stock AR7030 against R8B, HF1000, NRD535, RA17 over past 5+ years. * excellent for SWBC listening, esp. fluttering signals with Sync enabled, e.g. AIR, Kol Israel; great fidelity, comparable to Racal RA17, slightly better than Drake and WJ and dramatically better than NRD; * superior sensitivity with low noise, enjoyable SSB/CW listening with good AGC action; However filtering not nearly as flexible as others, and stock filters aren't much use for data or CW; * selectable sideband synch on the R8B beats the AR7030 for rejecting adjacent channel QRM on AM reception; * tone controls really work and do make a difference; * PBS on par with NRD; * don't have many "strong signals" in western Canada, but ultimate rejection and dynamic range seem appropriate for this class of receiver; * much nicer feel tuning knob than Drake, but not as nice as NRD or WJ; * superior computer control capability, slightly ahead of WJ and way ahead of NRD and Drake; however, slow data rate (1200 using byte level control) makes certain tasks much lengthier, e.g., full memory transfer takes minutes versus speedy DMA on Drake.

Of the five, which would I choose if forced to have only one?

CRITERIA SELECTION ===== * CW/SSB: NRD * All Round Utility
RX: R8B * SWBC Listening AOR * peer status WJ * keep Walt Novinger happy RA17

73 John Fallows VE6MBA ERGO Radio Software <http://swldx.com> SUPPORT *
<mailto:ergo@swldx.com> * mailing list - <http://ergoradio.listbot.com/> * MSN Messenger and
NetMeeting via VE6MBA@hotmail.com when available

Date: Thu, 6 Jul 2000 22:26:40 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: AOR 7030

I had heard from another respected source that a long term reliability problem in the 7030 is in the optical encoding of the main tuning knob. Anyone have any data to collaborate this? Don Oregon PS This person had his go bad.

Date: Thu, 06 Jul 2000 23:01:56 -0700
From: Ben Wallace <bwallace@crash.cts.com>
Subject: Re: Prem-Rx: AOR 7030

Info on the '7030 -- including the encoding issue

<http://www.ticon.net/~joelt/ar7030.html>

Ben Wallace WB8HUR -- San Diego

Date: Sun, 9 Jul 2000 18:34:00 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: Hallicrafter offshoot manuals needed. formerly Manson labs manuals needed

Thought that Halli might catch a few of the eyes that skimmed past Manson.

Date: Mon, 10 Jul 2000 00:46:06 -0400
From: "Chuck Rippel" <wa4hhg@amsat.org>
Subject: RE: Prem-Rx: AOR 7030

I concur with Colins suggestion. The KIWA mods to the AOR-7030 are most helpful. The audio is already very good and the KIWA mods bring audio quality and recovery on a par with the R8B. Of course, the price issue comes immediately to play as the various costs start adding up.

Those with JRC-535's will REALLY see a difference with the KIWA mods. "Stock" JRC audio, regardless of receiver model is poor on even its best day. The KIWA changes bring the 535 audio to a point where it is at least listenable for moderate amounts of time.

- > Should you purchase a 7030, send it to Kiwa for the audio mods.
- > Craig's mods significantly improve the audio recovery. Prior to the Kiwa
- > audio mods, my Kiwa modded HF150 had better audio recovery than the 7030.
- > For every day casual use, I don't believe there is a better RX. My wife
- > loves the remote as do I. If I could have only one, the 7030 would be it.
- > We have it playing 3 to 5 hours every day.

----- Chuck Rippel

"The two most abundant things in the universe are Hydrogen and stupidity."

Harlan Ellison

Reply to: win.308@home.com - -----

Date: Mon, 10 Jul 2000 11:43:59 -0400
From: "Chuck Rippel" <wa4hhg@amsat.org>
Subject: Prem-Rx: RE: AOR 7030

I have all and a 7030 PLUS.

These are all good receivers, of course. The AOR's main strong point is good audio but it only on a subjective, slightly better level than the R8B which offers other attributes making it a better value than the AOR. F'instance, the AOR's Passband tuning, IMHO does not offer as much utility as does the one in the Drake.

An undocumented "feature" on the R8B, is to engage LSB. Turn the PBT control clockwise; as you approach 2:30 minimum width is acheived. Going past that point puts you in USB. Thus, the receiver offers full PBT, a very useful feature for the serious SWBC DX'er.

The 7030 is a great leceiver for listening but is unexciting for DX'ing I fear.

----- Chuck Rippel

Reply to: wa4hhg@amsat.org

"The state calls its own violence `law,' but that of the individual `crime'"

-- Max Stirner - -----

Date: Thu, 13 Jul 2000 12:55:52 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Dan Turkisher

Gentlemen:

Our most recent member is Dan Turkisher from the Kansas City area. Dan has worked for Motorola for the past 24 years as an account manager. Specifically he is involved in their land mobile industry supplying communications for fire, police, EMS, rail, etc systems. This means he is generally above 30 MHz when working, but below 30MHz when he is operating his hobby receivers.

Dan operates a Racal 6217/6337, a 6790, an ITT-Mackay 3020A, and a 3021A. His interest in HF communication stems from the 60's and his first ham ticket. Presently he operates under the call of KODAN (K (zero) DAN).

I know we have a bunch of VHF and UHF operators in the membership, I assume Dan has some ideas on those repeater questions you may have????

Welcome to the group Dan!

Greg

Date: Sat, 15 Jul 2000 18:10:53 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: Moving to Hawaii and selling my WJ-9049

I had planned on making this the winter 2003 project as by then my youngest will be off at college. However, spouse Linda, threw a wrench in the works and has taken a job in Honolulu.

Linda relocates this fall and I follow 17 months later in spring 2002 when the youngest kid completes his Jr year in HS.

In any case I'd like to dispose of the system by winter 2002. It's up on one of the auction sites now but I doubt it will meet reserve without much more detailed description and photos.

<http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=381230447>

I have a Wandel and Goltermann selective level meter with a smashed control panel and a SHARC DSP board so still have a RX project, only lots smaller :-)

- bob Atlanta Drake R-7 and some homebrew stuff

premium-rx-digest Sunday, July 23 2000 Volume 01 : Number 081

Date: Sun, 16 Jul 2000 08:40:22 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: Racal RA6778C

Hi Folks

Can anyone help me re a source for a manual/copy for a Racal RA6778C receiver? Very much appreciated.

Regards, John England Racal, Plessey, Harris, Collins, Mackay, etc.

Date: Mon, 17 Jul 2000 21:33:31 -0500
From: "George Wagner" <geewagons@worldnet.att.net>
Subject: Prem-Rx: A modest proposal: Lets add V & U to HF

Hi

I've been a list member for about a year now. In the early days, I eagerly awaited each day's new post. My HF2050 was a new toy then and I enjoyed the great info being posted.

Well, a year later, things on Prem-Rx are pretty slow (I hesitate to use the D-word). So, here's a modest proposal to get the juices flowing again:

Lets open the discussion to premium VHF and UHF receivers as well. I would guess that many of the current members have a box or two around that goes above 30Mhz.....right??? I have a W-J 8628-4 and a Applied Communications SR2153.

Here's some suggestions for brands to include: Watkins-Johnson, Norlin, Applied Communications, Racal, Microdyne, Cubic. Criteria would be the same as for HF receivers, e.g. high performance, limited availability, digital display etc. I'm not aware of any other mail list or newsgroup with similar criteria.

Comments?????

George

Date: Mon, 17 Jul 2000 22:49:39 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Prem-Rx: WTB Lowe HF-150

Looking for Lowe HF-150 and keypad.

Thanks,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Mon, 17 Jul 2000 20:42:18 -0700
From: Martin Colby <mcolby@cts.com>
Subject: Re: Prem-Rx: A modest proposal: Lets add V & U to HF

George:

I (for one), have no problems with your 'modest proposal'...

I'm primarily interested in HF due to my interest in world-wide perspectives. However, I'm prone to interest in UHF/VHF due to my total lack of any knowledge in those areas.

Only hope that we don't become a haven for scanner stuff. (No offense to anyone intended, but the dispatching of cops/ambulances/etc. is just not high on my hit parade...)

So much for my 2 cents worth... Anyone else?

Regards,

Martin

Date: Wed, 19 Jul 2000 11:45:32 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: 1792 FCC type acceptance

Hi Group,

I am need of a quick answer on the following. I have bought a 1792 from outside the country and customs has it and I need an FCC type acceptance number. Does anybody know what it is for the 1792? Would it be the same as a 6790GM?

Thanks for any prompt replies.

Cheers!

Paul

Date: Wed, 19 Jul 2000 13:12:33 -0500
From: Turkisher Dan-CSLC82 <Dan.Turkisher@motorola.com>
Subject: Prem-Rx: RA1792 HELP

Would someone with a Racal 1792 be so kind as to provide me with the FCC ID number from the serial plate?

Thanks!

DT

Date: Tue, 18 Jul 2000 13:21:19 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Premium List server may go down.

Gentlemen:

The "Kahuna" server used for Premium-Rx is presently operating on auxiliary power. The electrical service to the entire engineering building was discontinued this morning when an electronic circuit breaker decided to go down (open).

Hopefully, the replacement (presently being UPS red) breaker will arrive before the generator decides to join the status of the breaker.

Greg

Date: Wed, 19 Jul 2000 20:00:28 -0500
From: IPAssets <pentodes@home.com>
Subject: Prem-Rx: Racal

Hello out there

No avalanche of response yet so am asking indulgence again. I am in need of a manual or copy of same for a Racal RA6778C receiver (or its parent). Will pay all costs/bribes. Thanks much.

John England

Date: Wed, 19 Jul 2000 18:27:12 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: 2nd Request for Help-

Sorry John-

The Premium-Rx server was up and then down, then up and then d---, who knows. Finally we switched back to the power grid at 0900 today and there was a surge that took out the power supplies of 18 Sun workstations! What a mess. Next time, we'll unplug everything before they dump us back on land power.

I trust all is working now, and that someone out there will take a few moments to answer your question regarding the Racal.

COME ON GUYS..... someone has this answer.

Greg

Date: Thu, 20 Jul 2000 09:05:06 -0400
From: Fred Osterman <osterman@dxing.com>
Subject: Re: Prem-Rx: Racal

I have a spiral-bound first generation copy of the Racal 6778 Manual. Specifically it covers the 6778A and 6778B. It is a thick puppy printed in 1978. You can borrow it if you are unable to locate a 6778C manual. Let me know.

Regards, Fred Osterman Universal Radio

-- Fred Osterman E-Mail: osterman@DXing.com Universal Radio Research Web site:
www.DXing.com Universal Radio Inc. Web site: www.universal-radio.com 6830 Americana Pkwy.
Phone: 614 866-4267 Reynoldsburg, OH 43068 Fax Line: 614 866-2339

Date: Sun, 23 Jul 2000 12:47:37 -0700
From: "Don" <ulformat@teleport.com>
Subject: Prem-Rx: Initial review of the TT340 vs HF1000a.

This receiver is excellet. Its a "keeper". Maybe even a new addition to the "Premium list?" (At least the 330 should be there as it is purchased ...allegedly...by NSA)

Don Oregon

premium-rx-digest Sunday, July 30 2000 Volume 01 : Number 082

Date: Sun, 23 Jul 2000 17:36:57 -0700
From: John Reed <jreed@ponca.net>
Subject: Prem-Rx: Racal Manual Needed

I'm looking for a manual (or copy) for a Racal RA6772E. Any help will be appreciated.

I fixed part of this receiver's problem, bad DMOS FETs in the first mixer, but now the AGC system needs work, and it's kind of hard to figure out where all the circuits end up without schematics.

John Reed

Date: Tue, 25 Jul 2000 18:36:30 -0700
From: John Miles <jmiles@pop.net>
Subject: Prem-Rx: HF2050 spares available

Gentlemen:

I've come into possession of a half-dozen replacement keypad PCB assemblies (each including speaker, keypad with buttons, and LCD displays) for the HF2050. Anyone want to take these off my hands as a lot?

Also have one spare 2050 power supply.

All items are believed to be in working condition, but no guarantees as I no longer have a 2050 to test them. I don't know if they are refurbished, removed from service, or what.

If no one here is interested, these items will end up on ebay. Cleaning up my office, everything must go....

- - - tnx es 73 de John KE5FX

Date: Fri, 28 Jul 2000 16:05:55 -0700
From: Robert Swenson <swenson@home.com>
Subject: Prem-Rx: Remote head interface board for I TT Mackay MSR 8000

Hi everyone,

I have been searching for the PC board that allows the ITT Mackay MSR 8000 radios to interface with the full function remote control head. This board piggybacks the front panel display board in the radio. The MSR 8000 manual has no part number listed. If anyone knows of a source for this board, or has one laying around - let me know! Any help would be greatly appreciated!!!

Thanks,

Robert Swenson

Date: Sun, 30 Jul 2000 16:51:53 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Franz Goenner

Gentlemen:

Our newest member is located in Zurich, Switzerland. Franz received word of our List from member Walt Salmaniw in Victoria, BC. Presently Franz is operating a Collins 2050.

He reports he is experiencing some "heating problems" with his new receiver. Franz. . . Welcome to our 2050 family, . . . you will find some past posts in the archives on redesigning the power supply, or the path the majority of us followed . . . finding a very QUIET fan.

I believe Franz is our first Swiss member, and we certainly welcome him to the List.

Greg

premium-rx-digest Sunday, August 6 2000 Volume 01 : Number 083

Date: Sun, 30 Jul 2000 17:05:05 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Franz's E-mail address

Ooops, I goofed. In my introduction of Franz, I neglected to include his E-Mail address:
fgoenner@dplanet.ch

Also I add, his English would make an English teacher blush . . . in fact, the word perfection comes to mind.

Date: Sun, 30 Jul 2000 17:14:43 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: I ncorrect E-Mail Addresses

Gentlemen:

The following E-Mail address are being returned to me because they are no longer active. If you know the whereabouts of the following, please have them contact me so we can update their file.

jmcvein@tinet.ie

mstud26073@aol.com

algo@bellatlantic.net

wnovinger@home.com

Thanks, Greg

Date: Sun, 30 Jul 2000 18:18:14 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Harris Corporation earning \$

Gentlemen:

My silence this past week was due to my traveling though the Buffalo-Rochester-Finger Lake area of western New York. The weather was perfection, humidity was low, everything was green, and an enjoyable time was experienced. While sipping coffee one morning, I found the following article in the Rochester Demarcate - Chronicle newspaper (who said I can't read?).

Quote:

Headlines- Profit at Harris tops \$75 million-

Harris Corp. reported fiscal year-end earnings of \$75.3 million on sales of \$1.73 billion.

That compares with last year's earnings of \$68.7 million on sales of \$1.62 billion. Results exclude one-time charges.

Sales in the fourth quarter rose 16 percent to \$501 million, and operating income jumped to \$35.5 million from \$10.3 million a year earlier.

The company's tactical radio business - which includes Harris RF Communication on University Avenue - has grown, mostly due to the market's interest in the company's multiband, secure radios. Orders for this equipment and other government communication products increased 23 percent in the quarter.

End Quote-

I must also share with you my finding on the following matter: Taking hat in hand, I admit I viewed the Falls at Niagara from the "Oak Leafers" side of the river. A most enjoyable day was experienced, including an open and warm welcome from all those Nancy and I encountered from north of the border. Only one negative experience for the day . . . the greeting we received from the INS agent as we returned to the US. I have witnessed pubescent teenagers present themselves more gracious than this IQ-2 dysfunctional idiot representing my country. A simple smile, a "welcome to the US", would have been sufficient. I am sure he is the bad apple in the pile, but to my fellow neighbors in the north, I apologize for submitting you to even one bad apple. Enough said. I will now dismount my soapbox.

Greg

Date: Thu, 13 Jul 2000 13:40:45 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: Harris Corporation earning

This guy is fast...I encountered him TWICE out in the ARIZONA desert...going to and from the San Diego area...my anglo daughter's deep tan was no help....

Date: Mon, 31 Jul 2000 23:19:49 -0500
From: Turkisher Dan-CSLC82 <Dan.Turkisher@motorola.com>
Subject: RE: Prem-Rx: RA1792 HELP

Hi John...

Thanks for the reply.

I have since learned (from RACAL and other sources) that there indeed was no FCC type acceptance number. Contrary to the Ostermann book, the 1792 was manufactured in England. If it was imported to the U.S., which wasn't likely, most customers would have been government agencies, which were exempt from the FCC regs in any event. I have since been able to import the receiver in question by filling out alternate FCC/customs paperwork in which I agree to comply with Part 15.

All is well, and the receiver is excellent!

Thanks and regards,

Dan

Date: Tue, 1 Aug 2000 14:52:12 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: RE: Prem-Rx: RA1792 HELP

Hi,

Could you identify the paperwork? Might come in handy in future.

thanks,

Date: Sat, 5 Aug 2000 11:51:09 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: MACAY DYMEK DA3

Hi, Can anyone give me some info. on the MACAY DYMEK DA3 , I am not even sure what it is, my guess is a directional aerial, it is built in an aluminium box with wooden sides, about 8 inches square, and 3 ins high, and what is probably a ferrite rod aerial mounted above it on a swivel mechanism, has mains input, and two sockets, RCA at the rear, one to set, and the other to external antenna. I bought it as being broken, very cheap, but I cannot start faultfinding until I know what it is supposed to do, any ideas gratefully received, Dave

Date: Mon, 7 Aug 2000 00:00:51 -0500
From: Turkisher Dan-CSLC82 <Dan.Turkisher@motorola.com>
Subject: Prem-Rx: ITT-MACKAY 3020A/3021A PARTS & BOARDS

I have a ITT-Mackay 3020A which was damaged in shipment. The guts are OK but the case was pretty mangled. Am debating parting it out or repairing (leaning towards cannibalize). Are there any 3020A and 30201A owners out there who would need spare boards or modules? If there is enough demand on the newsgroup I will gut it, else maybe consider repairing. Please advise. Thanks and regards, DT

premium-rx-digest Tuesday, August 15 2000 Volume 01 : Number 084

Date: Tue, 8 Aug 2000 10:45:42 -0500
From: Turkisher Dan-CSLC82 <Dan.Turkisher@motorola.com>
Subject: Prem-Rx: CASE/RACK F/ COLLINS 651S1

Looking for a case or rack mount kit for a Collins 651S1. Anyone have? Tnx DT

Date: Thu, 10 Aug 2000 08:26:16 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: RA6793 Instructions

Can someone slip me a copy of the 6793 operating instructions regarding the memory functions? I have a 6790 manual so I'm under control of most of the rest of the radio.

Regards, Al

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Fri, 11 Aug 2000 19:16:22 -0700
From: Martin Colby <mcolby@cts.com>
Subject: Prem-Rx: Re: [Racal] Batteries for 6790GM backup....

Greetings All:

I toss my reply to Ted on the 'pile' as there seems to be a demand for a solution to the problem of dead/dying Racal 6790GM backup batteries...

Don't necessarily believe that my solution is necessarily 'the best', but do recall the frustration that I felt when I first ran across the problem in my world...

If I've screwed up somewhere in my suggestions, please don't hesitate to set me straight!

Questions, comments, outrage, and/or angst? Speak, or forever hold your peace... < G >

Cheers,

Martin

> Date: Thu, 10 Aug 2000 19:52:28 -0700
> To: "Ted & Linda Minchin" <tedm@xtra.co.nz>
> From: Martin Colby <mcolby@cts.com>
> Subject: Re: [Racal] Batteries for 6790GM backup....
> Cc: Gordon Stewart <gdstew@mb.sympatico.ca>
> Would strongly concur with Gordon's reply to you regarding replacement of 6790GM backup battery.
> I had the same issue to deal with recently on my 6790GM and initially wanted OEM replacement.
After doing some research, looking around inside, reading info from fellow owners, etc., I came to following conclusions:
> 1. Original battery is an 'oddball' which would be difficult & expensive to source.
> 2. Original battery location is poor as vapors/emissions from degraded original batteries have a tendency to damage circuit board traces near the battery location. (My machine had early indicators of this damage, including heavy leakage within the confines of the DS25D packaging). I've heard of others with more significant damage.)

> My solution was to purchase a 2 N-cell battery holder along with two N-cell nicads. I located the holder in the unused space normally occupied by the ISB option board, well away from the circuit boards in my 6790GM. (If you have the ISB option, you'd have to find a different location.)
> Advantage of solution is that batteries are located away from boards, battery replacement does not involve soldering (I'm using a pretty nice aluminum snap-in battery holder), and battery type is 'somewhat' standard (N-cell). If you wanted to be even more standard, I'd imagine that you could use AA or AAA sizes with the same approach (I wanted form factor to remain relatively small).
> Hope that this info is of help to you...
> Regards,
> Martin Colby
> San Diego, California

>> Date: Thu, 10 Aug 2000 19:41:36 -0700
>> From: Gordon Stewart <gdstew@mb.sympatico.ca>
>> X-Mailer: Mozilla 4.05 [en]C-SYMPA (Win95; I)
>> To: "Crossland, Shawn" <Shawn_Crossland@racalcomm.com>
>> CC: Ted & Linda Minchin <tedm@xtra.co.nz>, racal@qth.net
>> Subject: Re: [Racal] Batteries for 6790GM backup....
>> Sender: owner-racal@qth.net
>> Reply-To: Gordon Stewart <gdstew@mb.sympatico.ca>

>> Hello all. The bat. I removed from my 6790/GM is a General Electric
>> DATAENTRY, DS25D, and the Radio Shack CR2/3AA is not even close. I would never put
>> a bat. back on that card in case it leaked again! 73 Gord ve4gs.

>> Crossland, Shawn wrote:

>>> All,
>>> According to the Technical Manual we have here on the RA6790, it used a 2.4
>>> V Nicad with a part number of DS25D. I took a quick look through the
>>> RadioShack.com catalog and they sell a 2.4 ni-cad in a CR-2/3AA package. I
>>> do not have any pictures of the battery in the radio however, there is one
>>> at Radio Shack's online catalog. Check out
>>> [http://www.radioshack.com/ProductCatalog/ProductDetail/Index/1,2098,,00.html](http://www.radioshack.com/ProductCatalog/ProductDetail/Index/1,2098,,00.html?SKUString1=960&SKUString2=0388)
>>> ?SKUString1=960&SKUString2=0388
>>> The catalog says it's a CR2/3AA package but the picture at the website is
>>> different. I do not know which picture is correct. Perhaps someone could
>>> follow up.
>>> Good luck.
>>> -Shawn

Date: Sat, 12 Aug 2000 13:55:06 -0400
From: James Goodwin <j.goodwin@sympatico.ca>
Subject: Re: Prem-Rx: Re: [Racal] Batteries for 6790GM backup....

I agree with Martin. Five and a half years ago, I replaced the original GE nicad battery in my 6790GM with two 1.2V no-name French-made nicads in series, located in the ISB board space. Having no information on drain and recharge specifications for either the old or the new, I opted for batteries that were described as suitable for low drain applications and that had a total physical volume greater than that of the old battery. The replacement batteries are still going strong and have never been measured at less than a full charge.

I've read in an ARRL Handbook that nicads, with careful handling, should be good for more than 500 discharge/recharge cycles. Mine may not have undergone that kind of use yet because I don't use the receiver frequently.

James Goodwin Toronto, Ontario

Date: Mon, 14 Aug 2000 11:15:44 +0200
From: "Franz N.Goenner" <fgoenner@dplanet.ch>
Subject: Prem-Rx: Hello from Franz (new member).

Gentlemen,

My name is Franz Goenner from Zurich, Switzerland. Greg recently introduced me to the members of the Premium-RX list.

My "passport" to the list is the Collins 2050. The excess heat generated by this otherwise fine RX is well known. The point in question will receive my attention soon and I intend to keep the list informed of my findings and actions. However, working with the soldering iron is more of a winter pasttime in my opinion, so do not expect my postings too soon.

Regards to all : Franz . _____

Franz N. Goenner 8045 ZURICH / Switzerland

e-mail: fgoenner@dplanet.ch _____

Date: Tue, 15 Aug 2000 15:27:16 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: REDIFON R-1000

Hi, Does anyone on the list have any info. or can point me in the direction of some details about this set? It seems to have very few controls, and I think, from reading the books I have, that it needs a separate controller. I have seen the piece in SW RECEIVERS PAST --- but not much help. Yours hopefully, Dave

premium-rx-digest Sunday, September 3 2000 Volume 01 : Number 085

Date: Tue, 15 Aug 2000 21:00:25 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: HARRIS RECEIVERS FS

Im not sure of our policy ..but here goes...

A friend has the following for sale..

2ea. 590s 1ea. 590A 1ea. 2368

all above are Harris receivers..very late production all working perfectly and in mint condition...I can pick these or any combination of these up this weekend and if you are on the path between Dallas and Huntsville AL drop off or deliver..or just ship as you might require...pricing upon request..thank you mac

Date: Fri, 18 Aug 2000 00:29:41 +1200

From: "Ted & Linda Minchin" <tedm@xtra.co.nz>
Subject: Prem-Rx: Manual wanted for WJ-340 LF receiver

Greetings, everyone. I recently acquired, from everyone's favourite auction place, a WJ - 340 1 to 900Khz VLF receiver. Quite a nice piece of gear, this one is very tidy and still has the toolkit inside. However, I would like to try and find a manual for it. Either an original or a photo copy, only too happy to pay for either.... Does anyone have any idea where I could find one? Thanks in advance for whatever help can be offered. cheers from New Zealand, Ted Minchin, ZL1MT

===== Ted Minchin ZL1MT Monitoring Service Co-ordinator NZART RD1,
Putaruru, New Zealand Phone + 64 07 8835716 FAX + 64 07 8835778 email tedm@xtra.co.nz
packet... zl1mt@zl1ux.ham.nzl

=== Talk Around the World === Amateur Radio =====

=====

Date: Sun, 3 Sep 2000 22:43:55 -0600
From: "Shaun Merrigan" <smerriga@compusmart.ab.ca>
Subject: Prem-Rx: Multicouplers

Hi Everyone,

I was browsing over at WJ Ford Surplus, and I noted that Ron has a new multicoupler in stock. Details here:

<http://www.falls.igs.net/~testequipment/M-50-8.html>

I also know that he had (as of last week) several of the LMC-32 LF multicouplers left. This is the LF companion to the TMC-32 units that Ron has sold before.

Shaun

- -- Shaun Merrigan smerriga@compusmart.ab.ca

premium-rx-digest Tuesday, September 12 2000 Volume 01 : Number 086

Date: Mon, 4 Sep 2000 02:22:48 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Multicouplers

Hi,

Looks good as long as you aren't too close to a BC station.

73,

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Fri, 08 Sep 2000 11:18:02 -0400
From: Fred Osterman <osterman@dxing.com>
Subject: Prem-Rx: Chapter 8 of Racal RA1792 Manual Needed.

I need a copy of Chapter 8 (only) from the Racal RA1792 manual. Will pay costs. TNX

Fred Osterman Universal Radio

Date: Sat, 09 Sep 2000 21:59:10 -0400
From: Geoff Greer <greer86@attglobal.net>
Subject: Prem-Rx: WJ counter needed

I know this is a bit old for this list, but, I'm restoring an Watkins Johnson RS160 and need the DRO335 counter for the system. Anyone got one sitting around that needs a new home?

Thanks, Geoff Greer

Date: Tue, 12 Sep 2000 13:13:26 +0100
From: "Bob Duckworth" <wb4mnf@atl.org>
Subject: Prem-Rx: Interesting RX/Converter

\$5 hamfest find. I thought this was an old signal generator, until I got it home and looked at the rear panel Thought it might be WJ at first but suggestion was made that it is racal. Rack mount, 50lb, RF in, RF out, power, 5Mc ref in 5Mc ref out IF out and remote connector (lotsa pins)

Synthesized. display on front. thumbwheel tuning local remote switch. fired it up with -6dbm of 5Mc for reference. All three synth unlocked lights go out and stay out over range of 00000kc to 32000kc Pulled IF board and filter is 75Mc plus a tad. Now all I need is the \$5 demodulator to go with it :-)

Anyone ever seen one of these??? Know what it is?? Have a demod? I have a nice frederic ISB/SSB/CW demod setup as possible swap.

Photos here.....

<http://216.91.87.4/~bob/00090301photos/> look at <http://216.91.87.4/~bob/00090301photos/mvc-005f.jpg> through <http://216.91.87.4/~bob/00090301photos/mvc-015f.jpg> some are washed out from operator error with camera.

- bob

premium-rx-digest Tuesday, September 19 2000 Volume 01 : Number 087

Date: Tue, 12 Sep 2000 11:06:23 -0700
From: "Anton, Chris" <CRAnton@pacific-papers.com>
Subject: Prem-Rx: JRC NRD92 Owners out there anywhere?

Does anyone on the Premium Rx list include the Japan Radio Corp. NRD-92 in their collection of rack mounted beauties. I have two of them and I'd be interested in trading notes with anyone who could fire one up. I've noticed some similarities in reception between the two units I have and I'm curious if anyone else might be experiencing the same with their unit.

Cheers Chris Anton VE7TOP

Nanaimo, British Columbia Canada

Date: Tue, 12 Sep 2000 13:53:51 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>

Subject: Prem-Rx: RE: [Racal] Interesting RX/Converter

Hi Bob, I have one of these units with no name tags on it. I reverse engineered it and got it running. If you mix the IF output with 7 MHz you will get 455 KHz. I used an external reference and another RX as a demodulator. The radio works down to 2 MHz, but the synthesizer goes to 0. The RF preselector cuts off at 2 MHz. but there is a provisional area on the board to add low frequency low pass filter. The shielding in this unit is impressive. The cannon connector on the back of the unit is for parallel data to control the attenuation and frequency. If you find any data on this radio I could use a copy. A Navy guy I know told me it was part of a large system that was computer controlled. The radio uses high level mixers and pin diodes in the attenuator. Many of the gain stages use PNP transistors. Who ever designed this radio knew their stuff. I bet the dynamic range is up there. I think there may be cage code numbers on the boards, so maybe it can be traced to the source. It would be nice to have the other half. fc WA1GFZ

Date: Tue, 12 Sep 2000 21:37:33 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Canadian update

Awfully quiet of late, so here's a bit of information from north of the 49th. Through my numerous sources I've discovered small numbers of Harris RF-590 receivers in Canadian military use. They don't seem to have been a replacement for the venerable Rockwell Collins HF-2050, but as of yet, I'm not sure exactly where they are/have been employed. Furthermore I have as yet not seen any surplused. As for the 2050, small numbers (probably several hundred) continue to be employed by the Cdn Forces, and no further quantities have been surplused. In case you wanted to know :) !! Cheers, everyone.....Walt.

Date: Thu, 14 Sep 2000 12:51:31 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Harris cabinets F/S

Well it has finally stayed below 100 degrees for enough days to get back into my shop and pick this project back up...

For sale genuine cabinets for the Harris 590 590A 2368 etal. these will initially be priced at \$253.00 ea. including UPS ground shipping and insurance..to any location within the lower conus 48 states..I expect shipping to start in about 4-5 weeks..these are the same cabinets that originally were offered as a table top cabinet, Harris p/n RF-594-02 painted to match the front panel of these receivers, depending on UV exposure etc. that your particular unit might have experienced.. there are 4 black headed screws with nylon washers that will hold the receiver within the cabinet. the side of these cabinets include the BUD metal fold out handles , that when not being used fold back against and into the cabinet and leaves the cabinet sides smooth and flush, with nothing protruding from the sides...thank you mac

Date: Thu, 14 Sep 2000 12:53:51 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: cabinet follow on...

I omitted that personal checks are fine and my address is as follows..

Mac McCullough 7215 Lakewood Blvd Dallas, TX 75214-3511

Date: Tue, 19 Sep 2000 18:04:40 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Slightly Off Topic

Gentlemen:

I have been under an academic rock for the past 8 weeks and it is one heavy rock! I just accepted a new job at the university, and I am buried! I ain't powered up my receiver in two months, probably stopped working as far as I know. However, I have been reading the mail, and am happy to see some traffic is being shared between List members.

I am writing because one of our charter members, (aka Ben Wallace, Wacko Wallace, Mr. Qualcomm, Moneybags, etc) who has taken a number of "hits" from this pen before, has again distinguished himself sufficiently to attain honorable mention status. Ben collects vintage "10" receivers, in original boxes, with manuals, etc. Personally, I think he is operating in the non-linear portion of the curve, but someone has got to collect mint-boxed receivers, and it may as well be our fellow List member. . . . "Wacko" Wallace.

Seems, Ben located a SP-3. For the uninitiated, an SP-3 is a speaker specifically built for the WWII BC-312/348 family receivers (of which he probably has four or five). He gave me a call to tell me of his SP-3 find. I noted, as he spoke, that he was almost speechless with enthusiasm. A few days later, he again called, this time speaking in tones similar to one who was recently bereaved. Seems his SP-3 arrived, but was still wrapped in a SEALED vacuum foil pouch dated 1947ish.

The poor guy has all but gone off the deep end trying to decide whether to open the pouch or simply mount it on the wall and look at it. For those who have a few minutes, you may want to drop Wallace some words of condolence. (bwallace@qualcomm.com). Please speak in gently terms, he is just a wee-bit on the sensitive side as I write.

Greg

premium-rx-digest Tuesday, September 26 2000 Volume 01 : Number 088

Date: Tue, 19 Sep 2000 21:58:31 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Slightly Off Topic

Hi,

Sounds like a phenomenological question to me Prof. I mean, Heisenberg and Farnsworth notwithstanding. Maybe a few X-ray shots, followed up with some ultrasound (friend knows chief engineer at Accuson). What if the contents are just a mockup, or maybe the voice coil is open?

Does anybody really know what time it is?

73,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Tue, 19 Sep 2000 22:41:05 -0400
From: "Howard L Ritter, Jr" <hlritter@mindspring.com>

Subject: Prem-Rx: Re: Old things in original packaging

No, no, I'm not talking about myself, even though my own factory-sealed packaging has only been opened a wee little bit, when I was 3, to allow my hernia to be repaired....

I mean a shirt. I bought it when I was stationed with the Air Force at Thule, Greenland, in 1969. Nice shirt, good Oxford fabric (Klopman, which you can lean on), striped and with a basic orange theme, nice tailoring, button-down collar, very collegiate and all that. Made in Denmark (Greenland is Danish, so lots of the goods in the Base Exchange came from there) and came packed in a stout polyethylene bag with rigid plastic end closures that snap together and have a hook for hanging molded into them. I bought a number of shirts during that year, not all of which I wore before coming home to the States. As time went by I seemed not to find quite the occasion from year to year to wear that particular shirt.

Medical school came and went. Internship, residency (who has time to wear *real* clothes while all that's going on?). Fashions change. Waist sizes change (!). The shirt gets looked at on the shelf from time to time with amusement and wry nods to fond and tortured memories of a year like no other before or since. Multiple Air Force assignments around the world, including a week at the epicenter of the world's attention in January 1981 in Wiesbaden (that's right, some of you remember). The Shirt Is There, witnessing it all through its transparent poly original packaging. Marriage and attempts at explanation to the spouse. Children. Eventually, the perpetuation of the unopening and unwearing of The Shirt takes on a life of its own, and what was incidental has by degrees now become central.

The garment continues to occupy a place of high honor on my shelf, now in its fourth decade of repose, its little folded cardboard tag resting unflustered with its string still looped through a buttonhole, fondly gazed upon from time to time, occasionally fondled but never opened, I'm sure still steeping in the pristine fragrance of Essence de Chemise Nouvelle. By all means, Ben, take your lead from this in the matter of the still-empouched SP-3. MANY can listen to an old speaker, or wear an old shirt. FEW are privileged to do what WE have the opportunity to do....

--howard

Date: Wed, 20 Sep 2000 06:44:07 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: Slightly Off Topic

Gee, Greg, he sounds perfectly normal to me! However, I'm the guy who shelled out mucho bucks for a sealed-in-the-box HRO-500 a few years ago. It came in a wooden crate, and I almost couldn't bring myself to toss out the nails when I opened it.

Jim Garland W8ZR

W8ZR Amateur Radio Website: <http://www.muohio.edu/~4cx250b/web/>

Date: Wed, 20 Sep 2000 07:06:05 -0400
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: Way Off Topic

...And I still face life with the same wife I started with though I have taken her out of the crate a few times ...

Tony (VE3NO) ComputerViz; NYAA StarFest on-line tonyward@home.com tward@spanit.com
www.nyaa-starfest.com

Is it just me or are the days really getting shorter?

Date: Wed, 20 Sep 2000 07:58:34 -0700
From: jan@skirrow.org
Subject: Re: Prem-Rx: Slightly Off Topic

Opening such a package could be a risky business. After all, as we all know from a famous quantum mechanics brain teaser, the speaker may, or may not, be in the package - or in fact it is both there and not there at the same time! The process of observation (i.e. opening the box, x-rays, ultrasound or devining rod) will collapse the wave function and the object will be there - or not there as the case may be - and this time for good. So, do you wanna risk losing it by opening the package?

I say mount it on the wall, and dream of what is in it. Or not, as the case may be.

PS to Brer Greg - nice to have you back in the land of radios!

Jan Skirrow

Date: Wed, 20 Sep 2000 21:37:31 -0700
From: Ben Wallace <bwallace@crash.cts.com>
Subject: Re: Prem-Rx: Slightly Off Topic

To the Group,

Ah.....seems my friend ??? Dr. Bailey -- Greg has crawled out from under his rock again. Errr....academic rock that is. Yes Greg, you are quite correct in your description of me -- with the exception of the term "moneybags" due to this year's collapse of Qualcomm stock.

To set the record straight. The speaker in question is a LS-3. This speaker is a match for the BC-312/342 and BC-314/344 receivers. And yes, it is still sealed in the original mil-spec inner bag and included was the serialized, original outer box.

Some background.....When I was a teenager in south central Ohio my Uncle gave me a BC-342 with a LS-3 speaker. That essentially was the catalyst that sparked by budding interest in electronics and ham radio. That was followed by twenty-two years in the USAF and my current career with Qualcomm. A couple of years ago I wanted to recreate my original listening station. The BC-342 was easy to find but the LS-3 was elusive. I have been looking for a LS-3 for several years. Only recently did I find one but it happened to be "new in the box." That was the cause for myhow did you characterize it Greg?..... "going off the deep end."

But all is not lost. When it rains it pours. I have suddenly found another source for "new in the box" LS-3's. Another sample should arrive here next week. I will invite Greg over to the house (only if he brings beer, his lovely wife, and my FT-101E -- in that order) to watch me open one of them. Will keep the group informed.

Ben -- WB8HUR San Diego

P.S. to the Group

Where is a good source of electrolytic caps -- approx 130 microfarad @ 450-500 vdc ??? Would like the bottom clamp mount with top terminal connectors.

Date: Thu, 21 Sep 2000 13:30:14 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: Slightly Off Topic

This all reminds me of a very beautiful High School girl friend who was a sister of one of my class pals. She was three years younger and her Dad was a break your knees kind of a guy.

Date: Thu, 21 Sep 2000 19:50:06 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Slightly Off Topic

And I vote for the wife...

Peter

Date: Fri, 22 Sep 2000 07:22:05 EDT
From: Radiomatt@aol.com
Subject: Prem-Rx: ElectroNav receivers??

I am now the perplexed owner of three Electronav EN R-2 receivers. (Only one works, though, and it shows promise)

Thanks to Fred Osterman, I also now have a spec sheet, which shows an address in Elizabeth NJ for this company (not too far from Mackay!!). Indeed, another receiver in EN's productline is a re-labeled Mackay 3030.

Did EN actually manufacture any goods in their own factory? Or was everything OEM'ed?
They targeted the Marine business, and I suspect they must have had strong ties to Mackay.
Can anyone provide some history?

Thanks

Matt

Date: Fri, 22 Sep 2000 21:34:15 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Prem-Rx: forwarded msg with interesting comment about HF-2050

> Date: Fri, 22 Sep 2000 21:22:48 -0400
> From: Paul & Ronda Pearson <Pearson@ody.ca>
> Subject: HF2050
> To: 4cx250b@miavx1.acs.muohio.edu
> Reply-to: Paul & Ronda Pearson <Pearson@ody.ca>
> X-Mailer: Microsoft Outlook Express 5.50.4133.2400
> Original-recipient: rfc822;4cx250b@miavx1.acs.muohio.edu

> I was one of the final test technicians for this unit when it was in
> production. I agree with you on most of the comments you made. Lord help
> you if the IF board fails. We weren't allowed to trash any of the
> modules, troubleshoot until the problem is found whatever the cost was the
> philosophy. It's biggest design feature was zero phase shift on data
> communications if I remember right. You can also make it do circles
> through the serial port at the back. Anything from a self-test to a
> digital clock. Nice to see it's still in use.
> Paul Pearson

***** W8ZR Amateur Radio Website:

<http://www.muohio.edu/~4cx250b/web/>

Date: Mon, 25 Sep 2000 22:14:32 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: 2050 Fault

After lugging my HF-2050 to a DXpedition on the WA coast, my hitherto functioning 2050 displayed an A2 Fault. This particular receiver was not rack mounted, and functioned fine 24/7 for many days at a time, with the usual cooling fans over the power supply. I had mounted the unit in a shock-mount rack for transport to WA. Upon arrival, the unit worked normally for maybe 30 minutes. The display then locked, associated with some ticking sounds from the speaker, but otherwise it went dead. The fault LED usually came on within a minute or two of this happening. None of the controls worked, so I could not initiate the BIT. Turning off the unit for some 10 or more minutes allowed the unit to function again for a short while. Initiating the BIT failed to elicit any faults. I removed the unit from the rack and checked the connections and used contact cleaner to be sure. It ran fine without the covers for several hours. Great, problem solved. Nope. After replacing the unit's covers and remounting in the rack (lots of air), the same problem recurred. The next morning was fairly chilly, and it ran fine for about an hour. Same problem. A2 fault has to do with the CPU. I again checked the connectors. All OK. The receiver worked fine in the shop without the top cover all night, with the blower fans beneath. When I replaced the cover this morning, when I got home tonight, no fault light, but the display and controls were "seized" and nonfunctional. Power off, and then on caused the fault light to light up, but no fault message. Fiddling with the A2 board, I touched the processor, the one with the heat sink on top. I noticed that it was quite warm. Pressing it a bit caused the fault light to light again. I have decided to mount a small CPU cooler fan adjacent the processor/heat sink to keep it cool, on the underside of the top cover about 1 1/2" towards the power supply side since it won't fit any closer. I may add a surface external fan externally if required. I notice that Joe Talbot, who was also at the DXpedition, has done the same thing. Questions to the experts on the list: Have I correctly diagnosed the problem? Is the processor truly the problem? Is it on it's last legs? Are replacements available? Am I doing the right thing? Any other suggestions? I'd hate to think my favourite receiver has become a parts only unit!

.....Walt.

Date: Mon, 25 Sep 2000 23:47:58 -0700
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: 2050 Fault

This is an Intel 80186 derivative part known as a 80188. (you may recall the original IBM PC was built around the Intel 8088 --- this is an embedded part with some additional onboard peripherals). (I used to work in the Intel group in Arizona responsible for these embedded processors). I am betting you can find a replacement part around if you look, although it may be discontinued by Intel (downsizing the embedded market for 186/188 several years ago)

Take a look at <http://www.intel.de/design/intarch/datashts/272430.htm> for a downloadable page as well as http://channel.intel.com/support/processors/embedded/intel186/80188_c.htm

At least one supplier sells the components <http://www.icsource.com/client/search-base.plx?user=cyclops&base=80188&sort=date> do a search and you will uncover others

If I were you, I would replace the existing part with a zero insertion force socket and then put in a replacement.

Don

Date: Tue, 26 Sep 2000 05:07:23 EDT
From: Radiomatt@aol.com
Subject: Prem-Rx: Manual for Mackay/Electronav?

My search for more info on the Electronav EN-R2 receiver continues. I've discovered that at least one Electronav product, model 3030, was made by Mackay. Any ideas on who might have made the R-2 receiver? And where to get a book? Thanks Matt

Date: Tue, 26 Sep 2000 06:41:44 -0400
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Re: Prem-Rx: 2050 Fault

Hi Walt, Sorry to hear about your problem with your 2050. Obviously you've got a heat-sensitive component, but it may not be the CPU. You might try buying a can of freeze spray (I think Radio Shack sells it). Wait until the radio seizes up and then judiciously start spraying individual components. After a component cools, turn the power switch off and on and see if the radio works normally. If so, then you'd have located the defective component. You can also turn on a cold radio, which presumably would work temporarily, and direct a flow of heat from a hair dryer at various components to see if you can induce a malfunction. Your problem might be the CPU, but I think it's unlikely. It's more likely a bad transistor, capacitor, etc. This might also be a good time to wire up the switcher power supplies you picked up off ebay. You could try outboarding them for awhile to see if they work okay. That would greatly cut down the heat load. 73,

Jim Garland W8ZR

***** W8ZR Amateur Radio Website:
<http://www.muohio.edu/~4cx250b/web/>

Date: Tue, 26 Sep 2000 08:18:51 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 2050 Fault

Rochester Electronics is a possible source. EMAIL them for a quote. They are kinda high so use as a last resort. fc

Date: Tue, 26 Sep 2000 08:33:38 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 2050 Fault

I had a similar problem with my RA6830 that ended up being an intermittent solder connection to an IC pin. The only way to inspect for the problem was to look at every solder connection on both sides of the board. The solder side looked fine, but the top side showed that solder had not flowed to the pin just beside it. You will need a good eye loop or microscope to find it. The RA6830 PC boards didn't relieve the connections to the ground plane, so it takes lots of heat to make solder flow. It is also possible you have an intermittent wire bond inside an IC which will do the same thing. Third, an intermittent PC trace or trace/via problem which can be a good one to find. Freeze spray is risky business because it temperature shocks everything. It can cause more damage and I avoid it. fc
WA1GFZ

> W8ZR Amateur Radio Website: <http://www.muohio.edu/~4cx250b/web/>
>

Date: Tue, 26 Sep 2000 10:02:35 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: 2050 on the sick list

Dr. Walt-

Sorry to hear your 2050 is on the sick list. A good medicine man like you should be able to prescribe a little electronic Viagra to get it "up" and running again.

With all respect to my associate and mentor, President Garland, I would be a little concerned about using your daughter's hair dryer on the 2050. I agree it is a troubleshooting technique worthy of consideration, however, the temperature spec of some of those non-replaceable components may be exceeded thus instantly converting your 2050 to one of most expensive door stops in the history of man.

Personally, I would check the hospital supply locker and find a can of that freezing spray you medicine men use. Yes, Radio Shack sells it, but I have a hard time envisioning a rubber gloved Doc draped in surgical gown spraying Radio Shack circuit cooler on a 2050. I mean, it is YOUR image, so I guess you can keep the Radio Shack can in a brown wrapper and the world won't know.

Seems like winter may be approaching up north????? Perhaps you could just make this 2050 your winter radio, and use one of your other 2050s as your summer machine? Another thought, you Oak Leafers are always distrustful of your government, maybe your PM embedded a time delay chip that caused the 2050 to go terminal?

Keep smiling Walt, I used one of your pills the other day. Nancy hid the rest of the box. :-) (joking)

Greg

Date: Tue, 26 Sep 2000 12:07:04 -0700
From: jan@skirrow.org
Subject: Re: Prem-Rx: 2050 on the sick list

At 10:02 AM 9/26/00 -0700, Greg Bailey wrote:

> little concerned about using your daughter's hair dryer on the 2050. I
> agree it is a troubleshooting technique worthy of consideration, however,
> the temperature spec of some of those non-replaceable components may be
> exceeded thus instantly converting your 2050 to one of most expensive door
> stops in the history of man.

Agree! Also be careful of the "freezing" sprays (wherever obtained!). Old radios are fragile creatures in many often unexpected ways. Thermal shock (hot or cold) can finish off a marginal component, shatter plastics that have deteriorated etc. So go easy and observe along the way - it's always disconcerting when a surgeon in full regalia says "oops".

Also, it is worth having a close (i.e. with a magnifying glass) look at all the solder pads near the CPU. I recently had a problem that had been bugging me for many months - an intermittent heat related failure. Cold weather - worked. Hot weather - no work. Finally failed completely and apparently permanently. No, not in a radio, but in my 'antique' automobile with a whole load of furrin electronics.

I localized the problem to my Ginza by Night dashboard power supply - a complicated switching supply supplying electrons to many fussy little circuits. Replacement? Not after I discovered the cost. Repair - hey I am an engineer - I can fix things!

Yeah right. After contortions that almost made me consider putting a chiropractor on retainer (sorry Walt) I got the blessed supply out, but could find nothing wrong with it.

However, with a magnifying glass I discovered very fine cracks in the solder pads holding one of the big multi-conductor cable plugs. Looked trivial, but reflowing the solder completely and utterly fixed the problem. And unlike some "fixes" this one has stayed fixed for some months now.

I've found similar problems with a piece of 1970s Navy Electronics. Everything on the PC boards is gold-flashed - except for the pins on some components and a few ICs. Wherever these non-plated connections connect with a solder pad there are obvious signs of deterioration. Some are very subtle - such as a "film" around the pad. Some was more obvious - pitting and gunk on some of the leads. Some solder connections also show some fine cracks. I haven't gotten any further with this - I'm waiting for a manual on the unit to arrive before they go back on the bench.

In the early days I always assumed component failure when something broke. More lately, that is often the last thing I suspect - unless there's an electrolytic cap in the circuit. Especially with aging electronics, I find mechanical connections (connectors and switches), poor grounds due to corrosion, and deteriorated solder connections often are at the root of many problems.

A very thorough physical inspection (obviously a Bailey specialty) is the first and most important part of any job!

Jan Skirrow

Date: Tue, 26 Sep 2000 16:42:48 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 2050 on the sick list

I agree, usually it is a mechanical problem and parts rarely fail. Unless you release the smoke from inside the package.

Date: Tue, 26 Sep 2000 23:08:08 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: 2050 on the sick list

Thanks to some of the list experts who have replied to my problem, most recently Greg Bailey, our illustrious leader, and my good friend up island, Jan Skirrow. Now after poking and prodding last night, I installed the small CPU 12v cooling fan and mounted it under the top panel cover to blow across the A2 board, directly at the Intel processor and its heat sink. I left it all day and evening, and when I arrived home, still humming along without a fault. I realize this is not a permanent fix, but until I can pull out the magnifying glass and spend some time carefully studying the board, this will hopefully do. Furthermore, I think I'll install a top mounted larger fan over processor to draw the warm air out of that side of the set. Until now, all of my fan experiments have been limited to cooling the power supply, but it looks like this side of the set should not be neglected.

This brings me to a very interesting subject I discussed with Guy Atkins at Grayland last weekend. He wondered about installing alternate cooling systems, including a water based one, using an aquarium pump...hate to have that one leak! More interesting was, engineers help me here, a French sounding name,...I don't have my notes here...Two plates with an electrical current passed between them causing one side to heat, and the other to cool, as are used in plug in ice chests. They can apparently be purchased in various sizes and are available for computer cooling. I immediately thought that they could be fitted on the power supply heat sink, and maybe ontop of the processor heat sink. Comments?

.....Walt.

premium-rx-digest Monday, October 2 2000 Volume 01 : Number 089

Date: Wed, 27 Sep 2000 03:16:53 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: 2050 on the sick list

Hi,

You are thinking of Peltier junction cooler/heaters. DC in, one side of the PN junctions heats, other cools (phlogiston got moved). Used for PC CPUs, also found at fleas. Can be liberated from "Auto cooler" made by Coleman etc. Most common name is "Melcor" (mfg); think they are in NJ.

Next step is to put 2050 in Liquid Freon bath, take her down with the LN2 and start overclocking.

Serious Q: Are there any fusible link PROMs or other not so swell sand in these radios?

73,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Wed, 27 Sep 2000 07:55:01 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 2050 on the sick list

One side of the cooler gets real cold and the other gets real hot. You will still need to remove the heat. Also deal with the additional power it requires to function. I think the name is Peltier cooler. They work well but you really need to address the real problem which is an intermittent connection somewhere.

Date: Wed, 27 Sep 2000 09:44:19 -0400
From: "Chuck Rippel" <win.308@home.com>
Subject: Re: Prem-Rx: 2050 on the sick list

With regard to below, thy not consider this approach. First, some background. Most of the "old" 486 computers came with a CPU fan (which you wisely used) that was mounted to a section of finned aluminium heat sink material. On the side opposite the fins, there was a machined face which fit against the top of the CPU.

Why not obtain one of these and cut it to fit your Intel CPU but leaving as much of the original heat sink (for thermal mass reasons) as possible. Then, take a departure from standard mounting and apply some heat sink compound to the top of the CPU. Secure the heat sink to the CPU with something as simple as a tie-wrap passed under the CPU IC (assuming you have the clearance) and the board then back over top of the.

This would wick the heat away from the affected IC by several orders of magnitude over the fan alone. I have an unused 486-66DX machine thats running a packet station and stays on all the time. When configuring it, I found that while the CPU indeed had a heat sink and fan, there was none of the usual

white compound (its actually glass impregnated silicone, don't get it in your eyes) on the aluminium heat sink. The white compound serves as a thermal bond between the dissimilar materials of the epoxy CPU case and aluminium heat sink. In fact, I don't recall EVER seeing one of those CPU heat sink/fan affairs installed with the compound.

Modification was made and the heat in the air flow off the CPU has noticeably increased.

- > Thanks to some of the list experts who have replied to my problem, most
- > recently Greg Bailey, our illustrious leader, and my good friend up island,
- > Jan Skirrow. Now after poking and prodding last night, I installed the
- > small CPU 12v cooling fan and mounted it under the top panel cover to blow
- > across the A2 board, directly at the Intel processor and it's heat
- > sink.

I think I'd re-think the below. One drop of water from either condensation or an outright leak that perchance falls onto the porous solder and you start an irreversible corrosion process.

Just get the heat out of the receiver cabinet by pulling air supplied from openings in the receiver cavity out through the power supply module. Don't push air into the power supply to exhaust into the rest of the receiver. That would be counter-productive.

- > He wondered about installing alternate cooling
- > systems, including a water based one, using an aquarium pump...hate to have
- > that one leak! More interesting was, engineers help me here, a French
- > sounding name,...I don't have my notes here...Two plates with an electrical
- > current passed between them causing one side to heat, and the other to
- > cool, as are used in plug in ice chests. They can apparently be purchased
- > in various sizes and are available for computer cooling. I immediately
- > thought that they could be fitted on the power supply heat sink, and maybe
- > onto of the processor heat sink. Comments?

++++
 Chuck Rippel Cornland, VA SWBC DX'er since 1971 Located on NC/VA Line 30KM inland from the Atlantic Coast wa4hhg@amsat.org WJ-HF1000A, R8B, R390A/Sherwood SE-3, Harris RF590, Racal 6790 WWW Site: <http://www.avslvb.com/R390A/index.html> Be sure to check the SWBC DX/Listening Section

++++

Date: Wed, 27 Sep 2000 11:03:00 -0400
 From: "Chuck Rippel" <win.308@home.com>
 Subject: Re: Prem-Rx: 2050 on the sick list II

Let me edit a couple of things that I didn't catch when writing this on the fly.

With regard to below, why not consider this approach. First, some background. Most of the "old" 486 computers came with a CPU fan (which you wisely used) that was mounted to a section of finned aluminium heat sink material. On the side opposite the fins, there was a machined face which fit against the top of the CPU.

Why not obtain one of these and cut it to fit your Intel CPU but leaving as much of the original heat sink (for thermal mass reasons) as possible. Then, take a departure from standard mounting and apply some heat sink compound to the top of the CPU. Secure the added heat sink to the CPU with something as simple as a tie-wrap passed under the CPU IC (assuming you have the clearance) and the board then back over top of the heat sink.

This would wick the heat away from the affected IC by several orders of magnitude over the fan alone. I have an unused 486-66DX machine thats running a packet station and stays on all the time. When

configuring it, I found that while the CPU indeed had a heat sink and fan, there was none of the usual white compound (its actually glass impregnated silicone, don't get it in your eyes) on the aluminium heat sink. The white compound serves as a thermal bond between the dissimilar materials of the epoxy CPU case and aluminium heat sink. In fact, I don't recall EVER seeing one of those CPU heat sink/fan affairs installed with the compound.

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++++++
 - ----- End of forwarded message -----

Date: Wed, 27 Sep 2000 10:02:22 -0700
 From: "Guy Atkins" <dxing@hotmail.com>
 Subject: Re: Prem-Rx: 2050 on the sick list

Hi Walter,

The part I was discussing is a Peltier device.

The water cooling idea is taken from the hard-core overclocking PC crowd, who claim this method takes away much more heat from CPUs and hot-running graphics cards than any amount of air cooling. Evidently they have solved the potential leak problems, as there are numerous plans, kits, and ready-to-run commercial water cooling products available. Some of the waterblock (radiator) devices are works of art!

Go to the following site for links to these topics:

<http://www.overclockers.com/home.asp>

Under the "MAJOR TOPIC AREAS FOR REVIEWS AND TIPS" section, click on the PELTIER and WATER COOLING subcategories.

Lots of interesting stuff at overclockers.com for cooling your equipment.

73, Guy

Date: Wed, 27 Sep 2000 22:43:50 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: 2050 on the sick list II

Thanks, Chuck for the excellent ideas. I was wondering last night as I checked the heat sink over the processor why there wasn't any heat sink compound. I think I'll add that to improve heat conductivity away from the processor and to the heat sink. Mounting a small fan onto the heat sink makes a lot of sense. There's not quite the clearance as it stands now, so I would have to remove maybe 2 mm from the top fins to allow for clearance. As for the water cooling idea, I wasn't seriously looking at that one!.....Walt.

Date: Wed, 27 Sep 2000 22:51:12 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: RE: Prem-Rx: 2050 on the sick list

At 07:55 AM 9/27/2000 -0400, Carcia, Frank A. HS wrote:
> One side of the cooler gets real cold and the other gets real hot. You will
> still need to remove the heat. Also deal
> with the additional power it requires to function. I think the name
> is Peltier cooler. They work well but
> you really need to address the real problem which is an intermittent
> connection somewhere.

Right, Frank. That's what they're called. I liked the thought of removing heat from close to the heat sensitive structures, and then using fans to remove the hot air. Has anyone tried this in any of their receivers? Of course I do have to locate the intermittent connection!.....Walt.

Date: Wed, 27 Sep 2000 23:00:49 -0700
From: "Colin Thompson" <burkec@1stconnect.com>
Subject: RE: Prem-Rx: 2050 on the sick list II

Walt,

Last night I was considering a humorous post regarding the thread's fringe tendencies towards the wild world of overclocking. Needless to say, my reservations were negated by other's posts (more RF qualified than I!). After lots of serious investigation, there is much to be learned from the overclockers. As I privately relayed to Chuck, I am seriously considering playing with this. Pray for me!:) Of course it would be a long time before I subject my 2050 to this. You can't just go to a computer show and buy new parts for it! There are some new variants on silicone grease you may want to investigate.

73,

Colin

Date: Thu, 28 Sep 2000 01:39:19 -0700

From: John Collins <jcollins@referencevideo.com>
Subject: RE: Prem-Rx: 2050 further view

Hi all,

I've been a bit of a lurker for many months, primarily because I'm here to learn, engage, and perhaps contribute.

I'd like to jump in and offer a slightly differing, although overall substantiating opinion:

It is valid to seek removal/dissipation of heat, although this may only mask the underlying problem.

Based on my many years of dealing with this vintage (although not this particular unit), I have found it useful to get into a mindset of microscopic proportions-that is, consider connections and connectors on a minute level-expansion/contraction with heating/cooling.

The basic observation of a heat-related issue is likely valid, and it could be a bad CPU chip...however, it could also be a heat sensitive solder joint, cracked trace, or some equally elusive connector problem. I've had great luck isolating such a fault with "cold spray"-available at many electronics stores. Set up the gear so as to create the problem,very carefully apply coolant (don't douse, just minute squirts), looking for a corrective reaction...it may take a number of passes, but 10:1, you'll get a marked reaction in your probing. Hopefully, it's not an obscure, unreplaceable component.

I'd be happy to contribute/learn further, so feel free to contact if further discussion would help.

PS: I've seen these receivers in operation in very poorly ventilated situations...the key point is to remove stagnant hot air from the units...cooled air is great, but somewhat secondary...keep the air moving briskly but not too fast.

regards

John Collins

Cubic R3030 x 2 Icom R9000 x 2 Racal 6790 x 2 and a bunch of GPIB stuff

Date: Thu, 28 Sep 2000 08:06:58 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 2050 on the sick list

I like to probe around with a scope when troubleshooting this type of problem on digital boards. It is very fast because you only look for wrong logic levels. A poor high or low sticks out. The trick is to keep it in the failure mode long enough to isolate the problem. I just fixed a RA6830 processor board that had a bad connection in a board via to IC pin. It took many hours because the board would start working randomly and sometimes would go days without failing. It was a connection between two pins of a 74HC02. I could see that logic high was only about 1.6 volts. I poked the probe into the solder and the board started working. Then fired up the microscope and looked for the third time and the solder side looked fine yet the component side had a cold solder connection. I just picked up extender boards for my radio and it sure is easier that way. fc

Date: Thu, 28 Sep 2000 09:55:05 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: RE: Prem-Rx: 2050 on the sick list II

Hi,

Certainly the original overclocking comment I made was what we term humor. Several people I know have done so, although the actual result is as questionable as any PC "improvement"; i.e. CPU runs a little faster, but much less so the bus.

The Freon/LN2 comment reflects something which has putatively been done. A friend wanted to do so; he got the 5-minute thermal stress, bad for interconnects and other packaged modules lecture.

I have used cascaded Peltier junction modules to remove heat from a nav system to be used on an undersea mining head destined for a hot place (not quite that deep). Things work, but again thermal stresses warp packages and the dies inside and the bonding wires which are fairly useful. "PC" CPUs aka Intel toasters presumably have been designed with some thought as to cooling the otherwise inadequate metal parts of the package. Also PC reliability is not exactly quantified in the marketplace.

I have not been inside a 2050, but would exercise care in using cooling methods which go beyond increased airflow. The one I looked at a few years ago was early 80's mfg; lot of things go on in and on a board that old especially if there has been some heat in the environment.

73,

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Thu, 28 Sep 2000 09:56:51 -0400 (EDT)
From: Steve Stutman <sstut@world.std.com>
Subject: RE: Prem-Rx: 2050 further view

Hi John,

Excellent set of comments.

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Fri, 29 Sep 2000 13:10:33 -0700
From: jan@skirrow.org
Subject: RE: Prem-Rx: 2050 further view

At 01:39 AM 9/28/00 -0700, John Collins wrote:

> I've been a bit of a lurker for many months, primarily because I'm here to
> learn, engage, and perhaps contribute.

Lurk no more! Good comments and really consistent with my experience.

Had a look at the overclocker's site - wow! There are unexplored worlds out there I never dreamed of. This one particularly impressed me:

<http://www.overclockers.com/tips197/>

Not to get too far off topic, or anything that might annoy uberperfessor Bailey :>) but there is so much discussion in amateur radio circles about why the younger generation isn't into ham radio anymore that I can't resist a comment.

It seems the folks who at one time would have been hardware hackers of the old school (twin 4-1000As and homemade or souped up rcvrs) are these days into other kinds of science-based efforts. If

they're still involved with radio, its UHF and up, laser comm, digital comm technology, and other things beyond the technical range of most current "hams."

More power to them. A lot of interesting people out there! Worlds to conquer.

Jan Skirrow

Date: Fri, 29 Sep 2000 21:41:16 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member: Vern Brownell

Gentlemen:

I have been derelict in my moderator responsibilities of recent. Seems we have had some new members, however, I have not been properly introducing them to the List. Trust me, I ain't been lazy, just buried.

Today I want to introduce our newest member, Vern Brownell. Vern claims to be an SWLer type, but I noted he just happens to have the personalized call: W1VB.

He claims Chatham, Mass. on Cape Cod is his QTH. You may remember this is just down the street from the old WCC Marconi/RCA maritime/commercial receiving site. Presently he is working in an internet business in Bolton, Mass.

You know, some of us are discreet in our lust for radios, but this isn't a problem for our newest member. He states, "I'm a receiver nut." Little does he know he has finally found a home of other wackos that suffer from this dysfunctionality. "My collection changes frequently, but I currently own a Racal 6790/GM, a Collins 51S-1, Drake R7 and R8B, Icom R9000 and R8500, an AOR 7030 and in the real boatanchor category a mint National HRO-50."

If you want to drop Vern a note I would suggest: brownell@egenera.com

Greg

Date: Sun, 01 Oct 2000 00:49:02 -0400
From: Michael Brown <piggin@mindspring.com>
Subject: Prem-Rx: re 2050

Coolant spray is great on components that are easily replaced...so beware Walt. Im sorry to hear about your problem...here are some thoughts that may help. If the fault went away when you touched the CPU dont assume its the chip. The board can have a fault some distance away and present in that way. My first suspect would be a capacitor (electrolytic esp). These go thermal all the time. In addition, the caps connections fail internally making them mechanically sensitive. Let it fault then gently tap all caps on the board. Do this also on all components...the secret is to be very subtle. Failing this be advised that if that board has any gold plated connectors they can also become weird. A mechanism called dendritic corrosion can and will take place. Tiny dendrites of gold migrate into the other metal and the whole affair starts to act like a diode. Clean very carefully all connectors again. A failed solder joint can be found by tapping as aforementioned. I hope you find the fault soon Walt. Good luck!! (PS. I had a receiver with a very intermittent cap in it...It failed once a month or so....it took 3 years to find!!! But it finally hardfailed and I found the bugger!! Michael Brown ITT Mackay Marine 3031A Driver

Date: Sat, 30 Sep 2000 22:35:52 -0700
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: re 2050

Thanks Mike for some great suggestions. Just to let everyone know what's happening at my end. Well I installed a tiny fan to blow across the processor/heat sink, and another CPU brushless cooler fan on the top cover to exhaust any hot air from the A2 board. I also removed the heat sink and applied a spot of heat sink compound to the top of the processor, and replaced the heat sink. Not so easy, as the stuff is pretty sticky, and the chip migrated a mm or so. I was worried about damaging the part, so I had to gingerly move the chip to align it properly. Everything worked OK. It's been 4 days and I've yet to experience any faults. Mike's comments are excellent, and to my non-engineer brain (heh, I'm just an ole' country doc!!!) easy to comprehend. For now, I'm going to watch things, and leave them be, but I know I'll be back sometime. Lucky for me I do have 2 other fully functioning units. Thanks everyone for all of their helpful advice, and please continue if you have anything further. Mike, there's lots of gold in this receiver, so the dendritic effect (heh, a medical term I understand ;) is intriguing.

.....Walt.

Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers:

Rockwell/Collins HF-2050 (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC NRD 535D, and Kenwood R5000.

Date: Sun, 01 Oct 2000 11:11:12 -0700

From: jan@skirrow.org

Subject: Prem-Rx: More on eBay item#451584676: ROCKWELL COLLINS HF-2050 RECEIVER

Hi Walt ...

The seller refers to a preselector "board" and then says this accommodates the 'matching' HF-8064 preselector. The HF-8064 is a 19" rackmount piece of gear about the same size as the 2050 - and not shown in the sellers pix.

Anyway, a pix of the HF-8064. Have a look...

<http://www.google.com/search?q=cache:www.fairradio.com/hf-8064.html+HF-8064&hl=en>

Elsewhere I found offered for sale:

1- Collins HF-8064, quad preselector for 8054 rx. \$400

Given the way Rockwell named radios, the HF-2050 "matching" components (if any were ever produced) probably would have an HF-20XX number. However, as you and I have discussed before, I find it hard to believe that Collins would go to the trouble of designing the 2050 from scratch for a single customer and then not try to either sell it to others, or to use it as the development platform for another similar radio that could be sold to other customers. It was a state of the art design, and I would've thought there'd be a wider market for it.

Anyway, in searching for info on the HF-8064 I came across the following - which appears to be info from a Rockwell brochure on the HF-80 radios - which are on the surplus market in the US right now in considerable numbers - - I think Murphy has a bunch.

Lo and behold, there is the HF-2050.

It almost seems to be an 8050 with the DSP and other features added. The description of the 8064 suggests that a radio it operated with would have to be able to provide frequency data to it, and perhaps that's what the "board" our seller is offering does. But you have the 2050 manual. Does it say anything about this, or does the stock 2050 just provide a set of data outputs that might well be compatible with the 8064 if, as I suspect, the 2050 was a special advanced variant of the 80 series radios? All it might take is an interface cable. The HF-8064 might be a good addition to your radio, given the high interference area you live in.

It's interesting that the HF-8064 is described as an "agile" preselector suited for scanning applications where the more conventional (at the time) mechanical tuning preselectors would be too slow. Sounds like just the rig for a SIGINT application.

And here are the various components of the HF-80 radio:

http://www.columbiaelectronics.com/rockwell_collins_hf_80_radio_system_data.htm

It's possible that some of the ancillary HF-80 stuff would be compatible with the 2050. Might even suggest some replacement parts might be more available than we think.

Still begs the question though - as the HF-2050 would seem to be a considerable advance on the HF-80 rcvrs. So what was the next generation of radios from Collins, and did they advance on the 2050 design or just repackage it for other customers?

Further, the lousy 2050 power supply design might be more understandable if it was built for the HF-80 receivers, and then just plopped into the 2050 without paying much attention to increased current drain from the more complex electronics and resulting heat problems. I note the HD-80 radios are much bigger physically. The power supply design might have been conservative for its intended radio, but being pushed in the 2050.

Enquiring minds want to know!

Jan

Date: Mon, 2 Oct 2000 12:03:16 +0200
From: Karl-Arne.A.Markstrom@telia.se
Subject: SV: Prem-Rx: More on eBay item#451584676: ROCKWELL COLLINS HF-2050 RECEIVER

Gentlemen,

As the owner of both an HF-8054 and an HF-2050, and also as a professional user of the HF-80 and Spectrum 2000 equipment line, I might be able to shed some light on the HF-8064 preselector question.

In the sales brochure (and the Canadian user/tech manual) for the HF-2050, the receiver was described to have an external preselector option, and the HF-8064 was given as the suggested preselector to use.

To my knowledge, no special accessories were made for the HF-2050, but the user was supposed to use HF-80 accessory equipment.

The requirements for the preselector interface for the HF-8064 are five BCD digits (10 MHz, 1 MHz, 100 kHz, 10 kHz, 1 kHz) in positive TTL logic, a tune start signal, a bypass signal and a preselector fault signal.

The next generation of HF radio from Rockwell-Collins was actually the Spectrum 2000 line of receiver/exciter (RT-2000/RT-2050) and exciter (EX-2050) modules, which had a PC/AT form factor and was intended to be assembled into an industrial PC passive-backplane chassis together with a modem (MDM-2501), a CPU and a 100W internal PA or a 400W/1kW/3kW external PA.

DSP was not used in the RT-2000, but was used in the RT-2050 and the EX-2050.

For various reasons, the PC chassis integrated radio was not too successful and was quite rapidly superseded by the current RT-2200 DSP receiver-exciter.

The current receiver-only product from Rockwell-Collins is the 95S-1.

Regarding the HF-2050 power supply, the explanation I got was that the intended custom switching power module became too expensive, and had to be replaced with an OEM linear power module. The HF-2050 power supply has no connection with the HF-80xx power supplies, except being linear.

Hope this helps and 73/

Karl-Arne Markstrom SM0AOM

===== Senior Radio Engineer Maritime Networks Telia Mobile AB
Nacka Strand Sweden Phone +46-8-6017171, Mobile phone +46-70-6636575 Fax +46-8-6017959

premium-rx-digest Monday, October 9 2000 Volume 01 : Number 090

Date: Mon, 02 Oct 2000 10:10:38 -0700
From: jan@skirrow.org
Subject: Re: SV: Prem-Rx: More on eBay item#451584676: ROCKWELL COLLINS HF-2050 RECEIVER

At 12:03 PM 10/2/00 +0200, Karl-Arne.A.Markstrom@telia.se wrote:

> As the owner of both an HF-8054 and an HF-2050, and also as a
> professional user of
> the HF-80 and Spectrum 2000 equipment line, I might be able to shed
> some light on the HF-8064 preselector question.

...

Great info - and I think answers quite a few of the questions surrounding the "orphan" HF-2050.

I assume from what Karl-Arne said that the preselector "board" in the 2050 would simply buffer already available internal logic levels. The output would be via the rear panel connector - the inner of the two - which on Walt's 2050 has a blank plate over the connector mount :> (

The eBay HF-2050 that started this thread is the first one I've heard of with the preselector option enabled. If other owners wanted to use a preselector, it might be possible to cobble up the interface - unless of course the interface is a readily available HF-80 accessory.

Interesting comment on the power supply. There is a former Collins engineer on another list who has much to say about the approach Collins used in R&D - - production never having been of much interest until well after Rockwell took over. Your comments about the power supply are consistent with his opinions! There was a tendency to concentrate on designs that advanced the art, cost be damned. I expect Rockwell introduced more of a bottom line orientation. The "profit" producing 1000+ HF-2050s for the Cdn military wouldn't go very far in paying for the undoubtedly expensive R&D process.

Jan Skirrow

Date: Tue, 3 Oct 2000 08:32:09 +0200
From: Karl-Arne.A.Markstrom@telia.se
Subject: Prem-Rx: Preselector in HF-2050

Hello again,

Checked my manual when home yesterday, and found that the preselector option in the HF-2050 differs hardware-wise from standard that there are buffers, latches and drivers present on the control board, that are not fitted on the non-preselector units.

Time permitting, I will hang a logic analyzer onto the bus and see whether the software puts data into the latch address space when changing frequency.

If so, the standard software also supports the preselector option.

For the software-inclined, another suggestion for preselector control would to let a microcontroller eavesdrop on the HF-2050 RS-422 monitor data bus and update a parallel (or serial) interface to a preselector of any type or make.

I have used this approach for "accessory control" when using a Standard Radio CR91 as the frequency controller for a HF-8014A/HF8023 transmitter when transceive operation is required. (The HF-8014A thumbwheel frequency input can be pretty tiring sometimes...)

73/

Karl-Arne Markstrom SM0AOM

===== Senior Radio Engineer Maritime Networks Telia Mobile AB
Nacka Strand Sweden Phone + 46-8-6017171, Mobile phone + 46-70-6636575 Fax + 46-8-6017959

Date: Tue, 3 Oct 2000 10:13:13 -0700
From: "Jerry Gardner" <jerr@nortelnetworks.com>
Subject: Prem-Rx: W-J HF-1000A Problem

I'm posting this for a friend who doesn't have net access:

"I have a Watkins-Johnson HF-1000A that has developed a strange problem. It works fine when first powered on, but after an indeterminate period of time that ranges from 20 minutes to 3 hours, the audio starts cutting out sporadically. Eventually the whole receiver locks up and must be power cycled to bring it back to life. The BITE doesn't indicate any fault conditions either before or after the lockup. This receiver is a June 1997 production model."

Anyone on the list know what might be happening to his HF-1000A?

- -- Jerry Gardner | Senior Project Manager Nortel Networks | email: jerr@nortelnetworks.com

Date: Tue, 03 Oct 2000 22:02:59 -0700
From: John Collins <jcollins@referencevideo.com>
Subject: Prem-Rx: Collins 2050 maint manual-ebay #452926731

Hi all,

I may be late, but any interested party might want to check the ebay item # above for a Collins 2050 maintenance manual. It appears as described-a high quality copy well bound.

regards

John collins _____

Date: Thu, 5 Oct 2000 01:03:29 -0600 (MDT)
From: Don Moman <ve6jy@freenet.edmonton.ab.ca>
Subject: Prem-Rx: SWL/Premium RX listening weekend

OCT 7,8,9

For the few of you on this list within driving distance of the Edmonton area, we are having another weekend of DX listening out here (here being approx 60km NE of Edmonton). Lots of spare outputs on the RCA CU 5069 multicouplers for you to hook up to the 4-30 log periodic. Lots of HF-2050's around plus the new ICOM 756 Pro DSP transceiver.

E-mail for any further info.

Back to the RCA CU-5069 m/c unit - some time ago I found one of my units had gone very dead - the 2N5160 in the hi level driver stage was gone. This transistor doesn't appear in any cross refs I have, or any of the parts houses either, and internet searches haven't been too helpful either. Any ideas for a source or a good bet for a sub?

Switching topics again - came across approx 20 front panels for the HF-2050 in a junk pile of surplus stuff. None are in better than average shape I guess, but if someone has a real tough panel this might be a good one to restore and then swap out.... Some even have parts (most) of the display circuitry intact - LCD displays, IC's, keypad etc - but NONE have the encoders. e-mail me if you need one for spare parts....

73 Don VE6JY

VE6JY Don Moman email: ve6jy@freenet.edmonton.ab.ca Box 127 Lamont, Alberta email forwarding: ve6jy@rac.ca CANADA T0B 2R0

Date: Thu, 05 Oct 2000 08:35:41 -0400
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: [Fwd: Replacement transistor in CU-5069 multicoupler]

Al Klase wrote:

> Jim, Don, and the Group,
> I respectfully wish to differ with Jim's suggestion. The
> 2N5160 is a PNP 5-Watt RF power transistor with a
> transition frequency (F sub T) of 500Mhz minimum.
> Replacing it with a low frequency device will almost surely
> degrade the LINEARITY of the system resulting in (possibly
> subtle)intermodulation problems. What to do?
> Use the Google search engine <http://www.google.com/> to
> search on 2N5160 . This silly thing appears to search the
> text of the ENTIRE WEB, and will find parts in individual
> inventory lists. Saw one source offering them for less than
> \$2.00.
> Best regards,
> Al
> --
> Al Klase - N3FRQ
> skywaves@bw.webex.net
> Flemington, NJ 08822
> Web Page: <http://www.webex.net/~skywaves/home.htm>
- - Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Thu, 5 Oct 2000 12:48:02 -0500
From: "Davez" <davez2@netzero.net>
Subject: Prem-Rx: WJ-8711A Pricing

Hi to all,

Sent Fred Osterman this info and was thinking that it might be of interest to the group.

Current USD prices on the (BAE Systems) WJ-8711A and options, and yes they are higher than just a few months ago. I wonder what's up with the HIGH STABILITY OVEN OPTION, what are the specs without it ?? .7 PPM vs 1 PPM perhaps ??

8711/488 IEEE-488 INTERF.OPTIN \$1,150.00 WJ-8711A DIGITAL HF RECEIVER \$5,295.00
8711/PRE SUBOCRAVE PRESELETOR \$1,100.00 8711/REF HIGH STABILITY RE.OP. \$995.00
8711/SEU SPEECH ENH.UNIT OPTON \$1,350.00 8711/SPK INTERNAL SPEAKER OPT. \$110.00

Dave Zantow Janesville, WI

***** "Dave's Radio Receiver Page" now at:

<http://members.fortunecity.com/swradios>

_____NetZero Free Internet Access and Email_____ <http://www.netzero.net/download/index.html>

Date: Thu, 5 Oct 2000 23:02:45 -0700
From: jmcvein@teleport.com
Subject: Re: Prem-Rx: WJ-8711A Pricing

On 5 Oct 2000, at 12:48, Davez wrote:

- > Hi to all,
- > Sent Fred Osterman this info and was thinking that it might be of interest to
- > the group.
- > Current USD prices on the (BAE Systems) WJ-8711A and options, and yes they
- > are higher than just a few months ago. I wonder what's up with the HIGH
- > STABILITY OVEN OPTION, what are the specs without it ?? .7 PPM vs 1 PPM
- > perhaps ??

I picked up a new surplus Ball Efratom rubidium standard (10 MHz) for \$400 recently. This will outperform almost any quartz standard a few minutes after power-up. I am assuming the W-J has a ext-std input spigot out the back. Any prem-Rx I have used has been adaptable to a 10 MHz standard. If you are listening to voice or any single channel data, the need for a OCXO is debatable. It is a luxury for intermittent listening to have the Rx "preheated", to get clear voice from turn-on, without having to wait for a cold crystal to warm up to a stable condition. In all but one Rx, I use the internal TCXO.
Jim McVein

Date: Fri, 06 Oct 2000 14:05:23 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Re: Prem-Rx: WJ-8711A Pricing

I have seen several Efratom standards sell on eBay. Is that where you got yours? How do you tell it is new surplus, vs cooked for 10+ years? I think there is one on eBay now.

Date: Fri, 6 Oct 2000 14:29:38 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Terry O'Laughlin

Gentlemen:

ATTN surveillance receiver drivers, a fellow lurker has arrived !

Our newest member, Terry O'Laughlin, joins us from Madison where he is chairman of electronics at one of the areas technical schools. Terry operates a RA 6790/GM and a WJ 8718/MFP as well as a number of other receivers. Like many of our members, his interest in electronics started at the age of 13, obtaining a call (WB9GVB) in 1970, and is now focused on premium receivers.

Terry reports that he is "drawn to surveillance equipment out of a fascination with the exquisite engineering and innovative designs that manifest themselves in equipment where budget is not the

main project constraint." His radio collection includes a number of pieces of Watkins-Johnson, CEI, and LTV receivers and accessories.

"I am fascinated by the history of surveillance receiver designs and have interviewed former engineers from Watkins-Johnson about their work. I maintain directories of surveillance equipment that are accessible through the boatanchor archives on the Web. Directories are available for WJ/CEI, LTV, Racal, DEI, and Nems-Clarke. The directories are a work in progress as variants and one-offs from these companies are numerous and poorly documented. I'm hoping to get these on a web site connected with my RF course at school. "

"I have begun to collect photos in hopes of developing an illustrated directory/history for WJ."

All you surveillance lurkers out there, here is the e-mail address of our latest member: Terry O'Laughlin [terryo@wort-fm.terracom.net]

Greg

Date: Sat, 7 Oct 2000 16:10:48 -0700
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Members in NZ

Gentlemen:

I can't seem to identify our members in NZ, I think we have a few. Please contact me off-line.

Thanks

Greg

Date: Sun, 08 Oct 2000 10:27:04 -0500
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: Prem-Rx: Intermittents - old wive's tale or science?

An instructor at Centralia Technical College who did consulting work for HP passed this information to me. It was his explanantion for gold plating on the connenctors in digital circuitry and the propensity for intermittent connections.

The theory he told me is that a stream of electronics helps to maintain conductivity through a mechanical connection. Digital signals, with their miniscule currents, don't push enough electrons through the connection. As a result, the electrons around the molecules in the two terminals repel each other, the gap widens microscopically and intermittents develop.

It is plausible. I have reseated all the cards when my WJ-8718 gets flaky enough times to put some faith in it. But is it scientifically true? It certainly sounds like a sales pitch for Caig's Pro-Gold.

Best, Terry O'

Date: Sun, 8 Oct 2000 20:09:29 -0700
From: John Miles <jmiles@pop.net>
Subject: RE: Prem-Rx: Intermittents - old wive's tale or science?

The idea behind using gold in electronics is that it doesn't oxidize readily. Most metal oxides (with the notable exception of silver) aren't conductive, so when inexpensive connectors are exposed to atmospheric moisture and miscellaneous contaminants, there is a risk they will become intermittent over time.

Periodic thermal (hence, frictional) stresses in high-current connections can help prevent oxidation-related intermittents. (Anyone else on this list ever fought electrical gremlins in an old Italian sports car that's been sitting in storage for years? :) I think it is VERY safe to say that this effect has nothing to do with electrostatic repulsion between under-worked electrons!

- -- jm

- -----Original Message-----

From: Terry O'Laughlin [SMTP:terryo@wort-fm.terracom.net] Sent: Sunday, October 08, 2000 8:27 AM
To: Premium-Rx@kahuna.sdsu.edu
Subject: Prem-Rx: Intermittents - old wive's tale or science?

An instructor at Centralia Technical College who did consulting work for HP passed this information to me. It was his explanation for gold plating on the connectors in digital circuitry and the propensity for intermittent connections.

The theory he told me is that a stream of electrons helps to maintain conductivity through a mechanical connection. Digital signals, with their miniscule currents, don't push enough electrons through the connection. As a result, the electrons around the molecules in the two terminals repel each other, the gap widens microscopically and intermittents develop.

It is plausible. I have reseated all the cards when my WJ-8718 gets flaky enough times to put some faith in it. But is it scientifically true? It certainly sounds like a sales pitch for Caig's Pro-Gold.

Best, Terry O'

Date: Sun, 8 Oct 2000 23:32:14 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Intermittents - old wive's tale or science?

Right, it is the corrosion resistance of gold that makes it attractive for connectors. But they still need to be clean, as a very tiny speck of hard dirt can keep two small contacts from touching. And not all gold connectors are created equal, many connectors designed for a limited number of mating cycles have only a minimal gold plating.

NEVER use a pink abrasive eraser to clean gold contacts, you will remove all the gold and ruin the connector.

Peter

Date: Mon, 9 Oct 2000 07:55:10 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: Intermittents - old wive's tale or science?

Try Deoxit on your connectors once and you will end up putting it on every connector in the shack. I just repaired a radio switch intermittent that has bugged me for years. One good squirt and no more problems. I was told about this substance many times but never gave it a test. I visited a friend this past weekend and started talking it up and he pointed to his work bench where there were 3 cans in various locations. Eraser use is a death sentence. fc

Date: Mon, 09 Oct 2000 10:16:36 -0500
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: RE: Prem-Rx: Intermittents - old wive's tale or science?

It is obvious that gold is used because it doesn't corrode.

The question is, why do gold contacts become intermittent, particularly in digital circuits? If they don't corrode, they should always conduct.

Best, Terry O'

Date: Mon, 9 Oct 2000 12:22:26 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: Intermittents - old wive's tale or science?

Gold becomes intermittent, when after many thermal cycles. The thin layer of gold is ground away and the base metal corrodes. Many gold plated contacts used in commercial connectors have a very thin plating. Many connectors have a small percentage of actual contact area between the mating pins. The contact will look fine until it is observed under a microscope. The mating point will have a small pit or scratch down to the base metal that will look like a black mark or scratch. When the connector is separated and remated sometimes the contact point changes to a clean spot or the black pit is scraped clean. The best thing to do is put more gold on the contact then seal it with a substance like Deoxit which block moisture and lubricate the mechanical joint. fc

Date: Mon, 09 Oct 2000 11:57:18 -0600
From: Robert Sherwood <rob@sherweng.com>
Subject: Re: Prem-Rx: Intermittents - old wive's tale or science?

Air pollution, cigarette smoke, salt in the air like in Florida, etc. gets in the contacts. Also, it is gold alloy, not 100% gold. The higher the contact pressure provided by the socket the better, (up to a point) providing a gas-tight connection. DeOxit is the closest thing to magic I have ever used.

Terry O'Laughlin wrote:

- > It is obvious that gold is used because it doesn't corrode.
- > The question is, why do gold contacts become intermittent, particularly in
- > digital circuits?
- > If they don't corrode, they should always conduct.
- > Best,
- > Terry O'

premium-rx-digest Tuesday, October 17 2000 Volume 01 : Number 091

Date: Mon, 09 Oct 2000 15:52:40 -0700
From: jan@skirrow.org
Subject: Re: Prem-Rx: [Fwd: Replacement transistor in CU-5069 multicoupler]

At 08:35 AM 10/5/00 -0400, Al Klase wrote:

- > I respectfully wish to differ with Jim's suggestion. The
- > 2N5160 is a PNP 5-Watt RF power transistor with a
- > transition frequency (F sub T) of 500Mhz minimum.
- > Replacing it with a low frequency device will almost surely
- > degrade the LINEARITY of the system resulting in (possibly
- > subtle)intermodulation problems. What to do?

I agree with Al's comments. The last time I looked, this transistor was still in production, but scheduled to cease production shortly. May already have happened. I understand the maker is phasing out the last metal case transistors.

Anyway, they are sure not hard to find at this point. Might be useful to have a few spares around, but my two couplers have no dead channels, and I cool them with some little 24 volt fans that I sold a bunch of to list members last year. Nothing magic about them except that they were very thin, fit nicely inside the case and could be run on the internal supply (I disconnected one bank of amps to keep the total current drain within the original - never have missed those last 8 outputs, and I think of them as spares!).

Cheers from the rainy northwest...

Jan Skirrow

Date: Mon, 09 Oct 2000 16:07:11 -0700
From: jan@skirrow.org
Subject: RE: Prem-Rx: Intermittents - old wife's tale or science?

At 07:55 AM 10/9/00 -0400, Carcia, Frank A. HS wrote:
> Try Deoxit on your connectors once and you will end up putting it on
> every connector in the shack.

I agree! Having used some of the older "contact cleaners" years ago, I was really sceptical about De-oxit - especially given the price. But I tried it, as the need was great and the old gunky cleaners not acceptable. It was like magic, and the improvement lasts and lasts. Great for noisy pots, bum contacts and just about anything where you wanna clean up an electrical path.

I use both the spray form, and the liquid form that comes in a little bottle. When I don't want spray all over everything, I use a q-tip and the liquid to get it exactly where I want it.

Jan Skirrow

Date: Mon, 09 Oct 2000 21:09:58 -0700
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: DeOxit

Gentlemen:

If you guys ever read the small print on a bottle of DeOxit you will note it is a home address in Poway, CA. That be a QTH not far north of here, actually in the higher rent district of our county.

Naturally, this leads me to reminding you that one of our member lives in this northern county area..... specifically "Money Bags" Wallace. Perhaps we need to have him run over to Poway and see if we can buy a case of the stuff at wholesale price. Then we could share it with those on the list.

I have to agree, it is one good cleaner. However, I suggest using a Q-tip and a test area if there is silk screening in the area of interest. I have a letter-less radio panel in my garage presently. Oooops.

Greg

Date: Tue, 10 Oct 2000 01:55:28 -0400
From: Michael Brown <piggin@mindspring.com>
Subject: Prem-Rx: gold connection failures

Gold has an evil tendency to grow into the base metal on the connector. Current flow worsens this. Tiny dendrites of pure gold cruise into the base and away from where it is needed. This is called dendrite corrosion. Silver is much better for long term service in a clean environment. This info comes from research done at IBM. (my Dad was a senior engineer there). I thought this was common knowledge. I

have seen electron microscope shots of this damage, and it is quite beautiful even if its effects are not! The effect is worse the higher the gold content of the alloy. And the base metal used in the connector is critical too.

Date: Tue, 10 Oct 2000 07:58:07 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: gold connection failures

Our manufacturing prefers to solder tin all component leads that have gold plating for this reason. They want to have a hay day with RF components. fc

Date: Tue, 10 Oct 2000 12:49:21 -0400
From: "Ed Tanton" <n4xy@att.net>
Subject: RE: Prem-Rx: gold connection failures

Two comments on this: I hate tin-lead IC sockets, and NEVER use anything but machined-pin sockets in anything I build. Reason: I spent a year as the Chief Technician for a Technical University. Their cpu lab was not air conditioned, and got very warm in the summer. They had a bunch of 8-bit cpu trainers that all had tin-plated sockets. These failed with such regularity, that part of my routine became stopping by the lab and reseating all the ICs. Gold didn't do that.

Second point: remember, silver oxide is ALSO a conductor... so silver is a real winner.

73 Ed Tanton <n4xy@arrl.net>
website: <http://www.qsl.net/n4xy/>

Date: Wed, 11 Oct 2000 23:11:26 -0400
From: "W. Charles Alexander" <chalexand@columbus.rr.com>
Subject: Prem-Rx: FS HF-2050

I am selling my HF-2050, if anyone is interested you can e-Mail me at chalexand@columbus.rr.com or just hit reply. There are a couple of photos of it on my web site.

===== 73 de charlie W. Charles Alexander KC8IKG E-Mail
charlie@HF-2050.com Web Site www.HF-2050.com Monitoring the World from Columbus, Ohio USA
39.951 N 83.124 W HF Collins HF 2050, Drake R8B, Yaesu FT-847 VHF/UHF Alinco DJ-X10, Icom
R-2, Uniden BC-235, Yaesu VX-5R Antennas: 33 Ft Off-Center Fed Dipoles, 45 Ft Longwires, Slinky
Dipole, a Dressler ARA 60 Active Antenna and 2 Radio Shack Discones (All In Attic)

===== =

Date: Fri, 13 Oct 2000 15:16:58 EDT
From: Daiungoed@aol.com
Subject: Prem-Rx: RACAL RA1792 TUNING QUESTION

Hi, I have just got a second RA1792 receiver, which I am delighted with, the only difference being that the new one has a 10Hz tuning resolution, and the old one has a 1Hz resolution. Is it just a matter of fitting the EEPROMS from one type to another, or is there more involved? They appear to be identical inside and out, both with backlight and BITE, and I see that the 1Hz digit is present in the 10Hz receiver, it is tested in the BITE routine. I have to admit that I prefer the 10Hz one for tuning around, it is quicker, the other one's tuning rate does not speed up to a fast enough level for me, and if

they can be modified with just the EEPROMS, I might put them both at 10Hz. Any info. much appreciated, Dave

Date: Wed, 17 Jan 2001 06:46:17 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Glenn Little

Gentlemen:

Glenn Little from Goose Creek, SC has requested to join our List. Glenn has been involved in the hobby since 1971, picking up a number of receivers, as well as a ham ticket, WB4UIV.

His first premium receiver was a WJ-8888B that he still owns. He has since added a WJ-8716, WJ 8617A, MacKay MSR 5030, Skanti R5000, as well as a Skanti R5001. Being a hands-on type, Glenn's area of interest is restoring radios and putting life back in them. His 8888B was in storage . . . outside . . . when he bought it for \$50. It is still undergoing restoration due to a leaking nicad battery on the processor board.

He states, "The Skanti receivers are my latest addition. They cost me a total of \$15.00 at a hamfest. The 8716 was bought working with some mechanical problems and was previously used in the American embassy in Spain. The 8617A was bought refurbished by WJ and was the highest dollar receiver so far." He has manuals for all of his devices with the exception of the Mackay (perhaps someone could offer a hand in this area?).

Naturally, I have to add the fact that he admits to owning a 390A. Don't worry Glenn, many of us admit to such closet equipment. I typically note this kind of behavior just to placate brother, and fellow List member, Chuck Rippel.

Lastly, Glenn has a desire to discuss a unique receiver built by "E-Systems". It is an surveillance aircraft (U2?) receiver that was driven by a computer.

You can contact Glenn at: glittle@awod.com OR wb4uiv@amsat.org

Greg

Date: Sat, 14 Oct 2000 10:22:37 -0400
From: "Kevin D. Murray" <murray@spybusters.com>
Subject: Prem-Rx: ITT MacKay Marine 3030A

Hi Folks,

I am looking for a 12 Vdc, fuse holder style, meter lamp for an ITT MacKay Marine 3030A receiver. (1.5 inches long x .25 inches wide)

If anyone knows a source (or has a spare for sale), please let me know.

A picture of the deceased appears at: <http://www.spybusters.com/spare/ITTdiallamp.jpg>

Thank you,

Kevin WB2ZSD

Date: Sun, 15 Oct 2000 22:55:51 -0400
From: Glenn Little <glittle@awod.com>
Subject: Re: Prem-Rx: ITT MacKay Marine 3030A

When I had to replace three of these, I built the lamp out of LEDs. I used the endcaps off of a regular fuse. I cut a piece of perfboard such that the length was just short of the length of the original lamp and the width was such that a rectangular LED mounted on the perfboard would just enter the cutout behind the meter. I used four rectangular LEDs in series as this number pretty much filled the opening in the panel. To attach the fuse caps to the perfboard, I cut an "ear" in the perfboard to accept the endcaps and placed a loop of wire through each ear. The end caps were solder filled and the ear inserted while the solder was molten. To the loops of wire was attached one end of the string of LEDs and to the other the series dropping resistor. This illuminates the meter quite well and should not fail in the near future. The LEDs that I used were yellow from an assortment from Radio Shack.

Hope that this helps.

73 Glenn WB4UIV

----- Glenn Little glittle@awod.com QCWA LM 28417 Amateur
Callsign: WB4UIV wb4uiv@amsat.org AMSAT LM 2178 QTH: Goose Creek, SC USA (EM92xx)
ARRL TAPR -----

Date: Tue, 17 Oct 2000 23:50:04 -0500
From: "Joe Watson" <wwatson@mmcable.com>
Subject: Prem-Rx: Plan to sell my Racal RA-1792

I have a nice pre-bite Racal RA-1792 I have decided to sell. If anyone is interested, holler.

Joe Watson W5WBR

premium-rx-digest Saturday, October 28 2000 Volume 01 : Number 092

Date: Wed, 18 Oct 2000 04:55:42 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: mute ckt.

AS near as I can tell, the Harris 590 family has a muting ckt. included in the 590 and 590a however the R-2368 does not seem to offer a real mute ckt. has anyone else found this ckt. or just built around this situation..thank you..mac

Date: Wed, 18 Oct 2000 15:49:08 -0400
From: "W. Charles Alexander" <chalexand@columbus.rr.com>
Subject: Prem-Rx: Any HF-1000A's for sale around here?

Hi Folks I am looking for a HF-1000A in very good condition. Anyone have one they would part with? Thank you in advance. W. Charles Alexander

Date: Wed, 18 Oct 2000 19:31:24 -0400
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: mute ckt.

Why do you want to mute?

I can look it up in my 590A manual if you want to know how it's set up there.

Peter

Date: Wed, 18 Oct 2000 19:48:13 -0500
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: mute ckt.

Peter..no problem with the 590 and 590a they have mute..pin 17 to ground and K-1 closes and you're muted....but I find no such ckt. for the 2368 as to why or want to mute..RF overload from the 1310H and the 130 1kw amplifier as well as using these receivers as a second receiver with my other transceivers...but it seems the 2368 was set up for group cluster receiving situations...thanx..mac - --

Date: Thu, 19 Oct 2000 19:41:39 -0400
From: "Peter Gottlieb" <nerd@bellatlantic.net>
Subject: Re: Prem-Rx: mute ckt.

You could always put a SPDT coaxial relay on the input and ground the input when it's energized. Do you also want to kill the speaker?

Date: Fri, 20 Oct 2000 10:34:12 -0700
From: jan@skirrow.org
Subject: Prem-Rx: Info on HP5334B Needed

Hi all ...

A bit off topic, but I only use this counter with premium radios :>)

The HP5334B universal counter allows the input triggering level to be set with a front panel control. The range is + 5 to 0 to -5 volts. The set level can also be displayed.

The problem is that while the displayed level varies over the range shown, the input level at which triggering actually occurs is in agreement. One of the counter's two 500MHz channels works correctly; the other "works" as described.

I have looked everywhere I can think of for a manual, but no luck. What I need to know is whether there is an adjustment, or failing that, if I can get a schematic at least - and preferably a manual (buy, borrow, copy - whatever!).

There have gotta be lots of these counters out there, but ...

Jan Skirrow

Date: Fri, 20 Oct 2000 15:17:57 -0400
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: Info on HP5334B Needed

Check out " Jack Manuals Plus" WWW.manualsplus.com

Date: Sat, 28 Oct 2000 19:00:42 -0700
From: Paul Wende <pwende@aimtronics.com>
Subject: Prem-Rx: 6790GM display

Hi Group,

I have a RA6790GM that has developed an intermittent (the hardest) display problem. What happens is all the segments in the left LCD light up at once. It only happens once in a while and has just started this behavior in the last month or so. It is getting worse. Seems to be happening more often than not. I have discovered that it is related to the RF/AF meter. When the RF/AF segments are not displayed, the display is fine, as more segments are lit, the other objects in the display begin to illuminate. ARG!

Look forward to any and all help you can suggest.

regards,

Paul

premium-rx-digest Monday, November 6 2000 Volume 01 : Number 093

Date: Mon, 30 Oct 2000 07:55:11 -0500
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: 6790GM display

Contact Gary Weingerd who does service on these. I bet he can help you. 301-582-2424. fc

Date: Mon, 30 Oct 2000 15:39:13 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Harris Cabinets last call....

This will be the last call for anyone to add to the existing order for new Harris cabinets for the RF-590 series receivers \$355.00 packing and shipping included via UPS ground to the lower 48..all other shipping at direct cost...is there any interest in cabinets for the 1310 exciter..thank you...

Date: Wed, 01 Nov 2000 22:51:50 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Racal help

Haven't seen any activity on this list of late, so this is also a test. I just acquired a Racal 8772 receiver, but unfortunately it's pretty deaf. Anyone out there have a tech manual on this lovely receiver? Thanks.....Walt. Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers:

Rockwell/Collins HF-2050 (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC NRD 535D, and Kenwood R5000.

Date: Sat, 4 Nov 2000 15:06:56 EST
From: MW1DUJ@aol.com
Subject: Prem-Rx: norlin receiver

Hi, list, Can anyone help me identify a set that I have been offered. It was made by NORLIN, and supposed to cover either 2 or 20 to 500MHz, in the center of the set is an approx. 20 key keypad, there is another similar to the right of center, on the far right is a tuning knob, and on the left, about 4 inch square display of operating parameters, and spectrum display. The model number was on the front, but I had no pen, it was a 5 digit number beginning with 13. Not much to go on, but any help would be most welcome, Dave

Date: Tue, 5 Dec 2000 14:53:17 -0600
From: "George Wagner" <geewagons@worldnet.att.net>
Subject: RE: Prem-Rx: norlin receiver

Hi Norlin changed their name Applied Communications sometime in the 1980's. The unit you are referring to sounds identical to the Applied Communications SR-2150, which covers 20 to 500 Mhz and can extend to 1.1Ghz with the appropriate plug-in units equipped. I have a SR-2151 which is internally identical but has a blank front panel being remotely controlled only. It's a nice VHF/UHF receiver. If you end up not buying it, pass me the sellers name - I would be interested. George Wagner

Date: Sat, 04 Nov 2000 22:22:28 MST
From: "joe talbot" <n52w113@hotmail.com>
Subject: Prem-Rx: Rockwell Collins HF 2050 Front Panel Restoration Project

Hello To You All:

I hope this posting finds you all happy and well! I am in the final stages of a non-profit front panel exchange project. Those interested would send in their less than "mint" panel and handles, the cost is still being sorted out and receive a restored mint panel with new plexi-glass display window and repainted handles, the entire project professionally done, right down to the packing and shipping! The project involves sandblasting the panels and handles, prepping and repainting the panel and handles and finally silk screening both the panel and plexi-glass display window. One question arises, regarding the painting method, is this panel "Anodized" or is it simply "Enamel Baked". Does someone in the group know if it is Anodized? If so I would have to send the panels away either to Edmonton or Calgary, if need be I could baby sit them. I had hoped to keep this project close to home, so I could keep an eye on things. I have had one panel sandblasted, a Guinea Pig of sorts, turned out well. A very nice finish, that the painters are happy with it. Anodizing is a very durable finish, a electrolytic process, similar to chrome plating. Baked Enamel, a spray then baked on finish, the method used on our vehicles. I have spent considerable time with the people involved, I am very comfortable knowing that they will deliver a beautiful panel in the end. Until we can pin point the painting method, I would be reluctant to proceed. A question of originality may surface, perhaps more importantly, will other than the original paint method meet our needs over the years. The original paint method sure has stood the test of time, considering the abuse some 2050's have been subjected to be bored military personal. The R390A panel has been the subject of several panel restorations, can anyone recall a concern over the painting method and how those restored panels have held up over time. Anodizing verses Baked Enamel? After sorting out the paint method I would be happy to fill you all in on the details of this project. I really want to be clear on doing the best, the right thing(s) in this project! So please gentlemen your thoughts, insight and wisdom please, either via our group or direct n52w113@hotmail.com A quick hello to the September Graylands group, still working on reception reports. Last evening I listened to the recording of 4T0 774 khz Townsville Australia, a Don Nelsen catch, very nice signal, 90% clear copy for 15 minutes! A great DXped! Take care everyone! 73's. Joe Talbot

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Date: Sun, 05 Nov 2000 06:40:13 -0600
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: Prem-Rx: HF-2050 parts

A friend of mine obtained several HF-2050s that he was told were missing "two chips." When they arrived, they were demil units with smashed LCDs and several destroyed chips internally. Oddly enough they smashed ICs in the power supply but not the microprocessor or DSP compartment. The circuit boards appear to be intact.

Are parts available for these units or are they filled with unobtainium? I was hoping to get a 2050 from him but if these things are unfixable...

Best Terry O'

Date: Sun, 5 Nov 2000 12:47:30 EST
From: MW1DUJ@aol.com
Subject: Prem-Rx: RA1792 FREQ.STANDARD

Hi, list, I have just obtained a RA1792 which has BITE, and Backlighting, and 1HZ readout, but curiously, no freq. standard as such is fitted, the freq. standard base is there, and wired up, both to supply and RF out, but no standard with the valve type base fitted. If I fit one, the set will not tune to anything, although a freq. counter shows 5MHz RF coming out of the standard. This I think, is because there are now two 5MHz inputs to the second L.O. board, which has a TCXO on it. I can see two ways to go from here, one is to somehow disable or remove the TCXO, the other is to connect the freq. standard output to the place on the LO board where the external standard wire connects, and switch it over to external. Any comments, I assume that the set if it had originally had freq. standard would not have the TCXO. All the best, Dave

Date: Sun, 05 Nov 2000 13:57:44 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: HF-2050 parts

At 06:40 AM 11/5/2000 -0600, Terry O'Laughlin wrote:

> A friend of mine obtained several HF-2050s that he was told were missing
> "two chips." When they arrived, they were demil units with smashed LCDs
> and several destroyed chips internally. Oddly enough they smashed ICs in
> the power supply but not the microprocessor or DSP compartment. The
> circuit boards appear to be intact.
> Are parts available for these units or are they filled with unobtainium? I
> was hoping to get a 2050 from him but if these things are unfixable...

Most odd, Terry. I have never come across the Canadian military de-milling their electronics. Perhaps this is because we use them long into obsolescence ;) !! Seriously, though, I know that Don Moman has seen some pretty sorry units, and that others have obtained junkers. I guess I have been lucky. All the ones I've come across have been fully functional, and in pretty good shape. There are still a number of this rigs in service, so there is hope for replacement parts. Parts, however, are not kept locally. I've checked with my sources. It seems they have at times shipped the units back to Cedar Rapids for repair. There once were repair depots in Edmonton, and Halifax, I believe, but I don't think they still exist.....Walt. (2050 driver X 3)

Date: Sun, 05 Nov 2000 16:36:00 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Re: Prem-Rx: HF-2050 parts

Group-

My new job has got me terminated in the spare time department, BUT, I still enjoy reading the posts on this List. In this regard, I've been reading this thread with some interest. I know that John Bryant, a fellow Listee and professor who recently retired and has been building his dream house on Orcas Island, is gathering information on the history of the 2050. John's past effort was a (co-authored) book on the Zenith Transoceanic.

QUESTION: Is there any way to determine the serial number/s of the receivers these 2050 boards were removed from?? Can we assume they are out of circulation?

Greg

Date: Sun, 05 Nov 2000 19:16:09 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: HF-2050 parts

At 04:36 PM 11/5/2000 -0800, Greg W. Bailey wrote:

> Group-
> My new job has got me terminated in the spare time department, BUT, I still
> enjoy reading the posts on this List. In this regard, I've been reading this
> thread with some interest. I know that John Bryant, a fellow Listee and
> professor who recently retired and has been building his dream house on Orcas
> Island, is gathering information on the history of the 2050. John's past
> effort was a (co-authored) book on the Zenith Transoceanic.
> QUESTION: Is there any way to determine the serial number/s of the receivers
> these 2050 boards were removed from?? Can we assume they are out of
> circulation?

Greg, it's good to see you back in circulation. I was starting to get concerned, as doctors frequently do :)!! I know that Prof. John passes on his good wishes as he does his final touches winterizing his Orcas Is home. Nick Hall-Patch and I spent a most enjoyable weekend visiting John, and even doing a little bit of dxing between the socializing.

The question is similar to one that regularly makes the rounds on the 390 reflector. It is my opinion that these receivers were handled in much the same way at the depot level, and so the cards were likely freely swapped when repairing them. I doubt anyone paid much attention to serial numbers, as long as the end product was back up and running. It would be nice if we had anyone who actually worked on them in the field on the list. Anyone out there???.....Walt.

Date: Sun, 5 Nov 2000 21:12:44 -0700 (MST)
From: Don Moman <ve6jy@freenet.edmonton.ab.ca>
Subject: Re: Prem-Rx: HF-2050 parts

On Sun, 5 Nov 2000, Walter (Volodya) Salmaniw, MD wrote:

> At 06:40 AM 11/5/2000 -0600, Terry O'Laughlin wrote:
> A friend of mine obtained several HF-2050s that he was told were missing
> "two chips." When they arrived, they were demil units with smashed LCDs
> and several destroyed chips internally. Oddly enough they smashed ICs in
> the power supply but not the microprocessor or DSP compartment. The
> circuit boards appear to be intact.
> Are parts available for these units or are they filled with unobtainium? I
> was hoping to get a 2050 from him but if these things are unfixable...

Well, consider yourself lucky if they just trashed the power supply - of all the boards it is the simplest to repair and all the parts are very common stuff. Most of the caps in the ps have or are close to being dried out so replacing them is a good idea anyway. Schematics are easily obtainable, if you need more help drop me a note (I'll be away from e-mail for a couple of days).

73 Don VE6JY

Date: Mon, 06 Nov 2000 23:05:12 MST
From: "joe talbot" <n52w113@hotmail.com>
Subject: Prem-Rx: HF 2050 Panels

Hello: I have researched the Anodizing process locally. As it turns out it can be done here. Anodizing is a old adhesion (circa 1974), process used to help paint adhere to aluminum, not a painting method as I told was in the beginning. The process is either electrolytic or a "bath" process. Today, Anodizing can be replaced with several brush on methods. A number of companies, Dupont, Endura, Dow, have products available. I will speak with the painters regarding any concerns they may have with paint adhesion to the aluminum 2050 panels, I will also recheck the estimates and our requirements with the parties involved and be back with a per panel price by tomorrow evening. 73's.

Joe Talbot n52w113@hotmail.com

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premium-rx-digest Friday, November 17 2000 Volume 01 : Number 094

Date: Tue, 7 Nov 2000 09:00:47 -0800
From: Paul Wende <pwende@aimtronics.com>
Subject: RE: Prem-Rx: HF 2050 Panels

Hi Group,

Just thought I would jump in and try to help out on the anodizing question. Anodizing, is indeed an electrolytic bath. It's main purpose is to protect the aluminum by rapidly oxidizing the surface (hardening it) and making it much more durable. Colours can be added to the solution which will then be transferred to the panel for decorative purposes.

As for the 2050 front panel, it might be anodized underneath and then painted, but probably the more durable and best looking solution would be to powder coat the panels, if that is available in your area. Powder coating involves putting a high static charge on the panel and spraying a fine coloured powder on the panel, then baking it at a temperature which melts the powder and adheres it to the metal. Very durable and it looks great. I have had a experience with both and both look good. Powder coating has a smoother finish (sheen) and look about it, anodizing will be a bit duller looking. Both finishes will readily accept silkscreen lettering.

Hope I haven't confused the issue.

kind regards,

Paul Wende

Date: Tue, 07 Nov 2000 12:22:33 -0500
From: Geoff Greer <greer86@attglobal.net>

Subject: RE: Prem-Rx: HF 2050 Panels

Hi Group,

I've following this thread with great interest. I have a WJ 8617B with a damaged front panel. Just the aluminum overlay is damaged. The heavy aluminum panel underneath is OK. WJ can't help at all.

Any ideas on how to make a new overlay. If I were to scan the front panel into something like autocad and clean it up, could an a silkscreen be made from that?

I remember seeing something about us who are also driving VHF/UHF premium boxes. Could this become a sig (special interest group)?

Regards, Geoff Greer

Date: Tue, 7 Nov 2000 21:23:20 EST
From: CLeyson@aol.com
Subject: RE: Prem-Rx: HF 2050 Panels

Hi Group

When painting or anodizing front panels do not forget to leave a blank area where the panel makes contact with the chassis. Firstly, this prevents your front panel from acting as a good antenna, radiating RF from the display or control electronics mounted behind it. Secondly, and most important, you need a low impedance earth return in the unlikely event of the panel becoming live, from a faulty power switch for example.

I have an RA1792 which picked up a lot more spurious signals than expected. Turned out to a be the front panel which had been repainted front and back providing a very effective insulator !

Regards Chris Leyson

Date: Tue, 07 Nov 2000 12:22:33 -0500
From: Geoff Greer <greer86@attglobal.net>
Subject: RE: Prem-Rx: HF 2050 Panels

Hi Group,

I've following this thread with great interest. I have a WJ 8617B with a damaged front panel. Just the aluminum overlay is damaged. The heavy aluminum panel underneath is OK. WJ can't help at all.

Any ideas on how to make a new overlay. If I were to scan the front panel into something like autocad and clean it up, could an a silkscreen be made from that?

I remember seeing something about us who are also driving VHF/UHF premium boxes. Could this become a sig (special interest group)?

Regards, Geoff Greer

Date: Mon, 13 Nov 2000 13:33:21 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member Takashi Kuroda

Gentlemen:

Our newest member joins us from Tokyo, Japan. Takashi operates a WJ HF1000A, NRD545, and R-9000 at the moment. He also states he owns (but does not list) some "Racal, NRD, and other receivers".

Takashi is our second member in Japan. I am sorry I do not have more information at this time, perhaps he will give us an update on this interests and radio collection?

You can contact our newest member at: Takashi Kuroda Tokyo, Japan e-mail : tkuroda@tke.att.ne.jp

Welcome to our List,

Greg

Date: Fri, 17 Nov 2000 15:01:43 EST
From: Daiungoed@aol.com
Subject: Prem-Rx: APPLIED COMMUNICATIONS (NORLIN) SR2152

Hi, list, I have just managed to get one of these fine looking receivers, covers 2-500MHz, spectrum display, etc. The only thing missing is any form of operating or service instructions. Does anyone know enough about them to answer a few basic questions, such as can you connect a speaker to it, and how? Any info. much appreciated, Dave. Incidentally, anyone got any comments on the WJ 8888B receiver, as I might be able to get one and would like an opinion. Thanks

premium-rx-digest Monday, November 20 2000 Volume 01 : Number 095

Date: Fri, 17 Nov 2000 21:38:53 MST
From: "joe talbot" <n52w113@hotmail.com>
Subject: Prem-Rx: Rockwell Collins HF 2050 Panel Restoration

Hello Group:

Sorry for the long delay in getting back to you. We have investigated all possible painting processes for this restoration project, including powder coat. I contacted the DuPont people and spoke extensively with a metallurgist and paint specialist. Following their opinion, the best possible process to restore these panels is the following: Sandblasting the panels, clean the panel with aluminum cleaner, prime with a EPPA primer and top coat with a two component Polyurethane "Endura" TM.

COST: (Prices in Canadian Dollars/Tax In)

1 Panel: Sandblasting (Panel/2 handles)- \$35.00 Minor Repair/Prep and Paint Panel/2 handles- \$134.82 Silkscreen and New Plexi Display Window Installed- \$227.91 Total 1 Panel- \$397.73

6 Panels: Sandblasting (Panel/2 handles)- \$35.00 Minor Repair/Prep and Paint Panel/2 handles- \$84.76 Silkscreen and New Plexi Display Window Installed- \$58.49 Total 1 Panel- \$178.25

12 Panels: Sandblasting (Panel/2 handles) - \$35.00 Minor Repair/Prep and Paint Panel/2 handles- \$67.91 Silkscreen and New Plexi Display Window Installed- \$43.69 Total 1 Panel- \$146.60

Extra Plexi Display Window (Mounting Holes Drilled)- \$16.05 each

Here is what is involved in the price:

1. Sandblasting Panel and 2 handles. 2. Aluminum Cleaner. Minor Repair- a bent corner/Prep (Filling standoff devots flush). EPPA Primer. Endura (Polyurethane) 2 component top coat panel and 2 handles. 3. Silkscreen to match original panel. Silkscreen tested to adhere to top coat. New silkscreen Plexi display window installed. Group keeps silkscreen template for future panels.

Advantages to Endura Polyurethane 2 component paint:

Standard filler can be used to cover standoff devots. Extremely flexible. Extremely durable. Near original paint/sheen match. Spray applied. Air dried.

Shipping (Canada Post "Express Post"). Shipped at 4 Kg (8.8 lbs) due to box size:

In Canada: 2-3 business days \$100 Insurance and Trace Option Extra Insurance at \$.50 per \$100.
BC\AB\SK- \$8.77-\$10.05 Ont (Toronto)- \$20.97

In USA: 5-7 business days \$100 Insurance and Trace Option Extra Insurance at \$1.00 per \$100.
Destination dependent- \$19.84-\$26.59

International 6-10 business days. \$100.00 Insurance and Trace Option. Extra Insurance at \$1.00 per \$100. To most "Major" European Countries- \$71.80 "Special Delivery" (3-7 business days) add \$4.92.

Packaging: 10x12x20" box. 2' of bubble wrap (panel wrapped). 2' of corrugated cardboard (over bubble wrap). 1 cubic ft of styro peanuts. Addressing and Documentation. Total: \$14.44.

This entire project is entirely a non-profit endeavor. Since purchasing my 2050 over a year ago, I have been wanting to have an absolutely mint panel. I have no immediate plans to ever part with my 2050 but a mint panel is surely a wise resale investment. I have had the aluminum receiver chassis sides professionally polished and the top and bottom "brush" finished, that has turned out very nice, it shines like stainless steel. The top and bottom would not polish up "like" aluminum so a brushed finish. Now the finishing touch a restored panel. I currently have two panels which I would like done, Walter Salmaniw has requested three, for a total of five. There are an additional 5-7 panels at our disposal, that have been donated to this exchange. As you can see that the price for 6 or 12 panels is extremely reasonable. I would appreciate hearing from those interested in having their panel restored. If you wish you can specify that you would like "your" panel returned to you or simply one from the exchange that has been restored. I will endeavor to ensure that "your" panel is returned to you. All panels in this restoration will of the same high quality. You may contact me via the group and or at n52w113 with your questions and or wishes. I hope to hear from interested 2050 owners and I can get things started at this end. The painters and the silkscreeners are quite eager to get started with this project, they both found our radio hobby quite interesting. Hoping to hear from you soon. 73's

Joe Talbot n52w113

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Date: Mon, 20 Nov 2000 17:53:26 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: First Premium-Rx Symposium

Fellow Members:

This is to announce that on November 18th, the First Premium-Rx Symposium " happened" at Murphy's Surplus. It was reported that all attending, were sober, had a wonderful time, and survived. Those pictured from left to right-

- - John Bryant, list member, retired professor, presently building a vacation home on Orcas Island (Puget Sound, Washington) but calls Stillwater, OK. as his QTH of record. John is a SWL type, tropical band, Grayland, WA. DXer. Co-author of the benchmark text on the Zenith Transoceanic, and his just out, Dangerous Crossings, a non-fiction work on the first modern polar expedition, 1925.

- - Ben Wallace, list member, aka as "money bags" on this list.... Ben is a Project Manager at Qualcomm. A serious collector of pristine BA's (1930 - 50s ?), a tour of Ben's QTH is a trip back in time. One never knows what Ben is operating from day to day, either a 590, 2050, or perhaps both? I

must admit, I gave Ben the name of "money bags" when Qualcomm's stock peaked over \$200 a share. I consider Ben a dear friend who has taken my banter far too long. However, having said this, be advised I still ain't going to cut money bags any slack. . . !

- -Mike Murphy, list member, proprietor of Murphy's junk shop. Mike's inventory of premiums modulates from day to day. On the day the picture was taken there were two R-9000 in stock, probably one or two 590s being used as a doorstop, and so on. For example, pictured between Mike and Ben is a Russian cold war Premium-Rx. Mike always takes time to be personal, talk radios, and gives guided tours of the shop. Yahoo key word: Murphy's Surplus

- - Greg Bailey, sometime list member, presently claims teaching as his occupation. Desires to retire so he can play more.

premium-rx-digest Tuesday, November 28 2000 Volume 01 : Number 096

Date: Mon, 20 Nov 2000 21:30:17 -0500
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: First Premium-Rx Symposium

I'm jealous, stuck here on the east coast...

> **This is to announce that on November 18th, the First Premium-Rx
> Symposium " happened" at Murphy's Surplus. It was reported that all
> attending, were sober, had a wonderful time, and survived. Those
> pictured from left to right-**

Date: Sun, 19 Nov 2000 21:13:51 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: First Premium-Rx Symposium

Looks like 4 of the Florida Supreme Court judges to me...mac/mc

Date: Mon, 20 Nov 2000 22:33:28 -0500 (EST)
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: First Premium-Rx Symposium

Hi Peter,

We will meet at the Taunton warehouse and generate other-coastal envy.

73,

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Sun, 19 Nov 2000 22:01:55 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx:

But !!! Murphy's has that genuine SURPLUS aroma.....

Date: Tue, 21 Nov 2000 10:51:43 -0800
From: "Greg Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- David Norrie NZ

Gentlemen:

David Norrie from NZ has joined our List. Dave is a guy that likes to move about..... A native of Scotland, received a PhD in microbiology in Birmingham UK, then a MBA at Henley also in the UK, then it was off to South Africa for a job. Finding he couldn't get the Scottish soccer scores on the local BC stations, he purchased a Sony 7600D to listen to the matches direct. Soccer scores lead to DXing and membership in the List.

He then read a review on the AOR 7030 about 4 years ago. The article was written by our fellow list member, Guy Atkins, in ODXA. While in Africa he purchased a copy of the 7030, but then moved again to his present QTH in New Zealand. Presently, his DXing interest is Latin America, and the US AM stations (ed note, move up to my backyard, they generate so much RF I can almost power the house with their garbage).

Dave is presently living in Auckland, New Zealand, a great DX spot, although (he notes) it would be great to be out of the noisy city. You can contact our newest member by e-mailing: norrieclan@clear.net.nz

BTW, Dave is our second member from down-under

Greg

Date: Tue, 21 Nov 2000 14:19:26 -0500
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Subject: RE: Prem-Rx: New Member- David Norrie NZ

Hi Greg, I know what you mean about BCI. I lived close to the KKNX antenna back in '82 and could measure a quarter volt P-P by holding a scope probe in the air. fc

Date: Sat, 25 Nov 2000 09:21:29 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: New Member- Ron Spears

Gentlemen:

Ronald E. Spears has been added to our growing Premium-Rx List. Ron works for the South Carolina Department of Transportation as a civil engineer. In his introductory notes he states, "I am a confessed tabletop RX and hamfest junkie." (sounds normal to me???) He is a native of Augusta, GA, an area he claims that is perfect for long wires because there is no ice, however, he notes, there is "lotsa noise on HF especially in the summertime!"

His interest in the HF RX hobby began in 1996 when he bought his first portable receiver while visiting the local Radio Shack. His timing was "perfect", it was the bottom of the solar cycle. But this error didn't attenuate his interest, it quickly expanded into tabletop RX after he learned the portable just couldn't quite cut it for DX and UTE listening.

Ron admits to reading everything he can find about tabletop receivers. He even purchased "a copy of Short-wave Receivers Past and Present from Universal Radio" and the rest as they say was history.

(Fred Osterman is the author of Short-wave Receivers Past and Present, and is also a member of the List. Fred Osterman <osterman@dxing.com>).

Ron ran across our List while searching the web for filter mods and a RTTY decoder for his ITT MACKEY AR3030A receiver. Perhaps one of our readers can help?

You can reach Ron at this e-mail: spearsre@dot.state.sc.us

Greg

Date: Tue, 28 Nov 2000 21:10:02 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: A Benchmark, well, almost?

A benchmark in history? Well, not quite but of some interest never the less- Almost two years ago to the day Chuck Rippel, Tony Ward, and myself exchanged our first greetings via this List. Items of interest-

- -Approximately 175 people have requested to join, of these 124 have qualified.
- -Two have "un-subscribed" officially.
- -Four hold "honorary" Listee positions, (do not own a Premium but have in the past, and in a heart beat could again)
- -Two were denied membership. . . . causing them to go out and buy a qualifying radio!
- -We have members in Europe, N and S America, NZ and Australia, and Japan. Representation is missing in the Middle East, Africa, India, and the Poles.
- -The most embarrassing moment. . . . well: Things are usually quiet on the List, but they were totally dead before I realized I accidentally "un-subscribed" myself for about a week. Dauh!
- -I was initially denied the use of the server for this List. Seems the SysOp thought the purpose of the List was to exchange information about Premium Drugs as in Premium-Rx. BTW, Rippel generated the name "Premium-Rx"
- -Hottest exchange of data was on the topic of listing E-Bay items on this List.
- -Most active member: Jim Pruitt who is our present Web worker.
- -Our thanks to all those who have suggested ideas and offered their help.

Happy Birthday- Greg

premium-rx-digest Sunday, December 3 2000 Volume 01 : Number 097

Date: Wed, 29 Nov 2000 17:30:07 -0500
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: A Benchmark, well, almost?

A Happy Birthday indeed Greg! As the impoverished owner of far too many qualifying radios (but not as many as Dave Clark) allow me to thank you sincerely for your hard work and constant good cheer. I particularly enjoyed the photo of the remarkable radio relics that you put on here a couple of days ago. And the radio equipment showed up pretty well too eh!! (G)

Tony (VE3NO) NYAA StarFest On-Line tonyward@home.com tward@spanit.com www.nyaa-starfest.com

Now an Official Beta test site for the Chaos Theory ...

Date: Thu, 30 Nov 2000 09:37:09 -0500
From: "Chuck Rippel" <win.308@home.com>
Subject: Re: Prem-Rx: A Benchmark, well, almost?

Happy Birthday to the list. Now, if only you could get propegation to cooperate some....

----- Chuck Rippel

Reply to: wa4hhg@amsat.org - -----

Date: Thu, 30 Nov 2000 10:50:28 -0500
From: "Walt Novinger" <wnovinger@nc.rr.com>
Subject: Prem-Rx: Rhode & Schwartz EK-07 opinions sought

Folks,

I have an opportunity to obtain an EK-07 and was wondering if anyone could provide an opinion of this rx as a result of hands-on experience. I am particularly interested to know if it is significantly better than, say, a hot Racal RA-17 (my current tube favorite).

TIA, Walt

Walt Novinger Collector and restorer of valve communications receivers, test equipment, and audio gear "Let me explain what I do here. I don't want to confuse you any more than absolutely necessary."
Eugene Ormandy Raleigh, NC USA wnovinger@nc.rr.com

Date: Thu, 30 Nov 2000 17:31:25 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: Rhode & Schwartz EK-07 opinions sought

At 10:50 AM 11/30/2000 -0500, Walt Novinger wrote:

> Folks,
> I have an opportunity to obtain an EK-07 and was wondering if anyone could
> provide an opinion of this rx as a result of hands-on experience. I am
> particularly interested to know if it is significantly better than, say, a
> hot Racal RA-17 (my current tube favorite).

Walt, don't know much about the radio, but sure am impressed with what Osterman's Shortwave Receivers Past and Present has to say: "sometimes called the R-390 of Germany, the workmanship is compared (better?) to Collins. One of the best tube radios ever made." Now for an American to make such a comment, I'm impressed!

.....Walt. (the other one). Walter R. Salmaniw, MD email: salmaniw@home.com Victoria, British Columbia DXING FROM CANADA'S WEST COAST, using CANADA premier radio receivers:

Rockwell/Collins HF-2050 (250) 592-1033 Collins R390A,ITT Mackay 3031A, Racal RA.117, JRC NRD 535D, and Kenwood R5000.

Date: Thu, 30 Nov 2000 21:08:08 -0500
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: Rhode & Schwartz EK-07 opinions sought

Hi All,

Believe that Dan Arney of 390 list has one as do some chums. I have an original manual of which he made some copies. Perhaps he can comment.

I take issue with the price given in the "RX book"; the book that's cost me about \$5500 so far. In Europe a private sale is usually around \$425 including spares. A dealer sells bench-tested nice ones for about \$1K. Since they do not float however, they cost real money to ship.

Many were used by German police, according to a dealer I spoke with. My sense, based only on hearsay, is that they are as well or better built than R-390A, but that they do not perform as well.

I, too would be very interested in performance experienxce, before I lug one back.

I should be visiting a possible source next Spring.

73,

Steve Stutman KL7JT

Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Sat, 02 Dec 2000 14:21:56 -0500
From: Cornel van Ravenswaaij <cortec@club.tip.nl>
Subject: Prem-Rx: EK07D

Hi All,

I have a R&S EK07D/2, it is a very good receiver. In my opinion it is far better than the Racal RA-17, which I have as well. The R&S is far less vulnerable when it comes to handling strong signals. The receiver is very quiet, that is, you hear what you want to hear: signal, hardly noise. Mine cost about USD 200,- rather cheap but the front has several scratches. I've seen several for sale here in the Netherlands and in Germany for prices between USD 250,- and USD 450,-. Take a look a the following site: <http://www.kraus-elektronik.de/namet/empfaenger/empfaenger.html> There's one minor problem: mind your back when you want to transport this receiver. Even when I split it in half (the front with the inner chassis can easily be taken out of the cabinet) both parts are difficult to handle. It is not only a matter of size but also dimension.

One question to the group: is the R&S a premium receiver?

Regards,

Cornel

Date: Sat, 2 Dec 2000 11:36:55 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Confessions !!!!

OK members I give up and want to ask. Every time I think I understand what " ISB " is or how my receiver SHOULD perform that has this feature ...it doesn't work out...I know that several of you could answer this directly to me if I asked, but I will just accept the indignation and ask ANY of you how this should work and the intended purpose or use..humbly mac/mc

Date: Sat, 2 Dec 2000 13:19:33 -0500

From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Confessions !!!!

Hi,

I've never really used ISB for anything, nor have I seen it used, but I have experimented with it. It is two independent audio signals. I set up an ISB transmitter and fed in stereo, and out of the two separate receiver audio lines I retrieved stereo. Listening on AM is sounded terrible, probably due to the lack of a carrier.

I sometimes hook up two speakers and use the receiver in ISB mode so when I tune across the band I can get it to seem like the active signals move from left to right (I seem to remember I had to reverse which speaker was hooked up to what side to get it to move that way). This was pretty interesting.

No need to feel bad, this isn't exactly commonly used.

Date: Sat, 2 Dec 2000 11:24:29 -0800
From: "RAMSTA" <ramsta@cts.com>
Subject: Re: Prem-Rx: Confessions !!!!

Hi Mac, ISB or Independent Side Band. VOA used to use it quite a bit on their feeders. You might hear Russian voice on USB and English voice on the LSB. Most of the receivers that utilize ISB have a separate output for the USB and LSB. The U.S. Military still uses some ISB. I used to print one of their stations on 11118 KHz. They would run RTTY Wx on USB and WX Fax on LSB or vice versa. Some of the ISB signals also have a carrier right in the middle which a receiver can lock on to. The U.S. military also runs some 4 channel ISB.....2 USBs and 2 LSBs evenly spaced. They can run 4 different channels of whatever.....data, voice etc. Is that any help ?

Mike/KC8CU/San Diego

Date: Sat, 2 Dec 2000 17:25:50 -0500
From: "Walt Novinger" <wnovinger@nc.rr.com>
Subject: Re: Prem-Rx: Confessions !!!!

Actually, Independent Sideband (ISB) is one of the coolest features to use when digging AM signals out of either flutter fading or really in the weeds. Flutter fading is often caused by differential fading of the two sidebands of an AM signal. If you use a stereo headset and feed one sideband into each ear, your brain will act like a diversity coupler and will cause the signal to appear to "jump" out from the background. I have done this on my HF-1000 (where the front-panel jack brings the sidebands out one on each stereo channel) and currently use the RA-121 ISB adapter on my Racal RA-17 the same way.

In a similar vein, if you wire a set of mono phones to include a DPDT switch in one can that reverses the phase in one position and leaves it alone in the other, you can simulate the ISB effect. This is an old trick, taught to me by an old ham.

Walt

Walt Novinger Collector and restorer of valve communications receivers, test equipment, and audio gear "Let me explain what I do here. I don't want to confuse you any more than absolutely necessary."
Eugene Ormandy Raleigh, NC USA wnovinger@nc.rr.com

Date: Sat, 2 Dec 2000 17:53:28 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: I SB follow on...

I appreciate the answers that have been offered, and I see the gaps in my ISB understanding...However more specific what I'm expecting is why or should I expect to for instance to tune in the ISB mode USB carriers on 20 mtrs and without leaving the ISB mode tune down to 40 mtrs and be able to detect LSB signals ...the receiver in use here is a Harris 590..thank you..I hope this is clear for your understanding..mac/mc

Date: Sat, 2 Dec 2000 21:04:13 -0500
From: "Walt Novinger" <wnovinger@nc.rr.com>
Subject: Re: Prem-Rx: I SB follow on...

A receiver that has ISB mode has, in reality, two complete IF and audio chains...one for the upper sideband, and one for the lower. They are both in operation simultaneously, and are both detecting their respective sidebands simultaneously. If their outputs are summed to a single audio output (e.g., speaker), then whichever sideband is active will be heard as though you had selected the sideband manually. Is this clear? :)

Walt

Walt Novinger Collector and restorer of valve communications receivers, test equipment, and audio gear "Let me explain what I do here. I don't want to confuse you any more than absolutely necessary."
Eugene Ormandy Raleigh, NC USA wnovinger@nc.rr.com

Date: Sat, 2 Dec 2000 22:30:03 -0500
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: I SB follow on...

As a simplified view, think of ISB as being two independent receivers, one in LSB mode and the other in USB mode. Both are tuned together. The audio from each comes out on a separate channel.

With an AM signal the LSB and USB are identical and so if you are listening to a strong (unfaded) signal each channel will have the audio on it. One form of BCB AM stereo used ISB but with a carrier and had left audio on one sideband and right on the other. Stereo receivers for these broadcasts were using ISB.

To answer your question, when you are listening to USB on 20 meters the audio is coming out of one channel and when you tune to the LSB 40 meter transmission the audio is coming out of the other channel. If you were to combine the two audio channels you wouldn't have to switch between LSB and USB to hear either (this won't work, really, because the spectrum of the "unused" sideband might be taken up by another station so you would get that other station's inverted audio mixed in. But it sort of works when the band isn't crowded.).

Peter

Date: Sat, 02 Dec 2000 21:01:34 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: Racal 1772

I've had no luck on the VSS list, so I'm counting on the many wise and always helpful fellas on the premium-rx list to help me out to get my Racal RA8772 (essentially a Canadian built RA1772 or RA6772), back in operation.

I was able to track down Part II of the maintenance manual for this Racal, but realized that Part I is missing (Chapters 1 to 6, including troubleshooting, etc). Anyone out there have the missing part for

which I'll happily pay for copying, etc. Many thanks! I'm using it for the RA 8772, which essentially identical.

.....Walt. (Driver of premium-rx Rockwell/Collins, Mackay Marine, and Racals, as well as non-premium-rx JRC, Kenwood, and AOR!).

Date: Sun, 3 Dec 2000 08:28:57 -0500
From: "Tony Ward" <tonyward@home.com>
Subject: Re: Prem-Rx: Racal 1772

Walt: In one of our periodic re-balancing of holdings operations I sold a Racal 1772 with manual to Dave Clark a year or so back. This included (to my sometimes imperfect memory) a full manual. I will give him a call today and have him get in touch with you ...

Tony (VE3NO) NYAA StarFest On-Line tonyward@home.com tward@spanit.com www.nyaa-starfest.com

Now an Official Beta test site for the Chaos Theory ...

Date: Sun, 03 Dec 2000 14:05:47 -0600
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: Re: Prem-Rx: I SB follow on...

ISB can also be obtained from a synchronous detector, although most are not implemented that way. I built one in college as an add on unit that took the normal IF out (I used an R-390 in the communications lab) and yielded the upper and lower sidebands simultaneously. Some forms of HF propagation would make you nauseous if you listened with stereo headphones too long. I prefer the IF method. You can't tune around with the synchronous detector because the out of lock noise will drive you nuts.

Best, Terry O'

Date: Sun, 3 Dec 2000 15:22:28 EST
From: Aidehua@aol.com
Subject: Prem-Rx: Multicouplers...Need advice!

Hello to the Group!

As with most of you, I have numerous receivers and would like to operate many of them simultaneously. I've never owned a multicoupler and would like to acquire one in the near future. I reviewed this group's archives but didn't conclude anything definitive.

The multicouplers I'm considering now are, either the R. F. Systems unit sold by Universal, or the Stridsberg models. These both seem to have the best specs.

Will I experience any signal degradation, even though both of these companies claim zero loss??? I enjoy 60/90m, where there's a plethora of weak signals. I need all the help I can get to dig them out!

Comments? Suggestions??? Therapy???

Happy holidays to you guys! :-)

Regards,

Ed Sylvester, NI6S Lomita, CA ("Where the heck is that!")

Date: Sun, 3 Dec 2000 13:10:14 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Multicouplers...Need advice!

I have a bunch of the 8 to 1 Stridsbergs <http://www.stridsberg.com/> that I use, both at home and on dxpeditions. They've been outstanding for weak signal distribution to a bunch of receivers. I've never used the RF systems version. You might also look at WJ Ford's page --- they sell used splitters (I have one of the 32:1 systems but its bulky and runs hot compared to the stridsbergs for dxpedition usage), as well as a new system they've just had built --- directly off their web page at <http://www.falls.igs.net/~testequipment/M-50-8.html> RF Tech M-50-8 Antenna Multicoupler \$225.00 (approx. \$150 U.S.)

I've never used the latter system; perhaps someone else has and could tell us about the system?

We've also recently tried a couple of the passive 8:1 built by minicircuits - these also worked very well in dxpedition use. They're a bit less expensive than the Stridsbergs. Try <http://www.minicircuits.com/splitter.htm>

If you are using a weak signal antenna (say, beverage, Ewe, Pennant, Flag, or K9AY(homebrew, not one of Andy Ikin's which already has an amp), you should consider mounting an active amplifier at the antenna feed point (no, don't put it just before the receiver, as the weakest signals will be gone in the transmission lines).

There are a couple of good suppliers of preamps - Kiwa <http://www.kiwa.com/bbpreamp.html> and another firm, advanced research (see <http://www.advancedreceiver.com/page2.html> -- get the specialty one that is for shortwave users if you are interested in 500kHz to 30MHz) have both been used at my home as well as out on dxpeditions. I prefer the latter for the gain, but the Kiwa's have a weathertight enclosure (except the connections!), and sometimes the lower gain has proved beneficial by eliminating spurious signals.

At the feedpoint, you will need a source of power (13V is about right), so either battery or run a feedline with appropriate fuses for weather problems. I've successfully used a simple plastic toolbox from the local ACE hardware to put these into --- but watch that you get the version that is completely sealed on top, as they sell at least one version that has holes punched to let the handles (and rain!) in. On some dxpeditions, we've run a power cord out to these boxes (as much as 400 feet of cable) with a wall-wart in the box to drop the power down. Since we've dealing with wet conditions, we carefully seal the connections with coax seal (another fellow has some rubber tape that works beautifully as well!) and they are plugged into 120V through a portable GFI (see your hardware store...don't omit this)

Good luck. Don Nelson Pacific Northwest

Date: Sun, 3 Dec 2000 18:44:59 EST
From: Aidehua@aol.com
Subject: Re: Prem-Rx: Multicouplers...Need advice!

Thanks for the reply, Dan. The one from Ford looks like a winner, but it doesn't have a LPF like the Stridsberg. I'll get a separate unit for VHF/UHF work. Though they work well for weak signal reception, have you been able to detect any loss at all??

What bands do you tend to monitor?? I WILL be putting up a Flag antenna in the near future. It's time to replace/supplement my RSM Comm. indoor BCB loop, though I still would also like to own a Kiwa one day...

Thanks again.

73, Ed NI6S

Date: Sun, 3 Dec 2000 18:13:12 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: HARRIS RF- 590 RF- 590A and R -2368 POWER SUPPLIES

Tony Snider has available genuine NEW power supplies for the above HARRIS receiver series and is offering these at \$80.00 including shipping to any of the lower 48 states..pictures of this item are available at <http://cgi.ebay.cocgi/ebayISAPI.dii?ViewItem&item 494281358> thank you

Date: Sun, 3 Dec 2000 16:22:25 -0800
From: "Don" <ulformat@teleport.com>
Subject: Re: Prem-Rx: Multicouplers...Need advice!

Hi, Ed

We haven't done any measurements, but on dxpeditions they do fine with very weak signals (eg ones that don't even budge the meter on the HF1000A's or R-590A) such as Ngada, Mangarrai (both RRI stations at 2899kHz and 2960.02) as well as a recent catch of the Papua New Guinea MW station on 684kHz (R Madang).

I spend most of my time on tropical band shortwave (< 6 MHz) but due to another fine gentleman, John Bryant, have recently taken up TP MW (trans-pacific mw) dxing, For these, a loop has proven insufficient (recently there have been Andy Ikin's 1530 loop as well as the Kiwa loop - -- they don't hold up on tropical bands and TP-MW to the K9AY and beverages), but are great for higher band listening.

Don Nelson Pacific Northwest

premium-rx-digest Wednesday, December 13 2000 Volume 01 : Number 098

Date: Sun, 03 Dec 2000 21:24:17 -0500
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: Racal 1772

Walter - check with Wal Novinger who bought the 1772 rig from me; the manual documentation that went with it may fill the gap you're looking for. Walt is on the Prem Rx List but here's his email: wnovinger@nc.it.com

Regards - dave

Date: Sun, 03 Dec 2000 21:30:51 -0500
From: David Clark <davidclark@home.com>
Subject: Re: Prem-Rx: Racal 1772

Sorry - Walt N's address is: <wnovinger@nc.rr.com>

/dave

Date: Mon, 04 Dec 2000 10:28:59 -0700
From: "joe talbot" <n52w113@hotmail.com>
Subject: Prem-Rx: HF 2050 Front Panels

Hello To Everyone: Just a quick update on the restoration project. Late last week eight 2050 panels and four sets of handles arrived here, via Don Moman. We can always count on Don to come thru for us. Thanks Don. Currently, the silkscreen people are making the positive, a copy of the original panel graphics. And the paint and primer supplier is matching both the panel and handle colors. Once the exact match positive is done, the panels can be sandblasted, cleaned, primed, painted and silkscreened. As of now, five panels are spoken for. If 2050 owners are interested in a panel, I would appreciate hearing from you. At this point I am a little leary on doing all ten, I suppose I could E Bay any extras. I had posted the pricing with the group on Nov 17, all things considered a very reasonable price for a restored panel. Interested group members can contact me via the group or at n52w1132hotmail.com for details or pricing. 73's.

Joe Talbot n52w113@hotmail.com

Get more from the Web. FREE MSN Explorer download : <http://explorer.msn.com>

Date: Mon, 04 Dec 2000 19:10:16 +0100
From: Christer Bergstrom <christer.bergstrom@adsum.pp.se>
Subject: Re: Prem-Rx: Multicouplers...Need advice!

Hello Ed and Group

To my humble knowledge the NV14 series from Rhode & Schwarz is something to keep your eyes open for. If one want to purchase slightly expensive devices, they are available form Helmut Singer, Germany see more: <http://www.helmut-singer.de/stock/-592149777.html> they are a very serious company, I have purchased my NV14, among other devices, from them.

best regards

Christer Bergström Viker Sweden

Date: Mon, 4 Dec 2000 13:55:40 -0500
From: "Mark L Bryant" <mlbryant@US.IBM.COM>
Subject: Re: Prem-Rx: Multicouplers...Need advice!

Ed,

I have been using a couple of the Stridsberg models (1 > > 8) over the past couple of years with very good luck. I have had up to 8 receivers connected at once with no loss seen. The antenna used is the Alpha Delta DX Ultra. The receivers included 2050, HF1000, NRD91, two Drake R7A's and an R8B. Only thing I did find was the wall wart on one of them started making some noise. It was replaced and the noise went away.

While they can be daisy-chained (I tried to get SE to make me a 16 unit but time/money did not permit it) however you will get a bit of loss when you do that. But who in their right mind would try and hook 16...never mind.

Regards,

Mark L. Bryant IT Architect - Project Manager IBM Digital Media Consulting & Services
mlbryant@us.ibm.com

Date: Mon, 04 Dec 2000 17:15:35 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Re: Prem-Rx: Multicouplers...Need advice!

At 07:10 PM 12/4/2000 + 0100, Christer Bergstrom wrote:

- > Hello Ed and Group
- > To my humble knowledge the NV14 series from
- > Rhode & Schwarz is something to keep your eyes open for.
- > If one want to purchase slightly expensive devices, they are available
- > form Helmut Singer, Germany see more:
- > <http://www.helmut-singer.de/stock/-592149777.html>
- > they are a very serious company, I have purchased my
- > NV14, among other devices, from them.

Bought one of these babies for approximately \$50 on eBay...not bad, eh? They were surplused from Canadian government use. Very compact, and appeared essentially unused, with a full manual. Might be worth keeping an eye on eBay for a better deal.

.....Walt.

PS: By the way, fellas, still a dead end for Part I of the Racal RA1772 manual...HELP!

Date: Mon, 4 Dec 2000 22:19:34 -0800
From: "Anton, Chris" <CRAnton@pacific-papers.com>
Subject: Prem-Rx: power cord wanted for Harris RF551A

Being the happy (almost) new owner of a Harris RF551A pre-converter to match my Harris RF550 I'd be able to increase my satisfaction if I could get my hands on a compatible power cord. Does anyone have any suggestions about a source for a plug that would work with a Harris socket.

Thanks Chris Anton

RTM/Norden 250-724-7821

Date: Tue, 05 Dec 2000 20:30:41 -0800
From: Ben Wallace <bwallace@crash.cts.com>
Subject: Prem-Rx: John Bryant -- Please Contact Me

John,

Please contact me -- off line.

Thank you,

Ben

Date: Tue, 05 Dec 2000 22:47:15 -0800
From: John Collins <jcollins@referencevideo.com>
Subject: Prem-Rx: DeOxit & where do I get some?

Greetings all,

I saw a thread go by recently in which a contact "cleaner" DeOxit was mentioned-can anyone steer me to a source for that product? As all of the group seems to have tried the usual stuff, so have I, with poor results. I have two Cubic receivers and a bunch of HP gear needing TLC.

many thanks in advance

John Collins

Date: Tue, 5 Dec 2000 23:50:25 -0800
From: John Miles <jmiles@pop.net>
Subject: RE: Prem-Rx: DeOxit & where do I get some?

You can get Caig products including DeOxit from <http://www.tubesandmore.com>.

- -- jm

Date: Wed, 6 Dec 2000 09:26:21 -0500
From: Steve Stutman <sstut@world.std.com>
Subject: Re: Prem-Rx: DeOxit & where do I get some?

Hi,

www.caig.com; lists distribution or order on-line.

GL,

Steve Stutman KL7JT
Cambridge, MA, USA

"Most people don't think about what they don't think about."

Date: Thu, 7 Dec 2000 13:06:43 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Harris receiver modifications

As the proud owner of several Harris receivers in the RF-590 family..the 590a and the R-2368 have the new improved ??? front plastic screen that replaced the plastic bezel style that was used on the 590...and as a result the new plastic screens even when brand new always appear "milky" or "cloudy" as you look into the display as opposed to the very clear bright look that you see thru the 590s clear lens...So I have made a new aluminum bezel that overlays the face on both the 590a and 2368 then relieved the inside to accept glass or if you desire clear plastic, then painted these flat black and used the existing holes within the main panel and tapped a reciprocal hole into the aluminum bezel..it all looks very good to me ...and I am quite pleased with my effort..I offer this blurb as information to any of you who have these receivers and might not like the cloudy look ..thank you..mac/mc

Date: Wed, 13 Dec 2000 22:49:18 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Harris receiver info...

This past February while I was visiting our national Headquarters location [Murphy's surplus] I bought a new pre selector for what I thought would only fit the HARRIS RF-590a receivers and at the time only owning a 590 , but had heard that Toronto surplus was offering to ADD and mod the 590 to accept this preselector..I have now discovered that this pre selector will and is a direct fit into the 590 receivers...and is the same selector that serves as a post selector for the HARRIS 1310 exciter...in each of these situations no change is required for the software of the effected unit...During this time I have acquired a R-2368 a 590a and several more 590s I can tell a nice improvement between the units with the pre selector and those that do not..as well as the pass band tuning and the 20db rejection + / - 10% of the center frequency.and it should be noted that as these units [pre selectors]

that Murphy is selling are brand new with a manufacture date of the mid 1992 era..and come needing no "peaking or field alignment" ...as a follow on I have finally ciphered the 10 number configuration code that is attached on the receivers left side...it is however a fairly long breakdown and I will need to format it, and will then post it for any Harris owners benefit... thanks for the read..mac/mc

premium-rx-digest Thursday, December 21 2000 Volume 01 : Number 099

Date: Thu, 14 Dec 2000 00:08:37 -0500
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Harris receiver info...

Hi,

In some previous messages I mentioned how to modify the preselectors to have them go into bypass when the NB button is pressed. You may want to do this since even the newer preselectors can lose 6 db and this is a noticeable difference on weak signals.

I'd love to see the decoding of the config code.

If anyone wants to pick up where I left off, I have decompiled the ROM firmware for the 590A into source code. You can see how everything works or even make your own custom versions.

Peter

Date: Thu, 14 Dec 2000 01:11:12 EST
From: Aidehua@aol.com
Subject: Re: Prem-Rx: Harris receiver info...

Mac:

Is this the same as the accessory internal preselector that Murphy's sells for \$75???

If it's an external box, can I still use it in conjunction with my internal preselector??

73, Ed NI6S

Date: Thu, 14 Dec 2000 00:42:32 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Re: Prem-Rx: Harris receiver info...

ED etal. yes and no..the Murphy unit is mounted INTERNAL within the receiver, and offers the 20db rate...while the EXTERNAL unit is controlled from the receiver proper, it is almost as large as the receiver it's self, but does offer about 60db and requires a small converter board designated as RF-553-01 remote preselector interface..that is mounted inside the receiver, then a somewhat MONSTER adapter cable from the receiver to the "outboard" preselector designated as RF-551a / RF-552 ..and this can be used in conjunction with an internal preselector...does this help clear things up...mac

Date: Thu, 14 Dec 2000 09:51:52 -0800
From: John Reed <jreed@ponca.net>
Subject: Re: Prem-Rx: Harris receiver info...

Mac McCullough wrote:

- > ED etal. yes and no..the Murphy unit is mounted INTERNAL within
- > the receiver, and offers the 20db rate...while the EXTERNAL unit is
- > controlled from the receiver proper, it is almost as large as the
- > receiver it's self, but does offer about 60db and requires a small
- > converter board designated as RF-553-01 remote preselector
- > interface..that is mounted inside the receiver, then a somewhat
- > MONSTER adapter cable from the receiver to the "outboard" preselector
- > designated as RF-551a / RF-552 ..and this can be used in conjunction
- > with an internal preselector...does this help clear things up...mac

The question I always have about these preselectors is: Do you really want one on the receiver? Unless you're really close to a strong transmitter, as on a navy vessel (which is what they were designed for) all you'll be doing in adding one is to decrease the receiver's sensitivity by at least 2 dB. The receiver already has a strong (+ 27 dB intercept) front end and normally won't need this accessory. I removed the one on my 590 after I added the in/out modification and found in all cases that reception was better without it. And you certainly don't want both the built in and external preselectors.

73, John KA5QEP

 Date: Thu, 14 Dec 2000 09:20:43 -0500
 From: "Peter Gottlieb" <peter@newyorknerd.com>
 Subject: Re: Prem-Rx: Harris receiver info...

You are right about all of this, and yes, the cable is BIG.

The external pre/post selector is nice, with good front end protection, two separate filter sections and a nice preamp between them. With the preamp you can even get a few net db of gain.

You will need a manual for the external unit as aligning it is difficult.

Tuning is done with servomotor driven variable air capacitors and the servo is driven on the output of a D/A driven by the receiver frequency. The manual tuning select switches on the front are essentially a precision resistance decade box. Alinging this unit requires getting the actual tuning passband center to agree with what frequency it SHOULD be tuned for based on the digital input.

Great unit if you want to run duplex or live next to a SW station, but way overkill for my needs.

Peter

 Date: Sat, 16 Dec 2000 09:33:48 -0800
 From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
 Subject: Prem-Rx: East coast DXpedition for Premiums?

Gentlemen:

Mark Bryant recently dropped me the following note- "By the way, are there any plans for any DXpeditions on this end of the world that you know of? I organized a couple to the Outer Banks a few years but most of that group has moved out of the hobby. It would be good to give these hot rod receivers a place to run."

 Mark, I personally SURVIVED a week at Grayland, Washington on such an expedition with the following Premium drivers-

(1) John Bryant, author/architect/college prof- who directed the antenna installation the first night. . . only to find in the light of the following morning, that we shorted the feed line and 50 ohm terminated the distant end of our beverage antenna. The DX was "in the mud" that first night, wonder why???

(2) Dr. Walt- from Vancouver driving 2X 2050, Wally was our in house physician just in case anyone decided to slit their wrists or other member's throat.

(3) The Rippel kid, from God knows where, who brought his own form of East Coast pollution?

(4) Dave Clark, screaming some DX station's call sign at the top of his lungs while wearing headphones. Perhaps the most accomplished, and addicted, SWL DXer in the world.

(5) Don Nelson, who sat quietly spinning a jungle of knobs, obviously the most relaxed member of the mob, at 6'4", no one gave him any static.

(6) Guy Atkins . . . who actually brought an 18 inch high graven image doll (or voodoo goddess) which purportedly brought low noise levels and good skip. I have pictures to prove this.

(7) and other souls that I will not incriminate by listing their name herein.

NOW, if you are still interested in such an east coast adventure, drop Mark an e-mail at "Mark L Bryant" <mlbryant@us.ibm.com>

Greg

P.S. Semester over, leaving for NZland next week for 3 weeks of no phones and/or students. Season greetings to all on the List. My special thanks to Jim and others who continue to assist in making this possible.

Date: Mon, 18 Dec 2000 20:37:11 -0600

From: "Mac McCullough" <w5hpm@airmail.net>

Subject: Prem-Rx: HARRIS rf-590 Configuration Code breakdowns

OK follows will be a breakout of the CONFIGURATION code that is applicable " ONLY " to the RF-590 this is listed on the tag usually on the left side rail of the receiver...but remember these 10 place codes do not follow directly over to the RF-590a/ R-2368 13 place codes...I have these configuration breakouts as well, but will not try and get those out at this time, operating on the belief that most of the Harris owners have the RF-590 ...these codes will read from left to right....

example place: 1 remote control } 0 w/o remote control feature * 1 with remote control feature 4
frequency standard 1x10/8

place: 2 ISB } 0 w/o ISB features * 1 2 ISB upper/lower ssb 2 2 ISB w/delay comp 3 delay comp only
4 4 ISB 5 2 ISB w/wide delay comp 6 2 ISB w/tadil & filters

place: 3 PRESELECTOR } 0 w/o any preselector * 1 half-octave preselector 2 digital 3 2-12 Mhz only

place: 4 NOISE BLANKER } 0 w/o noise blanker * 1 w/ noise blanker installed

place: 5 FREQUENCY STANDARD } 1 1x10/6 * 2 1x10/7 3 1x10/8

place: 6 MOUNTING CONFIGURATION } 0 w/o mounting hardware* 1 rack mount w/hdw 2 desk
mount 3 stack mount

places: 7 & 8 SOFTWARE } 01 02 03 04 05 standard * 06 07 08

place: 9 Remote Preselector Interface } 0 w/o preselector * 1 w/ remote preselector

place: 10 SYNTH SPEED 1 slow switching speed * 2 fast switching speed 3 AGC speed

NOTE * where shown, indicates standard as supplied in original factory configuration.

the most frequent examples I have seen are listed below

1140110512 1120110512 1120110501

Thank you mac/mc

Date: Mon, 18 Dec 2000 21:35:40 -0600
From: "Mac McCullough" <w5hpm@airmail.net>
Subject: Prem-Rx: Harris codes

well the codes I sent earlier look pretty poor when you print emm out..

I have re-done them and will direct mail them to anyone who ask..thanx..mac/mc

Date: Mon, 18 Dec 2000 22:49:04 -0500
From: "Peter Gottlieb" <peter@newyorknerd.com>
Subject: Re: Prem-Rx: Harris codes

Hi,

I'd love to get a copy, or you could just tell me what "110220110110" means...

Peter

Date: Wed, 20 Dec 2000 06:14:29 -0000
From: ra1792@pavilion.co.uk
Subject: Prem-Rx: Plessey PRS2282 Premium Receiver

Hi all,I have decided to sell my Plessey PRS2282 and would like to offer it to the group first.If any member is interested,please mail me direct. Happy Christmas to all, Regards Neil T

Date: Thu, 21 Dec 2000 18:51:08 -0800
From: John Collins <jcollins@referencevideo.com>
Subject: Prem-Rx: Cubic R3090 brain teaser

Hi group,

First, I want to thanks those who were able to steer me to DeOxit...on further investigation, there's a stocking dealer within 10 miles-thanks!

Here's the teaser: I have qty 2 (total 4 receivers) Cubic Communications R3090 HF Receivers. While all of the functionality has been checked aok against the handbook, the left receiver of one chassis (all others are aok) is being swamped above 20 MHz with digital interference from the front panel display. Drawing on my own experience and tips from this and other lists, the following summarizes my findings...ultimately, my question is DOES ANYONE HAVE ANY IDEA WHAT I'M DEALING WITH & HOW TO FIX IT? All observations are meared on HP 8568 and other related equipment.

1) With the luxury of dual receivers per chassis (the right receiver working very well), I've swapped every module-no effect. I've reseated/cleaned all connectors-no change. NOTE; in both receivers, the innards are pristeen-no age-corrosion/discoloration, no dust, no nothing-like opening a time capsule. Factory CAL seals are intact.

2) Removed front panel and associated circuitry-cleaned & reseated components and connectors-no change

3) Tightened all screws - no change

4) Disconnected antenna-noise ceases...applied pass-through terminator...still quiet...if I touch the center conductor test point, big noise problem...if I purposely short the antenna feed with my fingers, no reduction in intensity of noise, but the frequency content of the noise goes up (higher pitch).

5) If I dead short the antenna connector itself, it's quiet. If I dead short the pass-through terminator, there's noise just slightly below the previously described measurements. That probably figures ok due to 50 ohms in circuit.

6) Covers off or on, no difference...

7) There is absolutely no effect as I run my finger tip over exposed low volts signal circuitry-I'd expected at least some change in the quality of the noise.

Instinct tells me that I have a bum ground somewhere-I simply can't find it. Does anyone have experince or theory that may help? I'm either overlooking the obvious or this is one of those "you'd never have guessed" situations.

many thanks in advance

happy holidays

John Collins

qty 1 R9000 qty 2 R3090 qty 2 6790/GM

premium-rx-digest Monday, January 1 2001 Volume 01 : Number 100

Date: Sat, 23 Dec 2000 16:48:11 -0800
From: "Greg W. Bailey" <gbailey@mail.sdsu.edu>
Subject: Prem-Rx: Going Down Under

Gentlemen:

Seasons Greetings to all List members.

This note is to inform you that my wife and I will be leaving for NZland is less than a hour. Our visit to the "underworld" will last for three weeks in which I hope to have an eyeball with our two members on the twin islands.

I won't be answering or reading the List mail, so you are on your best behavior until I return :-)

Best wishes to all

Greg K6QPV

Date: Sun, 24 Dec 2000 14:03:14 -0800
From: Walt Salmaniw <salmaniw@home.com>
Subject: Re: RACAL Question and Prem-Rx: Going Down Under

I hope that Greg takes a radio with him. When I visited NZ in the 80s, I recall fantastic euro DX , just with a little Sony portable.

Now for the question. I was given a Racal 6772 along with all the manuals yesterday. A nice Xmas present!!! Sensitivity is great. The only problem is with the tuning. It's intermittent. You can spin the dial, and sometimes the frequency changes, and other times it won't move, and sometimes spinning backwards still causes the frequency to shift forward. When this is happening, switching between fast and slow tuning rates causes the frequency to jump consistently downwards, perhaps by 25 or 50 KHz.

Any idea what could cause this, and solutions? Seems to occur more after the set has been on for a while.

Thanks, and Merry Xmas to all!!! From a rainy and very windy Queen Charlotte Islands.....Walt.

Date: Tue, 26 Dec 2000 17:26:41 -0600
From: "Joe Watson" <wwatson@mmcable.com>
Subject: Prem-Rx: Some Extra Radios

I am thinning out my collection. I am considering selling the following: Collins HF-2050 Racal RA-17L Kenwood R-5000

If any of the group is interested, I would like to hear from you before I put them on eBay.

Thanks. Joe, W5WBR

Date: Wed, 27 Dec 2000 10:50:37 -0500
From: "Howard L Ritter, Jr" <hlritter@mindspring.com>
Subject: Prem-Rx: RA-6790GM

I've been thinking for some time about getting a 6790. A source I've found has three. One is in NASA green and has what appears to be incandescent toplighting in the LCD windows. Another has no lighting, and the third has green full-surround lighting that appears to emanate from a circumferential set of LCDs in the frame of each window and is just too cool for words. All appear functional, pass their self-checks, and are in reasonable cosmetic condition.

Is the green-lighted unit distinctive in some other way, or just a later model? What are reasonable (non-eBite) prices for a 6790?

Thanks,

--howard

Date: Wed, 27 Dec 2000 11:40:12 -0500
From: Al Klase <skywaves@bw.webex.net>
Subject: Prem-Rx: Re: [Racal] RA-6790GM

Howard and the group(s),

The displays and lighting are perennial problems with the 6790's. (BTW, you do want a "GM." The plain 6790 is an earlier version missing some features; fault led and perhaps self test entirely, I think.) The incandescent bulbs are failure prone and a pain to replace. The set with no lights has burned out bulbs. The later units have the green LED's and, perhaps, more reliable LCD displays. You want to pay attention to the condition of the displays. Many are defective and replacements are about \$100 a piece.

Other factors: Set should pass self test. Depress and release "LOCK" and "AM" simultaneously. If it stops with a two-digit error code there is a problem.

What filters are installed? Sometimes you'll encounter sets that have only a sideband filter.

Firmware: Standard sets only tune down to 500KC. It's fairly easy to change EPROMS to enable tuning down to 5KHz, but the stock mixers give up (slowly) below about 200KHz. The real VLF hardware option is somewhat rare.

These radios are quite complex, and maintenance normally amounts to swapping boards. This means there is an ever increasing number of "hanger queens" missing a complete compliment of good modules.

I like the 6790's and I'm listening to one right now. You should be able to buy a decent one for \$600-1000. If it's more than that, I'd ante up a bit more and buy a brand new Drake R-8B.

You mileage may vary, Hope this helps,

Al

- -- Al Klase - N3FRQ skywaves@bw.webex.net Flemington, NJ 08822 Web Page:
<http://www.webex.net/~skywaves/home.htm>

Date: Mon, 01 Jan 2001 23:52:23 -0800
From: "Walter (Volodya) Salmaniw, MD" <salmaniw@home.com>
Subject: Prem-Rx: MANUAL FOUND: RCA/TMC CU-5069/FRD-10A(V)

Before Christmas, I think on this list, there was some discussion on the TMC 32 output multicoupler that many of us own. There was some interest in acquiring the technical manual for this receiver. Over the holidays I was at a site that has the FRD-10A and was able to obtain the manual dated 1 July, 1969. I'm happy to photocopy and send it out to anyone for \$10.00 USD in North America, or \$12.00 USD elsewhere. Just e-mail me and I'll provide the details. The tech I spoke to corrected something I had read in the manual. It states that it's good for 2 to 30 MHz. We all know that it works well down into MW. He put a unit on a scope and confirmed a flat baseline from 40 to 50 KHz all the way upto 90 MHz. At 30 KHz and 100 MHz, there was a 10 dB loss, and 25 dB at 10 KHz. A great unit! By the way, if I understand the NSN thing, this unit had a \$7000 Cdn price tag on it when purchased. Hard to believe, really.

.....Walt.
