# SHORTWAVE BULLETIN

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Deadline e-mail next issue: 0900 SNT, Aug 19, 2007.

## SWB-info

SWB online på HCDX: <a href="http://www.hard-core-dx.com/swb">http://www.hard-core-dx.com/swb</a>

Dateline Bogotá: <a href="http://htttpi.htttpi//http://http://http://httpi.http://http://ht

# QSL, kommentarer, mm.

**Christer Brunström**: Vi har experimenterat med antenner på Kaneberget och var där och lyssnade inatt. Tyvärr något mediokra konditioner.

Tore B Vik: Uteglemt QSL forrige gang - R. Tacana - 4782 med e. post. Ny er R. Universidad - 4732 med e. post.

Lars Skoglund??: Skickar vykort med "en liten hälsning till SWB från ett soligt Tennessee. Jag och Peter Stillberg från DRAK är just nu på musikresa i den amerikanska södern. Men en del stationsbesök har det också blivit då vi åker bil och lätt kan göra avstickare. Närmast blir det ett par dagar i Nashville, sedan Memphis. Ha en fortsatt trevlig sommar!"

## EDXC RADIO LANDLIST 2007

**Dear DX** --- Friends all over the World ! I enclose the latest updated EDXC Radio Landlist 2007. The Landlist is coming from Mr. Olle Alm in Hudiksvall, Sweden, who updated this all the time in the past. I received this List today --- on Friday, July 20, 2007 --- from Mr. Torre Ekblom, Assistant Secretary General at the EDXC. With best wishes and greetings from Sweden, Tibor Szilagyi, EDXC Secretary General Written in Sweden on Friday, July 20, 2007.

direct link: http://www.dswci.org/news/2007/0707/edxc\_landlist.pdf

Best 73 (Rolf Wernli, DSWCI webmaster, July 21, DX LISTENING DIGEST)

Olle, I have been looking at the EDXC country list, very good work and useful with all the annotations, but one thing is not clear to me --- what is its scope? I see some countries where I do not recall there ever being a broadcast station, e.g. Navassa, yet it is not as comprehensive as DXCC for the hams. What qualifies a country to be in this list? NASWA of course deals only with SWBC countries. Surely EDXC also encompasses MW, but how about FM and TV and utility and ham? 73, (Glenn to Olle Alm, via DX LISTENING DIGEST)

Hi Glenn: The scope of the list is not well defined. It is intended to include all countries and territories that have had broadcast activity after WWII. The original authors also included a number of countries that were considered possible coming radio countries. I have not deleted these, although some of them may look silly today. The rules section of the list is a separate section that is not included in the list as such. It should also be noted that the list is not 100% updated. There may be errors and omitments, since I have not spent much time with the list in the past few years. Some countries have been included more or less only for the benefit of those hunting for amateur stations/countries. This is based on tradition, not on lists prepared by the hams themselves. Some odd "enclaves" in Europe have been included because of FM activity. 73 (Olle Alm, Sweden, July 26, DX LISTENING DIGEST)

## XDFilt

**XDFilt is a Windows application program** for filtering and removing noise from audio signals. The audio source can be saved .wav files, external live input as from a radio receiver, or external prerecorded material as from audio tapes, phonograph records, etc.

*XDFilt's features include*: - Adaptive removal of uncorrelated (random) noise. - Adaptive removal of correlated (whistle/heterodyne) noise. - "XD" adaptive removal of random noise. - Point-and-click graphical user-defined filter. - "Waterfall" spectrographic display. - 'Live' input from radio receiver, cassette player, turntable, etc. to standard PC sound interface. - 'Canned' input from saved .wav files. - 16 bit sampling. 8 k-sample/s sampling rate. - Signal strength meter. The distribution package includes examples of noisy signals in .wav files.

And it's free. <u>http://www.saharlow.com/technology/xdfilt/index.htm</u> (Steven A via rec.radio.shortwave)

Så är semestern snart över för den här gången. Här nere i Skåne kommer nu det vackra vädret med utlovade 25 graders värme. Idag får det väl bli ett besök på

stranden.

Bönderna har fått ut sina tröskor, men det är så vått i markerna att man får ta till bogsering för att ta sig fram på en hel del fält. Vi får hoppas värmen och det soliga vädret håller i sig.

Till detta nummer har bar ett fåtal bidrag letat sig fram och därmed får ni hålla till godo med en mager bulle.

Till nästa nummer kan det kanske finnas plats för en eller annan semesterrapport. Nog måste väl någon upplevt nåt utöver det vanliga på sin semester som kan vara värt några rader?

Annars får ni hålla till godo med lite teknik som utfyllnad.

Keep on ....

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# LOGGEN - ALL TIMES ARE UTC

3396	25.7	2210	Radio Zimbabwe förmodligen med non-stop musik. 3 CB
4716.6	26.7	0048	Radio Yura med ID. Tyvärr svag. 2 CB
4732	2.7	-0 <u>300</u>	R. Universidad, Cobija - mye RTTY QRM, men langt opphold ved s/off 0300 sikret et ID TBV
4805	26.7	0005	Difusora do Amazonas var en av de starkaste brassarna. Denna gång med fotboll. 3 CB
4965	26.7	2250	<b>R. Alvorada</b> , Parintins - A Voz do Brasil - høres ganske ofte, men svakt TBV
4991	26.7	2320	<b>R.</b> Ancash, Huaraz ble den store overraskelsen denne natta - s/off 0030. Hørt bare denne gangen TBV
5910	25.7	2225	Marfil Estéreo med musik. 2 CB
6035	26.7	0000	Bhutan Broadcasting Service började dagens sändningar med diverse exotisk musik. 3 CB
6070	25.7	1505	<b>BR1</b> med regionalprogram från Radio Brest. Intressant nog uppges frekvensen 6070 ligga i just Brest.
			Undrar om det kan räknas som lokalsändning? 2-3 CB
9265	26.7	0000	WINB med spanska program från Family Radio. 2-3 CB
11670	25.7	2200	RNV Canal Internacional via Kuba med programinformation. 3-4 CB

## Stationsnyheter

**INDONESIA - 4920 RRI Biak(p)** 1149-1221 July 20. Indo vocal mx to 1159; then M ancr briefly and SCI; Jak relay 1200-1216, then back to local M ancr at 1216, followed by vocal mx. The mx and Jak news were fairly readable but the local M ancr hardly at all. First logging for me of this station on this freq, although I've noted a weak signal there daily. They were right on 4920.00, going against the regional tradition of operating about .04 kHz from nominal. Excellent condx this morning to Indonesia and PNG. (Wilkins-CO via Cumbre Digest)

**SOUTH KOREA: 6003.0, R Echo of Hope**, heard 1220-1240, Jul 21, female hostess chatting, occasionally playing pop music // 3985 and 6348. Of these three frequencies, only 6348 seemed to be jammed. The jamming was quite strong and obnoxious and would be very noticeable on the other frequencies if they were jammed also. Why bother to jam only one frequency? (John Wilkins, CO in DXplorer via DSWCI DX Window July 25 via DXLD)

# Övriga radionyheter

## PERSEUS, another Software Defined Radio (SDR)



**PRELIMINARY INFORMATION** PERSEUS is a VLF-LF-HF receiver based on a outstanding direct sampling digital architecture. It features a 14 bit 80 Ms/s analog-to-digital converter with an exceptional 76 dB SNR (BW = 40 MHz), an high-performance configurable FPGA Frequency Coverage: Modes: Sensivity: Selectivity: Image Rejection: Input IP3: Dynamic Range:

Blocking Dynamic Range: MDS (Minimum Detectable Signal):

Input Clipping Level: Attenuators: RF Preselection Filters Bank:

ADC (Analog to Digital Converter): DDC (Digital Down Converter): SFDR (Spurious Free Dynamic Range): PC Interface: Output Sampling Rate: Output Bandwidth: Output Bignal:

Power Supply: Cabinet: Operating Temperature Range: Frequency Accuracy:

(\*Typical at 14.15 MHz)

Availability: End User Price 10 KHz - 30 MHz SSB, CW, AM, FMNB, etc. (Software Defined) 0.39 uV SSB (S+N)/N= 10 dB\* Software Defined (>100 dB Stop Band Attenuation) 90 dB\* 103 dB (SSB, 2.4 KHz BW)\* 107 dB (CW, 500 Hz BW)\* 125 dB\* -131 dBm (500 Hz BW)\* -124 dBm (2.4 KHz BW)\* -6 dBm (Att. 0 dB)\* 0, 10, 20, 30 dB one 3-poles LPF Filter (0-1.7 MHz) nine 6-poles BPF filters (1.7-30 MHz) 0-1.7, 1.7-2.1, 2.1-3, 0, 3, 0-4.2, 4, 2-6.0, 6.0-8.4, 8.4-12.0, 12-17, 17-24, 24-32, OFF (0-40 MHz Wide-Band Mode) 14 bit, 80 Ms/s with internal dither generator

14 bit, 80 Ms/s with internal dither generator FPGA Based (Xilinx's Spartan IIIE C3S250E) 110 dB High-speed 480 Mbit/s USB2.0 port 125 Ks/s, 250 Ks/s, 500 Ks/s 100/200/400 KHz (-110 dB Alias Rejection), 24 bit/sample I-Q pair

+5Vdc +/-5% 1 A (110/240 V wall adapter included) Heavy Duty Aluminium Enclosure 110 x 36 x 185 mm (W x H x L) 0-40 C +/-1 pm after calibration

September 2007 799,00 Euro VAT Included

digital down-converter with an up to 1 MS/s output sampling rate and a 480 MBit/s, high-speed USB 2.0 PC interface. Unlike in lower class direct sampling receivers, the PERSEUS RF analog front-end has been carefully designed for the most demanding users and includes a 0-30 dB, 10 dB steps attenuator (with an up to 500 mW input power rating), a low-loss 10 bands pass-band RF preselector filters bank, and an high dynamic preamplifier with a top-class input third-order Intercept Point of more than 30 dBm. The resulting third-order dynamic range is 103 dB for SSB signals (2.4 KHz BW) and 107 dB for CW signals (500 Hz BW). PERSEUS can be operated also in a wide band mode as a 10 KHz - 40 MHz spectrum analyzer with more than 100 dB dynamic range in a 10 KHz resolution bandwidth.

PERSEUS is a Software Defined Radio and relies on PC software applications to carry out the demodulation process. Compatibility and support of most used software will be provided by an interface DLL for Microsoft Windows operating systems and drivers for Linux.

IMPORTANT NOTICE: Perseus' price for EC users is 799 Euros VAT included. Perseus' price for non EC users is 666 Euros.

(information above reprinted by permission from Nico Palermo - iv3nwv. Note that published data are still preliminary and could be subject to some changes in their final release. /SWB-editor.)

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For more information, please have a look for this SDR at <u>http://www.microtelecom.it/perseus/</u> (Kuhl in DXplorer, Jul 18 via DXLD)

## Sputnik recollections wanted for CQ Magazine

October 4, 1957 saw the launch of the worlds first artificial earth-orbitingsatellite, Sputnik I.

The editor of CQ Magazine would like Radio Amateurs' recollections of that historic event for inclusion in the October issue. CQ Editor Rich Moseson, W2VU says: The 50th anniversary of the launch of Sputnik is coming up in October, and we are currently working on our October issue. Many of you remember the launch well, and of course, hams were in the vanguard of listening for those beeps from above. We'd like to collect a representative sampling of your first-hand recollections to weave into an article for our October issue. Plus, we'd like to hear if this experience had a significant impact on your choice of careers, etc. - in short, did listening for Sputnik change your life? If so, how?

Please respond as soon as possible by e-mail directly to a special mailbox we've set up at <u>sputnik@cq-amateur-radio.com</u> Many thanks in advance and 73, Rich W2VU, CQ Magazine <u>http://www.cq-amateur-radio.com/</u> (Mike Terry via dxld)

## SDR-IQ at Granite Pier: a whole new way to DX

I've tested out my newly-acquired RFSpace SDR-IQ software-defined receiver board from home several times over the past two weeks since it arrived.

Its spectrum capture ability (up to a bandwidth of 190 kHz) allows "after the fact" DXing on any PC loaded with SpectraVue software. This includes adjusting 'virtual' IF filter bandwidth, selecting demodulation mode, and viewing received spectrum in several different screen presentations.

Tests at home indicated that the receiver has DXing capabilities in the same class as many conventional table-top "knob and switch" radios.

Yesterday (24 JUL) it was about time to make things a whole lot more interesting: take the SDR-IQ and laptop combo out on a little "road trip": an after-work DXpedition to what is arguably metro-Boston's best (and most famous) medium wave DXing site - Granite Pier in Rockport, MA.

At this point I had no idea how much RF interference the laptop might generate in this situation since I was using antennas (active whip and broadband loop) mounted right on top of the car, rather than a fair distance away as in the case of the antennas used at home. I also had no clue how long the laptop's battery was going to hold out during the DX session.

As I still wanted to do some "hand-on" conventional DXing on my trusty Drake R8A while the SDR-IQ was gobbling up chunks of spectrum and loading them to the PC hard drive, I placed a Mini-Circuits ZSC-2-2 splitter at the output of my DXP-6A phasing unit so that equal signals would go to the inputs of both receivers.

I arrived at the site over an hour before sunset and the only transatlantic skip showing was fairly strong Saudi 1521 and some other hets (1134, 1503, 1557, 1575, 1584). The first two spectrumcaptures I did with the SDR-IQ were on longwave (150-340, 340-530) where purely daylight conditions were still in force. I figured that if noise from the laptop or the receiver was going to be a problem, it would likely show up "down there" worse than "higher on the dial". While there was a little bit of low-level hash, I was pleased to note the usual beacons coming through fine.

By sunset (0011 UTC), medium wave was alive with European and North African signals. Mostly it was "the usual suspects" from Spain and Algeria leading the parade. Algeria was enormous on 890.97 and 981 (and 549 wasn't too shabby either). Interestingly mid-band showed better propagation than the high end. Soon the low end caught up. It was wild watching the SDR-IQ spectrum display and seeing Spain-684 showing up STRONGER THAN (!) WRKO-680 at times.

With darkness setting in and some of the overseas signals getting seriously loud, it was time to capture some slices of medium wave for later dissection. I had saved ".ini" files of specific 150 and 190 kHz wide segments that I thought had the greatest potential to yield "goodies". This made setting the radio up "on the fly" much faster. I did a 1070-1220 kHz capture lasting 6 minutes. This produced a file of about 213 megabytes. A bit later I fired up a 639 - 829 kHz capture. Conditions in this segment were getting kicked-up with both Latin Americans and transatlantics in the stew. Also some killer Newfie signals (640, 740, 750, 800) at times for a nice domestic twist. About three minutes into this RF recording, the laptop battery gave up and the computer went into "hibernate". I wasn't sure if the file was going to be lost; luckily when I got home and powered up the laptop from the mains, it was there. Four minutes at a 190 kHz capture width produced a 308 megabyte file.

Though the recording times seem short for the size of these files, I must emphasize that there's a LOT of DX jammed in here. It's like being able to DX simultaneously with over 30 receivers (figuring access to 9 kHz and 10 kHz multiple channels).

Playing back the files the next day at lunch resulted in two more pages of loggings from what I had written down during the Drake R8A "live DXing". All logs will be distributed within a week.

Everything worked flawlessly except the laptop battery endurance. I have to do something about that. Whatever that solution is can't generate RFI.

The Boston Area DXers are set to have their annual "DX Clams" Granite Pier outing soon. I am looking forward to giving the SDR-IQ another workout there.

Looking ahead, the next East Coast North America play for this technology would be at a high-grade coastal HOUSE-BASED setting: Vern Brownell's in Chatham perhaps, or Miscou, or the "new" Newfie DX Inn. Unlimited "band capturing" could then go on since battery operation wouldn't be needed. Outboard high-capacity hard drives and DVD writers would be simpler to put into use to "soak up" all the data.

SDR receivers having significant spectrum capture range have the very real possibility of revolutionizing how DX is done. (Mark Connelly, MA, July 25, NRC-AM via DXLD)

## ABOUT CLASSIC HF VACUUM TUBE RECEIVERS

Hi All: I've been told that the 390/390A receiver is the best "tube" receiver of all time. I'm thinking of getting and restoring a 390 or 390A. Is this truly a good receiver for SWLing? Which is better, the 390 or 390A? Sincerely /b (Rasputin Novgorod, odxa yg via DXLD)

For a number of years, I used a Collins R-388/URR-51J3, (1974-1990) which proved to be the best of the units I had. Other then an odd tube, the receiver almost worked perfect for the years I had it. I also had the opportunity of using a R-390A, which I found to just as equal to the R-388. The one advantage was the mechanical filters vs the crystal filters, also the ability of 'zeroing in' on the frequency counter (pre-digital). The proof was logging of Mauritius on 7260, Zanzibar on 3339. The one disadvantage was the frequency changing. You had to have a good 'strong wrist' to the frequency you wanted to change; for example from 3385 way up to 15190. Like all tube receivers, you can not beat the sound of the audio. If you have the opportunity, I would go for the R390/A (Edward Kusalik, AB, ibid.)



Amigos: Also consider the Collins 51J4; and the Russian R-250 series, of which the latest model R-250-M2 is the best example of that

excellent design. But do your weight lifting training well before buying your R-250-M2, as the radio tips the scale at 85 kilograms or

approximately 185 pounds. It uses a 215 kHz last IF, an intermediate variable IF that goes from 1.5 to 3.5 MHz (extremely well shielded and filtered against feedthrough from the antenna) and a front end that essentially is a crystal controlled converter, with crystals to switch 2 MHz wide bands (à la COLLINS style, but these are 2 MHz wide instead of the 30 bands of the classic 51J COLLINS receivers). IMHO it is also a collectors item. 73 and DX (Arnie Coro, CO2KK, Host of Dxers Unlimited Radio Hobby Program, Radio Havana Cuba, ibid.)

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R-250, R-250M and R-250M2 where the most prominent and remarkable Russian short wave receivers. The receiver line produced and modernised from 1948 until 1981. The designer was Anton Antonovich Saveliev, Yuri Alexandrov (U1SX) and others. The project was started in 1940 and finalised in 1946 - 1949. First named AS-1 and AS-2 (designers initials) The set took the Stalin Premium prize in the early 50's. While working on the design numerous other developments were taken into account, but no examples were actually obtained, so it is basically an original Russian design. AS-2 is an early version of R-250 and identical to it. Only the labels are different. Very few AS sets were produced, so it is a rare thing among the R-250 series radios. The design is very rugged. The set comes in a cabinet with two compartments and is made from Aluminium (Silumin) castings which are used on chassis etc.

All R-250 series produced from 1949 till 1981 largely in Charkov Radio Works (later IU "Proton") and some in other factories. Name "Kit" - translated "Whale". The receiver was mainly used in soviet and her allied armed forces. Later often found in HAM radio clubstations. **Net weight** 95 kg / 3351 oz

Kolla mer om Warsawapaktens mottagare på denna lank: <u>http://www.milradio.com/warsaw\_gal.htm</u> (via SWB-editor)