

# SHORTWAVE BULLETIN

Nummer: 1445, 5 november 2000. Deadline nästa nr: 17/11 2000 (fax & E-mail 19/11 kl. 0900 SNT)

Ta en titt på tipsspalten i detta nummer... Den är verkligen lättläst. Som tur är har några få trots allt tagit sig lite tid att köra några bandscans. Vi måste därför hoppas på att vintern kommer att ge mycket bättre möjligheter för tipsbidrag.

Fick förresten ett trevligt mail från Stefan Wikander i Hammarstrand. Han håller på att testa ett nytt ställe långt norrut med helt störningsfria förhållanden. Brusnivån ligger på c:a -130 dbm, vilket måste anses vara exceptionellt lågt. SW:s mottagare AOR 7030 har en bruströskel på -127 dbm. Med andra ord hörs det inte i radion när antennen ansluts!! Vi får väl se senare i vinter alla de fina NA som kommer att vaskas fram från denna plats.

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## SWB-info

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

SWB old archive: <http://www.algonet.se/~ahk/swbhome.html>

SWB hot stuff: <http://home.sverige.net/thomas.nilsson>

**Komplettering av medlemslistan:** Några stycken har ännu inte skickat in en kort medlemspresentation innehållande åtminstone: Yrke, DX-start, Verifierade länder/stationer, Mottagare, Antenner, Ev. andra hjälpmedel, Ev. annat avlyssningsställe, Favoritområde, Övriga hobbies, samt annat av intresse.

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

## QSL, kommentarer, mm.

**Bengt Dalhammar** bifogar en kopia av artikeln **Trends in Tropical Broadcasting** sammanställd av Anker Petersen och presenterad i DSWCI. Uppställningen anger antalet stationer mellan 2200 och 5800 kHz vid 4 olika tidpunkter samt är fördelad på 17 olika regioner. Alla uppvisar samma negativa trend – kolla själva Grand Total i denna dystra artikel:

	1972/73	1984/85	1996/97	1999/2000
Antal stationer	1136	852	684	472

Under perioden 1973 – 1985 försvann 284 stationer vilket motsvarar 24 per år. Under 1985-1997 försvann 168 stationer eller 14 per år. Den stora nedgången kom dock under 1997 – 2000 där nedgången var 212 stationer motsvarande 71 per år i snitt!! Anker Petersen avslutar sin sammanställning med dessa ord: "**So do not give up! There are still 472 domestic broadcasting stations to hunt on the tropical bands!**"

**Lars Rydén:** Vill bidra med lite klagolåtar: Inte nog med att det är dåliga konds rent allmänt och urusla mottagningsförhållanden lokalt - det kommer inte några svar heller på de rapporter man skriver. Under senaste halvåret har jag (via postverket) sänt 18 rapporter (MV och KV) och fått 2 svar (**Zanzibar** samt **RNZI 15175**)! Visserligen till en del "knepig" länder, men ändå...Det enda som kommer är tiggarebrev från Superstation KTBN (Har ni förresten kollat in på fru Jans frisyri i den medföljande trycksaken?) Epost då? Epostverifikationer tycker jag är helt fantasilösa. Vad man vill få är ju brev med vackra frimärken, en personlig verifikation, vackra vimplar etc. Men den tiden är kanske förbi? Stationerna måste ju också rationalisera och får allt mindre resurser (personal eller budget) till att skriva brevsvvar. Så man får kanske acceptera att även de introducerar moderna kommunikationsmetoder för kontakter med lyssnare i allmänhet och DX-are i synnerhet. Men kul är det inte. Så för oss konservativa lyssnare är det kanske dags att lägga av QSL-samlandet och damma av frimärkssamlingen istället?

**Rolf Åhman:** Äntligen har brevbäraren börjat komma med nåt annat än PPM broschyrer. En del av QSLen är också kortvägsdito. **AFRTS Isabela, Puerto Rico** 6458,5 och **AFRTS Boca Chica, Florida** 12689,5 båda med brev, vs April K. Gorenflo, Broadcast Operations Specialist, efter 10 månader. **Rádio Rio Mar** 9695 med brev och kort efter 2 mån samt **Rádio Caiari** 4785 med brev via Håkan Sundman i Helsingfors (som oturligt fick mitt QSL i sitt brev) efter 2,5 mån. Trevlig allhelgonahelg

**Leif Råhäll:** Enligt uppgifter börjar Ramadan i år den 27 november och slutar den 26 december, det brukar ju bli lite mer sändningstid då. Konditioner skiftar mycket från dag till dag och även under dygnet. En fin eftermiddag betyder inte alltid en fin kväll om man nu kan prata om fina konditioner, det blir bättre framöver. Port Moresby hörs dagligen nu på eftermiddagen efter 1330 tills 1400. Några små öppningar har förekommit på eftermiddagen.

**Kurt Norlin:** Inga tips denna gång heller. Förra lördag kväll åkte jag till Rönnbäcken för att kolla CQWW:s SSB test. Inga KV stationer av intresse hördes. Enda MV station jag hörde var "bögradion" på 1386. Ovisst dock om jag skickar rapport. Ett antal fina öar i Västindien hördes men tyvärr gick aldrig KG4, dvs Guantanamo tillräckligt bra. Den var upp två gånger på clustret kändes japaner men tyvärr fick jag tji. Fel riktning och kanske bara lågeffekt. QSL: Vanliga brev från **AFRTS Key West** 12689,5, **Sigonella** 10940,5, **Diego Garcia** 4319 och **Guam** 5765. Dessutom E-mail svar från **AFRTS Pearl Harbor** 10320 och **Guam** på 1 dag resp. 2.5 tim. Dessutom några trevliga MV-svar samt amatör-QSL, t.ex. 4W6MM från Östtimor.

Fram till jul kommer min primära E-postadress att vara: [kurt\\_norlin@hadarclub.com](mailto:kurt_norlin@hadarclub.com). Den kommer att kollas de flesta vardagar medan den gamla kanske 1 gång/vecka. Jag går en kurs på Lernia nämligen. Idag dock föreläsningar på museet. Ha en bra och trevlig helg.

**Ove Fransson:** Det är knappt att jag tror det själv, men jag har lyckats få ett QSL, det första E-mailsvaret, dessutom. Det kom från **AFRTS Sigonella** 10940,5 med v/s Michael Foutch. Annars är ett av skälen till

att jag inte har bidragit så ofta helt enkelt att jag inte loggar något som jag tycker platsar i bullen. Just nu, lördag morgon 0345 SNT hörs inte ens vare sig Tachira eller Ecos del Torbes. Usch. Men man får försöka se det goda i situationen: det kan bara bli bättre. Ha det gött, OM, hoppas gåsen var god.

**Christer Brunström:** Ingen större aktivitet de senaste veckorna pga resor till Frankrike och England.

**Tore B. Vik:** QSL fra **R.Barahon Internacional** - 4930 - v/s Roberto Lama S.

**Börge Eriksson:** Söndag morgon. Det har varit lite körigt sista dagarna och "glömde" SWB för ett tag. Har inget särskilt att bidra med heller. Skolorna har haft höstlov och i måndags rasslade det till i ytterdörren och fyra barnbarn stormade in. Lediga ungar med jobbande föräldrar och vad passar bättre än att då bo hos morfar/farfar en vecka. Plötsligt fylldes mitt radiatorum med hockeytrunkar, innebandytrunkar, inlines och madrasser på golvet. Sedan skulle dom skjutas runt i kommunen på träningar och matcher. Dessutom gick avloppsslangen till diskmaskinen sönder med översvämning i köket som följde. Tur nog fanns jag i köket och kunde hejda katastrofen någorlunda. Men jag skjutsar hellre mina barnbarn till idrottsanläggningar än hämtar dom hos polisen eller på lasarettakuten berusade och magpumpade, även om jag nu fick avstå radion. Det lilla jag lyssnat har inte glatt någon människa. 60 mb har nattetid mest bjudit på asiaterna. Indierna på de flesta frekvenser, men faktiskt har det också hörts lite flämtande LA på de vanliga frekvenserna 4815, 4830, 4865, 4885, 4915 o.s.v. Har heller inga QSL att rapportera. Total torka i sex veckor nu.

## LOGGEN - ALL TIMES ARE UTC

2491,999	3.11	2300	Galei Zahal med nyheter, jingle. USB med bärvåg. 4+ SA
3214,832	21.10	1500	RRI Manado med Wartan Berita, lokalt väder, programöversikt. cd 1522 med sedvanlig godnattceremoni. 2-3 SA
3264,7	24.10	2110	RRI Gorontalo gick igenom väldigt svagt med 1-2 LRH
3344,8A	22.10	1358	RRI Ternate stängningsceremoni. cd 1401. 2+ SA
4000,168	3.11	1350	RRI Kendari med lugn mx. 2-3 SA
4788,8	3.11	1358	RRI Fak Fak med cd. 1- 2 SA
4795,7	30.10	1345	VTN Son La ( Tent) hördes med native mx (tribehill) tills close.down 1400 . Är en av provinsstationerna i Vietnam. 2 LRH
4845	4.11	0700	Radio Mauritanie gick starkt med nyheter på arabiska. Ny sändare? 3-4 CB
4876,7	30.10	0000	La Cruz del Sur på avvikande frekvens med brukbar kvalitet S2/3 TBV
4939,7	28.10	2225	R. Norte svak S2 TBV
4950	28.10	2220	R. Madre de Dios mved vanlig mx S2/3 TBV
5003	25.10	0503	Radio Bata hördes med annonseringar på spanska. 3 CB
5025	24.10	0459	Radio Parakou startade dagens sändningar med lång annonsering på franska. 2-3 CB
5101,113	21.10	1400	Voice of Jammu Kashmir Freedom Movement i Muzzafarabad, (PO Box 122) med engelska nyheter till 1405. Övergång till urdu 1405. Stängde 1432. Inget har hörts under hela hösten på gamla frekvensen 3665A, samma station??? SA
6300USB	3.11	1400	AFN här är enligt uppgifter Hawaii 2-3 BE
7260,0	30.10	1050	NET Radio Netherlands Int (Hade hoppats på Vanuatu). Sänder från Petropavlosk på Kamtjatka halvön. Har hörts 1999 också. Slutar 1225. 2 LRH
4890,0	dagl.	1330	PNG Port Moresby kommer igenom dagligen vid denna tiden här nere 2 LRH
6055,0	31.10	1410	JPN Tampa med nx // 9595, något bättre på 9595 2-3 LRH
11715	26.10	1330	Här hade jag en svag station denna dag. Religiöst med amerikansk accent. Omväxlande man/kvinna med bibelläsningar och litet musik. Starka QRM och splatter. KJES skall ju ligga här. Har inte hörts igen de gånger jag provat. 1-2 BE
11720	4.11	0800	SWR störd av Radio Ukraina. 2-3 CB
12 579	18.10	1440	AFN Diego Garcia - USB - popmx S3 TBV
15590	26.10	2330	KTBN talade om för mig att livet som homosexuell inte skulle vara något positivt. 3 BE
21815USB	ofta	1400	RFPI, Costa Rica nu här efter flytt från 25930. Bra hörbarhet.och engelska. BE
25870	ibl.	1400	WFLA , Tampa, verkar bara köra söndagar här. I varje fall har jag bara hört dem då. Oftast phone/in diskussioner. 2-3 BE

## Stationsnyheter

### DOMINICAN REPUBLIC

**4410.2, La Voz de la Alabanza**, San Francisco de Macorís, (harmonic 3 x 1470) 0207-0417 Oct 25, Religious programming, modern ballad/hymns, short talks and preacher with longer sermons. One talk ended with a Santo Domingo address to write to for more information. Canned ID's "...A-M, La Voz de la Alabanza, 1470 kilohertz amplitud modulada..." Fair to good signal with very good peaks. RTTY QRM just below. Occasional SSB QRM. More info and audio clips at <http://homepages.together.net/~hackmohr/whatsnew/4410.htm>. [Mark Mohrmann Coventry, VT, USA, Oct 25, DX LISTENING DIGEST]

### ECUADOR

**5010.3, Escuelas Radiofonicas Populares;** Riobamba, Oct. 31, 0232-0300\*, Nice surprise hearing them, given the low power of the station (listed as 800 watts) and the generally poor conditions towards the region. Andean music with lots of flutes, with short announcements by female. Not 100% sure about language, but sounded like Spanish. At 0257 ID, followed by what sounded like a

canned S/off announcement. Mention of medium- and shortwave, and "...Riobamba, ..., capital de la provincia...". This was followed by more music until 0300, when station went off air. 24242 (Veldhuis voa HCDX)

**5060 Radiodifusora Nacional Progreso.** 0125-0145 OCT. 21: Reactivated with excellent signal. Noted with Música Rockolera. "...8 de la noche y 30 minutos la hora nacional, ésta es, señoras y señores, Radiodifusora Nacional Progreso, transmitiendo desde Loja en la República del Ecuador, Progreso una emisora netamente popular al servicio de la patria..." (Rafael Rodríguez R., Bogotá, Colombia, DX LISTENING DIGEST)

#### MAURITANIA

**4845, R Mauritanie,** 0730 Oct 22 with programming in presumed Arabic and first time ever I've heard them clearly mention both country and "Nouakchott", fair to good this night (David Norrie, New Zealand, Cumbre DX via DXLD)

#### MEXICO

I have new updates from Mexico. In México, Distrito Federal: SW:

- XERTA 4800 Radio Transcontinental de América is still inactive, since April.
  - XERMX 5985 Radio México Internacional was broadcasting with 5 kW, yesterday (October 20, 2000) disconnected its transmitter to test other of its old and inactive frequencies.
  - XERMX 9705 Radio México Internacional is broadcasting with 6 kW.
  - XERMX 11770 Radio México Internacional began its transmission of test, I tuned in it from 15:00 to 5:00 UTC
  - XEOI 6010, Radio Mil has a new e-mail to receive reception reports at: [radiomil@nrm.com.mx](mailto:radiomil@nrm.com.mx)
  - Radio UNAM, XEUN 860, XEYU 9000 (inactive) and XEUN 96.1, the new "Director General" is Fernando Escalante Sobrino.
- Well, I hope this information will be useful to the next edition, the 2002 edition. I will send you the next collaboration as soon as I can. Greetings from Mexico [Héctor García Bojorge, via TL]

#### PERU

**3375.1 Radio San Antonio,** Callalli; was heard at 0115-0140\* good signal on 03/OCT/2000 during my stay in Chincheros, Peru. Huaynos and comunicados until 0130. At 0130 closing canned announcement was given as "Radio San Antonio cierra su programación del día de hoy. Agradecemos su amable sintonía. Hemos transmitido desde la Parroquia San Antonio de Padua, Callalli, Caylloma, Arequipa, Peru." and followed the evening prayer. At 0139 OM announcer said that the station will back be on the air at 6 AM. (i.e. The station runs at 1100-0140.) (Pedro F. Arrunátegui, Peru [Chasqui DX 161] via Conexión Digital)

**4389.2 R. Imperio,** Chiclayo; 25/10 0240-0300 y 26/10 0100- 0200 33333 px La voz de la Salvación advs la iglesia pentecostal, les invita a sus reuniones en jirón Santa Ana 457 de esta ciudad de Chiclayo.. (todos los advs son sobre la ciudad de Chiclayo) ID "1490 KHz Onda Media y 4390 KHz Onda Corta, Imperio Radio.." (Pedro F. Arrunátegui, Perú, Chasqui DX via DXLD)

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**4388.98:** The station which was reported as "Radio Estéreo" by several DXers, announces broadcasting on 1490 kHz medium wave and 4390 kHz shortwave from the Distrito of José Leonardo Ortiz in Chiclayo. The station has been audible around 1000-1130 with weak signal in Tokyo between 26/OCT/2000 and 28/OCT/2000; however no definitive identification was heard. During my stay in Chiclayo in December of 1994 and September of 1998, I noted that OAX1L Radio Imperio broadcast on 1490 kHz medium wave, and it runs at 1100-0300 daily. If the station identifies itself as "Radio Estéreo" now, the name should be changed after my visit to Chiclayo. However, I think it is possible to confuse phonetically "Estéreo" instead of "Imperio" (Takayuki Inoue Nózaki, Relámpago DX Logging via DXLD)

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Hi Friends, After listening again the tapes about the Peruvian in 4388 kHz, I recognize my error in the ID, as reported by Pedro F. Arrunátegui in Conexión Digital, the name of this station is Radio Imperio, and not Radio Mi Estéreo. Their address is: Avenida Pedro Ruiz No. 1250 Urbanización San Juan. Chiclayo, Perú. phone + 51 74 229494 My apologies, (Rafael Rodríguez R., Bogotá, Colombia, Oct 30, DX LISTENING DIGEST)

**4655, UNID PERUVIAN, tent. name CONDOR RADIANTE LA RADIO.** 0037- 0110 OCT. 21: New Peruvian station, noted with test transmissions. "...beneficiando el desarrollo de nuestro país, de la provincia de Celendín y por que no decir de nuestro querido Cajamarca, arriba los ánimos, aunque es novecita, hoy amanece, amanece con buena radio, la nueva estación Cóndor Radiante la Radio..." ment freq. in F.M. 96.3. Not heard the place it broadcasts from. "...éstas son nuestras primeras emisiones de prueba; pronto estaremos al aire con más programación y mejor sonido..." (Rafael Rodríguez R., Bogotá, Colombia, Oct 23, DX LISTENING DIGEST)

**4750, RADIO SAN FRANCISCO SOLANO** 1110-1130 OCT. 22: mx folk. "...6 de la mañana con 12 minutos, el saludo cariñoso para todos los amigos que nos sintonizan por diferentes caseríos, el saludo a través de las ondas de Radio San Francisco Solano, estamos llevando lo mejor de la música, lo mejor del sentimiento musical, es este domingo sensacional..." (Rafael Rodríguez R., Bogotá, Colombia, Oct 23, DX LISTENING DIGEST)

**5580.2, UNID PERUVIAN** 2310-2330 OCT. 21: Two women praying Rosary. Very weak signal; I checked this frequency before. In the past I heard music vernacular. Apparently only transmits between 2300 and 0000. Never heard at other hours (Rafael Rodríguez R., Bogotá, Colombia, Oct 23, DX LISTENING DIGEST)

#### SOLOMON ISLANDS

**5019.9v, SIBC** Off? Big open carrier all week, but no programming. Off the air? (Hans Johnson, HI, Oct 29-Nov 2, Cumbre DX via DXLD)

#### SOMALIA

**7530, R Hargeisa,** Oct 20 at 1825 poor signal though clear in USB. Plenty of talk and some indigenous music, heard following days from 1700 through to s/off 1900. Have been trying to hear this for over 20 years! (Paul Ormandy, Waianakarua, New Zealand Dxpediton on the SPR-4 and Sony ICF-SW55 using a bevy of bevys, via Cumbre DX via DXLD)

# Övriga radionyheter

## Ramadan 2000

**Ramadan 1421 Hegira** begin on November 28th 2000 and Ramadan 1422 Hegira begin November 17th 2001.  
[Salvo Micciché, Co. Rad. Coordinamento Italiano del Radioascolto, EDXC member via HCDX]

## Home pages of some Chinese SW stations

Here are home pages of some Chinese SW stations:

Guangxi Foreign BS <http://www.gxfbs.com/>. Nei Menggu PBS <http://www.nmr.com.cn/>. Sichuan PBS <http://news.swww.com.cn/scsb/>  
Voice of Strait <http://www.radiohx.com/>. Xinjiang PBS <http://www.xjbs.com.cn/>.  
[Pentti Lintujärvi via HCDX]

## Passport to World Band Radio Edition 2001

**Passport to World Band Radio Edition 2001 kom i slutet av oktober.** (Utgivningen senarelades med en månad för att få med uppgifter om stationernas vinterskeduler). Liksom förra året är boken tryckt på tunt papper till glädje för alla portabla lyssnare. Trots lika många sidor som WRTH (582 resp. 616) är PWBR bara 1/3 så tjock!

I år finns bl a en innehållsförteckning i pdf-format på websidan <http://www.passband.com>. Av årets innehåll kan nämnas: En lång artikel om radion i Bhutan. Flera rxbedömningar än tidigare, i prisklasser från under 100 till upp mot 10000 USD. Speciellt intressant (för USA-DX-are) är en lång recension av Grundig/Lextronix/Drake/Tecsun-hybriden Satellit 800. En nyhet är lab-jämförelser av prestanda mellan rx i olika klasser, t ex mellan Drake R8B och AR7030 (och mellan Watkins-Johnson WJ-8711A och Ten-Tec RX-340, om nu någon aspirerar på endera). I år recenseras också aktiva antenner och preselektorer (med jämförande lab-resultat) samt MV- och FM-sändare för "hemmabruk"!

Kvaliteten på de "blå sidorna", dvs frekvenstabellen med sändningstider, m.m. kanske någon mer aktiv lyssnare kan bedöma, men de brukar stämma hyggligt för "world band listeners".

Kan beställas på deras websida och betala med kort via en kryperad länk. Pris inkl. flygleverans till Sverige USD 26.95 d v s ca SEK 270. Billigare än via DX-Köp? Men framförallt snabbare. /LR

## Official databases/lists

These official databases/lists of broadcasters might be of use...

**Guatemala** - published by SIT -Superintendencia de Telecomunicaciones - lists of AM-Radio-, FM-Radio- and TV-stations are in pdf-format at: <http://espectro.sit.gtm.tripod.com/radiodifusion/radiodifusion.htm>

The whole spectrum is here: <http://espectro.sit.gtm.tripod.com/inventario/inventario.html> in ZIPped pdf -file.

**Honduras** - published by CONATEL Honduras - the whole spectrum (even Ham- and CB Operators!) in Access Database, with queries and report ready-made at: <http://www.conatel.hn/NoticiasAvisos.htm> (select 'Inventario de Expedientes')

**Nicaragua** - published by Telcor - a list of AM- and FM -stations (no frequencies!) at: <http://www.telcor.gob.ni/Operadores.htm>

**Philippines** - published by NTC - National Telecommunications Commission - lists of AM- and FM -stations in pdf- and html -formats at: [http://www.ntc.gov.ph/consumer\\_info/consumer\\_info.html](http://www.ntc.gov.ph/consumer_info/consumer_info.html)

... and one unofficial entry - but great piece of work anyhow - list of Brazilian AM- and SW -stations (with addresses!) compiled by DX Clube do Brasil at: <http://www.dxc.com.br/> ('Lista de emissoras do Brazil', in pdf format)

[Pentti Lintujärvi, <http://www.dxlinks.com/> via HCDX]

## SWL QSL museum

There are very nice QSLs to see in the SWL QSL museum: <http://www.antique-corner.com/SWLQSL>. They still need a verification from Tristan da Cunha Island. [Michael Schnitzer, via HCDX]

## EWE-antenna

As a DXer one never is in the final development phase. Normally there always is something to improve at the radio equipment. In this sense I was on the search for an antenna, which first of all should have its max. performance on the tropical bands, secondly should have a directional characteristic and thirdly should lower the usual electric noise level on that frequency range. The recent hits (K9AY, Beverage) didn't come into question. The K9AY is a special MW antenna with moderate performance only on TB and the Beverage exceeds somewhat over my property boundaries. However I found the wanted antenna. The EWE antenna fulfills all criteria specified above in almost optimal manner. This type of antenna was described first in the year 1995 by Floyd Koontz, an American radio amateur. He constructed this antenna system for ham purposes on 80 meters. Who wants to read the article, can do this here:

<http://home.iae.nl/users/reinc/scrapbk3.htm> or <http://www.arrl.org/tis/info/pdf/9502031.pdf> or

<http://www.arrl.org/tis/info/pdf/9601032.pdf>

Here also one can find appropriate schematic diagrams as well as the respective radiation patterns for azimuth and elevation.

### Construction principle:

In principle the EWE is an inverted U of approx. 8-9 m length with a height of three meters over the ground. Those are dimensions, which fit in each average garden. One end is earthed over a resistance of approx. 800 to 850 Ohms, the other end is attached over a 3:1 core balun to commercial coaxial cable RG 58. In the Koontz article a 3:1 balun is recommended, which seems to me a little bit incomprehensible. The output impedance of the antenna amounts to 450 ohms, which would suggest a 9:1 balun. But let's the antenna theoreticians discuss this topic. Due to the lack of the required Amidon FT 50-43 core I just used my usual 9:1 baluns with good results. The main reception direction is the end with the Balun and the coax cable. The zero point is toward the terminal resistor.

### East west combination:

It's a pure coincidence that I have three fruit trees in my garden exactly in a series, exactly in the correct direction and exactly in the correct distance! What does one want more? So I had the idea to build two EWEs, one toward South America and one toward Indonesia.

### Reception results:

After two days of test operation I can emphasize the most important point: The EWE antenna produces almost quiet signals on the noisy tropical bands. Let's begin with the performance on 60m. The signal strengths are approximately 2-3 dB weaker compared to the 25m



long wire and to the DX One. That is to be neglected absolutely. If the station is situated in the antenna main direction e.g. the east EWE, and one switches then to the west EWE, the signal decreases approx. 20 dB. Due to the quietness of the signal it's a real benefit to listen to a TB station for a longer time. The noisy long wire has no chance here.

Due to the east west combination I yesterday could switch between RRI Jambi and R San Miguel on 4925.2 at around 22.15 UTC without any problems. On 90m the conditions are similar to those ones on 60m. The long wire produces here higher signal levels than the other antennas. On 49m and 45m (out of band Peruvians) the directional characteristic of the EWE is still apparent likewise. On 45m however the DX One is unbeatable. On higher frequencies the direction effect disappears, and long wire as well as DX One beat the EWE.

#### **The medium wave:**

Just so the EWE is applicable for MW-DX, especially in the version structured by me. The signals generally are about 10-15 dB below the values of long wire and DX One. The switching possibility forward/backwards is ideal. Naturally this is nothing new for K9AY and phaser owners. Nevertheless here are some examples of the early evening yesterday:

**531 kHz:** The west EWE produced Switzerland as expected, on the east EWE Faroe Islands came in very well, although the Faroe Islands aren't located in the main reception direction of the antenna. Unusual good reception of Faroe here in South Germany!

**1017 kHz:** On the west EWE came SWR. The east EWE suppressed the SWR completely and a Turkish station became audible.

**1053 kHz:** On the east EWE Romania came in quite well, on the west antenna Talk Radio UK. Separation almost completely.

**1413 kHz:** BBC Oman on the east EWE with O=4-5. Long wire and DX One produced mud here only.

**1458 kHz:** Here one could switch between Tirana and Sunrise Radio.

#### **Final reflections:**

Who calls a garden its own as a DXer, should not use it for radish breeding only! The EWE rather is the best antenna system for DXing on the tropical bands, which one can still build under normal circumstances. All required material is available for some DM only.

Experienced Camp DXers have those things in their store anyway. One open question remains however: Why I didn't discover this fine antenna much earlier? Good luck rebuilding the EWE!

[Michael Schnitzer - [mschnitzer@cc-online.de](mailto:mschnitzer@cc-online.de), Receiver: JRC NRD-525, Antennas: 25m longwire, DX-One Professional, EWE to Perú (260°), EWE to Indonesia (80°), Location: Hassfurt, Germany. Via HCDX]

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**Glad to hear that youre EWE antenna is working very well for you!** You must have a satisfactory ground (earthing) condition where you live, for the EWE to give such good performance, as this antenna's results are known to be in direct relationship to the local ground conductivity. Where I live, the soil is very rocky and it is difficult to get a EWE to work well (flag & pennant antennas, as well as K9AYs are better here).

Mr. Koontz's original article specified a \*turns-ratio\* of 3:1 for the transformer, not an impedance ratio of 3:1. If you use a 3:1 turns-ratio transformer, you end up having a 9:1 impedance ratio (i.e. 50 ohms to 450 ohms). So, your choice of the balun was absolutely correct.

Two DXer friends of mine, Don Nelson and Patrick Martin, live to the south of me in Oregon. Their local soil is much better than mine, and they use a EWE to hear a lot of DX on the tropical bands and MW. Don uses a low-noise preamplifier at the balun to help boost the weaker signals of the EWE. Perhaps in Europe it is not a good idea to amplify the EWE's signal; here in the Pacific Northwest USA, signals are weaker and we can make good use of high-quality preamplifiers to help bring signals out of the noise (for antennas with negative gain like the EWE). [Guy Atkins, Bonney Lake, WA USA via HCDX]

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**I have been using a EWE antenna here on the Northern Oregon coast near Seaside since the early 80s and I have had excellent results.** I recently put up a K9AY antenna with better results. There is less sideband splatter than with the EWE. The EWE does have been gain though in comparing them. All my antennas are terminated in very wet salty soil about a mile from the Pacific Ocean which does help. Both the EWE and the K9AY antenna are directional to the SW-NW and they work very well for Asia and the Pacific. I have found that the K9AY antenna needs better grounding than the EWE. I have 3-4 rods in the ground for the EWE and 8 for the K9AY. If you can try both antennas and check out your results. If possible have them both up and running and that way you can compare them closely. Good luck. [Patrick Martin, [mwdxer@webtv.net](mailto:mwdxer@webtv.net), via HCDX]

#### **Palstar R30 review**

**I just got my Palstar R30 today; overall, I would say it is very good.** In terms of overload performance, it is better than my AOR-3030. I am not too far from a couple of 50KW stations (WBBM 780, and WGN 720). The AOR-3030 has a slight problem with a 2nd order IM product from WBBM, on 1560KHz. I think the problem stems from the protective diodes ahead of the 1st mixer. No problem with the R30. The R30 is more sensitive than the 3030, with much higher gain in the IF system. Audio recovery and weak signal handling is on a par with my AOR-7030. Paul did a very good job, when he designed this receiver. One thing I did notice, when the radio is connected to a good ground, MW and LW performance improves markedly. The wall wart supply that is included with the radio does not have a 3-wire cord, and when I compared this radio to one of my own design, I noticed that mine had much better sensitivity on these bands .... Hmm... After this discovery, I connected the R30 to one of my regulated supplies, with 3-wire cord, so the radio was now grounded to the home electrical system. What a difference! Now the Palstar unit worked just as well as my own design! All I can say is, that it is a good thing that this radio wasn't available 6 years ago, or I would never have taken it upon myself to learn about receiver design, and I never would have gotten the job at Rockwell-Collins (I have since moved back from Cedar Rapids to my home town of Chicago).

Congratulations, Paul, on a SUPER radio design; you've got a true winner. If this radio were selling for several hundred dollars more, it would still be a good deal, but at the 500 dollar price, it is a steal!

Actually, it looks as if the tuning step size is NOT mode dependant. The slow mode is specified as 20Hz to 100Hz per step, depending on how fast you turn the tuning control. The fast mode is specified as 100Hz to 500Hz per step, also depending on how fast you turn the tuning control.

Concerning the synthesizer, a good method was chosen; the synthesizer operates from 360 to 600MHz, and is divided down by 8. Dividing down does two things. First of all, it divides the tuning steps down by the same amount. This allows a higher reference frequency to be used in the synthesizer, placing less stringent requirements on the low-pass filter in the PLL. Second, as the frequency is divided down, the phase noise of the synthesizer is reduced by  $20\text{Log}(n)$ , where  $n$  is the division ratio. The reason that this occurs, is because phase noise is an FM type of component, so as the frequency is divided down, the phase noise is brought "closer in". I may have missed a couple of details on this explanation, so feel free to correct me.

Concerning DDS vs. PLL designs, right now, it seems as PLLs are capable of producing spectrally cleaner signals. DDSs have artifacts on their output signals, and each of these artifacts can cause undesired mixing products to occur. AOR did a good job with their DDS types of synthesizers. I am not sure how they do it, but one approach that would work is a hybrid approach, where the DDS is used as a variable reference oscillator, and the PLL is used as a tracking filter to remove the artifacts.

I have been using the Analog Devices AD9852 DDS in my most recent designs, and I noticed that when I was in the near field of KRMV 1450, in Cedar Rapids, I encountered reciprocal mixing, where the noise floor of the receiver would climb, when I would be within 1MHz of the station's frequency. I didn't encounter this problem with any of my PLL designs. That is the biggest reason that I did not promote the DDS that I am using in my current receivers.

Finally, back to the radio. The construction is very good; chromated aluminum is used for the chassis. The recovered audio is very clean; the unit has a very good "feel" to it. I am not sure about what was said in the Passport review, but I can attest to its performance. Using a Boonton 103D signal generator, I measured the MDS at .07uV, across the tuning range, rolling off to .12uV at around 140KHz. With a 10 foot random wire, I have no problem hearing the Loran signal, at 100KHz. One thing I will say about this receiver; it has plenty of system gain. This high gain might be interpreted by some reviewers as being a "noisy" receiver. I have seen many manufacturers touting the virtues of their "quiet" receivers, while really hiding the fact that there is inadequate gain in the IF system. The real figure of merit to look for is the noise figure. A good figure of merit would be 8 to 12 dB. Up until now, the only receivers that could even come close to my own designs, in terms of sensitivity, were the Rockwell-Collins HF-2050, and the Racal 6790/GM. I would put this receiver in that league, in this area of performance.

There are some folks who would like more "bells and whistles", but in terms of raw performance, I feel that this receiver is in the league of the "best of the best". If I were to summarize its overall performance, it is kind of like that old shoe, that always seems to fit perfectly!

I guess now is the time, when I get to see what I look like, with egg on my face! I must have been tired last night when I made the last post, because I made a mistake on the phase noise mechanism, in PLLs.

NB! I stated that when an RF signal is divided down, that its phase noise is reduced by  $20\log(n)$ , whereby it should have been the reciprocal of that function! Sorry about any confusion that the post might have created!

Actually, I don't miss the sync detection, since I never use the sync function on my other radios anyway. There is just something about hearing that fading signal, that brings back memories from when I was a kid (I am 47 years old). One thing that I did not mention is that the R30 uses a high quality optical encoder for the tuning; I just think about my 7030, with its mechanical encoder!

Concerning the 20Hz tune rate, it seems to be ok for exalted carrier reception. Funny that you mention the Drake R7; I've had a couple of those receivers over the years. Who knows, maybe I will run into another one someday. One improvement that can be made to the R7 involves changing the 1N4148 diodes that are used in the 2nd mixer, and the diodes in the translator mixer to HP1N5711 hot carrier diodes. This change lowers the noise floor of the receiver, thus improving the noise figure. I've done this mod to TR7s, and the MDS improves from .15uV to .07uV. At 28MHz, a four foot piece of wire picks up enough atmospheric noise to override the system noise in the '7 line. [Pete Gianakopoulos via rec.radio.shortwave]

**Palstar R30 field-test and a few comments on a Wednesday night DX session:** I had a good opportunity to test the Palstar R30 last night (14 June) out at the Granite Pier DXpedition site in Rockport, MA. The first foreign (non-US/Canada) signal to show, at 2345 UTC, about a half-hour before local sunset, was Euzkadi Irratia, Vitoria, Spain on 1602 kHz. Strong interference from Boston's WUNR-1600 was phase-nulled to a good degree with the loop/whip cardioid array, but 1600 still produced a substantial blob of QRM consisting of WWRL and residual WUNR. The Palstar with the 2.5 kHz Collins filter had similar performance to the Drake R8A with the 2.3 kHz L-C filter selected. Audio from 1602 was somewhat fragmented by the 1600 slop. When I put the R8A on the 1.8 kHz filter and either tuned in AM mode to the high side or listened on USB with passband tuning optimized, I had superior 1602 audio to what the R30 could produce. I guess that isn't really that surprising.

In terms of maximum loudspeaker volume, the audio from the R30's little speaker began to distort / get "rattly" at a lower level than the audio achievable from the Drake. With headphones, or an external speaker, this becomes a non-issue. In general, the R30 did a creditable job considering it's half the price and size of the receiver to which it was being compared. The R30 is certainly fine for a casual travel radio for trips where luggage weight must be managed carefully. It's nice that it can be connected to high-gain broadband antennas and not get overloaded the way a Sony ICF-2010 (2001D) does. [Mark Connelly, e-mail = [MarkWA1ION@excite.com](mailto:MarkWA1ION@excite.com) via HC DX]