

SHORTWAVE BULLETIN

Issue no. 1894, Jan 28, 2018.

Deadline e-mail next issue: 0800 UTC, Feb 11, 2018.

Time again to compile another issue of SWB.

This winter we have got a lot of snow up in central and north Sweden. Those DX-ers with long antennas have had serious problems with too heavy snow loads breaking the antenna wires.

On the picture to the right you can see another example of the damages from bad weather. In this case it was ice rain causing the breaks.

There has been a thread regarding the newly released Airspy HF+.

This quite cheap SDR seems to offer good value for the money. Bjarne Mjelde and Roelof Bakker have made some tests. I have copied a few of their articles. Surely more to come.

As usual a lot of stations in the log. But as you can see many of them appear in each issue.

Luckily enough the two low powered Aussies have been the highlites. A plus - they verify. 4KZ with a nice QSL card.

Keep on

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R e d a k t i o n:

Thomas Nilsson

E-mail:

thomas.nilsson@ektv.nu

SWB-info

SWB on HCDX:

<http://www.hard-core-dx.com/swb>

SWB member information:

<http://www.hard-core-dx.com/swb/member.htm>

Dateline Bogotá 1993-1998:

<http://www.hard-core-dx.com/swb/Dateline.htm>

SWB latest issue/archive:

<http://www.hard-core-dx.com/swb/archive.htm>

QSL, kommentarer, mm.

Gert Nilsson: Mina möjligheter att dra antenner här i Ö-vikstrakten och mitt allt mindre intresse att dra på DX-exp har fått mig att fundera på varför jag har en hög SDRs här på hyllan.

Jag tänker försöka avyttra följande:

- Perseus inkl org nätaggregat
- SDR-IQ i originalskick. Driver en aning, krets måste bytas enl tillverkaren
- SDR-IQ inköpt av BIH fungerar perfekt.
- 2 rullar DL-1000 c:a 870 meter oskarvad

Dan Olsson. Hej och god fortsättning på det nya året. Här kommer ett bidrag ifrån ett regnigt Kävlinge. **QSL: 4029 R Stove Farmer** e-brev och foto, **5055 4KZ** kort, dekal och lapp med info.

Nyheter: AUSTRALIEN: 4KZ kommer i februari höja effekten till 1000 w ifrån det nuvarande på 200 w. /Al Kirton

Christoph Ratzer (via A-DX Fernempfang). Und so sieht meine 250 Meter Beverage Antenne nach dem Eisregen aus. Ich hatte das Vergnügen schon vor Jahren, diese Woche nochmals. Damals war nur die Windom betroffen, aber dagegen ist man machtlos. Nimmt man dickere Litze bildet sich noch mehr Eis, bei dünnerer Litze reisst diese schneller (trotz Bruchlast lt DX-Wire von 90 kg).

Heute alles neu aufgebaut...



2598u	Jan26	2330	CJH-22 Riviere-au-Rernard "rain on Saturday morning ..." // 2749u Canada VCN Riviere-au-Rernard. This with the noise reducing antenna (Wilkner)
2850	Jan20	2255	KCBS, Pyongyang Korean talk with fanfare and song (AP-DNK)
3240	Jan26	0258	TWR IS ID (TB)
3260	Jan20	-1226*	NBC Madang. In Pidgin; seemed to be interviews about the disputed 2017 Madang regional election results (http://goo.gl/YGEyKG); first time I have heard this PSA - testing of their emergency announcement system with series of tones followed in Pidgin and tones again followed in English, that if there had been an emergency, listeners should tune to NBC for announcements; suddenly cut off (Ron Howard, Asilomar State Beach, CA, USA)
3310	Jan14	0959	R. Mosoj Chaski 0959 Quechua tlk by M anncr including a nice ID, then into instru. Andean mx. 1001 W anncr briefly more CP vcl mx. Fair signal. (Valko)
3310	Jan28	2325	Radio Mosoj Chaski, Cochabamba, brief music: 0100 very poor 28 January (Wilkner)
3320	Jan21	2155	PBS, Pyongyang Korean talk CWQRM (AP-DNK)
3320	Jan27	2100	SABC R Sonder Grense Meyerton, program local music (Mauro Giroletti)
3320	Jan26	0239	Radio Sondergrense in Afrikaans with pop vocals and a male DJ - Poor and noisy (Coady-ON)
3325	Jan22	-1153*	NBC Bougainville. This seems to not be on the air every day! Today mostly pop Pacific Islands music; light RRI QRM. BTW - NBC Madang (3260) went off at 1206*, Jan 22, at the end of the NBC news in English (Ron Howard, Asilomar State Beach, CA, USA)
3480.0	Jan9	1629	Voice Of The People (cland.), Goyang.Kor to KRE, tks, mx. 25432 (CGS)
3900.1	Jan13	2211	R. Technische Man - pir.Pops. 35443 (CG)
3910.0	Jan9	1620	Voice Of The People (cland.), Goyang.Kor to KRE, tks. QRM seemed to be from jammer. 24442 (CGS)
3910	Jan20	1318	noted no jamming at all on 3910, 3930, 3985, 5995, 6015, 6135, etc.; jamming started at *1323. Perhaps giving the south a brief respite from the jamming due to upcoming Olympics? Look for these daily breaks! Dave Valko on the East Coast also noted "unjammed 1006 and again at 1209," with 6520 and 6600 in the clear (Ron Howard, Asilomar State Beach, CA, USA)
3915.0	Jan9	2201	BBC, Kranji relay.WS in E to SEAs, nx. Deteriorating. 35443 (CGS)
3915	Jan21	2210	BBC, Kranji English World News about the Taleban attack on a hotel in Kabul (AP-DNK)
3930.0	Jan9	1617	Voice Of The People (cland.), Goyang.Kor to KRE, tks. QRM seemed to be from jammer. 34433 (CGS)
3945	Jan14	2240	R Nikkei, Nagara Japanese talk (AP-DNK)
3975.0	Jan18	-2158*	Short Wave R - pir.E, pops, fqs. & sched. ann. 25342 (CG)
3985	Jan14	2245	Echo of Hope, via Gyeonggi-do, South Korea Korean talk by man and woman, jammed // 5995, 6250 and delayed 4885 (AP-DNK)
3985.0	Jan9	1614	R. Echo Of Hope (cland.), Gyeonggi-do.Kor to KRE, tks, songs. QRM de UNID in F (SW Sce., D?). 34432 (CGS)
3990	Jan14	2255	Gannan PBS, Tianshui March: "The East is Red", Tibetan ann, 2300 news // 5970 . *2312 QRM Xinjiang PBS in Uighur (AP-DNK)
3990.0	Jan15	2324	Xinjiang PBS, Urumqi.Uighur, local pops. 35443 (CG)
4030.0	Jan20	2237	R. Alice - pir.E, songs, mx, tks, thanking for a rec. rpt from Marco. 35342 (CG)
4054.9	Jan27	0510	R Verdad Chiquimula, program music noise utility station (Mauro Giroletti)
4055	Jan26	2320	Radio Verdad strong signal om in Spanish with vocalist (Wilkner)
4450.0	Jan9	1626	Voice Of The People (cland.), Goyang.Kor to KRE, tks. QRM de jammer but mostly de CODAR. 33441 (CGS)
4747.2	Jan26	2320	Radio Huanta 2000 Huanta Ayacucho under massive killer CODAR, could make out om in Spanish. Thanks Dave Valko for heads up on return frequency (Wilkner)
4747.58	Jan15 Jan16	2310	R. Huanta 2000 This is indeed the one here. Noted at 2310 w/camposina mx but went off around 2315. Found back on 2330. Was able to // their webstream w/ad/promo block from 2336-2342. Ments of Huanta. 2 anmnts had long list of presumed network stns. Live M anncr came back w/anmnt including ID at 2342. Caught a full canned ID by M at 0005. Peaked around 2335 and faded some. Of course horrible CODAR QRM. (Valko)
4747.61	Jan16	2250	R Huanta 2000, Huanta. - back from 4764.1. 2300 fade out. Thank to Dave Valko (AP-DNK)
4750	Jan20	1545	Bangladesh Betar Khabirpur Dhaka, local program mix China (Mauro Giroletti)
4765	Jan14	0144	R. Progreso is S9+20, undermodulated but much better than 5025; CODAR QRM on both sides (Glenn Hauser, OK)
4765	Jan20	0446	Radio Progreso, La Habana, Spanish and Cuban songs. (Méndez)
4765	Jan26	0311	Radio Progreso at 0311 in Spanish with nice Cuban salsa music and a man with excited talk with mentions of "Progreso" and "Cuba" - Fair (Coady-ON)
4765.07	Jan16	2310	Tajik R 1, Yangiyul Tajik ann by two announcers, local music and song (AP-DNK)

4774.91	Jan17	1101	R. Tarma Starting their nice full canned ID w/calls and freqs over dramatic mx bed at 1101 t/in. Then intro for upcoming daily pgm "Antena Informativa". Still readable at 1127 recheck but fading quickly. Ments of informativa, Peru, Cusco, and Lima No longer readable at 1135. Fair signal at first but awful CODAR QRM. (Valko)
4800	Jan15	2115	Voice of China, Golmud Chinese ann and songs by choir // 6000, 6080, 6125, 6175 and 7230 (AP-DNK)
4810	Jan27	1545	Armenian Public R Gavar, program local in Greek (Mauro Giroletti)
4810	Jan21	0555	Denge Kurdistan CLA Via Yeravan , prog music (Mauro Giroletti)
4810	Jan21	1345	Dengê Kurdistanê (New frequency !), via Noratus, Armenia Kurdish talk about Iran and Syria, 1350 ID: "Era Dengê Kurdistanê", 1400 orchestra music, talk - noise on USB, so best in LSB // 7520 (AP-DNK)
4820	Jan15	2130	Xizang PBS, Lhasa, Tibet Chinese ann, songs by man // 5935 QRM Arab on 5940, 6050 and 7240 (AP-DNK)
4820	Jan18	1513	PBS-Xizang (Lhasa-Baiding). PBS' CH service doing rather well this morning with //5935 at easy-listening level as well. (Dan Sheedy)
4835	Jan27	1444	AIR Gangtok. Above threshold level audio; segment in English 1444-1459, with pop songs; REO Speedwagon "Keep on Loving You," a Rolling Stones song, etc.; several clear mentions of "All India Radio"; 1500-1512 non-stop solo sitar instrumental music; 1512 start of the New Delhi audio feed (tone, followed by commercial announcements); 1515 news in Hindi. This past week there were days they were clearly not broadcasting, while other days had strong hum from their transmitter, so great to find them doing so well today. Still a challenge to hear this, but today was one of their best days, as normally they are well below threshold level audio. Details very similar to these that Bruce Churchill reported in DXLD 16-36, during the same time period: " Surprised to hear English program at 1430 to 1459 with woman announcer intro ("Hello all you beautiful people out there...this is... Gangtok...today we will be talking about...") followed by intro instrumental/ vocal music piece. Talk on women's equality in education and society. Pop vocal/instrumental music selections in between talk segments. Back to vernacular at 1459.5 with man and local instrumental music. Commercials at 1512-1515. Intermittent slight CWQRM on 4836. Have logged Sikkim from this site before but in the Dec/Jan time frame and with QRM from ABC. From this site Gangtok was one of the predominant carrier indications on 60 mb." (via remote Perseus site in E. Finland, on Sept 1, 2016). My audio today of faint ID and soft sitar music at http://goo.gl/Evp6dG (Ron Howard, Asilomar State Beach, CA, USA)
4840.0	Jan10	1035	WWCR, Nashville TN.E, tks. F/out. 15341 (CGS)
4845.0	Jan8	2231	R.Cultura do Amazonas, Manaus AM.Songs. 35332 (CGS)
4850	Jan21	*2336-	Xinjiang PBS, Urumqi Kazakh ann, local songs // 6015 (AP-DNK)
4850	Jan19	1516	Xinjiang PBS (Urumqi). A little late dawn enhancement brought XPBS up to readable levels in (p) Kazakh--mostly emphatic chat + sounders to break up the polemics. (Dan Sheedy)
4862.5	Jan9	2205	R. Alvorada, Londrina PR.Tks, seemingly rlg. propag. 25321 (CGS)
4875.3	Jan8	2232	R. Roraima, Boa Vista RR.Songs, then suddenly no audio 2237-2240, tks (but w/ weaker audio level). 35332 (CGS)
4885.0	Jan9	1610	Echo Of Hope (cland.), Nowon-gu.Kor to KRE, tks on fqs, mx. 35443 (CGS)
4885.04	Jan16	0540	R Clube do Pará, Belém, PA Portuguese ann, Brazilian pop songs (AP-DNK)
4920	Jan15	2140	Xizang PBS, Lhasa, Tibet Tibetan talk and folksong // 4905 CWQRM in USB, 6025 Noise QRM, 6110 splashes, 6130, 6200 splashes, 7255 and 7385 (AP-DNK)
4930	Jan15	2150	VOA Studio 7, via Moepeng Hill English ann, pop music - heterodyne (AP-DNK)
4955.0	Jan8	2235	R.Cultural Amauta, Huanta.Quechua, rlg. propag. 35332 (CGS)
4960	Jan16	0535	VOA, Pinheira French "Journal" about Cameroon (AP-DNK)
4965	Jan19	1850	Voice of Hope, Lusaka, English, religious comments. Very weak. (Méndez)
4985	Jan24	2145	R Brasil Central Goiânia Goiás, program local+ ID (Mauro Giroletti)
4989.98	Jan13	0949	R. Apintie 0949 M tlk in Sranan Tongo w/ments of September and Pakistani. Nice peaks at 0950:10 and 0950:50. Into canned anmnts/ads at 0952, 1 w/M shouting, and ID by M at 0953:05. 0954 people singing/shouting in unison like girls jumping rope. Faded and was very weak but got a "R. Apintie, the happy station" ID by W at 0955. 1004 apparent nx sponsor ad, then M w/nx. Still had some audio at 1050 recheck. (Valko)
5005	Jan21	0535	Difusion de Guinea Ecuatorial Batá, prog music + ID female (Mauro Giroletti)
5005	Jan23	*0530-	R Bata opened today with news in Spanish, male, "Malabo", Guinea Ecuatorial", "Esto es Radio Bata", songs. (Méndez)
5020	Jan22	-1346*	SIBC. Mostly just carrier heard, but at times very faint music could be made out; continuing to have serious problems with low modulation (Ron Howard, Asilomar State Beach, CA, USA)
5025	Jan14	0144	R. Rebelde is S9+20 but JBM. Still same at 0702, with hum. Something's always wrong at RadioCuba. And I currently confront an S9 noise level around 5 MHz. (Glenn Hauser, OK)
5040	Jan16	1139	AIR Jeypore. With day 4 of India vs RSA cricket match being held in South Africa, at 1139+; seemed more English coverage today than usual (nice!); still also with Hindi coverage. No

			cricket Jan 17, from AIR Jeypore. Did hear test tone at 1126; 1127 tone off; 1128 AIR IS; fair signal and at times good reception. Jan 18, day 5 of cricket coverage, at 1220. Still off frequency 7555.57v, AIR via Delhi-Kingsway, 1310, Jan 18. Daily slightly different frequency; sub-continent singing/chanting (Ron Howard, Asilomar State Beach, CA, USA)
5040	Jan20	1540	AIR Jeypore, program female speaker in EE (Mauro Giroletti)
5040	Jan27	1315	AIR/Jeypore överraskade mig med att höra bra redan så här tidigt. (DOH)
5045	Jan15	1215	Ozy Radio. Sounded like a PSA, along with ID; pop songs; Australian folk group The Seekers, with "A World of Our Own," etc.; best in LSB. (Ron Howard, Asilomar State Beach, CA, USA)
5045	Jan27	1250	Ozy R med australiensisk musik. Hördes Q 1-3. (DOH)
5050	Jan20	1530	Beibu Bay R. Nanning (Guangxi), local program music (Mauro Giroletti)
5050	Jan21	1445	Beibu Bay Radio. With business Chinese language lesson and also announcer in Vietnamese; Chinese lesson slowly repeating a number of times as to when a store would be open for business and then repeating several times just the word for store (translated by native speaker of Mandarin Chinese). Have found these daily five minute language lessons being aired during the 1445-1500 time period (Ron Howard, Asilomar State Beach, CA, USA)
5050	Jan27	1300	Beibu Bay R med ett fint ID på heltimmen. (DOH)
5055	Jan15	1259	4KZ (pres.) 1259-1310 getting bits of M tlc a few times and mx on very short peaks of a no more than 1.5 seconds. Fading. Still barely visible in the Perseus display at 1438. Wish I would have been on freq earlier at my lcl sunrise. (Valko)
5055	Jan22	-1404*	Radio 4KZ. Cut off just before the end of the news (Ron Howard, Asilomar State Beach, CA, USA)
5115	Jan11	1556	V24 (S. Korean #s station). OC on at tune-in, *1600 with KR pop song (different from 6310, I think), 1604:30 start of KR # groups..big digital signal on frequency made reception difficult. (Dan Sheedy)
5840.0	Jan9	1836	World Music R - pir.Pops. Still on at 2200. ID via DX press. 35332 (CGS)
5840	Jan21	0635	WMR Pirate,1715/0635 Jan14/21, music + female ID(Mauro Giroletti)
5840	Jan25	1040	World Music Radio, Karup (Denmark) - non-stop music and songs with the occasional ID in English. 0-3 (CB)
5840	Jan21	0740	WMR med kubansk musik. Hördes via KIWIIn i Alingsås. Inget hördes på vår longwire i Saxtorp eller på KIWIIn i Hököpinge. (DO)
5850	Jan26	0030	Radio Slovakia International (via WRMI) at 0030 with "Slovakia Today" and a man with news - Fair to Good (Coady-ON)
5910.2	Jan23	0523	Alcaraván Radio, Puerto Lleras, Latin American songs. (Méndez)
5914.99	Jan14	0338	ZNBC/R. One 0338- live studio M and W pgm hosts w/chatter and taking phone calls. 0359 marvelous Fish Eagle mixed w/fanfare, then quick ID by W and pres. nx. 0403 Rooster crowing (which may have been the actual start of the next song) and into Afro Pop mx. More of the tlc show at 0405 to at least 0419. Not that bad of a signal and nice of 5920 WHRI to stay off. (Valko)
5915	Jan11	-2136*	R Zambia, Lusaka <u>reactivated</u> after six months Vernacular ann, Afropop, interview. 2136* Abrupt transmitter fall out in mid sentence. CWQRM in USB (AP-DNK)
5915	Jan19	2006	Zambia NBC Radio 1, Lusaka, Vernacular comments. (Méndez)
5915	Jan23	0344	ZNBC/Radio One. Very late starting! 0313 no signal; 0344 found on the air with pop African music/singing; 0400- 0405 with long commercial announcement in vernacular for GOtv Plus and GOtv Max; almost fair. My audio of GOtv ad http://goo.gl/cZmMHl GOtv website - http://eazy.gotvafrica.com/en/zm/get-gotv/packages (Ron Howard, Asilomar State Beach, CA, USA)
5915	Jan24	2130	ZNBC R Zambia Lusaka, program local vernacular (Mauro Giroletti)
5915	Jan22	1315	Myanmar Radio. Still being well heard here without CRI (China), but still QRM from the N. Korea jamming on 5920, of Voice of Freedom. (Ron Howard, Asilomar State Beach, CA, USA)
5920	Jan17	*1555-	Voice of Freedom (Hwaseong). OC into choral anthem, opening ID ("..FM radio...MegaHertz..odon [?] bangsong.."), nice singing jingle, 3+1 pips at TOH followed by (p) news headlines (Winter Olympics, etc)..no NK jammer heard at this time, but pulse jammer on during VoF broadcast closing at 1504. (Dan Sheedy)
5925	Jan18	1505	CNR5 (Beijing) (P) + unID. CNR5's CH programming mixing with unID 'whoop-whoop' noise (presumed jammer, but why?) until jamming cleared at 1521..VoV scheduled here, but unhrd today..also 1451-1530 19 Jan. CNR5 (P) with 'whoop-whoop' jammer & het with the latter 2 off by 1457..checking listed CNR5 //s of 7385/9410 was no help (unID just barely audible on 7385 & grinder jam covering 9410 @ 1506 during BBC's 15-16 Urdu broadcast). (Dan Sheedy)
5935	Jan18	1300	First day back on former 5935, Shiokaze/Sea Breeze, via Yamata, ex: 6085. After several non-English Thursdays, noted Jan 18 (1300+) again with English; intro and "Today's Newsflash"; no N. Korea jamming yet; now totally blocking reception of Tibet (PBS Xizang), which was heard underneath Shiokaze (moderate QRM). Ex: 6085 still being jammed by N. Korea today (Ron Howard, Asilomar State Beach, CA, USA)

5939.78	Jan19	0415	Ethiopian Somali Regional State R, Jigjiga Somali conversation (AP-DNK)
5939.8	Jan21	0625	Voz Missionaria Camboriu, prog relgs (Mauro Giroletti)
5949.9	Jan21	0520	Voice of the Tigray Revolution Addis Ababa, prog local vernacular Tigrinya (Mauro Giroletti)
5950	Jan19	0345	Voice of the Tigray Revolution, Addis Ababa. Talk with Horn of Africa flute (AP-DNK)
5950	Jan13	0131	IBC (via WRMI) 0131 M anncr in accented EG w/ment of upcoming features, ment of www.dxfanzine.com , DX pgm of MW and SW loggings 0133-0142, IBC singing jingle, SP ID by M, then 425 DX News segment past 0148. Good signal w/some QSB. (Valko)
5952.4	Jan26	2335	Pio XII, Siglo Veinte yl with music, percussion (Wilkner)
5960	Jan26	0324	NHK World Radio Japan at 0324 in Japanese with a lamentful female ballad and a man with talk – Fair to Good with fading (Coady-ON)
5960	Jan26	2251	BBC at 2251 with a man interviewing a woman with a “Newshour” story about Donald Trump – Poor (Coady-ON)
5980.0	Jan9	2208	R. Chaski, Cuzco.Cast, songs. Adj. QRM. 23431 (CGS)
5990	Jan26	2300	RCI at 2300 with a man with ID and into a man with news – Good (Coady-ON)
5995	Jan20	*0658-	Radio Mali, Bamako, anthem, French, id. “La Radio National du Mali emettant de Bamako”, comments, songs. (Méndez)
6000	Jan26	0231	RHC with a man hosting “From the Bookshelf” - Great signal crappy audio (Coady-ON)
6003.0	Jan8	2238	R. Echo Of Hope (cland.), Hwaseong.Kor to KRE, tks. Jammed, also adj. QRM. 22441 (CGS)
6010.0	Jan20	0803	Radio Inconfidencia, Belo Horizonte, Brazilian songs, comments, id. “Radio Inconfidencia”, “Trem Caipira”. Inconfidencia returned to 6010, instead of 6011.7 days ago. (Méndez)
6015	Jan20	0515	Zanzibar Broadcasting Corporation, Dole (presumed), Vernacular comments. (Méndez)
6015	Jan23	0338	ZBC Radio, 0338, on Jan 23. In Swahili with many mentions of Dar es Salaam; 0341 usual format of brief chant and song, as well as clear mention of “Zanzibar.” My audio at http://goo.gl/4nZTSy (Ron Howard, Asilomar State Beach, CA, USA)
6015	Jan16	1535	Hanminjok Bangsong 1/KBS (Hwaseong). Surprised to find HB 1 1 in the clear with no jamming (returned @ 1542 check, however)..also noted 5995 (VoH), 6135/6003 clear until 1542 (even with no SK transmissions on either freq.) (Dan Sheedy)
6030	Jan19	0350	R Oromiya, Adena, via Geja Jewe Oromo ann, Horn of Africa songs (AP-DNK)
6030	Jan16	2320	Voice of China, Beijing Chinese talk // 4800 (AP-DNK)
6035	Jan21	*0112-	Bhutan Broadcasting Service, Sangaygang Dzongkha ann, Bhutanese songs to local string instrument, 0129 two interviews (AP-DNK)
6040.7	Jan19	2135	Radio Evangelizar, Curitiba, “A Voz do Brasil”. (Méndez)
6049.98	Jan13	2150	ELWA 2150 lcl rel. tlk/phone-in pgm in EG. 2200 M w/simply short “This is ELWA” ID, then into next EG rel. pgm from World Christian ??, and blasted by 6040 WHRI slop QRM. 2230 live M anncr w/another ID “You’re listening to ELWA ...transmission...night ...”, instru. NA, and off at 2232:07. Getting QRM from HCJB as well by s/off. (Valko)
6050	Jan20	0640	ELWA Radio, Monrovia, English, religious comments. (Méndez)
6060	Jan26	0327	RHC at 0327 with a man and woman with news about the UN and Canadian PM Justin Trudeau’s commitment to fighting climate change – Fair signal great audio (Coady-ON)
6060	Jan17	1602	CRI (Kunming). EG programme with news followed by CRI's version of “Unshackled” (well, it surely sounds like a soap opera--usually heard in bit/pieces on 5955). (Dan Sheedy)
6065	Jan19	1703	Voice of Hope, Lusaka, English, religious comments and songs, id. “From Zambia, this is the Voice of Hope Africa”. (Méndez)
6070	Jan27	1415	IBC via Rohrbach, program in I “panorama onde corte” (Mauro Giroletti)
6090	Jan19	0355	Amhara State R, Geja Jewe. Amharic conversation, Horn of Africa song (AP-DNK)
6110.0	Jan9	1631	R. Fana, Geja Jawe.Vn, advs., songs. Adj. QRM. 33442 (CGS)
6110	Jan19	0400	R Fana, Addis Ababa. Amharic, two ID's: “Fana Broadcasting Corporation”, news with interview (AP-DNK)
6110	Jan15	2020	R Fana Addis Ababa, local program song (Mauro Giroletti)
6115	Jan20	*0558-	Radio Congo, Brazzaville, French, id. “Radio Congo”, “Notre programmation”, male, female, comments, some Vernacular comments, African songs. (Méndez)
6130	Jan15	1820	TWR Manzini, local program vernacular song (Mauro Giroletti)
6130	Jan20	*2050-	Xizang PBS, Lhasa, Tibet Tibetan ann, ID in Tibetan and English: “Tibet People's Broadcasting Company”, March “The East is Red”, reading long list, talk, music // 4920 (AP-DNK)
6134.8	Jan19	2212	Radio Santa Cruz, Santa Cruz de la Sierra, comments. Very weak, barely audible. (Méndez)
6134.85	Jan26	2330	Radio Santa Cruz om in Spanish with very weak signal, 0040 similar weak signal. (Wilkner)
6150	Jan14	0019	The Mighty KBC 0019 tlk abt writing of “Telstar”, then ID singing jingle, M w/song anmnt, and into “You Can Drive My Car” by The Beatles. Very strong and clear of course. (Valko)
6150	Jan14	0004	KBC (Nauen). Dave Mason's/Eric's shows with OK signal this evening..rare to hear KBC clearly before 0100. (Dan Sheedy)
6160	Jan20	1100	Shortwaveradio.de with Feature Story news followed by music. The test broadcasts in preparation for a new service to Western Europe apparently continue. 3 (CB)
6173.8v	Jan17	1038	R. Tawantinsuyo Seemed a little stronger than usual at 1038 t/in on 6173.82 and wasn’t doing the nx which is usually the case at this hour. Instead was playing some OA camposina mx.

Drifting up rapidly, so must have come on just before I tuned in. 1042 long canned SP anmnt by M w/echo, then back to mx. Still going w/mx to at least 1101. Found it was // to their web-stream. Slightly audible by 1125 and had drifted up to 6173.93. Still barely visible in the display on 6173.94 at 1206, so xmtr settling down by then. Had to notch out 6175 China. (Valko)

6175	Jan26	2215	CRI in Portuguese with a woman with talk with music bridges – Fair to Good (Coady-ON)
6185	Jan20	-0603*	Radio Educación, Ciudad de México, comments, female and male, id. “Radio Educación”, songs in Spanish, Latin American songs. (Méendez)
6185.017	Jan26	1513	very weak signal, but I can tell it is in Spanish, which means it has to be XEPPM, on the air far earlier than supposedly scheduled from 2300 or 0000. Also others have measured it slightly off+plus. There is another weaker signal, perhaps the 15 kW China Huayi, or the 500 kW Voice of Turkey in Italian (Glenn Hauser, OK)
6230.0	Jan9	-1704*	VMW-Marine Weather stn, Wiluna WA.Wx warnings. 25442 (CGS)
6241.5	Jan20	1925	UNID - pir.Pops. 25331 (CG)
6250	Jan15	1257	A rare event ; instead of the normal heavy jamming from N. Korea, was able to hear two stations mixing together with no jamming; from the south with the much weaker Echo of Hope - Voice of Hope (10 kW) and from the north with Echo of Unification (100 kW); 1259 clear "V O H" ID underneath EOU. Usually the jamming is so strong here it's impossible to tell what is going on. My audio at http://goo.gl/sQQwKu (Ron Howard, Asilomar State Beach, CA, USA)
6250.0	Jan9	1830	R. Echo Of Hope (cland.), Nowon-gu.Kor to KRE, songs, tks. Jammed. 34432 (CGS)
6250	Jan20	1318	another day hearing two stations mixing together with no N. Korea jamming; from the south with a somewhat weaker Echo of Hope - Voice of Hope (10 kW) and from the north with Echo of Unification (100 kW); "V O H" ID underneath EOU; *1323 jamming started, totally covering both stations (Ron Howard, Asilomar State Beach, CA, USA)
6280.0	Jan9	1710	UNID, Dutch? - pir.Mx oldies. 35332 (CGS)
6309.9	Jan20	1923	R.Focus Int'l - pir.E, pops. 35443 (CG)
6310	Jan8	-1538*	V24 (S. Korean #s station). OC on by tune-in to *1530 with KR romantic pop song, followed by KR # groups to 1537, carrier off at 1538. (Dan Sheedy)
6350	Jan14	1131	Echo of Hope - Voice of Hope. Thanks very much to Hiroyuki Komatsubara, who recently noted that VOH has dropped their third program ("Hope plaza of my brothers" or "Hope Plaza of my brothers who have been defeated"), which had been exclusively on 6350. Heard Jan 14, at 1131: 4885 - "Radio Broadcasting Guide" (not // to the other frequencies). This one hour program is repeated every hour. Never jammed. 3985 // 5995 // 6250 // 6350 // 9100 - The main VOH program; all jammed except for 9100 (Ron Howard, Asilomar State Beach, CA, USA)
6973.0	Jan8	2243.	UNID.Argent.-accented Cast, tks, tango songs. 15331 (CGS)
7120	Jan19	0405	R Hargeisa, Hargeisa, Somaliland Somali talk (AP-DNK)
7140.1	Jan24	0620	Voice of the Broad Masses1 Eritrea Asmara, program local fair, (Mauro Giroletti)
7181.5	Jan24	0620	Voice of the Broad Masses2 Eritrea Asmara, program local fair, (Mauro Giroletti)
7200.0	Jan22	1230	Myanmar Radio. Start of series of lessons; biology lecture ("membrane," "molecules moving . . .," etc.); fair, but some ham QRM (Ron Howard, Asilomar State Beach, CA, USA)
7204.0	Jan20	0447	off frequency 7204.0, Sudan Radio (presumed). Sounded to be in Arabic, but weak; nothing on 7205.0 (Ron Howard, Asilomar State Beach, CA, USA)
7204.02	Jan19	0410	R Omdurman, Al-Aitahab Arabic news (AP-DNK)
7205	Jan27	0515	R. Rep.of Sudan Al-Aitahab, program local (Mauro Giroletti)
7210	Jan26	2219	CRI at 2219 in Spanish with a woman with talk and a rock music bridge at 2220 and a man with a promo – Good (Coady-ON)
7215	Jan11	-1558*	CRI (Kunming). Closing Nepali broadcast with severe ACI from 7220 CRI (Jinhua) in JP..but 7215 clear in RU from Shijiazhuang at 1600 when CRI closes on 7220. (Dan Sheedy)
7245	Jan27	0540	R. Tajik Dushanbe-Orzu, music local program (Mauro Giroletti)
7265	Jan14	1113	Test Transmission G , music + ID e-mail " transmissiontest@gmail.com " (Mauro Giroletti)
7285	Jan27	0459	Can-can music, i.e. ``Gaîté Parisienne``, not from France but Sonder Grense; maybe this is their rise-&-shine signal? 0501 into Afrikaans news. Unlike BBC/UAE earlier, this good 7285 signal is not perceptibly off-frequency. Has just moved up from 3320 overnight, which is always audible here, sometimes fairly well (Glenn Hauser, OK)
7370	Jan20	1120	KNLS, Anchor Point, Chinese, comments, religious songs. (Méendez)
7410	Jan26	2224	Vatican Radio at 2224 in Mandarin with a beautiful choral hymn and a woman with talk from 2227 to closing music at 2229 and a “Ladetur Jesus Christus” over a choral hymn then IS and off at 2230 – Fair to Good (Coady-ON)
7445	Jan26	2235	CNR1 at 2235 // 7470 and 7480 in Mandarin jamming RTI in Mandarin with a man and woman with excited talk – Fair to Good (Coady-ON)
9265	Jan14	*2100-	Atlantic 2000 International via WINB, Red Lion, id. in English "Your are listening to Atlantic 2000 International", id. in various languages, French, id. pop songs, comments. (Méendez)
9390	Jan13	1613	RFE/RL (Udon Thani). Uzbek programming with canned ID @ :15. (Dan Sheedy)
9400	Jan13	*1500-	KBC (Kostinbrod). Eric & The Giant Jukebox on the Euro-beam doing OK this morning with Moody Blues to open & Ringo Starr's "Back Off Boogaloo" @ 1541. (Dan Sheedy)

9400	Jan13	1604	VoRW Radio Int'l (Kostinbrod). Presumed it's these guys running "Radiogram" digital text mode with fair signal today. (Dan Sheedy)
9450	Jan14	-0030*	Firedragon music jammer. Crash-bang-clang v. unhrd RTI. (Dan Sheedy)
9514.9	Jan19	2113	Radio Marumby, Curitiba, "A Voz do Brasil". (Méndez)
9525.95	Jan22		VOI, continues silent through 1402 today (Ron Howard, Asilomar State Beach, CA, USA)
9550.05	Jan13	0940	Super R. Boa Vontade PT tlk by W in PT at 0940, // 6160.02 which was very poor. This freq better. I believe this was the first time I've been able to // these freqs. (Valko)
9564.9	Jan20	0815	Super Radio Deus e Amor, Curitiba, religious songs and comments. (Méndez)
9570	Jan17	1205	CRI w/tremendously strong signal splattering all the way out 20 kHz on both sides at 1205. (Valko)
9635	Jan19	1701	Radio Mali, Bamako, French, comments. (Méndez)
9635.8	Jan10	1115	R. Voice Of Vietnam, Son Tay.Vietn, tks, mx. F/out 1155 25432 (CGS)
9650.0	Jan13	1644	R. Guinée, Sonfonia.Vn, tks, F at 1700 for nx.35443 CG
9665	Jan19	2111	Voz Missionaria, Camboriú, "A Voz do Brasil". (Méndez)
9665.0	Jan20	2137	R. Voz Missionária, Camboriú SC.Natl. nx magazine A Voz do Brasil. 25331 (CG)
9674.9	Jan8	2300	R. Canção Nova, Cachoeira Paulista SP.Rlgs. propag. px hosted by Father PH. A bit distorted. 35443 (CGS)
9674.9	Jan19	2110	Radio Canção Nova, Cachoeira Paulista, "A Voz do Brasil". (Méndez)
9725.3	Jan19	2108	Radio Evangelizar, Curitiba, "A Voz do Brasil". (Méndez)
9819.1	Jan20	0840	Radio 9 de Julho, Sao Paulo, religious comments. (Méndez)
9835.0	Jan10	1120	Sarawak FM via RTM, Kajang.Tks, mx. F/out 1220 25432 (CGS)
9835	Jan20	1610	RTM Sarawak FM Kajang, music "Lemon three" relay +"Sarawak" (Mauro Giroletti)
9965	Jan20	1555	Nippon no Kaze PLW Medorn CLA, local program + web and e-mail (Mauro Giroletti)
9975	Jan20	1600	Furusato no Kaze PLW Medorn CLA, local program. ID "Furustao no Kaze" (Mauro Giroletti)
11670	Jan14	0032	RHC/CNR2 (Beijing). A little busy here with great music from RHC & CH chat from CNR2 (/11620 [Beijing] just breaking the noise level). (Dan Sheedy)
11735	Jan14	1750	Zanzibar Broadcasting Corporation, Dole, Swahili, comments about soccer, English Premier League, mentioned Liverpool vs Manchester City, at 1800 time signals, English, news, "it's nine o'clock, the news from Zanzibar Broadcasting Corporation", "The main points again", 1809: "This is the end of the news from Zanzibar Broadcasting Corporatino, thank you for listening", Swahili comments. (Méndez)
11735	Jan13	1805	ZBC with live coverage of the Mapinduzi Cup final between URA from Uganda and AZAM FC from Tanzania w/M anncr doing the play-by-play and screaming on occas. when the action got intense. There were a few breaks when they cut into Afro Pop mx. AZAM FC won 4-3. (Valko)
11735.0	Jan9	1758	Zanzibar BC, Dole.Swah, tks. QRM de B. 34443 (CGS)
11735	Jan24	1630	Zanzibar Bc Corp with nice local music and songs. 3 (CB)
11735.0	Jan9	1715	R.Transmundial, St. ^a M. ^a RS.Rlgs. propag., mx. QRM de TZA. 34443 (CGS)
11750	Jan27	1755	SLBC City FM Trincomalee, program local music ID "City FM" (Mauro Giroletti)
11815.0	Jan9	1730	R. Brasil Central, Goiânia GO.Px Show da Tarde, w/ songs, nx at 1730. 35433 (CGS)
11854.7	Jan19	2105	Radio Aparecida, Aparecida, "A Voz do Brasil". (Méndez)
11854.8	Jan9	1728	R. Aparecida, Aparecida SP. Songs, quiz, mx dedications. QRM, but improving. 34432 (CGS)
11895	Jan19	2031	Radio Boa Vontade, Porto Alegre, religious comments and songs, id. "Rede Boa Vontade", at 2200 "A Voz do Brasil". (Méndez)
11895.06	Jan14	1012	Super R. Boa Vontade. Rel. tlk by W pgm host in PT w/ID at 1016. Ments of Gloria, Jesus, Jesus Cristo, esparto Santo, amor. 1027 canned anmnt by M and W w/ment of "Bible ???" and contact info. 1029 W w/ment of "oficial do Brasil" and Sao Paulo. Then rel vcl song 1029-1033. 1035 ID by little girl and then by same W. M anncr continued the pgm then to at least 1045, but was fading badly then. Seemed to peak around 1020-1025. No //s found. Nothing on any of the freqs on any web rxes from Brazil either. This freq best hrd in a while. (Valko)
11895.2	Jan9	1725	R. Boa Vontade, Pt. ^o Alegre RS.Rlgs. propag. Adj. QRM after 1730. 35432 (CGS)
11915.0	Jan9	1720	R. Gaúcha, Pt. ^o Alegre RS.Interview, advs., infos. 25432 (CGS)
11934.9	Jan19	2102	Radio Evangelizar, Curitiba, "A Voz do Brasil". (Méndez)
13700	Jan19	-1057*	CNR 13, Uighur Sce., Lingshi Uighur talk, abrupt s/off as scheduled (AP-DNK)
13730	Jan27	0710	R. New Zealand Rangitaiki, talk program music in EE (Mauro Giroletti)
15190.0	Jan9	1244	R. Inconfidência, Belo Horizonte MG.Px Diário da Rádio, songs. 15441 (CGS)
15370	Jan17	Jan17	RHC Around 1520, I was getting bands of buzzing noise in the 19 meterband which I thought was coming from a local origin. I discovered it was in fact being generated by Radio Havana Cuba every 67 kilohertz above and below their primary frequency. The first ones above and below were very strong. A Youtube video of the reception showing the noise can be found using this link: https://youtu.be/03siD5md7Lw (Valko)
15375	Jan14	0035	CNR1 [jammer]. Listed in Aoki 00-01 but why now? RFA in Tibetan sked 12-14 only..EiBi has no 00-01 listing for CNR1 [J], but does show CNR1 [J] 12-14..also loud & clear 0030+ 15 Jan. (Dan Sheedy)

Contributors to the log:

wb, Wolfgang Büschel, df5sx, wwdxc BC-DX TopNews, DXLD, DXPlorer, A-DX Glenn Hauser, Enid, OK, USA (also from WOR&DXLD) Ron Howard, oceanside at Pacific Grove, CA, USA Manuel Méndez, Lugo, Spain AP-DNK, Anker Petersen, Skovlunde, Denmark Mauro Giroletti, Italy DO, DOH, Dan Olsson, Kävlinge, Sweden Bob Wilkner, Pompano Beach, FL	(CG) Carlos Gonçalves, Lissabon, Portugal (CGS) Carlos Gonçalves, SW coast, Portugal Dave Valko, Dunlo, PA, USA CB, Christer Brunström, Halmstad, Sweden Mark Coady, Selwyn, Ontario Dan Sheedy, Moonlight Beach/Encinitas, CA TB, Tomas Burian (TB), Morava, Czechia
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(CG) = **Lisbon**. JRC NRD-545DSP & PERSEUS *sdr*; homemade amp. (*W7IUV* version); 20 m & 16.7 m T2FDs, 5 MHz dipole, 6x19x6 m Ewe 135°, raised, 4 loop K9AY

(CGS) = **SW coast** JRC NRD-545DSP & DRAKE R8-E; *Advanced ReceiverResearch* amp.; 20 m T2FD, 30 m 180°/0° mini-Bev., 80 m 300°/120° Bev., 200 m 270°/90° Bev., 270 m 145°/325° Bev., 300 m 225°/45° Bev., raised, 4 loop K9AY.

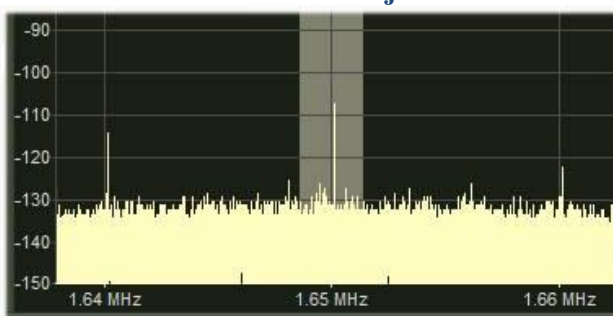
Station news

GUINEA-BISSAU The government broadcaster in the tiny West African republic of Guinea-Bissau can now be heard live online from its new website at <http://www.rdngebissau.com>. Radiodifusao Nacional [RDN] broadcasts 05:55-24:00 UT daily in Portuguese, Crioulo and local languages, according to the detailed programme guides available on the site. Nowadays RDN only transmits terrestrially on FM, though it used to broadcast on 5475 kHz short-wave (last WRTH entry in 1987 edition) and 1034 kHz mediumwave (last WRTH entry in 2001 edition). I couldn't hear the latter from neighbouring Senegal when I visited that country in early 1999, however there was a civil war underway in G-B at the time! The only Guinea-Bissau station I could hear from Dakar - fleetingly on FM - was Voz da Militar Junta, which I now know was using the facilities of private station Radio Bombolom. (David Kernick, Interval Signals Online via DXLD)

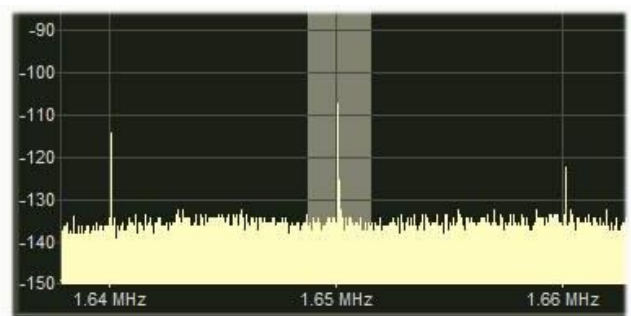
SVERIGE. Hej! På **Världsradiodagen den 13 februari 2018** avser Sveriges DX-Förbund att genomföra en **special-sändning över Channel 292 på 6070 kHz**. Ett 60-minuter långt program sammanställt av Moritz Saarman kommer att sändas kl. 07.00, 18.00 och 20.00 UTC. Som vanligt en sändning med flera olika inslag och radiorelaterad musik. (Christer Brunström)

Other radio news

Für den Mittelwellen-DXer zählt jedes dB!



Noise level without isolation...



and with USB Isolator

[Bruce Conti till DX'ing - sponsored by the National Radio Club](#)

Working on an upcoming tech article for NRC DX News about USB ground loop noise. Initially stumbled upon USB ground loop noise problems in the pro audio industry, and how USB ground loop eliminators/isolators are used to break the ground loop. The USB isolators used in pro audio are typically only full speed (12 Mbps), not fast enough for our SDR applications. The high speed (480 Mbps) isolators are much more expensive. Found and purchased the Intona USB 2.0 Hi-Speed Isolator, pricey but not too far out of reach, and it works! Reduced the noise floor by more than 3 dB. This could make a huge difference in trying to dig out weak signal DX on clear frequencies such as 828 South Africa or 1206 Mozambique, or in my case getting audio from weak transpacific signals at dawn. This image is a comparison of daytime reception in the x-band without and with USB isolation...

(Christoph Ratzer, A-DX Fernempfang)

AIRSPY HF+

You haven't really missed anything Mauno, I'm still investigating. A write-up will appear. However, I see that people are expressing opinions about it, maybe without having tested one, so I need to be very certain about my conclusions. As I mentioned in my previous post, Roelof's observations on LF is confirmed by several others, including me at Smøla island. A firmware update is said to possibly address this, but I need to be physically at the receiver to do it. It has not been observed at MF though, to my knowledge.

Now, to be REALLY off topic (sorry! won't happen again!), those who want can do this blind test of the Perseus/Jaguar and HF+. If you want to know which is which, email me with your guess.

https://www.dropbox.com/s/1ulruaq569mojhf/1520_recording%20one.mp3?dl=0

<https://www.dropbox.com/s/jjz8kwy9dc29u8u/1520%20recording%20two.mp3?dl=0>

(Bjarne Mjelde, arcticdx.blogspot.com via Perseus_SDR)

Regarding the AIRSPY HF+, I have been further looking into second order intermodulation from 30M broadcast stations, receiving the 300 - 500 kHz frequency range. In the late afternoon this band was filled with broadcast stations due to second order intermodulation.

Lab tests showed that using tones of -40 dBm at 9810 kHz / 9430 kHz the IP2 at 380 kHz was - 2 dBm. A firmware update did not change this behaviour, though it set the onset for HF AGC 6 dB lower.

It was also found that sensitivity gradually dropped below 1.5 MHz.

Taking 1.4 MHz as a reference of 0 dB the measured figures are:

1400 kHz: 0 dB
800 kHz: -3 dB
400 kHz: -10 dB
200 kHz: -14 dB
150 kHz: -18 dB
50 kHz: -27 dB

There is a modification available to open up the AIRSPY HF+ at VLF. This is not too difficult: bypass a 300 pF SMD (size 1206) capacitor labelled R3. I used a 0 ohm SMD resistor, which was soldered on top of the 300 pF capacitor. This worked and the frequency response is now flat +/- 1 dB.

Reception in the NDB band is much improved and so far no intermodulation products have been observed.

The lab test now produces an IP2 figure of + 9 dBm, which is 11 dBm more than before the modification. This means that the level of the 30M broadcasters must be 22 dB stronger to cause the same level of interference on LF. The maximum levels observed with my PERSEUS using HF-Span are -40 dBm; levels of -20 dBm are unlikely. So far so good.

The AIRSPY HF+ uses a novel mixer type and I could not find information about second order intermodulation. A quick test has shown that for the same tone spacing IP2 is decreasing significantly when the frequency of the test tones is increased. I gather this is a feature of this type of mixer. This is what I found for test tones of - 40 dBm:

MHz	IP2 (dBm)
1.0 / 1.38	+35
1.5 / 1.88	+43
2.0 / 2.38	+30
5.0 / 5.38	+18
10.0 / 10.38	+8
15.0 / 15.38	+4
20.0 / 20.38	+2
25.0 / 25.38	-10
29.0 / 29.38	-11

The same tests have been performed for the 1.8 MHz, 3.5 MHz and 7 MHz amateur bands and the results are very similar.

The good news is that the lack of sensitivity at VLF can be easily resolved and this also seems to be a fix to get rid of second order intermodulation at LF. These tests also show that second order intermodulation from strong signals at relative close frequency spacing is not easy to happen. At my location, unlike other low cost offerings, the AIRSPY HF+ does not suffer at LF from IMD from strong medium wave broadcast stations.

This is only a test of a single sample. Tests done on more samples should be nice.

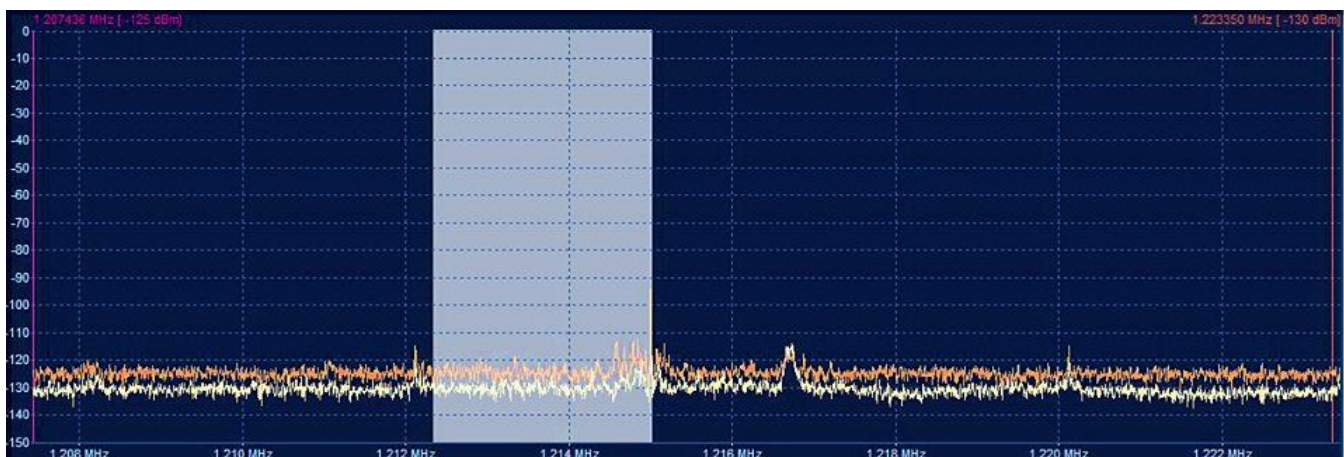
(Roelof Bakker, pa0rdt via Perseus_SDR)

Airspsy HF+ "R3 Bypass" modification done today, works extremely well. sensitivity up from -95 to -110 dBm in AM, 30% modulation. Equal to or better audio than the Perseus with 10 dB preamp. The mod is relatively easy to do. (Bjarne Mjelde via DXing.Info)

If you want to follow the thread regarding Airspy HF+, please visit Bjarne Mjelde's site at <http://arcticdx.blogspot.se/2018/01/airspy-hf-testing-testing-testing.html>. /TN

GUTE ERDUNG

Oft sind es kleine Details die sich bezahlt machen. Bei meinen Beverage Boxen habe ich die Erdung anstatt Draht nun auf gute Massebänder umgestellt, dazu Schaffner Stromfilter im Einsatz, beides zusammen bringt ein um 5 dB ruhigeres Mittelwellenband, was bei extrem schwachen DX Signalen eine große Hilfe sein kann.



(Christoph Ratzler via A-DX Fernempfang)

NEW HISTORY MATERIAL AT < <http://www.ontheshortwaves.com> >

For many years, Peru, Ecuador and Bolivia were the triumvirate of Andean countries whose shortwave stations were sought out most often by DXers. There were many stations, and they conveyed the kind of local authenticity that long-distance shortwave could provide. The Bolivian stations were generally the least well heard. Under "DX History/Recordings" we have posted some Bolivian recordings made at various times since the 1970s. Only a few Bolivian stations are still on shortwave (including R. Mosoj Chaski, which is among the recordings).

ID locations are in [brackets]. (1) R. El Mundo, Santa Cruz, 6015 kHz., 1987 [:03, :12, :35, :51]; (2) R. Fides, La Paz, 4845 kHz., 1976 [:16]; (3) R. La Cruz del Sur, 4875 kHz., 1976 [:52]; (4) R. Luis de Fuentes, Tarija, 6141 kHz., 1987 [:19, :32, 1:52]; (5) R. Mosoj Chaski, Cochabamba, 3310 kHz., 2000 [:31]; (6) R. Municipal, Caranavi, 4845 kHz., 2004 [:17, :23, 1:01]; (7) R. Norte, Montero, 4936 kHz., 1983 [:14]; (8) R. Nueva America, La Paz, 4797 kHz., 1976 [:04]; (9) R. Panamericana, La Paz, 6105 kHz., 1981 [:14]; (10) R. Pio Doce, Siglo Veinte, 5952 kHz., 1997 [:35]; (11); another recording of R. Pio Doce, 5952, this one in 2002 [:12]; (12) R. San Miguel, Riberalta, 4902 kHz., 2003 [:54, 3:26]; (13) another recording of R. San Miguel, this time on 3310 kHz., 1984 [:11, :49, 1:29]; (14) R. Santa Cruz, Santa Cruz de la Sierra, 6135 kHz., 2002 [:10, :41]; and (15) Radioemisoras Bolivias, Oruro, 4755 kHz., 1978 [1:00].

(Jerry Berg via DXPlorer)

John Ekwall has scanned a few pennants from Nils Olsson's collection. In this case you can say it was better in the old days.

John, thanks a lot for sharing those beautiful pennants with us. /TN

