

Well, here we are again with our fourth bulletin, back to a normal issue now. For the time being, at least, it won't be possible to have a front page as mentioned in 003, nevertheless we hope that the slight change in the format will improve it. In future the bulletin will be in "sections" as follows. Page 1: Short-wave, page 2: mediumwave, VHF, page 3: "Spotlight" and technical articles, page 4: articles of general interest, members comments, questions and suggestions, page 5: publications, editorial, new members. The QSL and propagation sections will be on pages 1 and 2 and there shall be 6 pages whenever necessary.

SHORTWAVE NEWS SW DX SW DX SW DX SW DX SW DX SW DX SW DX SW DX SW DX

- BANGLADESH - New address for Radio Bangladesh is as follows: Research Wing, Radio Bangladesh, Directorate General, 23/7 Shamoli, B-Block, Dacca 5. The foreign see to Europe is as follows: 17690 kHz 1230-1300 in English, 1645-1915 on 9465 & 7520 kHz in Bengali & English, slow-speed news is broadcast at 1900. All xmitters 100 kW.
- ICELAND - Voice of Iceland has been heard on 12175 kHz at 2030 (DSWCI)
- ISRAEL - Daylight saving time has officially ended in Israel and the English language broadcasts from Kol Israel now take place at 0500, 1130 and 2000 hours GMT. (DSWCI/IBA)
- LEBANON - Radio Lebanon broadcasts in English to Europe and Africa in French, English and Arabic from 1830-2030 on 11795 kHz and to N. America from 0130-0330 on 9675 kHz.
- MALAGASY REPUBLIC - English is heard daily from Radio Madagascar from 1500-1600 on 17730 kHz 16mb (SCDX, WRTH)
- MONGOLIA - Radio Ulan Bator broadcasts in English on weekdays from 1220-1250 on 17785, 17820 kHz and 2200-2230 on 11810, 11860 kHz to SE Asia and Far East. (DSWCI)
- PARAGUAY - An international shortwave service is planned to broadcast in English to Europe from 1976 according to a report in SCDX.
- TOGO - Radiodiffusion do Togo broadcasts an English news bulletin for 10 minutes at 1930 GMT on 5047 kHz in the 60 mb. (Fritz Buttner, SCDX)
- YEMEN ARAB REPUBLIC - Radio Sanaa can be heard on 6065 kHz at 1730 with Arabic in // with 5805 kHz. News in Arabic is heard on 9585 at 0230 (SCDX, Arthur Cuschen)

This months' tips come from CS - Claus Scheiderer, Memmelsdorf, FRG and DK - David Kenny, Twickenham, UK.

STATION	GMT	kHz	MB	LANGUAGE	SINPO	ADDITIONAL DETAILS	
R. Atlantida, Peru	0400	4785	60	Spanish	33333	Folk mx, id's	CS
R. Colasal, Columbia	0555	4945	60	Spanish	34444	music, id's	CS
Radio Sanaa	1900	5805	52	Arabic	33222	Arabic talk	CS
DW/Malta, test	2140	5955	49	German	54444	excellant reception	CS
R. Barquistimento Ecuador	2231	9510	31	Spanish	33433	pop music (Chile?? ed)	CS
Voice of Chile	2230	9510	31	Spanish	33433	chimes and S. Id by YL	DK
RAE Buenos.	2105	11710	25	German	34433	news and comment	CS
R. Nederland/M.	1700	11935	25	Dutch	45444	sign-on, news	CS
A. Tupi, Brazil	2140	15155	19	Portuguese	54423	word programme, music	CS
Ghana BC	1830	15285	19	English	34444	news	CS

Thanks for the fine log Claus! sorry, but we can't include utility stations as we are not supposed to listen to them in the UK.

QSL's RECEIVED: DK - David Kenny, DB- David Balhatchet, Twickenham, UK.

- R. Bangladesh (15520) card 2m DK OTS Colombo (9937) letter 1m DK
- R. Kiev, USSR (7390) card, sched. 6m DK R. Kiev USSR (7390) card etc 4m DB
- R. Habana Cuba (15155) card, lett, 3m DB WWV, US (20000) foulder tp cd. 1m DK.
- GB2SM, Science museum, London, (3700) card 6 1/2 m ! DK

Propagation conditions in Europe are fairly good at the moment. Try 60 mb after local sun-set, the 13 mb is good in early afternoon.

Please do contribute to this page with tips, news, QSL info etc, I look forward to hearing from you, 73's DK.

MEDIUMWAVE DX MW DX MW DX MW DX MW DX MW DX MW DX MW DX

GREAT BRITAIN - R.1 now relayed on 1484 kHz in the Torbay area. IBA stations due on air early next year are: Sound Broadcasting (Plymouth) 1169 kHz (261m), 0.5 kW. Teesside and Radio Trent 988 kHz (301m) 0.3kW
SOUTH AFRICA - All medium wave transmitters in South Africa are due to cease broadcasting by the end of 1974 as there is adequate VHF and SW coverage.

SRI LANKA - TWR intend to build 2 x 250 kW MW transmitters near Trincomalee to broadcast to India and South Asia. (UADX)

TIPS: LF-Lennart Frostelid, Atorp, Sweden. DK-David Kenny, DB-David Balhatchet, Twickenham, UK.

STATION	GMT	M.	kHz	SIO	LANGUAGE		POWER (kW)
R. Riga, USSR	2130	222	1350	444	Swedish	LF	-
Manx R. IOM, GB	1000	232	1295	152	English	DK	1
Swansea Sound, GB	2100	257	1169	322	English	DB	0.5
Metro R. GB	0845	261	1151	343	English	DK	1
R. Zagrab, Yugosl.	2000	265	1133	444	SerboCroat	LF	3.5
BBC Radio Leeds	1005	271	1106	242	English	DK	1
BBC R. Medway GB	1010	290	1034	344	English	DK	0.5
BBC R. Solent GB	1015	301	998	454	English	DK	1
AFN Munich, FRG	1900	271	1106	433	English	LF	50

QSL's received: (wavelength in brackets)

BBC Radio Bristol, Lett. (194) 7w DK Swansea Sound (257) lett, 1½w DK
Radio Hallam GB (194) letter, 2w DK RTL, Luxembourg, (208) c. 2½w DK
NRK, Stavanger (228) card 1w DK BBC R. Leeds (271) card 2½w DK
AFN Berlin (321) card, shd 2w DK Manx Radio GB (232) card 2w DB

Propagation: fair.

That's about all for this month, your comments, suggestions and, of course contributions would be appreciated.

VHF NEWS VHF NEWS VHF NEWS VHF NEWS VHF NEWS VHF NEWS VHF NEWS

I will be using this space up for the next few months for a series of introductory talks on VHF which I have written and hope will give you enough background information to start this really rewarding section of our hobby.

VHF - Part one

I am a real VHF enthusiast and do all my serious listening on this band. The advantages of a good VHF tuner make it really worth the extra cost and I hope to enlighten you on some of these in this article. I am lucky enough to own a Blaupunkt "Riviera" 10 valve VHF receiver which has a sensitivity of 1.2 mV - that beats any transistorised tuner on the market today! I have a 4 element antenna in the loft with a co-ax lead-in and a matching transformer, as the receiver is German and has a 240 ohm impedance. Well, with this array I have almost constant reception of the three Lille transmitters on 94.7, 98 and 88.7 MHz, the Belgian stations Aalter on 98.6 and Ougree on 90.5 MHz, The Dutch stations at Goes on 99.8, Ijsselstein 92.6 and Markelo 96.2 MHz as well as the BBC local stations at Oxford on 95.2, Medway 96.7, Bristol 95.6 and Southampton on 96.2 (+ the local stations of course!). Reception from all the above is quite regular, that should give you some idea of just what can be heard in the Twickenham area of England on an average reception day. On occasion there are real DX possibilities on the band, these are due to freak atmospheric conditions such as sporadic-E, tropospherics and even short periods of meteor scatter. There have been two such memorable conditions over the past year. One Sunday last June I heard over 25 local Yugoslav stations as well as a few Italians and even an Arabic one, with very good reception. Some weeks before this a tropospheric condition brought in a number of continental stations such as AFN Frankfurt, NDR etc in very good stereo! this particular condition lasted over two days. So you see, it is really worth having a go!
(Continued next month)

TDC MAILBOX

D.O. French, of 136 Tollington Park, Stroud Green, London N4 3AD has very kindly written an article on missionary Radio which is published below.

The parting command to the Disciples was "All power is given to me in heaven and earth. Go ye therefore and teach all nations... to observe all things I have commanded..." The modern political situation hinders access to an increasing number of missionaries and the population explosion makes the job harder and harder. The only practical way of obeying the command is radio. The advent of tape recording and availability of cheap transistorised sets have all come along at the right time,

The original station was of course HCJB, Quito, Ecuador. Eventually other stations followed such as ELWA, Liberia, FEBC in the Far East, ETLF in Monr. Ethiopia, TWR Monte Carlo followed by Bonaire, Cyprus, Swaziland and soon Guam and Sri Lanka. Latest, in the USA is WYFR which has twice the power of WINB. The only British sponsored station is FEBA, in the Seychelles, who are at the moment without any official permission to use their new aerials built in the sea! and can only use the 100 kW xmitter at low power on the beach aerials. The reason is possible QRM to aircraft.

Some of the call-letters are mæmonics for slogans - HCJB is Herelding Christ Jesus's Blessings, ELWA is Eternal Love Warming Africa, and TWR is Telling the World of Redemption. Some commercial stations carry religious programmes, but as the managers don't vet the programmes like the operators of missionary stations, care has been taken before accepting everything over the former.

Wavelengths used vary according to the part of the world and according to the legislation in force. The spread of stations all over the world is a recognition of the fact that consistent day by day reception of long-distance stations is not often possible, and parallels arise of relay stations in the secular field. At the moment what is badly needed is some central organisation to ensure that programmes in the same languages don't clash. In these days of computers I expect that will come.

Anyone wanting to know more of the general background should obtain a copy of "Gospel Radio" by Barry Siedell from "Back to the Bible Broadcasts" at Reading. An earlier book listing all the stations with technical details is out of print, and I gather will not be reprinted.

TWR Swaziland is now broadcasting on 6070 kHz 0330 - 0700, on weekdays, (to 0845 on Sundays), 1615-1645 daily and on 3365 kHz from 1655-2000. Two xmitters will be on the air by the time this reaches you. Possible QRG's are 4790, 6175 and 7230 kHz with 6070 kHz. (times are GMT. courtesy of "The DX Special" of TWR)

Once again, thanks for a very interesting contribution Mr. French.

A few DX questions have dropped into the postbox over the last month which the committee have been unable to answer, so if any members have any information on the following, please write.

- a) On 30/11, Andrew Nock, of Witham, Essex, heard a station on about 5750 kHz from 0835-0915 identifying as "Edinburgh Rescue" (?) giving weather reports for "Alpine 21, 23, 24 and 42". Any information?
- b) Peter Kuklinski of Doylestown, USA heard a SFT station from 2200-2240 on about 9900 kHz. Woman ann. says "572, 735," for about 8 mins, then morse, silence, counting followed by strange noises. Then the woman repeats the schedule and gives an address which was under heavy QRM. Any information?

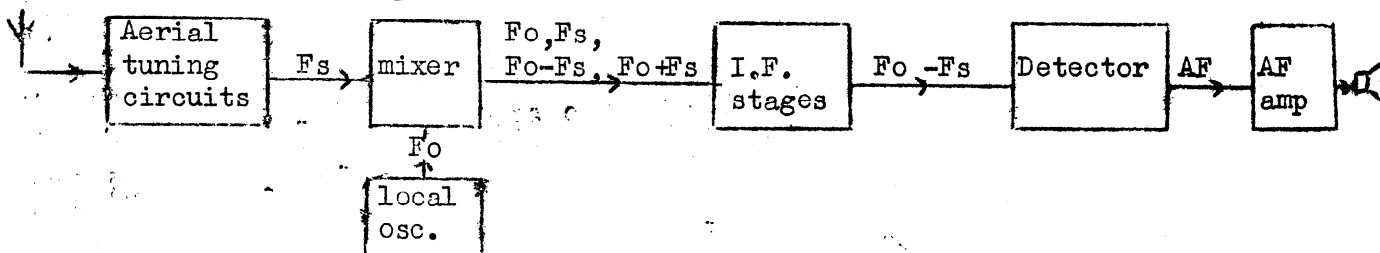
If you have any DX questions or items I would be pleased to print them, just drop a line to me at the usual address.

SUPERHETS By Mark Lee, TDC-006-GB.

It has been found that increased selectivity can be achieved by incorporating more tuned circuits in a receiver. One way in which this can be done is to have a multiple-gang variable capacitor in the set. This however, is not a good answer since 6-gang variable capacitors are expensive and clumsy.

The answer that has been adopted is to have a number of the tuned circuits set to the same frequency permanently. This is made possible by mixing a signal from an oscillator with the incoming signal. The oscillator is varied in frequency so that it is always a set distance away from the signal frequency. The signal from the oscillator beats with the incoming signal and thus two beat frequencies are produced; $F_o + F_s$, and $F_o - F_s$. (the oscillator is usually set above the signal frequency). These two beat frequencies, plus the two original frequencies, pass to the IF (intermediate frequency) stages. These are a series of tuned circuits with amplifiers, all tuned to $F_o - F_s$, which is usually 465 kHz, or perhaps 1.6 MHz for exclusively shortwave receivers.

Block diagram of a superhet:



It is the I.F. stages, usually numbering between four and six, that the excellent selectivity of a superhet is achieved.

One problem which arises with this type of receiver is that of images (or second-channels!). The usual I.F. signal is $F_o - F_s$, but an I.F. can be generated by a signal which is the I.F. above the oscillator frequency. This is $F_s - F_o$, and will produce the same I.F. as the wanted signal. This can be avoided by increasing the selectivity of the aerial tuning circuit. One way of achieving this is to have two or more tuned circuits in the aerial circuit. If your superhet is plagued by second channel trouble, one cure could be the use of a preselector (see previous articles).

SPOTLIGHT ON A RADIO STATION By D.P. Balhatchet.

This month we feature RADIO ALGIERS

'Radio of the Democratic Peoples' Republic of Algeria' is the rather splendid name given to the station that is more commonly known to DXers as 'Radio Algiers'. 'The Radio' is, of course, government controlled and consists of both the home and foreign services. It can never be called a DX station (except on medium wave), but it is another station and I think that is the only reason one needs for writing to it. The address is: Radio Algiers, 21, Boulevard des Martyrs, Algiers. Algiers is regularly heard booming in on LW in the evenings transmitting English pop music and political commentaries with incredibly BAD quality. According to WRTH 74 the most powerful transmitter is 120 kW but this is probably either out of date or just not true. As for verification, Algiers is one of those stations. I have written twice and have not yet heard and I recently read about one DXer who only heard after writing for the fifteenth time! However, our editor received a QSL within a month. So, if you are feeling lucky or if you are very patient write to Algiers - if only for the QSL.

Mr. Van Stigt, the club treasurer reports the following accounts for the last quarter of 1974.

TOTAL PAYMENT IN	£ 10.80p
TOTAL PAYMENT OUT	£ 8.47p
GRAND TOTAL	£ 2.33p

TDC PUBLICATIONS

Reception Report Forms (in English). Price - GB, 20 forms for 2 IRC's or 10p.
Overseas 3 IRC's surface, 4 airmail.

TDC Time Check List - A list of all "Radio Countries" and their time deviations from GMT. Price - GB, stamped addressed envelope.
Overseas, 1 IRC surface, 2 IRC's air.

DX Codes, a comprehensive listing of the three main DX codes (SINPO, RST, Q) explaining them with examples. Price - GB, stamped addressed envelope.
Overseas, 1 IRC surface, 2 IRC's air.

TDC TAPE "Jingles of the pirates" please write to the club for further details. For those interested the TDC ID tape is now being prepared, please wait for further information.

EDITORIAL

This month has seen some changes in the bulletin, I hope for the better, your comments will be greatly appreciated.

Thanks SBC and AWR for publicising us over their DX shows, look out for us in the RBSWC bulletin soon!

I would welcome contributions in the way of tips, news, QSL information, new addresses etc, as well as technical and other articles of interest, please address them to: The Editor, at the usual address.

After continued requests from our member TDC-001-EU, Lennart Frostelid of Sweden I am pleased to say that we shall soon be having a list of the top 5 QSL collectors in the club - possibly in the next edition. So if you have more cards than when you returned your application form then please send up-dated details to me. (List the number of cards you have, the number of stations and countries, please give a list of stations and countries).

We are really well into the winter propagation period and it would seem that conditions are very variable, at the moment.

This month WELCOME THE FOLLOWING NEW MEMBERS!

TDC-002-EU Mr. Harmut Wolff, D-3121 Schoneworde, Nr.96, FRG.

TDC-009-GB Mr. Edward Jones, 35, Alice Arnold House, Reley Square, Bell Green, Coventry. UK

TDC-010-GB Mr. Terance C. Dixon, 95, Ramsgate Drive, Ipswich, Suffolk, IP3 9DD. UK

TDC-011-GB Mr. Michael Thomas, 8, Hawkwood Rise, Great Bookham, Surrey, KT23 4JP. UK

Don't forget that your contributions should reach HQ by 30th December for inclusion in the January edition.

73's de

David Kenny
David Kenny (editor).

THE CLUB BOARD:

Editor - David Kenny
Deputy Editor - Mark Lee
Secretary - David P. Balhatchet
Treasurer - Nicholas Van Stigt

MEMBERSHIP SUBSCRIPTION PER YEAR:

GREAT BRITAIN - £0.75p
EUROPE - 12 IRC's
OTHER COUNTRIES - 12 IRC's surface mail, 15 IRC's airmail.

THE TWICKENHAM DX CLUB,
37a, Pope's Grove,
Twickenham, TW1 4JZ,
England.

THE TDC BOARD WISHES YOU ALL A MERRY CHRISTMAS AND A HAPPY NEW YEAR