

SHORTWAVE BULLETIN

Issue no. 1797, May 11, 2014.

Deadline e-mail next issue: 0900 UTC, Maj 25, 2014.

Förra helgen var det dags för ARC/SWB's gemensamma konvent på Flustret i Lessebo.

Stort tack till Bengt Ericson och Hasse Mattisson som hållit i alla trådar till detta arrangemang, vilket blev välbesökt. Det är alltid stor glädje att få snacka lite DX, inte bara via mail.

Något referat har ännu inte kommit mig tillhanda, men de stora punkterna var Lisette Åkessons semesterbilder från Anguilla, Stig Adolfssons föredrag om radiovågornas brytning i jonosfären samt två föredrag om beverage antenner signerade Torolf Johansson och Rolf Larsson. Mycket intressant var det också att lyssna på Tony Lopes från WVBF, Taunton om deras arbete på stationen.

Några personliga betraktelser kommer längre fram om just beverageantenner.

JOE har skannat ännu några gamla QSL och här till höger ser vi hur trevligt HR hade det under påsken.

Keep on

=====

Redaktion:

Thomas Nilsson
Mardalsv. 372
262 93 Ängelholm

Tel: 0431-27054

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>

SWB anniversary issue:

http://www.hard-core-dx.com/swb/SWB_history.pdf

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>

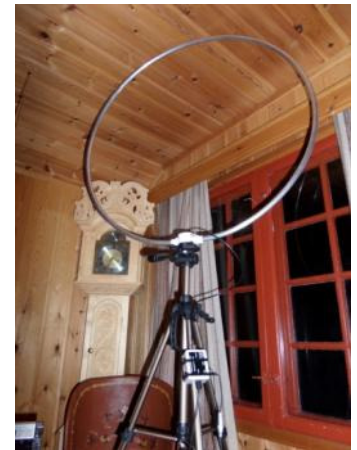
QSL, kommentarer, mm.

Lars Skoglund: Har fått ett trevligt kort från **Malagasy Global Business** på 17540 KHz.

Hans Östnell, Vardö: Lovade ju att sända ett litet bidrag till förra utgåvan av SWB, men av olika anledningar så glömdes detta bort. Då tipsen i bidraget inte är av den digniteten att de får folk att tjurrusa till sina mottagare, så sänder jag de nu istället, även om de är lite gamla. Samtliga loggningar är från påskhelgen, som jag tillbringade tillsammans med ungarna i en stuga i Krøderen i Buskerud, ca 5 mil norr om Drammen. Långt ute i skogen, ingen ström, inget internet och inga grannar med plasma-TV. Däremot vedspis och utedass. Underbart, med andra ord!

Det lyssnades kväll och natt efter att jag lyckats få ungarna i säng, något som var en utmaning så gott som varje kväll - sockerstinna och påskäggsfryntliga som dom var. På kortvåg var det dessvärre inte mycket att höra, däremot loggades det britter "i bøtter og spann" på MV, där jag dessutom lyckades logga mina första peruaner med inomhusantenn. Hade tagit med mig min Eton E1 och en av mina modifierade ICF-2010:or som kördes parallellt via en antennfördelare från Heron Electronics.

Antennen var min Wellbrook ALA-1530 med modifierat fäste, placerat på kamerastativ, alltså samma lösning som jag använt med framgång i husvagnen i Komagvær. Mottagarna kördes på internbatterier och ALA-1530 strömförsörjdes med hjälp av min portabla batteripack, bestående av två parallellkopplade motorcykelbatterier monterade i en praktisk plastbox med lock, bärhandtag och polskruvar för enkel anslutning. Bifogar ett par bilder på upplägget för "myslyssning".



Stig Adolfsson: Hej alla!

Trevligt att träffa fler av er på konventet. - Bifogat översändes några tips. Alla utom den oidentifierade på 3380 är hörda i Vallentuna. Nämda oid är hörd uppe i Sjöandan där jag provisoriskt satt upp en dipol som är resonant på MV, ca. 1230 kHz. Den går då som 3/2 våglängder på 80 meter amatörband och tanken är väl att så småningom börja nyttja den som sändarantenn.

Jag har kopplat bort min frekvensnormal eftersom den börjat låta illa varför jag avstår att närmare ange frekvenser. Kör på 91:ans interna oscillator men den är bättre än 1 Hz, åtminstone på MV. Vårhålsningar från södra Roslagen !!

Dan Olsson: Hej! Först vill jag tacka Bengt och Hasse för ett trevligt konvent förra helgen. Det är alltid roligt att träffa likasinnade och utbytta erfarenheter och nya rön. Tipsen märkta 26-27/4 är från vårens sista lyssnarnatt i Saxtorp.

QSL har det inkommit sen sist nämligen: **6260 R Little Feat** e-brev o kort, **6322 Island Radio** e-brev, **6803 R Pink Panther** e-brev. brev o kort samt **9420 CNR 13/Lingshi** 2 kort och pappersdekorationer.

Log

(UTC)

3210	Apr30	1326	Vintage FM relay (presumed). Have been looking for the anticipated increase in power as recently mentioned in WOR and today seemed to be the day Craig did it. Now 500 watts? For a long time now all I have heard here is below threshold level carrier (no audio), but today clearly hearing songs that I couldn't ID, as they all seemed to be pre-1950s and were non-stop from 1326 to 1355 with QRN. My local sun rise was at 1315 UT. Brief segment with poor audio at https://app.box.com/s/ovk4z3zek4pirho3qw50 (Ron Howard, Asilomar State Beach, CA, USA)
3260	May3	-1203*	NBC Madang, 1142-1203*. Poor/QRN; in Tok Pisin/Pidgin with pops songs. Thanks to Dave Valko's timely alerts, have recently been hearing more NBC station. (Ron Howard, Asilomar State Beach, CA, USA)
3310	Apr18	0054	Radio Mosoj Chaski, Cochabamba. Gick väldigt bra en stund. HR
3310	May3	2233	R. Mosoj Chaski, Cochabamba, quíchua, texto, canções; 35332. Carlos Gonçalves
3310,01	May3	0120	R Mosoj Chaski, Cotapachi Quechua talk and songs 35233 AP-DNK
3325	May7	-1216*	NBC Bougainville, 1202-1216*. This had not been heard by me in a long time! Mixing with and slightly better than RRI Palangkaraya. NBC with DJ in Tok Pisin/Pidgin and playing pop songs (no news segment), while RRI was all talk with the Jakarta news. Great to hear this one again, thanks to Dave Valko! (Ron Howard, Asilomar State Beach, CA, USA)
3330	Apr16	0235	CHU Ottawa, med tidsignaler og fvrhellandervis god styrka. HR
3364,9	May2	2235	R. Cultura, Araraquara SP. a parte de A Voz do Brasil; 25331. Carlos Gonçalves
3380v	Apr20	0305	OID men troligen Centro Radiofonico de Imbabura . Hördes några nätter runt påsk och varierade i frekvens mellan 3379 - 3381. Mycket svag och cd runt 0310. SA
3385	May4	-1201*	NBC East New Britain, 1201* May 4, 5 and 6. Always going off the air via a timer; very nice to find them back again and is by far the strongest PNG being currently heard. (Ron Howard, Asilomar State Beach, CA, USA)
4699,9	May2	2230	R. San Miguel, Riberalta, castelhano, anúncios comerciais, "Noticiero Nacional", às 2131; 35433. Carlos Gonçalves
4700	Apr18	0058	Radio San Miguel, Riberalta. Ganska svag. HR
4716,6	Apr18	0125	Radio Yura gick risigt. Ingen annan bolivian som kom upp i Mosoj Chaskis styrka denna natt. HR
4765,04	May3	0030	Tajik R 1, Yangiyul Tajik romantic sentences from man and woman with stringmusic 45243. It had nearly faded out at 0120 AP-DNK
4774,9	May2	2227	R. Tarma, Tarma, castelhano, anúncios comerciais, canções, 34433, QRM da R.Congonhas, B. Carlos Gonçalves
4775	May2	0049	Brazuguese preacher yelling, LAH from second carrier slightly offset. Usually I only hear the LAH but now some modulation is making it, i.e. R. Congonhas, vs Peru`s R. Tarma. The ZY is listed to close at 0100. (Glenn Hauser, OK)
4775	May1	2200	R. Congonhas, Congonhas MG, noticiário de futebol; 35433. Carlos Gonçalves
4785	May1	2203	R. Caiari, Pt.º Velho RO, propag. relig.; 35433. Carlos Gonçalves
4800,00	May3	0035	AIR Hyderabad English news from Delhi, 0040 Indian songs 25242. China had already faded out here due to early sunrise AP-DNK
4805	May1	2204	R. Dif.ª do Amazonas, Manaus AM, anúncios informativos, noticiário; 34432, QRM adj. de sinal de ponto a ponto e da CHN, em 4800. Carlos Gonçalves
4815	May2	0050	Similar sound to 4775, but not //, and 4815 is somewhat stronger, i.e. R. Difusora Londrina, yet another Brazilian SW station co-opted by gospel huxters (Glenn Hauser,

			OK)
4815	May2	2138	R.Dif. ^a , Londrina PR, canções, rubrica que pareceu ser um consultório jurídico, c/ conselhos, comentários e exemplos de casos, e, pelas 2200, A Voz do Brasil; 44343, QRM adjacente. Carlos Gonçalves
4850	May5	1314	PBS Xinjiang. Fair reception with their Kazakh service. No sign here of AIR Kohima for quite some time now (Ron Howard, Asilomar State Beach, CA, USA)
4869,93v	May8	1227	RRI Wamena, 1227-1255. Another Thursday with the English programming of Kang Guru Indonesia (KGI); heard Greg with his Australian accent; almost unusable, but slowly improved. Nice to find RRI still carries this. http://www.kangguru.org/ (Ron Howard, Asilomar State Beach, CA, dxldyg via DXLD)
4875	May1	2205	R. Dif. ^a de Roraima, Boa Vista RR, canções; 54433, QRM de CODAR. Carlos Gonçalves
4885,00	May3	0040	R Clube do Pará, Belém, PA Portuguese ann, ID, pop songs 35232 AP-DNK
4895	May2	2146	R.Novo Tempo, Cap. ^o Grande MS, canções, ID simplesmente como "Novo Tempo"; 35332. Carlos Gonçalves
4905	May3	2209	Nova R.Relógio Rio de Jan. ^o RJ, texto; 22431, QRM da CHN. Carlos Gonçalves
4910	May1	*2130-	VL8T, Tennant Creek, Territ. ^o do Norte, *2130-2154, inglês, noticiário, canções; 34432, em perda, QRM adj. do B, em 4915. Carlos Gonçalves
4914,97/ 4915,00	May3	0045	R Daqui, Goiânia, GO and R Difusora Macapá, Macapá, AP both heard with Portuguese ann and musical programmes - and heterodyne 32232 AP-DNK
4915	May1	2153	R. Dif. ^a de Macapá, Macapá AP, noticiário local, anúncios informativos, música; 33431, QRM da R.Daqui, B. Carlos Gonçalves
4915	May2	2151	R. Daqui, Goiânia GO, propag. relig. anúncios p/ reuniões, no sáb., 03/5, A Voz do Brasil, às 2200; 54333, QRM da R.Dif. ^a de Macapá, B. Carlos Gonçalves
4925,2	May2	2152	R. Educação Rural, Tefé AM, música, anúncios informativos, ID+indicação das freqs., às 2201, e A Voz do Brasil, às 2203, ou seja, sem emissão do seu início; 45332. Carlos Gonçalves
4949,75	May2	1906	RNA-Canal "A", Mulenvos, noticiário; 35332. Por agora, coíbo-me de facultar alguns dados mais acerca dos txs da RNA, mas conto fazê-lo, se e quando obtiver permissão p/ tal, da fonte. Carlos Gonçalves
4949,78A	May6	0102	approx., off-frequency carrier detectable most evenings is a bit stronger, with some talk and a Luso rather than Brazilian accent, as expected from RNA, 0104 music; still more talk at 0131, yet very poor (Glenn Hauser, OK)
4949,8	May5	1835	Angola med riktigt fin modulation och småktande afrikarytmer. 3-4 SA
4955	May2	2225	R. Cultural Amauta, Huanta, quíchua, texto, anúncios informativos, canções relig. em castelhano; 35332. Carlos Gonçalves
4976	May2	1734	R. Uganda, Kampala, inglês, texto,...., entrevista; 25332, em ascensão. Carlos Gonçalves
4985	May1	2207	R. Brasil Central, Goiânia GO, música pop'; 55433. 11815 fora do ar. Carlos Gonçalves
4990	Apr17	1230	PBS Hunan. Since April 17 have daily heard this dominating the frequency through to May 7, during monitoring from about 1230 to 1430. This was a rapid and dramatic improvement of reception, so assume something was done to improve their old tx or is a brand new one? Only occasionally now with AIR QRM (Ron Howard, Asilomar State Beach, CA, USA)
5005	May1		RNGE, Bata. Sinal ausente, desde 5. ^a -f. ^a , 1/5, a dom., 4/5. Carlos Gonçalves
5010,00	May3	0050	AIR Thiruvananthapuram Malayalam ann and songs 35232 AP-DNK
5010,3	May2	1740	R.Madagasikara (p), Ambohidrano, malgaxe (p), texto; 25332. Carlos Gonçalves
5025,05	May3	2217	R. Educação Rural, Coari AM, texto, música; 22431, QRM da R.Aparecida, B. Carlos Gonçalves
5035,00	May3	0055	R Aparecida, Aparecida, SP Portuguese talk, 0100 orchestra music with weak heterodyne possibly from R Educação Rural, Coari, AM 24232 // 6135 (31321) AP-DNK
5035	May3	2215	R. Aparecida, Aparecida SP, rubrica acerca da própria emissora, incluindo referências ao 50. ^o anivers. ^o do Sertanejo, v.g. sobre os progrs. em torno do tema; 44333, QRM da R.Educação Rural, B. Carlos Gonçalves
5109,76	May3	0105	WBCQ, Monticello, Maine English conversation on its SW broadcasts, phone no., "Have a nice weekend" - best in USB 35333 AP-DNK
5910	May2	2210	Alcaraván R via A Voz da tua Consciência, Lomalinda, castelhano, canções folclóricas colombianas; 35433. Carlos Gonçalves
5939,8	May1	2213	R.Voz Missionária, Camboriú SC, hum, cópia da SRDA, do ímpar D.Miranda? Pregador exaltado, muito ao estilo do dito, da SRDA; // 9664,9. Carlos Gonçalves
5952,48	Apr18	0122	Pio Doce gick hyggligt. Ldnge sedan jag hvrde denna. HR
5952,5	May2	2214	R. Pío XII, Siglo XX, castelhano, canções índias e rubrica sobre a radiodifusão boliviana; 35332. Carlos Gonçalves

5970	May1	2211	R. Itatiaia, Belo Horizonte MG, relato de encontro de futebol, anúncios comerciais; 35433. Carlos Gonçalves
5980	May4	2237	R. Chaski, Cuzco, castelhano, propag. relig. e canções a condizer; 45433, alguma distorção durante a passagem de música. Carlos Gonçalves
6010	May2	0058	poor signal with YL in Brazuguese, but no het so seems Colombia and Mexico are both away, leaving R. Inconfidência; 0102 ZY- IDs for all their outlets. JBA carrier circa 15190. Seems XEOI, R. Mil, México is silent again; has anyone heard it lately? The other HJDH, however is going on 5910 with music (Glenn Hauser, OK)
6010+	May11	0103	Brazuguese mentioning saudade, até meia-noite. Poor signal but in the clear, no hets and no carriers from Colombia or México. So it's R. Inconfidência, while their // achieves only a JBA carrier on 15190+, both slightly on the hi side. At 0133 however, there is enough signal on 15190.1 or so to make a // modulation match, not that there was any doubt (Glenn Hauser, OK)
6010,1	May1	2142	R. Inconfidência, Belo Horizonte MG, progr. A Hora do Fazendeiro; 45433. Carlos Gonçalves
6010,18	Apr18	0119	LV de tu Conciencia, Puerto Lleras, med prat till ganska god signal. HR
6015	May6	1235	(KBS Hanminjok Bangsong 1) on May 6 was in the clear (no white noise jamming) from 1235 till jamming came on at 1248. May 5 with no jamming at all from 1205 to 1230 with news in Korean; after each report IDed with "KBS news," per brief attached audio. Mauno reported May 6 - "at 1645 both 6015 and 6135 kHz are heavily jammed by that normal growling white noise sound," with programming not //. Hope to eventually tie down which service of KBS is now on 6135, which just started this month. Thanks to both Sei-ichi and Mauno for their valuable assistance! (Ron Howard, Asilomar State Beach, CA)
6015	May7	1232	(KBS Hanminjok Bangsong 1), for the third day in a row on May 7 heard in the clear from 1232 till the start of the white noise jamming at 1250; strong signal and good reception (Ron Howard, Asilomar State Beach, CA, USA)
6059,8	May1	2145	SRDA, Curitiba PR, propag. relig.; 23431, QRM adj. e no mesmo canal. Carlos Gonçalves
6080	May2	2205	R.Marumby, Curitiba PR, A Voz do Brasil; 33331, QRM da CHN. Carlos Gonçalves
6090-	May11	0106	it's my lucky night for Brazilians, as Anguilla is off again; jazzed up ``Workin` on the Railroad`` tune, 0106 full ID for R. Bandeirantes, São Paulo, with all their ZY- calls and frequencies. Slightly on the lo side. 11925 is also audible at 0144 but with the usual big het, presumably IBB Kuwait to Afghanistan at 0030-0230, because Brasil is off-frequency, just like it also is on the third SW channel, 9645.3v, not checked tonight (Glenn Hauser, OK)
6134,79v	May5	-0211*	R. Santa Cruz, 0211*, May 5 and 0210*, May 7 (Ron Howard, Asilomar State Beach, CA, USA)
6135	May2	1241	KBS Hanminjok Bangsong 1 new frequency 6135 (presumed). On May 2 tuned in here at 1241 to check if N. Korea had already started their jamming in preparation for Shiokaze's sign on, but no jamming heard; instead was hearing an UNID Asian station that sounded Korean and playing EZL pop songs; 1300 - "How to Learn English" language lesson ("I want to mail this package. . . Where are you sending the package?" etc.) in English and Korean, along with cute English song incorporating all the English sentences given in this lesson. At Aoki database found this station listed, along with "May 1." 10 kW? Sounded more like 100 kW? Good audio at - https://app.box.com/s/phqiof55x2ye7l6qr019 . The only problem here now is that N. Korea sometimes starts the jamming of Shiokaze well before their 1330 sign on. So the question now is will N. Korea start noise jamming of KBS as they do on 6015? Believe that reception of Madagascar and Yemen on 6135 will be much more difficult now with KBS here (Ron Howard, Asilomar State Beach, CA, USA)
6135	May6	1300	UNID and presumed KBS station. Seems this is NOT Hanminjok Bangsong 1 as I had presumed. Further monitoring reveals this frequency clearly not // to 6015 (KBS Hanminjok Bangsong 1). Sei-ichi Hasegawa also confirms is not // Hanminjok Bangsong-1 on 972 kHz. nor Hanminjok Bangsong-2 on 1170 kHz. Mauno Ritola has also been working on IDing this, but so far we have not come up with an ID, but I feel it's a major broadcaster like KBS, due to their programs. Frequency is assigned to KBS per - http://www.hfcc.org/data/schedbyfmo.php?seas=A14&fmo=KBS , but which KBS? May 6, on 6135, again hearing the daily English language lesson ("I will," "I will tell him," etc.) from 1300 to 1305; today's lesson heard without the N. Korea pulsating jamming in preparation for Shiokaze's sign on; in fact at today's (Tuesday) Shiokaze sign on at 1330, with Chinese, there was still no jamming, unlike yesterday that had jamming long before sign on. (Ron Howard, Asilomar State Beach, CA, USA)

6135	May7	1245	UNID KBS service. Noted Aoki has now replaced "KBS Hanminjok Bangsong 1" with just "KBS," which I believe is correct, but still the question - which KBS service? May 7, quick check at 1245 found 6135 already with pulsating noise jamming (getting ready for Shiokaze *1330), blocking the UNID KBS service. Still needs more monitoring! Will help when Shiokaze moves off this frequency, taking the N. Korea jamming with them! (Ron Howard, Asilomar State Beach, CA, USA)
6135	May8	1150	UNID KBS service. May 8 at 1150 and subsequent checking found only an open carrier from what must have been the KBS tx; at 1312 N. Korea pulsating noise jamming for Shiokaze started; whereas 6015 (KBS Hanminjok Bangsong 1) had normal audio with the usual white noise jamming (Ron Howard, Asilomar State Beach, CA, dxldyg via DXLD)
6135	May2	2207	R. Aparecida, Aparecida SP, A Voz do Brasil; 34432, QRM na mesma frequência. Carlos Gonçalves
6165	May1	2151	R.Voz do Vietnam, Xuan Mai, , mong (ou hmong), hino nac., ID e anúncio das freqs., sinal momentaneamente fora do ar, pelas 2154; 45433, QRM da CHN, às 2155, ao que se seguiu forte QRM adj. da R.China Int., em 6175, via retransmissão europeia. Carlos Gonçalves
6205	27.4	0615	King Shortwave spelade Mick Oldfield. DO
6205	10.5	2030	R Verona med ID och holländsk musik. DO
6210	May3	2136	R. Sluwe Vos, HOL, holandês, música pop', texto; 45433. Carlos Gonçalves
6215,4	May4	2244	R. Tango Italia, I, música argentina, IDs em italiano/castelhano; Carlos Gonçalves
6221	26.4	2235	Island Radio med gamla godingar som Elton John, ELO, och David lee Roth. DO
6240	9.5	2200	R Experience med bra musik som Bob Dylan, Beatles, ELO. Satt och lyssnade i över två timmar för det var så himla bra program. DO
6250	26.4	1600	R Golfbrekker med polkamusik. DO
6255	May3	2133	R. Telstar South, G, inglês, música pop', texto; 35433. Carlos Gonçalves
6285	May3	2132	R. Powerline Int'l, HOL, holandês/inglês, música pop', texto; 45433. Carlos Gonçalves
6285	27.4	0610	R Focus med Mink De Villo och The Romancers. DO
6285	10.5	2155	R Odynn spelade just Dreadlock Holiday med 10 CC. DO
6295	May4	1835	Reflections Europe, IRL, inglês, blocos de propag. relig.; 34343, QRM adj. de sinal de ponto a ponto; // 12255 c/ SINPO 45333. Carlos Gonçalves
6300	27.4	0700	R Norton hälsade till oss alla i Saxtorp. DO
6305	May3	2131	R. Bogusman, G, inglês, música pop', texto; 45433. Carlos Gonçalves
6322	26.4	1800	R Unknown gillar Johnny Cash eftersom de spelade 6 låtar med honom. DO
6725	May3	2140	R.Tower, HOL, holandês/inglês, canções holandesas; 45444. Carlos Gonçalves
6925		2142	TRX R, QTH?, música norte-americana; 35433. Carlos Gonçalves
7105	May3	1142	Sound of Hope. Believe a year ago SOH used this frequency in the 2200-2300 time period. May 3 heard SOH at tune in of 1142 with usual segments of monologues; // 10960, both in the clear with fair reception and no jamming, but assume it's just a matter of time before the PRC finds this frequency in use again and turns on the strong CNR1 signal to block them, causing a mess for the hams; still heard at 1325; certainly not a low powered SOH tx (Ron Howard, Asilomar State Beach, CA, USA)
7105	May3	1230	Sound of Hope was only heard here on May 3 and 4, from about 1230 to 1330; so only on for two days through May 7. Perhaps testing for some future scheduling? (Ron Howard, Asilomar State Beach, CA, USA)
7185-LSB	May5	-0234*	"Radio Station YHWH" (religious pirate), 0217-0234*. Again found in the 40m ham band. Reported to Chuck Skolaut (KØBOG), Field & Regulatory Correspondent ARRL, whenever I find this in the ham band; Chuck has monitors trying to locate this pirate with direction finding equipment (Ron Howard, Asilomar State Beach, CA, USA)
7259,967	May6	0930	English program of Radio Vanuatu, VST Port Vila, heard like speech to the crowd interspersed by local south sea music, around 0930 UT May 6th, weak S=5-6 at -91dBm strength in remote SDR unit downunder in Australia. NOT \ 3945 kHz, but heard instead 3945.000 kHz R Nikkei2 S=4 in Australia at -92dBm, \ much stronger 6115 kHz. (73 wb df5sx via DXLD)
7295	May6	1703	Traxx FM med nyheter på EE. Murrigt ljud men god styrka. QSA 3-4 SA
7324,95	May5	1406	Wantok Radio Light, after recently hearing them again, gave another listen at 1406 on May 5 to find no trace of them at all (Ron Howard, Asilomar State Beach, CA, USA)
7330-AM	Apr30	-0315*	"Radio Station YHWH" (religious pirate), 0250-0315*. Usual format on another new unique frequency; fair (Ron Howard, Asilomar State Beach, CA, USA)
9515	May2	2218	R. Marumby, Curitiba PR, A Voz do Brasil, 2.ª parte às 2224; 45433. Carlos Gonçalves
9525,88-9525,90v	Apr30	1159	VOI on April 30 with anomaly - 1142 tuned in to special programming all in English; 1159 VOI news; pop songs; 1213-1237 seemed reports from a festival(?); 1240-1307 interview with OM talking about his father; 1308 VOI news-commentary-"Today in History"; poor (Ron Howard, Asilomar State Beach, CA, USA)

9550	May1	2120	R. Boa Vontade, Pt.º Alegre RS, canções; 23441, QRM na mesma frequência. Carlos Gonçalves
9586,4	May2	2219	SRDA, São Paulo SP, A Voz do Brasil, 2.ª parte às 2224; 35433. Carlos Gonçalves
9630	May2	2216	R. Aparecida, Aparecida SP, A Voz do Brasil, 2.ª parte às 2224; 45433, sobremodulado. Carlos Gonçalves
9635,75	May5	0959	R. Voz do Vietname, Son Tay, 0959-desvan. total 1050, 05/5, vietnamita, anúncios informativos, separadores musicais, texto, canções; 15432. Neste dia e a esta hora, o tx do Mali, em 9635 ainda não estava no ar; só houve sinal pelas 1100; em todo o caso, não há QRM mútua porque ambos os sinais são recebidos por antenas Beverage diferentes. Carlos Gonçalves
9645,4	May4	2240	R. Bandeirantes, São Paulo SP, relato de partida de futebol Corinthians x (?) (não entendi o nome do outro grupo) c/ informações de trânsito e anúncios comerciais à mistura; 35433. Carlos Gonçalves
9664,7	May2	2217	R. Voz Missionária, Camboriú SC, propag. relig.; 45433. Carlos Gonçalves
9730,0	Apr30	1104	Myanmar Radio, theme music for the start of the ABC/Radio Australia segment; Wednesday edition (only on Mon. & Wed.) with "Lesson 17 - Out on the Ferry" ("watch your step," etc.); in English and vernacular; poor with heavy ACI (Ron Howard, Asilomar State Beach, CA, USA)
9730,0	May7	1104	Myanmar Radio, Wednesday, 1104 to 1118 with ABC/Radio Australia segment "Lesson 18 - Out on the Ferry"; better than last Wed. reception (Ron Howard, Asilomar State Beach, CA, USA)
9818,8	May1	2135	R. 9 de Julho, São Paulo SP, Jornal das Comunidades; 43432, QRM adj. da CHN, em 9820. Carlos Gonçalves
11725	27.4	0730	R New Zealand International med nyheter till Q3. DO
11945	27.4	0720	R Australia med sportreferat mellan Melbourne-Victory och Boston. DO
12085	May5	0900	Voz da Mongólia, Khonkhor, 0900-1100*, 05/5, progr. em inglês; progr. de mandarim, às 1000, em japonês, às 1030; 24432, mas em ascensão, quando costuma ser bem o contrário. Será que os técnicos da emissora não conseguem manter um áudio limpo, sem traços de sobremodulação? Ela é particularmente notada durante as emissões em inglês e mongol. Carlos Gonçalves
12255	May4	1407	Reflections Europe, IRL, conteúdo cf. 6295 supra; 35443; por esta hora, ainda inaudível em 6295. Carlos Gonçalves
15460	May8	1153	Radio Free Sarawak, per Aoki via Palauig-Zambales (Philippines), with unusually good reception; certainly one of their better days; IDs given occasionally (Ron Howard, Asilomar State Beach, CA, E1 & CR-1, dxldyg via DXLD)
15476		1930	Arcangel nästan varje vardagskväll med olika program; aktualiteter, tangoinspirerad musik etc. Vanligen kvinnlig announcer. Kör på USB + bärvåg. Ingen signal på LSB. 1-3 SA

May 8 still finds both Radio Klasik (5964.69) and Sarawak FM (9835) silent! (Ron Howard, Asilomar State Beach, CA, E1 & CR-1, dxldyg via DX LISTENING DIGEST)

Contributors:

SA Stig Adolfsson, Vallentuna Sweden
DO Dan Olsson, Kävlinge, Sweden
AP-DNK Anker Petersen, Skovlunde, Denmark
HR Hans Östnell, Vardö, Norge
Carlos Gonçalves, Lissabon, Portugal
Ron Howard, Asilomar State Beach, CA, USA
wb Wolfgang Büschel df5sx Germany via DXLD
Glenn Hauser, Enid, OK, USA

Station news

ARGENTINA: E-mail address for QSLing **LRA36 R Nac Arcángel San Gabriel** is lra36@hotmail.com also via private message in their FB page "Esperanza San Gabriel". (Santiago San Gil, Venezuela; Horacio Nigro, Uruguay, Apr 28) (73, Horacio Nigro Geolkiewsky, Montevideo, Uruguay via DXplorer)

AUSTRALIA. 3210, Vintage FM relay (presumed). April 30 - Have been looking for the anticipated increase in power as recently mentioned in WOR and today seemed to be the day Craig did it. **Now 500 watts?** For a long time now all I have heard here is below threshold level carrier (no audio), but today clearly hearing songs that I couldn't ID, as they all seemed to be pre-1950s and were non-stop from 1326 to 1355 with QRN. My local sun rise was at 1315 UT. Brief segment with poor audio at <https://app.box.com/s/ovk4z3zek4pirho3qw50> (Ron Howard, Asilomar State Beach, CA, USA)

Email from Craig (owner of the station on 3210) today (apr 30) indicates power now at 300 watts, so not as much as I thought. (Ron Howard, Asilomar State Beach, CA, USA)

CUBA. 13820, May 1 at 1759, multiple pulse jamming vs nothing with R. Martí gone from here, but more jamming atop where it really is now, 13605.

5010-5040, May 2 at 0055, extent of splatter from 5025 R. Rebelde out to plus/minus 15 kHz, and QRMing its own leapfrog spur on 5010 mixing with 5040 RHC, the latter also too strong to be bothered by the splatter.

Today may be RHC's 53rd anniversary, but that doesn't mean they've got their act together yet --- more and more anomalies:

6000, UT May 2 at 0100, no signal from RHC English; by 0103 the carrier is on, and by 0105 modulation, while // 6165 was on time.

9572 & 9588, May 2 at 0103, CRI relay on 9580 has some hum, and same pitch buzzy spurs 7 or 8 kHz above and below. The upper one is obvious, but the lower one is squeezed between 9570 Albania CRI relay, and 9575 Morocco.

12140, May 2 at 0114, RHC poor but readable here, 2 x 6070 which it matches, with 53rd anniversary talk. No harmonics audible on 12000, 12120 (blocked by uteblob), or 12330 (Glenn Hauser, OK, DX LISTENING DIGEST)

KOREA SOUTH. 6135, Voice of Freedom. Will attempt to summarize what is now known about this station, based upon my own observations and the valuable input from Sei-ichi Hasegawa, Mauno Ritola, Hiroshi, S. Aoki, Bill Harms and several online sources.

of Freedom is a clandestine operated by the Republic of Korea's Defense Ministry which is new to SW (in past years was on FM) and established to provide propaganda broadcasts into the Democratic People's Republic of Korea.

Seems that portions broadcast are made up of VOF programs and other portions are perhaps KBS programming.

ID and helpful comments from Bill Harms after listening to a recording made by S. Aoki: "Isang-eulo Jayuui Sori Bangsong-eul machigessseubnida. ... Jayuui Sori Bangsong-eun ... danpa " (This is a liberal transliteration.) It roughly translates as "and now the Voice of Freedom broadcast comes to a close. The Voice of Freedom Broadcast on (Shortwave)" The word "Danpa" is indistinct. The sentence in between the rest were wiped out by interference. I occasionally heard them in Seoul on 103.1 MHz when we lived there. I had understood that they had stopped broadcasting on FM and were using loudspeakers along the DMZ. But that was several years ago. If I remember right, they played the Voice of Freedom program for three or four hours per day, and regular KBS programming the rest of the day, but my memory is fading." Thanks Bill!

Additional info:

A 2011 article: <http://www.strategypage.com/dls/articles/The-Air-War-Over-North-Korea--10-19-2011.asp> .

A 2010 article: <http://www.aljazeera.com/news/asia-pacific/2010/05/201052534421773321.html> .

Schedule now at Aoki database.

I welcome any additional comments, observations or corrections to the above info. Appreciate any additional feedback! (Ron Howard, Asilomar State Beach, CA, USA)

PAPUA. Ron, Just back from our latest Asian vacation - I was unable to hear any sign of Wantok Radio Light whilst in Denpasar and Singaraja (Bali) between 16 and 21 April, or from Singapore on 25 April.

By the time propagation was favourable for my limited receiving set-up of the Sony ICF7600G and short wire antenna, it was after 1000 UTC and only CRI's Japanese service to be heard.

But - since arriving home on 29 April I have been able to hear them fading in daily around 0610 UTC and also traces around 2000 UTC. I measure their frequency at 7324.97.

(Regards, Bryan Clark)

Nothing heard from PNG though on April 28.

(73 Wolfgang Bueschel_DF5SX)

TAIWAN 7324.995 NOT Wantok Radio Light, Port Moresby, PNG, -- but **RFI Paris** in Mandarin language instead, scheduled 0930-1030 UT via Paochung site in Taiwan. Endless Chinese talk by woman.

(wb, wwdxc BC-DX TopNews April 28)

Elad FDM-S2 - Några kompletterande intryck till Per Erikssons & Göran Norstedts presentation i SWB 1795

Elad FDM-S2 är en trevlig bekantskap, där mjukvaran (som verkar vara i ständig utveckling) erbjuder en hel drös med olika inställningsmöjligheter. Manualen ger massor med anvisningar om hur man kan ändra vissa parametrar, men är inte alltid så lätt att förstå. Konstigt att det inte går att skriva lättbegripliga manualer. Men med lite envishet och testande så kommer man rätt tillslut.

Min NetSDR är ändå i en klass för sig när det gäller att hitta och plocka fram de svagaste signalerna på mellanvåg. Utan att behöva göra så många inställningar.

På kortvågsbanden klarar sig dock Elad FDM-S2 bra i en jämförelse. Men där finns ju å andra sidan inte så mycket att lyssna på.

Min gamla favorit-rx, Perseus, använder jag numera huvudsakligen i kombination med Microtelecom FM+ konverter för FM-DX, men eftersom Elad FDM-S2 täcker hela 5 MHz "spurious free", och hanterar WFM och RDS direkt helt utan extern konverter, så kommer jag försöka nyttja den möjligheten när det blir E-skip. Det inspelningsbara spännet kan lätt ändras genom att klicka på SET/Advanced Tab/Device configuration och välja där.

Inledningsvis hade min Elad FDM-S2 problem med extrem överstyrning under kväll/natt. Det visade sig dock snart att det var jag som inte hade fått rätt kläm på AGC-hanteringen, som är väldigt känslig för rätt nivå vid starka signaler. Några sådana överstyrningsproblem yttrar sig sgs aldrig med NetSDR.

Det går alldeles utmärkt att på samma PC köra Elad FDM-S2 samtidigt som NetSDR och Perseus/FM+ är igång. Även samtidig inspelning med samtliga mottagare fungerar utan problem. Vid ett tillfälle drog jag igång även min Perseus nr 2, och det var heller inget bekymmer. CPU-load låg runt 40-50%, och då var även många andra program i datorn också igång.

Elad FDM-S2 är extremt frekvensstabil. Faktiskt nästan i klass med NetSDR-01 som har en ultra low noise ocxo reflock, och kostar US \$1999. Jag testade BBC Radio Ulster 1341,000 kHz och körde en flera timmar lång inspelning genom SDR-Radios IQ-filteknik, och använde, som jag vanligtvis gör, 40 Hz bandbredd för att få en detaljerad upplösning. Frekvensdriften var nästan obefintlig.

Nämnas bör att Elad-teamet verkar väldigt serviceinriktat. När jag kämpade med att installera programvaran, och inte visste varken ut eller in, så fick jag snabb och tålmodig hjälp, och kunde snart komma igång. Huvudorsaken till allt initialt trassel visade sig vara avsaknad av vissa installationsfiler på det bifogade usb-minnet...

/AHK

Stort tack för denna kompletterande information. Det verkar som den här mottagaren är oerhört kompetent i förhållande till priset. Skönt att du efter alla vedermödor med installationen fick igång maskineriet! /TN

Radio Hams Keep 'Queen Mary' Wireless on the Air

Voice of America, Los Angeles, By Mike O'Sullivan, April 29, 2014

The Queen Mary, an ocean liner that once sailed the North Atlantic, is now permanently berthed in Long Beach, California, where it's a tourist attraction and hotel. In one of the rooms aboard the ship, the tradition of ship-to-shore wireless operations is continued and visitors are introduced to the hobby of ham radio.

A young visitor recently got an introduction to Morse code, the system of dots and dashes once used for wireless communication. Amateur radio operators, called "hams," still use it today.

The Queen Mary was the pride of the Cunard Line after its 1936 launch, and is now a popular tourist attraction.

The wireless room preserves the ocean liner's communications hub. Queen Mary Commodore Everette Hoard said it was a lifeline in emergencies, providing two-way messages -- ship to shore.



“And not only did they carry several transmitters for transmitting the ship's business, they also, even in 1936, had radio-telephone service,” said Hoard.

Today, volunteers from the local amateur radio club show off old equipment and operate new gear, as they talk to hams around the world.

“Just chit-chat, back and forth, some of them for hours at a time, many on voice, some of them even on Morse code,” said wireless room manager David Akins.

Volunteer Kurt Freitag said the wireless station is popular with visitors and hams overseas.

“When we get out there and say, this is W6RO, our call letters, we get a pile up. People go, that's the Queen Mary, and they all jump in, talk to me, talk to me, no talk to me,” said Freitag.

Ham operators help with communications in disasters, from earthquakes and hurricanes to winter ski accidents.

The man who helped create the ship's ham radio operation, Nate Brightman, said helping in emergencies is an important part of the hobby.

“That's the big reason that the government is so nice to amateur radio operators and gives us all these frequencies to use, because we serve the public. It's a hobby and it's a lot of fun, but it's also very valuable to the country,” said Brightman.

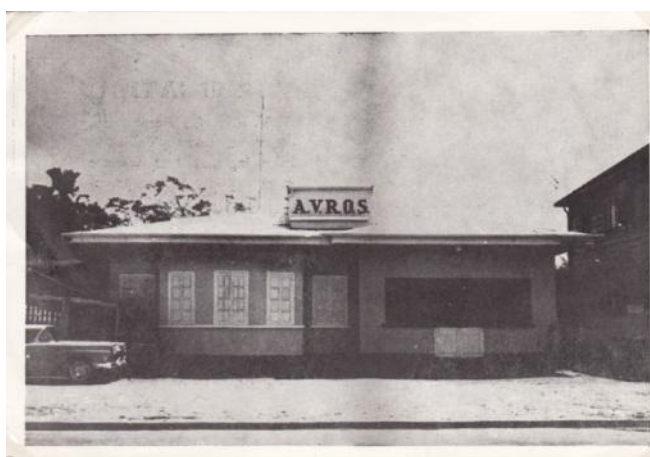
These volunteer radio operators are continuing the heritage of seaborne communication on board the Queen Mary, reaching out to visitors to the ship and radio enthusiasts worldwide.

<http://www.voanews.com/content/radio-hams-keep-queen-mary-wireless-on-the-air/1904153.html>

(Mike Terry via DXLD)

(the picture copied from cynic.org.uk/TN)

Avdelingen gamla QSL



15465 Avros från 1962



5965 LV de Bogota från 1957

A.V.R.O.S. Radio Omroep, Paramaribo, Suriname (Station building). AVROS used very low power of only 0,35 kW, but thanks to the high frequency, it could still be heard in Northern Europe.



6016 R Clube Pernambuco från 1954



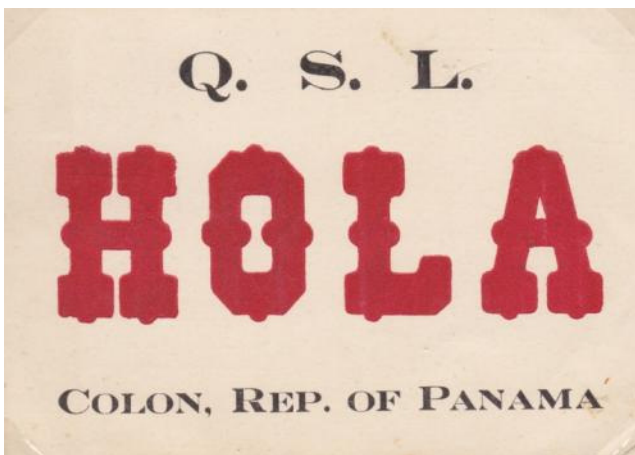
5050 R Cultura från 1956



6035 R Panamericana från 1974



4920 R Caracas från 1955



9595 R Atlantico från 1955. Stationen startade 1946.



6120 R El Mundo från 1953

Stort tack till JOE som skannat in dessa gamla QSL. När det gäller QSL så får man väl ändå vara så gammalmodig att man kan påstå att det var bättre förr ?? /TN

Version 3.8 von G3xDDC-CSVUserlistBrowser

Version 3.8 kommer den Användaren entgegen, die ihre Ausrüstung an verschiedenen Standorten betreiben und für jeden die passenden Entfernungsangaben und Antennenrichtungen haben wollen. Der QTH-manager verwaltet bis zu vier Standortangaben und konvertiert auf Wunsch bestehende Listen in welche für andere Standorte.

<http://www.df8ry.de/htmlde/csvub/news.htm>

(73 Christoph Ratzer via A-DX)

CQ Serenade

Its probably the first-ever ham radio song. Listen and enjoy!

http://www.southgatearc.org/news/february2008/cq_serenade.htm

(Henrik Klemetz via NORDX)

Några noteringar från konventet i Lessebo

Först, stort tack till Bengt Ericson och Hasse Mattisson som ordnade och höll i trådarna. Konventet var välbesökt och det var nog bra nära deltagarrekor.

Till ett kommande SWB kan vi nog presentera ett fullödigt referat från konventet. Tills dess kommer här några personliga intryck av vad vi bjöds på. Ni kan ju förstå av ämnesvalet vad som ligger närmast mitt hjärta

Torolf Johnsson höll ett mycket intressant föredrag om beverage antenner och hur han tillämpat de kunskaper som ON4UN beskrivit i boken Low Band DX-ing och som ibland också kallas DX-arens bibel.

Tyvär gjorde jag inte några anteckningar om just den antenntyp som Torolf dragit ut, men i korthet är det en ändmatad dubbel bäver med ett avstånd på 5-10 m mellan trådarna och en förskjutning på ungefär 30 m mellan de två antennerna.

Torolf hade också gjort erfarenheten att om längden överstiger c:a 600 m så får man oönskade effekter med att sidoloberna plockar in mer skräp ju längre antennen blir. Det som dessutom påpekades är vikten av att se till att alla parametrar som kan påverka gör att båda antennerna var för sig uppträder exakt lika. Bl a har Torolf lagt ned ett stort arbete med att förfina varenda detalj i sin antennenläggning. Alla bävrar modelleras först i EZNEC programmet. Därefter dras antennen ut, och ett mycket noggrant arbete följer med baluner, belastningsmotstånd. SWR, avstånd mellan trådarna, förskjutning, antal jordspett, etc.

Redan 2010 i ett inlägg på NORDX beskrev Torolf ett antal saker som påverkar hur antennen kommer att fungera:

- balun - skall lindningen vara tvinnad eller SS (side by side)
- balun - vilket material på toroiden?
- ändmotståndet - vilket värde? 320, 460, 560 eller rentav 680 ohm
- ändmotståndet - vilket material? kolfilm, metallfilm, trådlindat?
- koaxen - choke eller inte, jordad strumpa eller inte
- koaxen - nergrävd eller i luften
- jordspett - hur många? vilket material? mätning eller inte

Det finns flera faktorer som spelar in, men framförallt så är varje gth unikt och att få fram det optimala är inte lätt, Många och systematiska tester är nödvändigt. Våra mottagare är idag ganska likvärdiga. Där man kan göra en insats är påantenn och matningssidan. (Torolf Johnsson via NORDX)

Därefter höll **Rolf Larsson** också ett likaledes intressant föredrag om en helt annan typ av beverageantenn, en tvåtrådig beverage som ger lika bra mottagning i både fram- och backriktningen och som har den stora fördelen är att omkopplingen kan mellan fram- och backriktningen kan skötas från DX-hörnan.

Hur antennen skall designas beror på längd, höjd, valet av trådar samt avståndet mellan trådarna. Lämplig 2-tråds kabel är enligt Rolf numera svår att få tag på. Det är också viktigt att balunerna lindas på rätt sorts toroidkärnor och med rätt varvtal för att fungera bäst på avsett band.

Det finns flera anvisningar om hur sådana här antenner skall beräknas. En sammanställning av litteraturen om detta finns bl a på min hemsida: <http://www.thomasn.sverige.net/>.

För den som vill ha mer konkret hjälp så har Rolf Larsson erbjudit sig att hjälpa till med anvisningar för materialval och beräkningar av antenn och baluner. Han har mycket stor erfarenhet då han byggt många sådana här antenner i sina dar.

Torolf och Rolf har alltså använt helt olika typer av beverageantennerna. Det finns ännu fler varianter än dessa två och jag tänkte nedan helt kort beskriva de olika varianter som finns och i förekommande fall hänvisa till de nordiska DX-are som använder de olika modellerna. En del material har presenterats tidigare i SWB, men väljer ändå att köra en repris nu på en del av det materialet. Så här kommer en kort sammanställning som visar hur de olika modellerna är uppbyggda.

Fasning av Beverage Antenner. (Källa "Low Band Receiving Antennas" - Al Penney VO1NO/VE3)

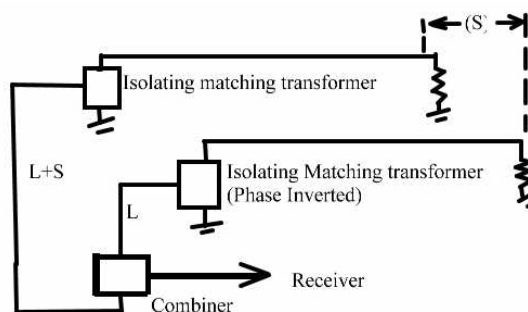
För att förbättra riktningsverkan utan att behöva långa antenner kan man fasa individuella Beverages.

Det finns i princip två metoder där var och en har sina fördelar:

- Broadside
- End-Fire (eller Staggered)

End-Fire Phasing

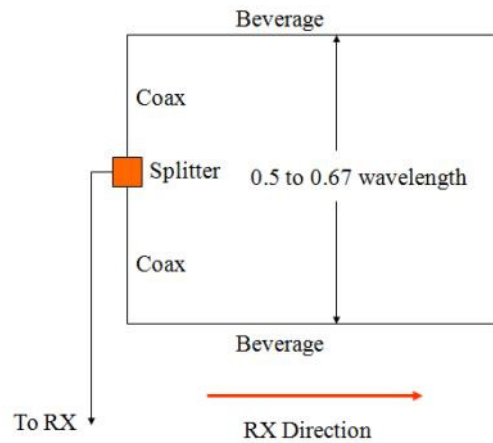
- Greatly improves Front/Back directivity
- Front lobe remains much the same
- Spacing 5 meters
- Stagger NMT 0.5 wl
- 20 m for 40 – 160m ant
- 30 m if only 80 – 160m



Broadside Phasing

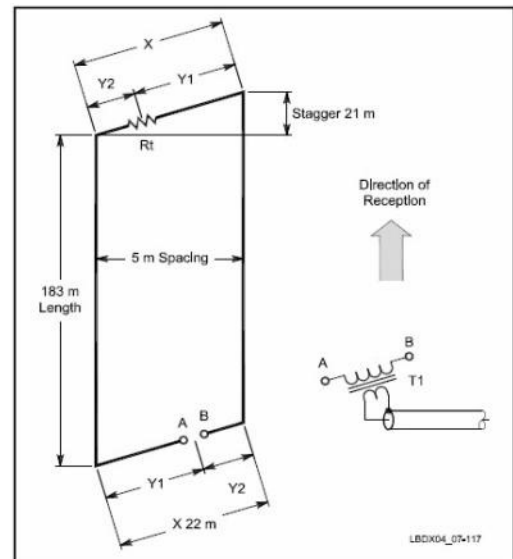
- Narrows frontal lobe
- Front/Back remains the same
- Fed in phase
- Multiband
- Require wide spacing
- 0.5 wl spacing good

0.67 wl excellent



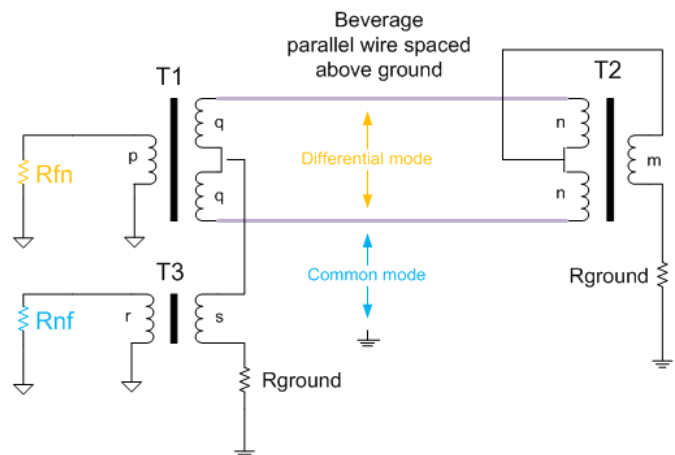
Crossfire Phasing

- Simple end-fire feed system developed by W8JI
- Usable over several octaves
- Termination value = twice that of single Bev
- 16:1 matching transformer used (900 Ohms)
- $(X - S)/2 = Y2$
- $Y1 = X - Y2$



Bi-directional beverage antenna

The two-wire Beverage is fed from one end but can be switched to receive either from the forward or the backward direction.



W8JI Parallelogram-antenn använd av Arne Nilsson

En beverage som blir mer o mer intressant är W8JI Parallelogram-antenn. (Se bild ovan för Crossfire Phasing)! Rätt intressant strålningsdiagram och den verkar dessutom inte så grinig vad gäller mått, den är rent av ganska kort för en Bäver-variant. Jag har kört Eznec på den och varierat längd på trådarna och avståndet mellan dem, Inget av dem verkar kritisk! Testat längd mellan 150-300, och avstånd mellan trådarna på 2-10m. Ingen dramatisk skillnad!! Tror att hemligheten ligger i fasningen, som beskrivs på websidan (bif.). Dessutom behöver man inte switcha eller fasa något alls! Och F/B är inte illa alls. Dessutom slipper man dribbla med jordspett och jordplan!

Som ett exempel på alternativ uppbyggnad finns en bra artikel skriven av Marti Karimies (från SWB 1753) och en av Jürgen Bartels (även den presenterad i SWB 1753). Deras erfarenheter tål dock att upprepas.

Broadband staggered beverage used by Martti Karimies

Here is an illustration of my broadside staggered beverage. After many years, in the beginning of January this year, I had again possibility to erect an aerial in southern Finland, not at home but this time at office!

First I had a single wire, a 720 meter beverage pointing to 255 degrees for hunting La Plata stations, but later in the spring, in the beginning of May, I replaced it to a broadside, staggered shorter beverage pointing to 268 degrees.

That new construction was eliminating man made noise from the industrial area, where my office is located, but was also directed to my favorite area, Southern Peru. Result was more than I expected.

The second night after erecting, signals from Bolivia which situation continued nearly the whole May and beginning of June and was starting again in the middle of July. So far it has offered me four new Bolivians on MW, Radio Andina 1390, Radio Integracion de Padilla 1470, Radio Amor de Dios 1480 and Radio Bendita Trinidad 1540 among few more which I was able to hear already with longer beverage 31st of March. The best catch so far is 250 watts Radio Nuevo Tiempo from Santiago on 1599.805 kHz.

This construction is giving around 5 dB more forward gain comparing to a single beverage, but also reducing the noise level, just now daytime noise level is -130 dBc with 3.0 kHz filter. In theory forward gain should rise 3 dB, but according to the Perseus that is a little more.



For phasing I use MFJ-1026 Phasing unit, which have served my phasing purposes now for more than 10 years. My first two wire phased solution is from 2002.

Phasing is offering constant result from 1200-1600 kHz which segment is the best for this kind of shorter beverage arrangement. Baluns are made by using Amidon's 114-75 toroid rings with 11/33 laps and feeding lines

are made by Aircell 5 coax.

Grounding is made as good as possible using 4-6 stainless steel rods for all four places, at the feeding points and at the ends. Resistor values are 470 ohms.

For a non-skilled person factory made phasing unit is the easiest way to achieve good phasing results.

On the picture you can see that our industrial hall is locating behind beverage 2. It is creating some kind of reflector to that beverage and reducing signals backward more than 10 dB comparing identical beverage 1. Distance to the metal panel facade building is quite optimal, around $0,15-0,2 \lambda$.

This antenna arrangement has proved to work well. And it is easy to build. Better directivity could be achieved by using wider spacing between wires, or more staggering.

For forward gain there is not much influence between $0,2-0,7 \lambda$ spacing.

Our industrial site was limiting this as it is now, but I can't complain!

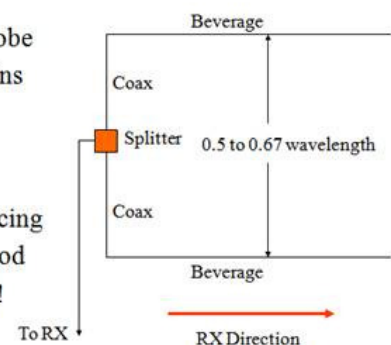
(Martti Karimies)



Beverages are 240 m long, separated 50 m and staggered around 10 m.

Broadside Phasing

- Narrows frontal lobe
- Front/Back remains the same
- Fed in phase
- Multiband
- Require wide spacing
- 0.5λ spacing good
- 0.67λ excellent!



Broadband staggered Beverage used by Jurgen Bartels

A 300m beverage has a nice small front lobe but its F/B ratio is not really good, an EWE outperforms it easily but unfortunately has a broad front lobe. Desirable is a combination of both.

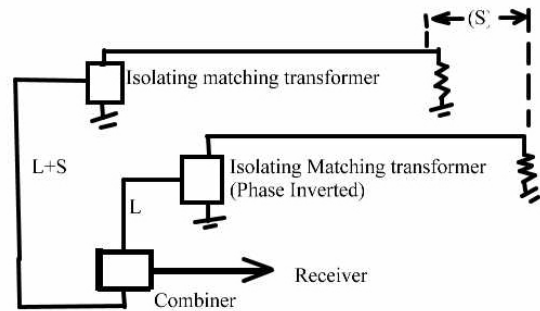
Some good approaches to improve beverage F/B are [here](http://www.kkn.net/~n2nc/bev_arrays/) (http://www.kkn.net/~n2nc/bev_arrays/) and [here](http://www.w8ji.com/echelon-log_beverages.htm) (http://www.w8ji.com/echelon-log_beverages.htm) but their combiner rely on 90° phase shift, not wise for broadband (500-1600 kHz) that would require a stagger distance of 75 m at 1MHz. Dallas Lankford guided me onto the right track and suggested his QFDA combiner, that requires only a distance of 30 m.

Initially I used 30 m stagger distance and 10 m side by side separation. That improved F/B but did not give the expected attenuation of signals arriving from the sides. Thorough contemplating its working principle I concluded that for maximum reduction both distances should be identical, because the phase shifter shifts all signals by the same amount, not only the signals from the rear. That finally gave the wanted attenuation from the rear and from the sides.

Much later after some helpful tips by Neil Kaz I manage to simulate this structure with [4nec2](#) and found the simulation results pretty close to what I see in reality.

Results:

The left back sidelobe is reduced by an additional 15-20 dB compared to a single beverage. So the total F/B is even larger. This sidelobe was the most annoying for me, as it points to the south-southwest and signals arrive from there during my local morning. The right sidelobe points to east and signals from there are already well attenuated in the morning. To reduced that sidelobe would be nice but requires even more space. It works all over the MW band and this broadband feature is great when you want to record the entire MW band with Perseus. However some specific transmitters sites from the side are not attenuated, I found that their level differs from antenna to antenna. The reason is unknown.



(Jurgen Bartels in <http://dx.3sdesign.de/> where you can find more information and also a schematic for the combiner. /TN)

Read the full article here http://dx.3sdesign.de/index.htm?staggered_beverage.htm