

SHORTWAVE BULLETIN

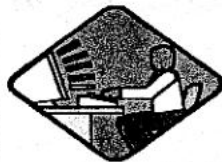
Nummer: 1319, 27 maj 1996. Deadline nästa nr: 7 juni 1996 (fax & email 9 juni 0800).

Helgerna avlöser varandra i snabb följd så här års. Det blir ont om tid till både det ena och det andra, trots att man är ledig! Hur går det ihop? Hur som helst så verkar det som om läsekretsen inte varit så aktiv som den borde.

Notera att redaktionen har bytt E-mail adress. Den gamla fungerar ett tag till, men det är lika bra att använda den nya omedelbarns.

Synpunkterna på AOR AR7030 fortsätter att strömma in. Håll tillgodo.

Ett välkommet och välmatat bidrag speciellt för SWB kommer denna gång från Henrik Klemetz. Här finner vi svaren på bl.a. den nya stationen på 6479,8. Redaktionen tackar och bugar!



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The AR7030, Intermodulation and Radio Netherlands - by John Thorpe.

Since my name has been mentioned in the Radio Netherlands review of the AR7030 on their web site [click here to visit the page on RN] I feel able to comment on their measurement techniques and results. Despite some rather snide remarks accompanying the sensitivity figures, (repeated several times so as to be unavoidable), the RN results and the AOR published spec for the AR7030 (ie my measurements) agree to within normal measurement tolerances except for the intermodulation results. This is not surprising, since intermodulation measurements on a high dynamic range receiver are very difficult to do and great care has to be taken to verify that the receiver is being measured by the test equipment and not the other way round.

It is interesting to note that to date there has been no technical discussion between myself and RN despite my offer to discuss with them any points of my measurement techniques that they were unhappy with. Instead we have an incorrect rebuttal of the technique (saying spuriously good figures are produced by AGC action) and a claim that it is unconventional and therefore wrong. In fact the measurement method I use is outlined in IEC standard 315 (and the equivalent British Standard).

In the field of laboratory testing, exercising a few brain cells is often more productive than spending thousands of dollars. I spent less than UK200 pounds on an intermodulation test rig, but I can prove that the figures I measure come from the radio and not from the set setup. The RN measurement technique has no such guarantee, and the fact that they measure several receivers and get very similar IP3 results when I know them to be very different would seem to indicate that the receivers are measuring the test equipment!

Since the initial launch of the AR7030 there have been more reviews and, of course, more independent tests. (forts. på annan plats)

QSL

Christer Brunström: Radio Esperanza -6090 trevligt QSL-kort. V/s Eleazar H. Jara. Dessförinnan kom kassetter och trycksaker från Frank Nagle i USA. Han producerar "Comnfort and Cheer" som sänds av Radio Esperanza.

Bengt Dalhammar: Radio Esperanza -6090 folder som Bengt inte sett förut

Lars-Eric Svensson: Estación Radial Luz y Sonido -6472 har svarat med brev och diverse. V/s

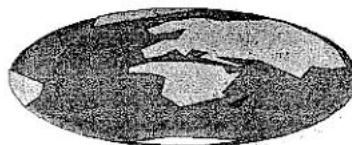
Orlando Bravo Jesús, Comunicador Social (borde finnas på varje station för oss DX-are). Privat adress: Av. 28 de Agosto 307, Paucarbamba Huánuco. Han meddelar följande: Förra v/s Sor María Milagros har flyttat till en studio i Lima. Ny direktör för stationen är Sra. María Dávila. Även en ny frekvens för stationen är 3235 kHz, svårhörda? Inom kort gäller väl, eller "este mes cambiaremos" som Orlando skriver.

Ivar Stormo: R Esperanza -6090 nytryckt QSL-folder v/s Eleazar H. Jara; R Concordia -6141,2 brev, vykort og sticker v/s Pedro Pablo Acosta Fernandez (som faktisk sjekket og kommenterte alle rapportdetaljer). Radio Concordia forteller forresten at de sender parallelt MV/KV, unntatt 14.00-17.00 hvor de sender et separat program p} KV spesielt beregnet p} lyttere i "indre strlk" av landet. Frekvensene som oppgis i brevhodet er FM 95.9 Stereo, AM 1140 kHz og Onda Corta 10 Kw 49 mts. 9580 kHz



Christer Brunström är jätteglad för sitt Radio Esperanza-QSL

LOGGEN - ALL TIMES ARE UTC



3205	26.5	0245	R Ribeirão Preto med tone QRM QSA 2	TBV
3249,5	25.5	0055	(tent) R Luz y Vida med ett hälsningsprogram. Q2	HEJ
3255	24.5	0130	OID PP mycket svag i tal men en 2+ vid musik. Enl WRTH finns 3 brassar, Crato?	LES
3255	25.5	0230	OID brasse med s/off kl 0230 QSA 2/3	TBV
3365	26.5	0245	R Cultura Araraquara QSA 3	TBV
4505	26.5	0330	R Horizonte QSA 2 lokal musikkfestival	TBV
4759	26.5	0110	R Tingo Maria idar mellan varje låt. Q2	HEJ
4759,3	26.5	0110	R Tingo Maria QSA 2	TBV
4800	25.5	0159	R Buenas Nuevas gick fram med ett ID innan Lesotho(?) startade. Sedan var det kört. 2.	OVE
4910	22.5	0345	OID verkade ej vara LA. Kanske afrikan, Zambia? eftersom Chad var hörd senare, 0445 med hygglig styrka på 4904,5. 1-2	BD
4930	25.5	0225	R Internacional oerhört bra med prat-px. 4!	OVE
4991,4	25.5	2310	R Ancash med massor av rekar och ett par ID. Q3	HEJ
5005,6	25.5	2335	R Jaen med andinsk musik i ett moln av CW. Q2	HEJ
5012,26	26.5	0241	Radio Pueblo ID:ade denna station ständigt under dom två timmar jag lyssnade. Ett något osäkert UTC -4 uppfattades. 0050 UTC låg den på 5012,03. DJ verkade heta Leonardo Rosario, som ledde ett hälsnings-px. Är säker på stationsnamnet, men frågan är om det är ett px-namn, jingel eller annan skit. Första Lysckillsloggningen på 8 månader! 2 (Kolla Numero Uno för ytterligare om denna station/AHK)	BM
5012,4	26.5	0242	UID med dårlig modulasjon, kalte seg "Emisoras ... (Caracal?)" eller liknande 2	IS
5012,5	26.5	0240	OID LA med "música tropicana" QSA 2/3 ganske sterk, men ID vid s/off uleselig	TBV
5020,7	25.5	2245	L V du Sahel med härlig afrofranska och dito musik. Q4	HEJ
5645,9	26.5	0040	L V de San Antonio med musica romantica. Q3	HEJ
6025	25.5	2250	R Nigeria Enugu nonstop soul och rapmusik. Q3	HEJ
6235,4	25.5	0030	R Quisqueya kaller seg nå "Radio Quisqueya Internacional" 3	IS
6479	20.5	0005	Peru med ID som nog kan tydas som Radio Los Andes i Huarmaca (orten låter dock som Huarmamaca). Annars huaynos och comunicados. 2	CB
6479,8	26.5	0000	Radio Los Andes verkar vara namnet på den här stationen. Varifrån de sänder blir jag inte klok på, möjligen Huarmaca. Får se om bandmanglingen ger något. Q3-4	HEJ
6480	18.5	0400	Radio Los Andes, Distrito Guarnaca, Provincia de Huancabamba, Dept. de Piura, Peru. Programmet kom på lufta omlag 0210 med s/off 0600. Med förbehold om Guarnaca så skulle resten vara 100%. Brukte også Radio Noventas	TBV
7085	23.5	2000	VOBME med förlängt program, hördes efter 2300. Även // 4999,78 med 2-3. Också hörd den 24.5, nationaldagsfirande? 3-4	BD
9400	20.5	0000	WGTC meddelar följande: "Radio Station WGTC QSL:s 100%" vilket låter bra. Man kräver dock svarsporto. 3	CB
9720,5	20.5	2235	R Victoria, religiöst 2	IS
9725	25.5	2140	R CI Paranaense med px-info. Stängde plötsligt 21.50. Q4	HEJ

Rättelser & förtydliganden från tidigare bullar (herregud vilka tomtrar vi har här på redaktionen!):

4552			R Dif Trópico - ERBOL px = px producerat av Escuelas Radiofoncas de Bolivia	TBV
4779,8	18.5	0215	R Buenas Nuevas QSA 2-3 rlg px (ej 47798 som felaktigt angivits av red)	TBV
4950	10.5	2145	OID i 1317 hördes 2145, tidigare uppgift fel	BD
6479,76	13.5	0445	OID LA tidigare uppgift fel pga missförstånd per tel. Vid slölyssnande 0445 uppfattades Radio Los Andes, ovisst om namn eller slogan. Tiden stämmer med TBV, ej hörd sedan dess vid sporadiska försök. Ej uppgift i listor. 2-3	BD
6747	10.5	0130	Radio San Ignacio tipsad av OVE (ej av IS som felaktigt angivits av red)	OVE

INFO DESK (DXPL/HCJB via CB)

Radio América, San Pablo, Cajamarca 5139,8

Radio Estación Uno, Pucará, Jaén 5955,1

Radio Gotas del Oro, Chiclayo 4524v

Radio La Voz del Marañón, Cajabamba 5604,1

Radio Fortaleza 4723,2-4751,4. Adress: Carrera 10 No. 14-95, Sogamoso, Boyacá, Colombia

DATELINE BOGOTA
Specialrapport för SWB
12 maj 1996
© Henrik Klemetz
A. A. 95473, Bogotá
Colombia

3285.0 La V del Río Tarqui, Ecuador, förvånade mig med att "omlott-sända" med "Grupo Radial Delgado" i New York, vilket visade sig vara stationen på 1380 kHz, 10 maj på morgonen lokaltid. Vad sände man? Jo, telefonhälsningar med anledning av torsdag (12 maj). Bl a var det en ung man vid namn Bayardo Maldonado som ringde till NY-stationen för att få sin hälsning reläad (via satellit?) till sin mamma i Cuenca, faktiskt samma dam som satt bakom miken på La V del Río Tarqui. Jag har besökt stationen och skulle aldrig ha trott den kapabel till såna här program.

H4291 R Majagual, Colombia, 3x1430.3, då och då på kvällstid.

4653v R Soledad, Parcoy, Peru, har legat här sedan mitten av april. Sändaren driver inte på långt när så mycket som tidigare.

5139.8 Oid peruan 28 april 0051-0159 då den dränktes av störsändare, typ mellanöstern. Anrop lät som R Amauta och musiken lät nordlig (=Cajamarca?). Ej hörd senare.

5604.1 R La V del Marañón, Cajabamba, Peru, s/off 2329 3 maj, 0017 5 maj. Testar och angav som adress Jr. (=Jirón) Bolognesi 1300 (?), Barrio La Alameda, Sector Los Delfines (?) i ovannämnda stad som ligger i Cajamarca. Har hörts senare också, men går inte varje kväll. Har hyfsat ljud.

5766.8 R Estelar, Jr. Callao 768, Moyobamba, Peru, annonserar 1,5 kW. Har varit tyst i flera dagar nu, men återkom lagom till torsdag 12 maj med en lågeffektad reservsändare. Anger också Jr. Trujillo 289 som adress. På den första adressen ligger Centro Laboratorios Láser som tillverkar AM och FM-sändare från 20 W till 2 kW. Samma firma har också en adress i Soritor (ca 15 km från Mbba), Av. Grau 399, och det var därifrån som Estación Soritor sände. Den 22 och 23 april läste man upp mitt brev i nyhetsprogrammet *Dialogando* kl 1200 UTC. Den 2 maj nämndes att man fått "trevliga brev" från utlandet.

5927.1 (ex 4986.4v) R difusoras Minería, Oruro, Bolivia, 24 april 1048 s/on. Eftersom jag varit i telefonkontakt med denna station redan i Sverige ringde jag nu på nytt. Stor glädje på stationen och "specialprogram" med musik och hälsningar dagen därpå. Kvällssändningarna ligger nere tills vidare.

5955.1 R Estación Uno, Pucará, Peru, hördes f f g 12 maj till s/off 0257. Av ett tidigare nr av SWB ser jag att BM stötte på den i febr redan (utan att närmare veta vad det var han hörde). Detta Pucará ligger i Jaén, Cajamarca, nära gränsen mot Ecuador. Bra ljud och QSA, men torde vara hopplös i Europa för det lät som VOA e. d. använder frekvensen för program på ryska. Angav "59-60 kcs" som frekvens, och adressen lät som "Barrios Altos" uti ovannämnda håla.

5980.1 R LTC/RCC (uttytt: R Leoncio Torres Ccalla resp. R Comercial Callao), Jr. Unión 242, Juliaca, Peru, testar en 1 kW-sändare här med drygt halva effekten 1100-1300, 0000-0200, lö/sö dock bara 1100-1900 enligt vad dirren Mario Leónidas Torres berättade per tel. och fax som svar på en faxrapport. Tycks numera sända med full effekt. Bör gå att ta vid midnatt UTC i Sverige. (JEÖ och JHU i Finland har redan klarat av det).

6015.2 R Mira, Colombia, tycks vara aktiv bara på morgonen lokal tid.

6250.1 Oid peruan här i mitten av april. Stänger vanligtvis 0100. Slogan "La V del Pueblo" är säkerställd, likaså att stationen ligger i Apurímac, möjligen Andahuaylas eller i närheten av denna stad. Stationsnamnet däremot oklart, men R Progreso har nämnts vid ett par tillfällen. Mycket trängd frekvens här; bl a finns ett mobiltelefonnät i Villaviciencia, Colombia, här.

6339.4 R San Miguel Arcángel, Peru, 24 april 2354. Tidigare hörd på 5720v.

6479.7 R Los Andes är en ny peruan i Huarmaca, nära gränsen mot Ecuador. Hördes f f g med testprogram 9 maj 0200. Angav "6480 kHz" som frekvens, men bad inte om rapporter och nämnde heller ingen adress. Hälsade dock till teknikern som satt i staden Trujillo och lyssnade. Hallåmannen felannonserade flera gånger, t ex "Radio Al... Los Andes" och "Tack för att ni föredrar R Altura, nej, R Los Andes heter det ju".

6747.3 R San Ignacio, Jr. Mercado 218, San Ignacio (Cajamarca), stänger ca 0300. I slutanropet anges ett par namn som hågade rapportörer kan chanssa på: "director general y gerente ejecutivo: Pedro Alfonso Morales y Sáenz" och "asesor legal y jurídico: Dr. Daniel Carrillo Mendoza".

7143 R Altura, Huarmaca, Peru, med gatadress "Antonio Raymondi 302" (eller 312), är regelbunden här. Stänger 2315-0015 för påfyllning av generatorbränsle!

NUMERO UNO Shortwave Weekly Since 1969

No. 1373, May 19, 1966 (Edited highlights)

[BOLIVIA] 6557, R. TV Colonia, hrd quite regularly, but apparently not on daily; no clear trend in sked, as they have been noted s/off at 2357 one day, and before 2300 the next. No ID or closedown sequence at s/off; somone simply throws the switch. Signal is fair, with some RTTY QRM. Noted with local nx and mensajes. (Perolo-BRZ) 6557.02, R. Television Colonia-? 0058 on May 14, LA mx when I tuned in. As I was busy reviewing tapes, I didn't stick with it, thinking I could come back to it in a few minutes. When I rechecked at 0104, it was gone. Arggg!! Obviously it signed off. I think this is the first time I've hrd anything here. Very weak. (Valko-PA)

[PERU] 6818.07, R. Universo? Def. OA here at 2321 on May 19, with mensajes by man, then long silence. When audio came back up at about 2335, there was excited commentary by a man. Futbol match? No ID. (Sharp-FL)

No. 1374, May 26, 1966 (Edited highlights)

[DOM.REP.] 5012.1, R. Pueblo, May 23 at 2330-0300*, M&W with religious talk and mx, ID as "7, 40 de la noche en Republica Dominicana, Radio Pueblo." There is a R. Pueblo listed on 1510 MW. (Rausch-NJ)
5012.34-.24, Radiofonicas Populares? Hrd 2358-0110+ on May 23, soft pop-like mx prgm to 0000, then long prgm of tlk by two men annrcs w/many live remote rpts. Appeared to be a cultural prgm w/ments of el mundo, nacional y internacional, pueblo revolucionario, el pais, la problema. Also many ments. of la hora (no official TCs, though). Possible ments. of Christiano and palabra. Only one brief canned anmnt by man over piano mx at arnd 0100. Went off the air for two min. once, only to return 100 hz lower,
5012.24. Gave no clues as to identity or QTH. Have hrd R. Eco on 5012.1 briefly in 1989, and Radiofonicas Populares up as high as 5011.6. R. Horizonte has also been around this area. Pretty sure it's been on nightly, but the QRN level has been quite high the last few days. (Valko-PA) I hrd something here as well in the morning, circa 1000, May 24, drifting arnd this fqy, with "LV de Esperanza" anmts. Also hrd closing with an NA at 0240 on May 26; not hrd in AM slot May 26. (JB)

[URUGUAY] 9650v, Emisora Ciudad de Montevideo, first hrd May 16 & 17 with brief tests during local afternoon. Thereafter, nothing until May 20, when hrd at 1640*. Daily since May 21, coming on the air anytime between 1500 and 1600. Evening rcpn poor, but hrd until 2300 fade-out on one occasion. Varies 9650.0-.2. (Jones-PRGY)

[PERU] 5766.93, R. Estelar, May 18 at 0006-0018, great mx, "... esta emisora ... radio TV de Peru ... noches andina en los paisas andinas," beautiful high Andean flutes, vocals, "esta es R. Estelar," then into several love songs, "amor mi querida ..." Tnx Klemetz for his log of this one. Still am hearing Estacion Soritor IDs from time to time. I think they know about the hobby and are out to mess with our minds. (Wilkner-FL, MosqCoast)

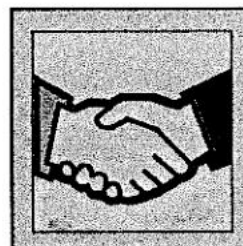
forts från första sidan (The AR7030, Intermodulation and Radio Netherlands - by John Thorpe.)

Chris Lorek G4HCL, reviewing in "Ham Radio Today", quotes his measured figures that are within 1dB of the AOR figures (add 8dB to Chris's figures to get the quoted IFDR to account for the difference between 12dB SINAD and 3dB S+N/N). Another independent reviewer in the USA has produced figures within a few dBs of the published spec.

Many of us in the 'radio performance assessment' business have had problems measuring receivers that are getting better and better. I have had many discussions with engineers and reviewers and from these talks measurement techniques and pitfalls to avoid become known. Most of these problems are sorted out long before figures are published, but unfortunately RN chose to make their AR7030 results public without any prior communication with AOR or myself, despite a huge variance (3 orders of magnitude) in measured performance. Let us hope that they will be equally quick to apologise when proved wrong.

For those interested a technical discussion of IP3 measurement is available on the AOR web site.

John Thorpe, designer of the AR7030. e-mail: jt@aor.co.uk



More on the AOR AR7030
COMMUNICATIONS RECEIVER
and notes on various reviews

by Gordon Bennett,
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LARRY MAGNE

Since I intend to quote from his review, let me first of all introduce him to those who are relative newcomers to the radio hobby scene. I first became aware of him when JENS FROST, then owner and editor of the World Radio & TV Handbook, invited Larry to update a receiver review in 1977. This duly appeared in the 1978 WRTH. From then on, until 1987, Larry had a regular "Equipment Test Report" section in every issue. Those reports were so good that they were the main reason why I bought the WRTH every year, in fact I regarded them as brilliant. However, in the 1987 edition there was a sudden change in the title of the section, but no credit was given to any new author or authors, as far as I could see - it certainly wasn't Larry! Then in the following year, 1988, credit was given to JONATHAN MARKS and WILLEM BOS for that year's Receiver Section, so most of us assumed that Marks and Bos had taken over abruptly in the 1987 edition.

Meanwhile, and ever since then, Larry had continued and expanded his receiver reviews, publishing them in his own annual book "PASSPORT TO WORLD BAND RADIO". No doubt about it, Larry is, and always has been, regarded as the king of receiver reviewers, with his primary panel, his secondary panel and, of course, the famous Robert Sherwood Laboratories in Denver, Colorado, to deal with the receiver test measurements.

SOME COMMENTS FROM LARRY MAGNE IN HIS AR7030 REVIEW, via RADIO JAPAN on March 7th, 1996

(1) "It's an incredible receiver - overall, it's as good as anything we've laid our hands on since we started testing shortwave receivers in 1977." Remember that Larry has tested all the top semi-professional and some professional receivers since that date!

(2) "The 7030 comes with synchronous selectable sideband, and when that's in use, distortion is minimal with audio quality that's first rate". "...This synchronous detector is nothing short of first rate". (More on this point, later).

(3) "Most receivers have one or two weak points that show up during the rigour of laboratory testing. The 7030 appears to have none - it's impressive across the board".

(4) "For DXing, an important characteristic is quietness. This receiver is stone quiet!"

(5) Referring to prices worldwide, in particular the £799 price - inclusive - in the UK, Larry said, "given that this is arguably the best receiver on the market, regardless of price, that's actually a very attractive price".

In last month's issue of the club magazine I gave some clear and succinct answers as to my own opinion on the 7030

and I repeated them on the a my AWR programme on March 3rd. It was nice to hear Larry, the maestro, agree with me when he broadcast a few days later.

I was interested to read similar opinions from DON PHILIPS, writing a review for *Shortwave News*, the DSWCI bulletin. As far as I know, DON has only been in mainstream DXing for some 4 years or so, but his logs are of first class calibre and he has a good receiver for comparison purposes, the DRAKE R8. Another very, very favourable review appeared in the March issue of *SHORT WAVE MAGAZINE*, no less than 6 pages! This was by JOHN WILSON, involved in radio all of his working life, and now retired to Devon.

We are all agreed that the operating system comes as an initial surprise, unless you have been forewarned. Let me give my own reaction. My main receiver for some 14 years has been an R820, with digital read-out to the nearest 100 Hz. It's basically an amateur band receiver with a few SW bands available. The spec. on the amateur side is very good indeed, with all the trimmings of notch, IF shift, switchable selectivity and variable selectivity etc., so I always use it in SSB mode. However this means that I have to use a DATONG UC/1 general coverage converter in front of it, as well as a DATONG filter. The upshot of all this is that I have some 43, repeat 43, controls to play with!

The 7030 operating procedure involves a handful of push-buttons and three rotary controls, and it is DISPLAY-BASED. Hence I found it a real culture-shock, especially as I was foolish enough to try to start off without studying the (temporary) manual. However, in two or three days I was a real convert to the system and I had memorised the various displays, so I could switch them with ease - in fact the handling became a pleasure. So much so that when I reverted to the R820 for DX comparison purposes I found the latter a real "bind" to operate! If I'd had the benefit of a few minutes handling demonstration of the 7030 in a showroom beforehand, there would have been no problem at all. (And I'm long past the age at which changes are supposed to begin to be difficult or impossible to accept!). Anyone want to buy an R820 in first class condition? (hi!)

If you had read or heard my summary of the virtues of the 7030 you might have been as astonished as I was to hear some of the comments read out by JONATHAN MARKS and DIANA JANSSEN in the "Media Network" review, broadcast on March 7th. The review team comprised Jonathan Marks, Diana Janssen and Willem Bos. The latter apparently deals with the measurement side of reviews, and he is referred to as a technical author and consultant.

From Jonathan we have "The overall design of the synchronous detection mode is a weak point the audio distortion rose (using sync. det.) instead of dropping as you would expect." This audio distortion rise was determined by measurement, there was no comment that it was noted *anrally*. But from Don Philips we have, re sync.AM, - "Well, it is one of the best I have come across... The end result seems good quality."

Now turn back to read Larry Magne's verdict on the sync.AM! From John Wilson we have "...if you can't get sensible audio out of even a rotten signal with the 7030 then nothing will do it". He was pointing out that on sync.AM you have full passband tuning AND availability of all bandwidths as well. Where else do you get this? And what did GB think of the sync.AM then? I didn't mention it in my summary which was solely answering the repetitive questions I was getting by letter and by phone, and no-one had even mentioned sync.AM! Well, I tried it out of course, thought it was ingenious, liked the quality and the flexibility. However, AM sync is not my

scene, because I'm a dedicated DXer and am on USB or LSB. Sideband DXing (or ECSS) is simply superb on the 7030 - the best ever handled by me, from 1934 to date.

Back now to RADIO NETHERLANDS, where we had the lady following up by reading - "Unlike on some portables, you can't switch between upper and lower sidebands in the sync. mode". You're not given a switch because you use the *passband tuning* in the sync.AM mode to give you USB sync., LSB sync., or whatever you fancy in between! How many receivers give you that facility? Unfortunately the phrasing used by Diana Janssen gave the implicit impression that you *can't* separate the sidebands at all!

I had several callers on the evening of the Netherlands review, all asking if it was true that the sidebands could *not* be selected on AM sync.!

Now let's take the issue of sensitivity: From Jonathan we had "... However if you are going to compare receiver specifications you must compare like with like. For instance, the sensitivity quoted by AOR is 0.5 microvolts in AM, but the manual doesn't say that this is with the preamplifier switched on."

Surely, the *only* sensitivity that makes any sense is the *maximum* available. You can always *back off* sensitivity if necessary, but you can't *increase* sensitivity without circuit mods. or external aids of some sort or another.

As for comparing like with like, does this mean that you should not compare the 7030 with any receiver which *hasn't* got the benefit of a preamp.? It's rather like saying that with an older type of receiver with a rotary RF gain control, you mustn't turn it to maximum gain for DXing because it's not fair to less sensitive receivers!

I did most of my review-DXing with the preamp. OFF, but it was marvellous to be able to flick in the preamp. when (rarely) necessary. And, incidentally, I found no intermodulation problems when using the preamp, even though its introduction inevitably reduces the intermodulation-free dynamic range somewhat. (AOR quote this reduction).

The R. Netherlands team also advises you to check the 7030 against other receivers costing much the same in the States (and *several* times the price of the 7030 in the UK!).

They do *not* point out that some of these receivers throw out "hash" which will be picked up by an adjacent indoor loop! Hence, if you occasionally, or mainly, DX on Medium Wave you've got a problem. There's no such problem with the 7030 - that was one of the first things I checked out!

The Netherlands review also criticises the third order intercept figure, claimed by AOR to be of the order of 30 dBm, which is in the "superb" class. (If you don't understand this term, take it as read!). They state that the above figure can only be obtained by switching in maximum attenuation, and their figure using *zero* attenuation is only 0 dBm or +2 dBm on two different sample 7030s. Although I'm fully familiar with the theory, I can't comment on either set of figures because I lack the +£100,000 worth of test-gear required! What I *can* say is that if the Netherlands figures are correct then I would have expected their team to notice some intermodulation problems during "... some 80 hours of tuning this set..." Yet none was referred to. I personally spent much more time at the controls of my sample, and I noticed neither second nor third order effects interfering with my DXing, and that is the *real* test of a receiver's performance.

If you feel you *must* have figures then read this extract from Chris Lorek's review in "Ham Radio Today" -

"Regarding the RF performance of the set (the 7030) my measured results say it all. If you're not technically minded, just read these as 'superb'..." (If you compare Chris' figures with

those provided by AOR, they look somewhat different. That's because Chris uses a different system of measurement. If you know *his* system then you can easily cross-calculate, and you come up with answers similar to the AOR data.

Larry Magne, quoted earlier in the article, certainly likes the 7030, although he is not over-fond of the operating system (remember, I became a convert!) and is not happy about the "gap" between the SSB filter and the next widest one. Here are a couple of paragraphs from his review in the "Monitoring Times" (a publication that all should read, in my opinion) -

"Sensitivity is good with the preamp. off and excellent with it on. Overall distortion (i.e. *lack of*) is generally good to excellent in the AM mode, although the 7030 earns a "fair" rating at 100 Hz... However, it becomes *excellent-to-superb* when the synchronous detector is used, and in the SSB mode, distortion is nearly nil.

Viewed as a whole, the performance measurements of the 7030 suggest electrical performance that eclipses most of the radios currently regarded as top-gun receivers. And the ear confirms what the lab suggests; the 7030 is exceptionally quiet and pleasant to listen to for extended periods. The synchronous detector works exceptionally well, and seems solid as a rock. For the serious DXer and fastidious SWL alike, this receiver is simply incredible."

And I thought I gave the 7030 a good write-up in my earlier summary!!

I *can* offer one comment on the possibilities of improving a "standard" 7030, excellent though it is, even to begin with. My sample was later fitted with a nominal 2.5 Collins mechanical filter *in addition* to the standard three AM/DX filters. (The nominal 10 kHz filter is primarily for NBFM). This Collins, which the receiver calibrated as 2.3 kHz, is an absolute beauty. Under really tough DX conditions of adjacent interference I still had to drop down to the 2.1 kHz filter (nominal 2.2), but apart from that, I stayed with the Collins for "normal" tropical band DXing. Using ECSS (sideband technique) and this Collins I got a far richer (treble enhanced) audio than I would have got using a really good 4 kHz filter in AM mode, of course, as well as far, far better selectivity.

With both the standard 2.2 nom. and the supplied extra 2.5 nom. I got *no* "sideband breakthrough" whatever with the strongest SSB signal I could find on the bands. That is, correctly tuned on say a USB signal there was *nothing* to be heard when flicked to LSB, or vice versa. One reason for that, of course, is the exact, *automatic* filter centre-ing designed into the 7030 by JOHN THORPE. (The lad is quite brilliant!). No receiver is perfect, and the spacing between the standard 2.1 filter and the next one up, reading 5.8, is, of course, too large for those who DX in AM mode. Maybe not perfect, but as I've said before, I've not come across one under £2,000 which can outperform it, nor, I suspect, am I likely to.

A shame I had to return it. Life is so unfair, and moreover I now hate the operating system of my R820!!

.....(c).GB, Bramhall, April 96 (typing and w.p. by dls)

Inx to Play-DX

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