

# SHORTWAVE BULLETIN

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Sitter framför datorn nu på lördagskvällen och skall påbörja sammansättningen av bulletinen och konstaterar att det inte är mycket till bidrag denna gång..

Därför tar vi med en mycket intressant artikel av John Bryant om Harris 590, som anses vara en riktig "state of the art" mottagare. Läs och njut av hans artikel.

I övrigt väntar jag som vanligt iverigt på era bidrag!! Låt inte denna väntan bli förgäves!

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Notera stoppdater först om 3 veckor, pga min skidresa till Champoluc i V 13.

## QSL, mm.

**Anders Hultqvist:** Jag har fått besked från DX-Clusive Jarmo Havukunnas att de har en ny chief editor istället för honom. Det är Jari Lehtinen, Saimaankatu 7 C 51, SF-151 40 Lahti.

**Christer Brunström:** Mycket jobb den senaste tiden har gjort att det inte blivit speciellt mycket lyssning för min del.

**Leif Råhäll:** säger helt kort: "Det blir inte något nytt numera, säsongen börjar gå mot slutet."

**Stig Hartvig Nielsen:** QSL:s: **Lao National Radio** 6130 brev (v/s Miss Vichisavanah Chanthery). Land nr 189, 5 m. **Radio Stereo 4**, Italien 102,8, brev, stickers, tidningsklipp med omtak af min rapport, 7 v. **Radio Free London** 5804,53, QSL-text bag på Newsletter, löbeseddel, 3 m. **Radio Tonair Int'l** 6244,5, A4 ark, foto, 18 d. **WBCQ**, Kennebunk, ME 7415, kort, 1m. **ORB, Radio Fritz**, Pritzwalk 103,1, kort info sticker, 2 v. **Radio Pridnestrovye**, 1467, kort fra R. Dniester int'l, info (via Pankov) Land nr 188, 2 m. **BBC Radio Shropshire**, 1584, brev, stickers, cover map, 7 d. **ILR Classic Gold**, Reading, 1431, brev info om FM, 3 m. **ORB Radio Fritz**, Königswusterhausen 603, kort, sticker, info, sch, IRC i retur, 10 d. **Ozone Radio Int'l** 3903,1 kort5, info 3 v. **IRIB** 21770, kort, info, sch, islamisk ungdomstidning, 70 d. **WJFP**, Ft. Pierce, FL 25910 kort, vykort, sticker (v/s Ray Hassis), 71 d. **Radio Euskadi**, San Sebastian 819, kort stickers, 1 m. **Radio Algiers Int'l** 15160 kort, sch, rap. Form 3 m. **Radio Christian Voice** 4965, brev (v/s B. Phiri) 45 d. **Turkmen Radio** 5015, brev sch. Land nr. 190 8 v.

**Lars-Erik Svensson:** Har inte kollat så intensivt på natten. Däremot har jag kollat runt 05 SNT och då har det varit tunt på banden. I samband med kommande sommartid och LA konds, förväntar jag mig en del nya stationer skall dyka upp. Mellanvägen har haft en del toppar på morgonkonditionerna, bl. a. CPN Peru 1470 ovanligt stark den senaste tiden.

QSL: Efter en längre tids torka, har plötsligt 4 QSL kommit på en vecka. KV-QSL:en var som följer, brev från **Radio La Hora** Peru 4855, den vanlige v/s som verkar vara intresserad av vår hobby och vill ha kontakt med klubbarna, samt ett vykorts-QSL från **Radio Difusora de Londrina** 4815.

För tillfället jagar jag 4800 mexikanen som hörs ofta men sällan riktigt bra. 15476 Antarktis hörs också men tidigare än tipset i SWB. Det kommer nog en kondstopp på denna vilken dag som helst, just nu är den ganska svag.

Tackar för den fina bullen som du gör, den är trevlig att läsa med sitt fina innehåll (känn papperskvaliteten - det senare ett påstående som min son körde med när han sålde Gtidag) Tack Thomas. [Det värmer med så fina ord! /red]

## Stationsnyheter:

### ARGENTINA

**15820U, Radio Mitre "AM 80";** Buenos Aires, Feb 14, 0540-0620, fair signal. Heard the usual morning show "De la Noche a la Manana". At 0601 nice station jingle "Mitre AM Ochenta" was confirmed. On LSB mode, a station identifying "97.1 FM" was heard, but its full ID could not be confirmed. (TIN) [DX-Window nr 153]

**15475.8, LRA36 Radio Nacional Arcangel San Gabriel,** Mar 3, \*1802- 1907+, hrd w/strong signal, full ID at s/on in Spanish by lady announcer & by male in English, mentioning the phone-fax for reports: 54-2964-21519 and E-mail: [esc38ant@satlink.com](mailto:esc38ant@satlink.com), you can send reports through this way, hil, promising QSL for reports, the pgm hrd was completely talking about the region Litoral of Argentina, including Misiones, Corrientes and Chaco provinces, including tango, folkore and cumbia music, but after first ID at s/on, not heard again ID up to 1907 when I heard to them. Very nice signal here. SINPO: 44544 (Barrera) [DX-Window nr 156]

### HONDURAS

**5890, HRMI Radio Mi;** Feb 22, 0305, Older male announcer with apparent news in Spanish. ID at 0311 followed by program change to music. Severe thunder storm QRN and interference from UT station on 5885kHz (Oldenburg) [DX-Window nr 155]

### INDIA

**4810, AIR testing new frequency from unknown transmitter site** (Maybe Alok can get more details ?), Mar 5, 1415-1425\* 1440-1455\* 1530-1750, Relaying Delhi B on 666 kHz MW (heard

here in Colombo) with English talks and 1530 news followed by Spotlight, 1600 National Sports Magazine, 1630 Vernacular program, QRM Armenia co-channel, 44544 (Petersen) [DX-Window nr 156]

#### LIBERIA

**3450, R.Veritas**, Feb13, 2216, Highlife vocals constantly interrupted by comments from announcer, including one with mention of Liberia, but so brief that I couldn't tell if they were in English or vernacular. Cut off abruptly at 2224 and hadn't returned by 2230 recheck. Clear and steady, though not particularly strong. (Hill) [DX-Window nr 153]

#### MEXICO

**9600, XEYU Radio Universidad Autonoma de Mexico**; Feb 10, 2147, the transmitter was fixed, tuned in the carrier, voices very low, around 2220 with better sound, classical music (relaying XEUN 860) with a SINPO 54433. Feb 12 I was hearing Radio UNAM with test transmission, it was around 1500-2300 (Bojorge) [DX-Window nr 153]

## LOGGEN - ALL TIMES ARE UTC



3231,9	8.3	1625	RRI Bukittinggi QSA 2, GW
3925,0	8.3	2026	JPN Tampa med klockspel 3 LRH
4696,6	4.3	1635	INS Radio KIP med gamelan mx 2 LRH
4789,1	7.3	2050	RRI Fak Fak med pop mx 2 LRH
4800.7	11.3	0530	XERTA med musik och täta annonseringar. 2-3 CB
4913 8	11.3	0540	Radio Cora "Es el Cancionero Platense en Radio Cora del Perú". Kl. 0600 nyhetsprogrammet "Nos Preocupa..." 3 CB
4945	13.3	2322	Emissora Rural. ".....uma nova rádio para o novo milenio" fick mig att tro att något nytt var på gång men det vara gamla vanliga Rural i Petrolina. 2-3 CB
4955	6.3	2330	Radiodifusora Nacional de Colombia med "Un Inglés en Bogotá", ett inslag på engelska. 2 CB
4975	10.3	0530	Pacifico Radio med religiös betraktelse. 3 CB
6130	13.3	2235	Vientiane gick fint med lokal musik. 3 CB
11795	13.3	2205	Rádio Guaiba gick fint på denna nya frekvens. Gissningsvis växlar man frekvens runt 2200 för att undvika störningar. Jag hörde nämligen Guaiba på vanliga 11785v tidigare under kvällen. Programmet var "Último Toque - o resumen deportivo do dia". 3-4 CB
11955	13.3	2130	Rádio Nacional de Angola med "Discolândia". Här ringde lyssnarna in och röstade om de tio mest populära sångerna eller "Dez da Noite". Stationen sänder tydligen dygnet runt på denna tidigare dagfrekvens. 3 CB

## Övriga radionyheter:

### JRC NRD-525 versus NRD-535 and JST-245 RX?

I have the JRC JST 145, 525 and 545DSP. The 145 is the same as the 245 less 6 meter coverage. My findings:

**A. The 145/245 is quieter than the 525**, generated noise. 525 has a 13 khz whine in the audio output. Probably from the dc - dc converter for the display. Then the syntheizer of the 525 generates slight clicks while tuning. Not present in the 145/245.

**B. Sensitivity: not much difference.** Both very good. Altho, in the lab, the 145/245 is just a touch better.

**C. Stability. No differences.** Nil

**D. Audio: Better audio with the 145/245.**

**E. Selectivity: I like the 145/245 better here.** The 145/245 has BWC. Lets you vary bandwidth.. 525 does not have this feature. JRC did not offer this feature until they offered the 535D.

**Overall: The receiver in the 145/245 is better than the 525.** The 145 brings more features to the table. The 145/245 really compares to the JRC 535DDin most respects, not the 525. I compared the 145 to the 535d. I sold the 535D. This says it all.

I have the 145 and 545DSP as my tx - rx station. For SSB performance, this pair is in my opinion, state of the art. The only way to upgrade this station would be to step up to the Watkins Johnson1000 receiver. I would encourage all SWL's to consider the 145/245 over a straight receiver, if they ever would consider getting a ham ticket. Funny thing is, the US HAM community seems to have forgotten JRC as a supplier of quality Ham gear. 99% of hams go with Kenwood, Icom or Yeasu products. In my opinion, the 145/245 is the best rig on the market, in the 1000 to 3000 price range. No, it does not have fancy dsp. It IS state of the art analog. In the same league as the FT 1000-D Yeasu. For the SWL it does not have synch. Not a consideration if you are a Ham. Anyway, you have my two cents. I doubt if many have compared the 525/535D/545DSP and the 145 like I have, to the FT 1000D and the Drake R8.

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### An Informal Review of the Harris 590 Solid State Receiver by John Bryant for DX-Monitor, IRCA Technical Column

Even though, as a receiver collector, I own more serious radios than ought to be legal, I continue to use JRC's NRD-525 as my main DX receiver. My MW/Tropical Band work is almost all done with Beverage antennas, so the 525's IC clock noise that has put off MW loop users has not been a real concern for me. However, the 525 was designed in the early 1980s and is now getting very long in the tooth. I have lusted after the JRC NRD-535 (an under-appreciated receiver) and the 7030, but have held out, so far, to buy a REALLY top of the line radio "someday soon." I've been quietly squirreling away odd bits of cash for the past four years and have spent many pleasurable hours studying Fred Osterman's wonderfully complete receiver

reference, *Shortwave Receivers Past and Present (1942-1997)* to try to identify the absolute best radio for my interests, no matter what the price. Like many of you, I figured that the recent downsizing of the military/intelligence communities would cause some top-drawer receivers to hit the used equipment market soon. After all, the government can't put them all into strategic stockpile, can they? And with paying a used price, maybe I REALLY COULD buy the best radio ever produced! After a lot of study, I focused on the Harris Model 590, known (I've been told), as the current favorite receiver of both the National Security Agency and the CIA. The Harris 590 specs were just what I wanted: 0.15 uv sensitivity, lots of selectable filters and it weighs 45 pounds! I assumed that a modern receiver weighing in at 45 pounds would be built like tank and shielded from here to eternity.

Well, a couple of months ago, John Reed, a retired Conoco scientist and receiver connoisseur, and Bill Bowers, owner of many of the current best/top of the line sets and my mentor in such, both bought Harris 590s from a very honest and quality-oriented military electronic surplus outfit run by Mike Murphy in El Cajon, CA. The price was \$2200 including a 2" thick manual and a no fault return policy. If you don't like the set, just send it back, with you paying freight both ways.

Soon after Bill got his Harris, I went down to visit and more or less fell even more in love with the set. It is 20" deep and when you pull the dust cover, about all you see is what appear to be cast aluminum isolation boxes... there must be 20 of them. And, at 45 pounds, definitely, my kinda radio... none of this W-J "expensive aluminum lunch box" stuff for ole John! The Harris has REAL push buttons and the controls are silky smooth. Turning the set ON, via the audio gain control, was an almost sexual thrill. There was an honest-to-god THUNK when you gave the knob that first twist... There's a REAL switch back there. Running the "Built-In-Test-Equipment" (BITE) test turns the Harris 590 into a flashing-beeping-squealing rectangular R2D2 for about 10 seconds and then up flashes a message on the front panel which says PASSED ALL TESTS, or some-such. That BITE test itself is almost worth the cost... a real entertainment thrill for me, anyway. The front panel is well laid out and the tuning/programming/memory scheme is fine...a small learning curve, but nothing, like the old R-8 or the 7030. I just simply fell in love. My kind of receiver and built to last forever. If there was ever a solid state successor to the Collins R-390A, this is it!

Well, I came home from Bill's, slept on it for a couple of days, meditated on my cash stash and called Mike Murphy. I ordered it, got the Postal Money Orders on the way and waited breathlessly. This whole Bill Bowers was a bit disgruntled by this whole affair (my NRD 525 is very ratty, having spent far too long in the field) and we decided to do brief comparisons of the WJ and both of the Harris receivers on low frequency, where Bill spends all of his serious radio time. The difference was PHENOMENAL! Even my hissy Harris put the WJ to shame in CW mode on the low frequencies. There was a literal night and day difference. Sooo, if you want to do lower work, the Harris 590 sure seems to be the receiver of choice. Personally, I love the ergonomics of the WJ-1000, I love its filters and it is clearly the best of these three for what I do, however, I am much put off by the "overpriced aluminum lunch box" approach that WJ took. I have also heard a number of people that I trust worry aloud about component reliability of the WJ and the fact that the thing does not have modular construction. .. It is one big motherboard.

Some people are familiar with my review of the NRD-525 in Proceedings 1988 ("Wastegunner on a 525") You will remember that I had a love/hate relation with that radio then... I still feel the same way. However, this experience has given me new respect for that radio. It has a street value of about \$500 and stayed on the playing field with some pretty fancy radios.

I know that some of the more precision-oriented people reading this article would like to choke me for not running bench sensitivity tests on these radios. I didn't do so because I don't know how to do so, precisely, and I really do trust my ears after more than 30 years of serious listening. I admit that I am baffled by the Harris' poor performance. The manufacturer lists a sensitivity of 0.15 microvolt... but please note that sensitivity is measured in CW and is specified as above 1.8 MHz.

I know for sure that I'll never buy a serious used radio by mail, etc., without a "no questions asked" return policy like Mike Murphy's. I was VERY lucky to be dealing with Mike and I strongly recommend his place of business. He is a straight shooter and handles only the best surplus goods. Bill, John Reed and I have been awfully well treated by Mike. He doesn't advertise, but develops lists of his stock and then e-mails or faxes them, on request, to potential customers.

Well, that is it.. I so much wanted to keep the Harris 590. It appeals to all of my prejudices, heavily built, heavily shielded, the finest components that money can buy, a full size front panel, etc. The darn thing just won't hear weak AM stations between 500 kHz and 5 MHz very well, unfortunately, at least judging from these two samples.

The newest edition of Fred Osterman's book, *Shortwave Receivers, Past and Present (1942-1997)* may be ordered from his firm, Universal Radio <[www.universal-radio.com](http://www.universal-radio.com)> at 1-800-431-3939 (orders) or

614-866-4267. Mike Murphy's e-mail address is <[murphy@cts.com](mailto:murphy@cts.com)> or Murphy's Electronic and Industrial Surplus Warehouse, 401 N. Johnson Ave., El Cajon, CA, 92020, ph: 619-444-7717.

--Has anybody tried the ICOM IC R-8500 table top receiver? It's specs seem to place it somewhere between the R-72 and R-71, leaning towards the R-72. Its most striking feature is its ability to tune 100 kHz to 2000 MHz, but that leads one to wonder whether there are any drawbacks to its use in the lower part of its frequency range.

--The new DSP based receiver from JRC, the NRD-545, was reviewed in the April 1998 *Medium Wave News*. The reviewer, Karen Milliken, felt that it was a better "ham receiver" than the previous JRC communications receivers, but that it required some adjustment to get the best audio. The audio quality was comparable to that of the Watkins-Johnson HF-1000, but crisper. Using the AM synchronous detector locks out the use of a number of controls unfortunately, including AGC decay and bandwidth, as well as the noise reduction and beat cancelling modes. Milliken preferred using ECSS mode for AM, as the automatic bandwidth selection in synchronous detection was too wide for DXing. AGC timing is also fixed in all AM modes and the reviewer felt that the timing was too fast. When using noise reduction, the audio becomes very artificial sounding, but signal readability, if not listening comfort, is improved. In general, the variety of bandwidths available and the passband tuning control were found to be the most impressive features of the radio.

Mike had to get the manual printed up and UPS is very slow on heavy packages, sometimes). I called my wife every afternoon, wanting to know about deliveries...  
FINALLY IT CAME.

Well, I rushed home, carefully disassembled Mike's good packing job and there it was FINEST KIND! Hauled the thing up stairs, plopped it on the desk, plugged it in and ran BITE twice. Great! I then spent a wonderful two hours with a very excellent manual learning how to run the thing and putting it to the test.



The first negative thing that I noticed was bacon frying at all filter settings... made the 525's very famous hissy audio sound quite nice, actually. Well, heck, no radio is perfect. I decided to do some .A-B tests with the old 525 to see what my 2200 had bought me... this would be really fun!

Well, it wasn't. On the tropical bands, listening to a weak broadcasting station out in the open, using either -AM Mode or USB, the Harris had more hiss and a poorer S/N ratio than the 525. When the Harris was using a 3.0 kHz filter and the NRD was using its 6 kHz wide filter!!! To make a long story a bit shorter, the Harris 590 that I had was a very hissy one with poor sensitivity, at least from 500 kHz to 5 MHz.

By the way, our three Harris receivers, like a lot now coming on the market, had "selectable" IF filters as follows:  
CW 300 and 1000 Hz. (Bill added a 150 Hz. at \$235)  
SSB: 3.2 kHz.  
AM Mode: 16 kHz., 6.0 kHz., and 3.2 kHz.

PLEASE NOTE THAT THE HARRIS 590s FILTERS ARE "SELECTABLE" BUT ONLY WITHIN A PARTICULAR MODE. In other words, if you want to use the 1000 Hz. Filter listed above, and you are in AM mode or one of the sideband modes, you cannot select that filter! The 1000 Hz. Filter (and the 300 Hz.) are ONLY accessible/useable while the receiver is in CW mode! Neither Bill nor I know if you can unsolder the filters and move them physically to the other boards to, say, access them in the AM mode and they are soldered in, too.

After the very disappointing test results in my shack, I decided to visit Bill Bowers again and took along both the Harris 590 and my NRD-525. Bill kindly let me spend about 4 hours in A/B/C listening tests with his radios. I quickly confirmed that his Harris was less hissy than mine, by far, and had a better signal to noise ratio, so I put my Harris away and decided to compare his Harris, his Racal 6793A, his WJ-1000 and my NRD-525. My only concern was reception of weak AM signals on the tropical bands and medium wave in either USB/LSB or AM mode.

I rather quickly eliminated the Racal. I tend to slowly scan across the band a lot while DXing and the Racal has a VERY fast tuning rate and a VERY slooow rate and nothing in between.... so for me, the Racal was out, period. Other users and other users would surely disagree. I then focused on Bill's WJ-1000, his Harris and the NRD 525.

For the A/B/C comparisons, I used the 3.0 kHz filter on the Harris, used the closest filter on the NRD (a 2.8 kHz Collins mechanical) and set the WJ-1000 filters at 3.0 kHz. I tried dozens of signals in the tropical bands and weak signals on medium wave above 1600 kHz., along with the Spanish station on 855 kHz which was present only as a very weak carrier and the 595 signal from Dominica. The latter two were decent tests of dynamic range as well with VERY strong adjacent signals. I did not use S-meter readings and simply trusted my ears I was concerned about intelligibility of the spoken word and not much else I did NOT take advantage of the almost infinite number of WJ filter width settings... that seemed an unfair comparison.

In every case on tropical bands and on MW, on every signal, the WJ-1000 produced noticeably superior intelligibility of the spoken word.... period. Subjectively, the Harris and my NRD-525 were mostly in a tie for distant second... but the WJ was very noticeably superior on every signal and in every instance and that without manipulating the filter width. My 525 seemed a bit superior to Bill's Harris, but not by much. The 525 audio was a bit mushy, but the S/N was better and the Harris audio had more bacon on the stove but was a tiny bit more intelligible. Given the choice of having my NRD-525 and keeping my \$2200 on the one hand or having my 525 and a Harris 590 but no money on the other. GUESS which one I chose.