



NEW ZEALAND DX TIMES

ISSN
0110-3636

Vol.32 No.10 Registered at P.O.H.Q. Wellington as a magazine June 1980

who is interfering now?

Coincidentally at the time I settled down to write this TV was screening 'The Longest Day' - which made me think of the earlier days of Radar and how it has since developed.

The word 'Radar' is an acronym of the words Radio Detection and Ranging. Back in the 1930s and 1940s it was something rather mysterious which sent out signals which bounced back from incoming enemy aircraft and enabled the ground controllers to vector defending aircraft against the attackers. It was one of the major weapons which saved Britain in the early days of World War II. Since those days and since the end of that war, numerous peaceful uses of radar have been developed, sophisticated beyond the dreams of those early days.

Now we are coming full cycle and, as users of the HF spectrum, being adversely affected by the use of Radar for its original purpose - Radio Detection and Ranging. Radar has again become a weapon, a defensive weapon it is true. In the last few years we DXers have become only too accustomed to hear 'Woodpecker' - a Russian variation - popping up in various sectors of the SW bands.

Now, according to news published in FRENEX (May 1980), the U.S.A. is joining the party. An experimental Over the Horizon Backscatter Radar (OTH*0) may, by the time this appears in print, be operational in Maine on the east coast.

The USAF, which is the operating agency, has a 'good neighbour' policy and makes the point that it has obtained permission to operate in segments of the bands in the HF spectrum on a 'non-interference' basis in the HAM, maritime, aero and standard frequency bands. It admits, however, that some spill over can happen. The USAF also states that the experimental station will be operational only on limited days for limited hours though at least once quarterly there will be a 24 hour operation. Finally, the point is made that it doesn't sound like 'Woodpecker' - it's not a pulsed radar but a continuous sweep radar and what SWLs/DXers will hear is a sound like AC hum.

Glen Hauser, also in FRENEX and with reference to the frequencies to be used, asks - if they're not operating on those SW bands, 'what are they using?' And the answer - 'You guessed - fixed and BROADCASTING'.

Continued on Page Two

NEW ZEALAND RADIO DX LEAGUE	PRESIDENT: A.T.Cushen, M.B.E., Hon.Sec. C.G.Chester, Administration Committee: P.O.Box 1313, INVERCARGILL, (Membership, Competitions, Policy, Subs.) (9500.
Editorial: P.O.Box 2956, WELLINGTON 6000. Enquiries regarding content & distribution of the 'Times' only. CLOSING TIME: Noon on 1st Monday Monthly.	
Stationery: P.O.Box 450, DAMARU 8901.	
Archives: Paul Ramsay, 67 Wharfe Street, DAMARU 8901.	
ANNUAL SUBSCRIPTIONS: (All \$ NZ) - NZ \$10 : Aust. & S.Pac. \$15 : Asia & N.Amer. \$18 : Eur., S.Amer., Africa \$20 :	
JOINING FEES: NZ \$3 : Aust. & S.Pac. \$4 : Other Areas \$5 .	

DEADLINE: NOON - MONDAY, 7 JULY - LOGGINGS: VERIES: BEST OF MONTH

FROM THE BRANCHES ²

AUCKLAND: 25 members attended the May meeting with 1 apology. Business was followed by a display of pamphlets on the new SONY ICF2001 by Bryan Marsh. Hopefully this set will be demonstrated at a future meeting. **COMPETITIONS:** Over 9 - Nicholas Pacey Switzerland 21520 250 kW. Under 9 - Bryan Clark RAI, Italy 7175 5 kW. MW: Bob Homewood KKUA 690 10kW. Novice - MW Nicholas Pacey 1XP 1593 5 kW. **NEXT MEETING:** 2 pm Sunday 29 June NZART Clubrooms, 3000 G.N.Rd. **CANTERBURY:** Nothing this month except date of **NEXT MEETING:** At Alistair Stewart's place on Sunday, 29 June. **NORTH OTAGO:** April highlight was visit by Roger Stubbe. Stan Vincent of the local NZART worked a link with Ecuador and Roger was able to talk with his family and friends. Main discussion in May centred on BCNZ cuts in DX programmes. Local station R.Waitaki (4ZW) comes on air at 6.am (NZST ?) on 21 June (see elsewhere - Ed) and will send special QSLs printed by Ito Tsukigawa. Paul Ormandy has offered a prize for the first report coming from the greatest distance from Oamaru and received not later than 21 July 1980. They also had a showing of slides from the New Hebrides by Doug Walker. **NEXT MEETING:** 19 June. **SOUTHLAND:** 16 attended the May meeting at Leo Miesenbeck's. Stations heard during the recent weekend at Tiwai by 10 members were reviewed. A Vintage Radio display by Arthur Williams and 2 others at the Winter Festival was discussed and Branch cooperation on publicity arranged. **NEXT MEETING:** Harry Searle's, 5 Arun Crescent, Tués. 24 June, 7.30 pm. Steven Greenyer showed a film on the basics of integrated circuits used in many modern receivers. **COMPETITIONS:** BC B.O.M. - Artuh Cushen AIR Parbhani 2305 10 kW. Merit - R.Crawford KGNR Sacramento Cal. 1320 5kW. SW Over 9 Irene Simpson HCJB Ecuador 26020. Under 9 - P.Ballett Voice of Lebanon 6550 15 kW. **WELLINGTON:** Eight attended the May meeting at John Mainland's. There was considerable discussion on Branch activity and the need for more member participation if a Convention is to be successfully organised in 1982. At 0915 GMT the new DX programme from KTWR Guam was heard on both John's SONY CRF160 and Cecil Symmes' SONY ICF2001 - the latter purchased on a recent trip overseas. **NEXT MEETING:** 8 pm Fri. 27 June to be hosted by Tony Marr at BCNZ Transmitting Station, Titahi Bay.

* * * * *

Continued from Page One

With a planned range of 500 - 1800 miles, it is not clear what effect, if any, OTH*8 will have on SW reception in Australasia and the Pacific. Members who experience this type of interference are urged to send reception reports and complaints to "OTH Radar Office, USAF Electronics Systems Division, Code OCUE, Hanscom AFB, MA 01731" - with a copy to the 'Times' so that the effects can be assessed.

C.S.

letters

First - an APOLOGY to Paul Ormandy - it was he - NOT Paul Ramsay - who is getting back into DXing and who sent details of a folded dipole. Paul has written again and I quote 'DXing has become quite technical with me just lately, latest additions being a cardioid array antenna switch with built-in attenuator and a 2 element beam for 10 metres which works extraordinarily well on 13 and 16 metres as well.' He has been concentrating on the tropical bands looking for new countries. We learn from M.Burke that R.A. Domestic SW stations are apparently still verifying reports. Yes, a card verifying more than one frequency counts for the lot, and he would like to know if Long Wave DXing is possible in NZ. Can anyone help? Thanks to Cleve Costello for a very interesting letter - will try to use it soon at any appropriate date. From Duncan Fraser came some constructive ideas - where necessary these have been passed to Section Editors for their comments. Two others were a section for members enquiries and for forthcoming propagation conditions. Can anyone help with the latter. On the 'Help Wanted' side would willingly publish as space is available.

BROADCAST DX

③

POR EL PERSONAL
NECESARIO

The recent announcement by the Broadcasting Tribunal that 33 Radio New Zealand stations are to go on to 24 hour day operation must have caused distress with League members.

The 30 Community stations and the three ZM stations are to operate with a transmission between midnight and 5am NZST and along with the National stations and Private Commercial stations, this will mean 59 stations out of the 66 in operation will operate all night. This is 89% on all night operation while in Australia with 89 ABC stations and 129 Commercial stations less than 25% are on 24 hour operation. It is hoped that we will be able to provide readers with a list of the days and times of transmitter maintenance so that the frequency will be clear to enable some DX to be heard on the channel.

RADIO WAITAKI 4ZW on 1395kHz opens on Saturday June 21, the station will operate 24 hours a day with its own programme 1800-2100GMT, a relay of 4ZB up to 0700, then the Tonight Show to 1200, the all night National programme to 1700 and then the Early Bird show. The transmitter of 2 kW will operate from Parson's Road, 2km North West of Central Oamaru and 500 feet above sea level. The studios are in the C.B.A. building in Oamaru and Lyall Flett is the Station Manager. Radio Waitaki is issuing a special coloured verification viewcard of Oamaru, along with a coloured brochure and publicity sheet on Oamaru and North Otago, supplied by the North Otago Progress League, and this verification card will be issued to listeners who report Radio Waitaki during its opening few days.

This Radio New Zealand station will have studios consisting of two modern units, a main one and a stand-by which will be used for interviews and commercial production. (Thanks to Paul Ormandy and Ito Tsukigawa).

RADIO CENTRAL Radio Otago's network of stations in Central Otago to be located at Alexandra, Cromwell, Queenstown and Wanaka is much in the news. The Alexandra station is expected to be operating during July. The studios in Alexandra will be located in Torbert Street. The roads for the transmitting masts have been poured and the station is awaiting the arrival of the transmitters. The Alexandra station will operate on 531kHz and relay Radio Otago, Dunedin, 24 hours a day. (Thanks to Dexter Powley)..... Guest Editor Arthur Cushen

MARK NICHOLLS, AUCKLAND, has reports off to 1XB, 2XG, 2XL, 4XG 558, KIKI, KSSK, KIBO, no veries ... note you are moving to Queenstown in September and hope to see you down in Invercargill some time.

DEXTER POWLEY, DUNEDIN, has, logs, 1XP, 2XG, 2XG, 4XG 558 and veries, 1XB, 1XP .. thanks for clipping re: Radio Otago. Power of 1XB is 100W, 4XG 200W.

HANK WILKINSON, SANTA ROSA, CALIF, 95405, has veries received from HLCP 1035, 10KW, Pohang City, South Korea, JOCF 864kHz, 3KW, Muroren, Japan and HSKV 1215kHz, 50kW Surat Thani, Thailand ... thanks for your interesting letter. Happy to receive article on your 50 years of listening.

DEWE LYNNBERG, TITAHU BAY, has reports out to 4QD 1548 and VCA Thailand 1575, veries in from HJZH Radio Disco 1500, 2AP 1404 and Dubai 1480... congrats. on Radio Disco.

LINDSAY ROBINSON, INVERCARGILL, logs, 2KO, 2TM, QSL Heureka 1476kHz.

BRIAN WEBB, UPPER HUTT, has reports out to 2XG, 2XL, 3XG, veries from Noumea 666, MNW, 2XG, 2XL, 5DN.

IAN CATTERMOLE, BLENHEIM, veries 4RO, JOHR, MASKA, broadcast reports 2CA, WHAM, JORK. North Korea.

BRYAN CLARK, AUCKLAND, report to 4XG 558 and QSL's from Trupo 1224 and Auckland's two Easter FM pirates 89.5 and 92.5MHz. (Please to advise that GB 138 Chile 1380 audible in Auckland, but still no luck on other South American signals!)

LANCE JOHNSTON, CHRISTCHURCH, has logged 2XG, 2XL, 4XG, veries in 2AP Channel 2, 1XB, 2XA, 1XG, 3ZA, 4XR, 3ZB and 2XG.

ROBIN CHAMBERS, OPUNAKE, has reports out to LRA23, 2XG, 4TT, HJCA, 2NX, 3NE Fiji (711) 3BC and ABC. Veries KACY, LRA4, JOHR and 2NX.

DAVID RICOUSH, CHRISTCHURCH, has logged 1XI 1XP 2XG Petrolera 1180, QSLs 1XI, 1XP, 4YA, 2CF, 2EA, 15C4, 2IT 3BA, 3KZ, 3MA, 3MP, 3NE, 3WL, 3XY, 5AA, KNIX, ZBM-1 and ZBM-2 - countries now 51

BILL JOLLY, KAWARAU, only one logging of 3ZM, two veries back from Avon 1260, and 3ZM.

KETEM ROBINSON, KAPUKA, has reported JOAD, 2DU, 2XG, Fiji 711, 4RK, 2KA, 2TR, Cuba 600, 5CK, 2XL, 4XG, veries from 4TC, 2EA, 1584, 2KM, 4IP Wenchang 594, CK16 Radio Hokanui test 1224, 2NX, 3ZE, 2BY, 2QN, Manning 792.

ARTHUR CUSHEN, INVERCARGILL, has verified 3HA 981, 3ZO 1485, AIR Farbhani 1305, 4SB 1071, Singapore 792, JOIK 567, KSSK 590, Langenberg 1593 and 4XG 558, reports out to FEN Okinawa 648, Mundial 700, Radio Sucre 700, Radio Globo 1220 and 4XG 558.

ANDREW BOOTH, DARFIELD, veries for last month 1ZB 1080, 2ZA 927, 2ZM 1161 and CFCN 1060kHz.

ERIC McINTOSH, INVERCARGILL, loggings, 1ZD, 1XW, 2GL, 2KP All night with floods, 3WM, 3AR, 4TC, 4XG, 5DN, Noumea, Dubai. Veries from 1ZD, 1ZH, 2XG, 2KP, 2NA, 2ZE, 2ZN, 1ZN, 3DV, 4XG, KSSK.

BEST OF THE MONTH - Broadcast

Dene Lynneberg with Radio Disco Columbia, Medellin 1500kHz
1kw

151 points
(Long Personal letter and prepared card, card stamped with slogan of sister station Radio Colibri, both stations belonging to Sisterna Colibri.

MARTIN HADLOW, FORMERLY OF 2ZM Wanganui has rejoined the League and says "After a career in AM radio I am now employed as Station Manager of radio 2NUR-FM based on the University of Newcastle, NSW. Our 3000 watts ERP signal on 103.9mhz is widely heard in stereo throughout the Hunter Valley region of NSW. As yet we have had no reception reports from keen New Zealand FM DXers but we look forward to such reports in the future. It would, of course, be extremely difficult for NZ FM DXers to tune in our signal but as we are all aware, anything is possible!"

STATION NEWS HAWAII - KAHU 940kHz has changed call to KHEO. KNUI has changed freq. from 1310 to 900. (A. Roycroft)

- 550 0705 Unidentified Columbian
- 558 2100 GWA, Sign-on
- 580 0620 Tuvalu,
- 590 0730 KQMB Baseball commentary
- 600 0730 KOGO Radio 6
- 666 0710 Noumea Classical music
- 690 0810 KKUA, pop music
- 774 1500 JCUR, to sign-off 1450
- 780 0700 HJZG, good signal
- 792 1500 Singapore, good EE
- 870 1025 LRA good
- 910 0930 LRA 23 good ID
- 930 0900 Radio Antilles poor at sign-on
- 960 0640 Radio Panamericana, OAX 4D
- 963 1730 6TZ, New 24 hours?
- 980 0530 HJES Radio El Sol
- 990 1050 KHVH news radio
- 990 0630 XET, good in Spanish
- 1005 0828 HJDP, Radio Colosal
- 1010 0730 Radio America Lima
- 1020 0620 WRS Radio Mundial Margarita
- 1060 0730 HJFJ Manizales Colombia
- 1062 0630 2AP, Somoa, fair
- 1062 1857 4TI, Thursday Island
- 1110 0730 HREW, Radio Reloj Cali
- 1116 1930 4BC, good signal
- 1125 0930 YJB, New Hebrides poor in EE
- 1180 YVNI, Venezuela fair throughout the night
- 1220 0705 ZYJ458, Radio Globo Brazil strong signal
- 1224 1145 3EA good over 2WS
- 1230 Radio Calided Colombia fair all night
- 1480 0600 Radio Punta/enas sigh-off 0600

Thanks to Robin Chambers, Stuart Forsyth, Ray Crawford, and Duncan Fraser.

DX LIBRARY

Several members no doubt subscribe to technical radio magazines for the purpose of seeking articles that help the shortwave hobby, and recently one member has offered to start a library of articles, circuit diagrams etc for members. From his collection the following are available for 50c plus stamped addressed envelope - simply covering our photo-copying cost.

- SWL Pre Selector
- Passive Mixer (for tape recording)
- SW Supercharger (another booster)
- ZN414 circuits
- Image Rejection Filter
- Antenna Matching Unit
- The MW Wedge Loop
- BCB Booster
- Antennas: Loops, Dipoles etc.
- BCB Pre-Selector
- RF Pre-amp
- Radio Nderland Aerial Brochure
- Active Aerial (.5 to 30 Mhz)
- Crystal Tuner (for taping)
- Component Codes & Values
- DIN Connectors
- Bass Reflex enclosure design
- Simple stereo amps using IC's
- The Quad aerial
- Medium Wave Loop Booster

The above are from English, U.S. Australian and New Zealand publications published during the last five years.

Send your requirements with SAE and 50c to

DX LIBRARY
P.O. Box 3160
Wellington

And we want YOUR additions to the Library to, at the above address. All originals will be returned after a library copy has been taken.



We learn that the new programme to which reference was made in the May issue is attracting considerable interest from overseas listeners with mail running at 100+ letters a week. The segment on N.Z. history appears to be particularly appreciated.

market square The N.Z. Agents for McKay Dymek wish to sell their demonstration unit of the DR 101 Auto-Scan Receiver (see p.48 of 1980 WRTVH). Price will be in the vicinity of \$1800 - \$2000. Interested members should send name, address and telephone number to Bryan Clark, P.O.Box 3011, Auckland for passing on to the agent.

FOR SALE: Drake SSR1 Communications Receiver. Has upgraded selectivity, ex. calibration. Write for details. \$375 or consider part exchange older receiver. Also 25' aerial mast, 2" steel pipe \$15. A.C.Verry, 52 Athlone Crescent, Lower Hutt

NOTE: Market Square Rates - 10 cents per word - Minimum \$2.00

n.z. domestic

The Broadcasting Tribunal has approved an application from the Broadcasting Corpn. of N.Z. to permit most commercial stations to continue their transmissions for 24 hours a day. The stations concerned are 1 ZB, 2ZB, 3ZB, 4ZB, 1ZM, 2ZM, 3ZM, 1ZN, 4ZH, 1ZC, 1ZD, 2ZP, 2ZD, 2ZC, 2ZK, 2ZN, 2ZE, 2ZG, 2ZW, 2ZA, 3ZA, 3 ZC and 4ZA

Advice has been received that 4ZM starts transmission on 5 July. via Paul Ormandy and BCNZ.

stolen goods

The following have been stolen from Auckland member, Tom Rushbrooke - Yaesu FRG7 Ser.No.308M241807, Nat.Panasonic Model RS246JB Ser.No. 26573, Nat.Panasonic Stereo Cassette Recorder Model RS254S Ser.No.EE10 5598, 2 Fountain Clock Radios DCR100 Ser.Nos. 114021 & 110814, AKAI ASE95 Headphones. All with initials TR scratched on. Anyone with information, please contact Tom - P.O.Box 23001, Papatoetoe, Auckland or nearest Police Station.

ANARC 1980

Barry Williams who, with his family, is visiting the USA soon, intends to spend a couple of days at the ANARC convention. Have a good holiday and tell us all about it when you come back.

great circle maps

Obtainable from Map Sales, Dept. of Lands & Survey, Price - 75 cents - and very nice too!

Guidelines for DXing

The following article, co-authored by Jerry Berg, Kent Corson, Dan Ferguson and Don James was published as a Special Feature in FRENEX in September 1978. We believe that it will also be of great interest to League members.

INTRODUCTION

Periodically there develop controversies over particular loggings which seem propagationally unlikely, or improbable for other reasons. These incidents inevitably bring into question the credibility of the reporters and usually are accompanied by debate over whether editors should screen out such loggings or just publish what they receive.

Editors have the responsibility to edit, to exercise their best judgment in handling items submitted to them. However, the purpose of these guidelines is to minimize erroneous reporting at its source by offering standards of good practice for DXers. It is hoped that this will encourage both newcomers and veteran listeners to practice good DXing habits so they can contribute to the maintenance of high standards in the exchange of DX information.

THERE IS NO BLACK MAGIC IN DXING

It is often said of DXing that "anything can happen". And it is true that from time to time, but rarely, what might be called "freak" reception does occur. But all shortwave reception is dependent on natural propagation phenomena; there is no magic involved. What we term freak reception is merely reception caused by such a complex combination of natural factors that we may not be able to explain in terms of our limited knowledge. Strictly speaking, it is a case of "we can't adequately explain what happens" rather than "anything can happen".

The distinction is important. If we too literally believe that anything can happen, we may too easily be ready to believe - especially when rare stations are concerned - that anything will happen.

Freak reception, by our terms, happens so rarely that any given DXer might experience it only once or twice in his hobby career. When an individual repeatedly reports freakish reception, the laws of probability strongly suggest that most of those reports are erroneous. Thus, strange and hard to explain receptions should be subjected to even more careful scrutiny than normal receptions, not merely written off with, "well, anything can happen".

The purpose of these standards is not to discourage the reporting of rare or unusual receptions, but to suggest DX practices which will help the DXer establish the genuineness of such reception before reporting it.

LOGGINGS SHOULD BE TERMED IDENTIFIED, TENTATIVE OR PRESUMED IN ACCORDANCE WITH THE DEFINITIONS BELOW

The issue is, at what point is a station identified and how should stations not fully identified be reported.

The process of identifying stations should be viewed as a continuum. At one end is the unidentified station. An example of a completely unidentified station is an open carrier. The absence of any programming clues offers no help in identifying the station.

At the other end of the spectrum is the positively (100% probability) identified station ("This is the Voice of America broadcasting from Greenville, North Carolina." (JAL Note: VoA no longer uses this type ID.)).

Many DX stations fall somewhere in between on the identification spectrum, however. One may hear only part of the ID, and it may be in a poorly understood foreign language or in the midst of heavy static or interference. Or perhaps no ID is heard but certain characteristics of the signal or programming lead to the belief that you are tuned to a particular station.

Generally speaking, the longer one listens to a station - on one date or many - the more clues to its identity one will gather and the better the chances of identification. If you can't ID a station, keep listening!

The factors which might contribute to the identification of a station are: quality of signal (such as presence of a

flutter, fade-out, and fade-in times, etc.), time of reception, frequency, and programming. Programming is usually the most important clue.

Knowledge of languages will help. Familiarity with different kinds of indigenous music is a big help in identifying stations. Other factors which could contribute to station identification include similarity of programming to that reported by other listeners, use of known tuning signals, sign-on and sign-off sequences, identification of advertisers and much, much more.

It should be apparent that one's ability to identify a station depends mostly on one's ability to interpret what one hears and reach conclusions from it. Thus, DXers with greater experience may find it easier to suggest plausible identities for unidentified stations than with newcomers to the hobby. A station which is unidentified to a new listener may be identified to a more experienced DXer. The experience factor is critical. One should, over one's years in the hobby, build a mental storehouse of information about the stations and countries one may hear on shortwave. Then, when one hears a station whose identity one is seeking, one has a background of knowledge which one can bring to bear on the various items of programming one hears.

No matter how experienced you are, you will not be able to fully identify all signals you hear. A couple of shorthand expressions have developed for describing these cases.

One is "presumed" identification. When a logging is listed as presumed it means the DXer has concluded that, based on all of the clues he has, he is almost certain (95% probability) that it is the named station he has heard. About all that is missing is an actual ID; virtually all the other clues as to identity "fit".

The other term is "tentative". A tentative identification means that the DXer has strong reason (80% probability) to believe that he is hearing the named station, but he is not sufficiently certain to call it presumed.

For example, if one hears a Spanish station on a frequency where several Latin Americans operate, there is no basis, without more, on which this could properly be termed an identified logging of one station rather than the others. The probability in being right in guessing any one of the listed stations is less than 50%. If the listener identifies the music as definitely Peruvian, however, and, if only one of the known stations is located in Peru, and if other DXers have reported Peru only at this time, one might properly call this a tentative logging of the Peruvian station. In this instance one might be about 80% certain of that identity. If, in addition, part of an identification is heard which seems to match that of the Peruvian and there are mentions of the town in which the Peruvian is located, this could properly be called presumed reception of the Peruvian. Identification certainly would be better than 95%.

Anything short of a tentative is an unidentified. DXers should avoid the temptation to classify loggings as tentative when they are truly unidentified. A legitimate tentative designation is not just the product of a guess, and should not be used merely as an "insurance policy" against embarrassment if a logging reported to a bulletin later proves to have been in error. When there is any doubt in your mind, call the station unidentified. If you must err, err on the side of caution. Even with unidentifieds, however, you might want to indicate which station or stations you think it might be, if you have any ideas.

A word about the propriety of sending reception reports to stations in the presumed or tentative categories. The main purpose in seeking a QSL is to cause the station to verify what the listener himself has already fairly concluded, namely that it is that particular station he has heard. It is not the purpose of a QSL to confirm a mere guess.

Ordinarily it is permissible to seek a verification from a station in the presumed category. The problem is more difficult with tentative loggings. Perhaps the best test is this: If, based on all the circumstances, you are able to fairly conclude that it is a particular station you have heard - having applied the stringent "have I been guilty of wishful thinking" test - it is permissible to seek verification. You should spell out to the station that your reception is not positively identified, however. You should tell them that you are not

8
A STATION LIST SHOULD NEVER BE THE SOLE OR PRINCIPAL FACTOR IN IDENTIFYING A STATION

All DXers use lists of one kind or another: Club bulletins, other hobby publications, World Radio TV Handbook, etc. The issue is not whether to use such lists, but how to use them. Lists provide a useful element of information to a listener who is trying to identify a particular station operating on a particular frequency. They tell him which stations are scheduled to operate on that frequency or have been heard there. Thus, they are helpful mainly in narrowing the list of stations a DXer might be listening to.

To be carefully avoided is a practice called "list logging". List logging is the habit of concluding and reporting that one has heard a particular station when that conclusion is based mostly on the fact that the station is, according to a list, supposedly operating at the time and place heard. A list logger proceeds on the wrong assumption that because station X is supposed to be operating on a particular frequency at a particular time, and because he heard a station on that frequency at that time, it must be station X he heard.

List logging is mainly the product of the DXer's desire to hear a particular station. He wants to hear station X, so he concludes he has heard it, even though other possibilities are more likely. Wishful thinking has led him to "identify" the station principally by the fact that the station is reported to be operating at the time and place of his logging.

List logging becomes progressively more hazardous as the list being relied upon ages. Thus the annual WRTM will normally be less accurate than a list which updates several times a year (such as the Danish Shortwave Clubs International Tropical Bands Survey), TBS may be less accurate than the lists in monthly bulletins and so forth. Furthermore, stations move to new frequencies as well as from old ones. So a station heard on a given frequency may well be something not yet on any list, and even the most up to date listing of stations on a frequency may not indicate all the possibilities.

As stressed previously, it is the other factors in a logging - language program content, reception conditions, etc. - which should provide the basis for a credible identification. That a wanted station is supposed to be operating at the same time and on the same frequency is just one element - and not a critical one - in the overall determination of which station is being heard.

REPORT THE FREQUENCY OF RECEPTION AS ACCURATELY AS EQUIPMENT AND SKILL PERMIT

A DXer should be familiar enough with his equipment to know how to use it properly and get the most accuracy it can offer. With all but the simplest multi-band portables, + 3 kHz accuracy is possible and should be sought. If digital readout is not available, the DXer should develop appropriate frequency graphs, charts, or tables for his receiver so that by interpolation he can establish an accuracy of about + 3 kHz. Even greater accuracy, to the nearest kilohertz, should be standard where digital readout is available. Measurements to the nearest kilohertz are not indispensable to proper reporting or to one's development as a serious DXer, however.

It is not necessary to report frequencies to one or more decimal places, e.g. 9710.2, 9710.23, 9710.238 kHz, etc. Generally, such frequency citations give the illusion of a great degree of accuracy which is not warranted in fact. Instability in the receiver or frequency counter is at least as likely an explanation for variations in "measured" frequencies over a period of time as is transmitter instability. If the frequency is measured on appropriate equipment by an experienced operator, it may be of value in determining "frequency offsets", that is deliberate off frequency operation which may be characteristic of particular stations. Caution should be used in reporting these to bulletin logging sections as the inexperienced DXer may be misled or become discouraged because his equipment does not permit such accuracy. The obvious exception to the above is where a station is known to broadcast regularly on a decimal or "split" frequency, such as Bouganville on 3322.5 kHz. (Editor's note: This paragraph was revised as a result of discussion with the authors at NUvention 5, 12 Aug. It may appear in its original form in other DX publications.)

As always, the frequency reported should be the one actually heard and not just



9
Welcome once again to the SW QSL Review for June. In future the QSL Review will now be appearing quarterly due to a policy decision by Mag-Com, so the next QSL Review will be in September. Keep those entries for the QSL Review coming in and please remember to include frequency with each item. Now into the mailbag, but firstly I guess congratulations to Bob Padula on his Greenland Verie. Nice work!

ARMENIAN SSR: Radio Yerevan 15500 kHz. Plain cd. in 15 months by air. (B. Padula)
GHINA (People's Republic): Central People's B/C Station. 5320 6790 7095 10245 11040 11100 11330 11610 12015 15550 15590 15710 kHz. separate cards with full details for EE rpts. 18 days by air from Peking. (Dene Lynneberg) Radio Peking: 11445 15520 kHz. colourful cards with full details. 19 days air for EE rpts. (D. Lynneberg) Fujian Front Station: 5240 5265 6765 kHz. full detailed colourful cards direct from Peking. EE rpts. (D. Lynneberg) Regional People's B/C Stations: Zhejiang 2475 Hubei 3940 Qinghai 3950 Xizang 4750 Yunnan 4760 Liaoning 4830 Gansu 4865 Guangxi 4915 Heilongjiang 4925 Nei Monggol 4950 Fujian 4975 kHz. Full detailed colourful cards received direct ex Peking by air for EE rpts. (Tony Marr) (Some excellent regionals there Tony. Ed.)

CHILE: Radio Agricultura, Santiago 9630 kHz. Pennant with verie text taped on. 35 days by air for SS rpt postcard and stamps. (D. Lynneberg) Radio Nacional Chile: 15150 kHz. postcard with full details. No v/s. 2 months by air on 3rd attempt with SS rpt. (Alex Wellner)

DUBAI: Dubai Radio & Colour TV 21500 kHz. map card with full details and personal letter from GE Harold Robins. 1 month for EE rpt and 2 IRC's. (D. Lynneberg)

DJIBOUTI: Radiodiff Tele Djibouti 4780 kHz. Verie letter in FF stamped by Directeur of RTD for FF rpt & 1 IRC. (John Durham)

GREENLAND: Godthaab 9575 kHz. folding cd describing radio b/casting & telecomms in Greenland with view of microwave link equip in mountains. in 7 weeks by air for 2 IRC's. (Bob Padula)

GUYANA: Action Radio 5950 kHz. Verie letter in 3 months. v/s Joy Luke Frazser for L.R.E. Case Chief Engineer (J. Durham)

KAMPUCHEA: Radio Voice of the People of Kampuchea 9695 kHz. EE verie letter from Miss Som Kim Sour, Head of Foreign Transmission Service for EE rpt sent via Hanoi. (D. Lynneberg) 9695 kHz similar verie letter together with ballpoint pen drawings of Kampuchean musical instruments. Rpt also sent via Hanoi. (J. Durham.) (Excellent John. I wonder how many more of these have now been received. Ed.)

MALTA: ANR-Cyclops. Coloured cd No. 3 in ANR series - shows Christmas designs in 4 w by air for 1 IRC. Freq. 9665 kHz. (B. Padula)

NIGERIA: FRC Sogunle 4990 kHz. verie letter with full details & Personal ltr. V/s Frank Eyo in 8 w for EE rpt & no Rp. (Jim Benzoni)

PHILIPPINES: Radio Veritas Asia 15320, 17790 kHz. beautiful coloured cds by air in 2 w for 1 IRC each. (B. Padula)

PORTUGAL: NHK via RTE 15305 kHz. coloured cd showing Pagoda and Lake Scene. Air in 3w (B. Padula) ANR-RTE 9745 kHz. coloured card No. 3 in series, shows night snow scene. Air in 4w for an IRC (B. Padula) Radio Renascenca via RTE. (Freq?) blue & white cd depicting antenna tower. Details in PP & EE. Signed by Director Manager. (J. Durham)

SAUDI ARABIA: BSKSA Riyadh 21605 kHz. card showing crossed swords. air in 6w (B. Padula)

SOUTH AFRICA: Radio RSA 15380 kHz special New Years Eve freq. coloured card showing African lions. air in 6w (B. Padula). R. RSA 17780 kHz. full detailed cd with scene of Table Mountain. air in 18 days. No RP. (Brian Strong)

SRI LANKA: ANR via SIBC 11800 (Ekala Site) pink cd from v/s Adrian Peterson. Rarely heard freq for ANR (reported for Malayalam b/c) air in 3 m. (B. Padula)

SWAZILAND: TWR-Manzini 11965 kHz. folding cd air in 4 w for 2 IRC's (B. Padula) TWR-Manzini 11740 kHz folding cd air in 2 m 2 IRC's (D. Lynneberg)

SWITZERLAND: SRI Berne 17750 kHz. coloured cd with Alp view. from FF Dept. Sea in 10w (B. Padula)

TOGO: Radio Togo, Togblekops 5047 kHz. Map of Togo cd. 9w air for FF rpt & 2 IRC's (John Allchin)

Thanks to the following contributors: Jim Benzoni, John Allchin, John Durham, Tony Marr, Bob Padula, Brian Strong and Alex Wellner.

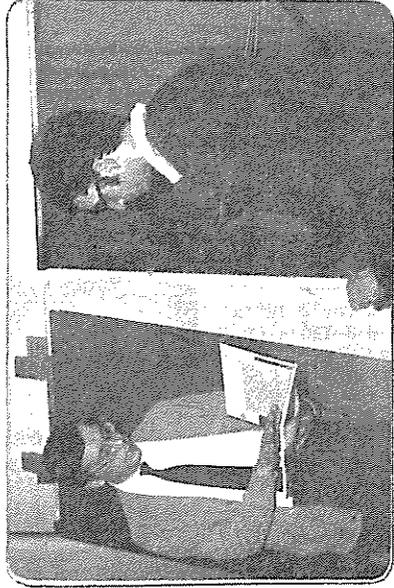
Well seems space may allow us another item. From Ray Crawford: Uruguay: Radio Carve 6155 kHz Ltr and stickers from v/s Graciela Corradi, Secretaria for SS rpt.

73's Sec. Ed. Dene Lynneberg



CONVENTION 1980 • MOTU MOANA • AUCKLAND • 4,5,6,7 APRIL

Some photographic memories of the League's Sixteenth National Convention, held over the 1980 Easter Weekend and hosted by Auckland Branch.



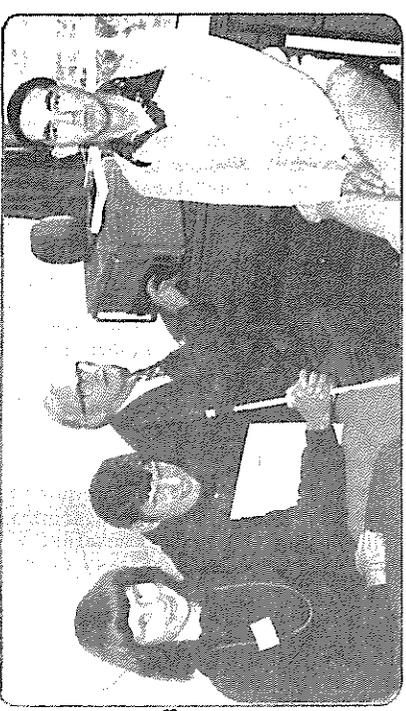
Left: SPECIAL GUEST Roger Stubbe of HCJB The Voice of the Andes receives a presentation from Auckland Branch President Barry Williams.



Right: DX LISTENING GROUPS enable attendees to share their DX skills and try out a variety of equipment. "Tristan da Cunha" Listening Group members Jack Searle & Chris Hattan (in front) are shown preparing reception reports.



RADIO PACIFIC DX PROGRAMME host Robert Jeffares (left) interviews Colin Campbell of Rotorua, for the special Convention broadcast over IXP 1593



This special photo supplement prepared and financed by the Auckland Branch, NZ Radio DX League.

Photos: Bryan Clark

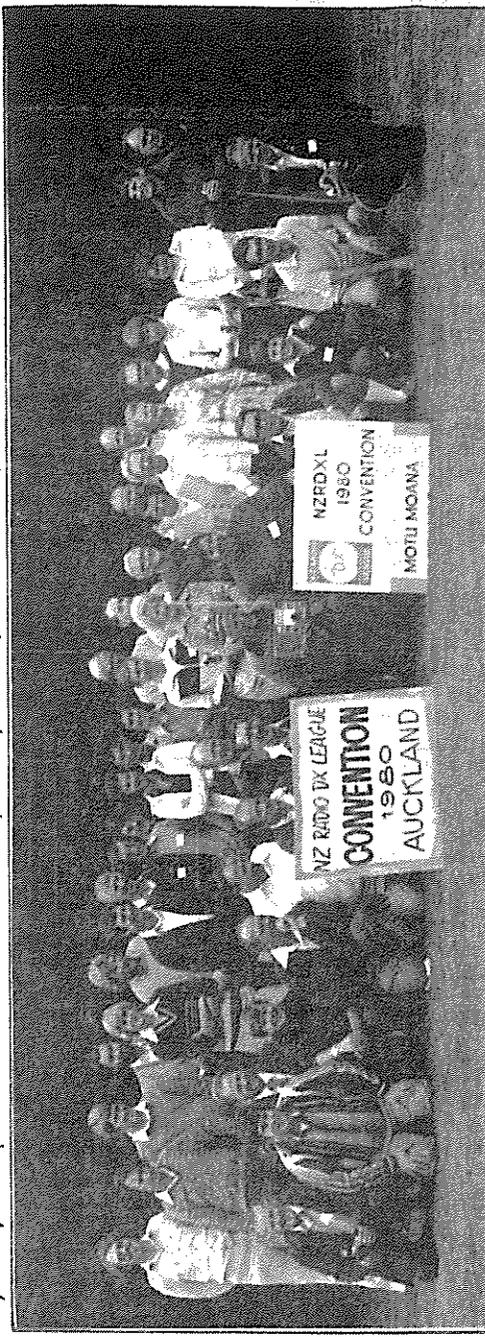


SLIGHT HANDICAPPED GROUP Shirley Lansink, Barry Jones, Arthur Cushen, Douglas Doull, all of whom made their contribution to the success of the 1980 Convention. All are from Auckland, except Arthur of course!

CONVENTION GROUP AT MUSEUM OF TRANSPORT & TECHNOLOGY - left -right kneeling: David Ricquish, Tom Rushbrooke, Norm Thompson, Roger Stubbe (Frequency Manager of HCJB Ecuador), Theo Donnelly (News Director, CIVB Radio Vancouver Canada, David Mairdonald (Executive Director for HCJB in NZ), Jack Searle, Bob Logan. Standing: Mrs Betty Marsh, David McNabb, Philip Hamlin, Chris Leigh Morris, John Durham (obscured), Mrs Ralda Cushman.

Bryan Marsh, Arthur Williams, Jim Benzoni, Mark Nicholls, James Niven (South Australia), Leigh Morris (South Australia), David Feldon, Arthur Cushen, John Durham (obscured), Mrs Ralda Cushman.

CONVENTION GROUP left to right - kneeling: Jack Searle, Mark Nicholls, Frank Vader, Tony Marr, Bill Huddleston, Norm Thompson, Tom Rushbrooke, Les Ricketts, Theo Donnelly (Canada), Bryan Marsh, Ian Hitchiner, Jim Garman, Nicholas Pacey, Barry Williams, Bob Logan. Standing: David Ricquish, John Durham, Stuart Forsyth, Michael Pollard, John Allchin, Arthur Williams, John Schof, David Munn, Chris Mackerell, Chris Hattan, Philip Hamlin, Jim Benzoni, David McNabb, James Niven (Australia), David Feldon, Douglas Doull, Mrs Ricketts, Arthur Cushen, Mrs Cushman, Leigh Morris, Shirley Jamieson, Garry Bryan, Mrs Huddleston, Colin Campbell, Shirley Lansink, Mrs Marsh, Barry Jones, Jim Pope. Other conventioners not in photo: Bryan Clark, Bob Homewood, Mrs Williams.



LEAGUE LADDERS

Broadcast

DIVISION	DEC	JUN	INC	CNT
GOLD STAR (over 1250)				
Arthur Cushen	2393	2430	37	145
Keith Robinson	2275	2310	35	114
Ray Crawford	1423	1497	74	163
Eric McIntosh*	1050	1088	38	88
SILVER ACE (751-1000)				
Robin Chambers	951	979	28	119
Dene Lynneberg	815	829	14	101
ACE (501-750)				
David Ricquish	584	628	44	51
Bryan Clark	504	514	10	92
SENIOR (301-500)				
Hank Wilkinson	462	483	21	78
Ray Babbage	447	451	4	45
Ian Cattermole	410	445	35	24
Lance Johnston	-	330	-	30
John Campbell	330	343	13	98
John Allchin	309	318	9	29
INTERMEDIATE (151-300)				
Stuart Forsyth	188	213	25	12
Lindsay Robinson	-	206	-	26
Paul Rawdon	187	188	1	27
Jack Searle	182	185	3	20
Leigh Morris	179	182	3	33
Gunter Jacob	164	170	6	34
Paul Ramsay	154	160	6	5
JUNIOR (50-150)				
Peter Jones	120	138	18	6
Mike Smith	115	127	12	10
Mark Nicholls	71	99	28	5
Steven Greenyer	-	73	-	27
Alex Wellner	-	59	-	9

THE WINNERS BROADCAST Gold Star :
 Ray Crawford, Gold Ace: Eric McIntosh,
 Silver Ace: Robin Chambers, Ace: David Ricquish,
 Senior: Ian Cattermole, Intermediate: Stuart
 Forsyth, Junior: Mark Nicholls.....
SHORTWAVE: Gold Star: Arthur Cushen,
Gold Ace: Ian Cattermole; Silver Ace:
 John Campbell, Ace: Peter Jones:

Senior: Bill Jolly, Intermediate: Leigh Morris
 Junior: David Hughes.....
 I guess Ian Cattermole does not sleep, what
 do you use to write the reports with Ian?
 A computer! A considerable amount of
 competition in the Gold Star and Intermediate
 divisions, thats good to see. Congrats to
 Peter Jones on the 100 countries on SW and
 a mention of Arthur Cushen, Ray Crawford,
 Ian Cattermole and Peter Jones who all
 had increases of 100 and more this period....

Well there is still an Eddystone EC 10 at
 \$975 in Wellington and the DR 49 at the FSIS
 has dropped to 1199 Bucks was 1470 dollars,
 Reduce it about \$500 more and I will be interested
 myself. For you who can't afford that there is a
 Sanyo RP8820 available at a Cuba St Store for
 \$999. Next ladder August see you all then.....

Shortwave

12

DIVISION	DEC	JUN	INC	CNT
GOLD STAR (over 1250)				
Arthur Cushen	4688	4836	148	240
Bob Padula	4656	4719	63	-
Dene Lynneberg	2317	2383	66	214
Ray Crawford	1540	1659	119	170
John Mainland	1529	1581	52	203
John Durham	1521	1571	50	187
Bill Huddleston	1384	1405	21	144
Ray Babbage	1342	1366	24	135
Bryan Clark	1286	1317	31	204
Gunter Jacob	1255	1311	56	127
Ian Cattermole	1179	1311	132	131
GOLD ACE (1001-1250)				
Jack Searle	1058	1110	52	137
SILVER ACE (751-1000)				
John Campbell	730	776	46	224
Lindsay Robinson	-	776	-	117
ACE (501-750)				
Eric McIntosh	670	676	6	117
Peter Jones	540	651	111	100
Paul Rawdon	558	573	15	134
SENIOR (301-500)				
Steven Greenyer	-	447	-	139
Lance Johnston	-	439	3	80
Bill Jolly	343	362	19	77
Leigh Morris	230	328	98	121
Jack Farrow	317	326	9	53
Mike Smith	223	301	78	70
INTERMEDIATE (151-300)				
Chris Hatton	150	201	51	56
Ian Wells	154	157	3	63
David Hughes	114	183	69	80
Stuart Forsyth	120	159	39	59
JUNIOR (51-150)				
Michael Williams	105	114	9	35
John Allchin	102	108	6	67
Arthur De Maine	91	108	17	48
Les Boyd	-	59	-	27
Mark Nicholls	50	50	-	19
Bill Mannix	45	-	-	37

* Eric McIntosh should be in the Gold Ace
 section not Gold Star. Will correct.....
 Welcome back to Lindsay Robinson.....
 You will have to put up with me for a
 little longer yet, despite what was
 reported in last months column I will
 be around for a little while longer.
 At this stage I dont anticipate giving
 up my duties in the Column until the end
 of the next 6 month period (Dec) So any
 budding editor can be ready to commence
 in February 1981. I have been preparing
 this section 5 years and I consider it is
 is time for a rest.....

The new model TRF has been sighted
 Stan Larking has one, the Dial is a little
 longer and the tone control is just a
 switch. Its the model 556 cost is \$39-95
 Australian.....

SW MAILBAG

with JOHN ALLCHIN

13

Plenty of activity reported this month, obviously with the winter weather of the last few weeks, there's a bit more time to sit down and get reports out to those stations you've always been meaning to log, but never had the time It will certainly be an idea to monitor those lower frequencies over the next few months as reception 'down there' is certainly more favourable during our winter, especially for searching out those more elusive stations, and countries!

QSL highlights include Radio Capital, Voice of Revolutionary Ethiopia, Radio Apintie, Surinam and further to last month, Iceland and Burma. Let's see what else has been mailed home in the past month!

JOHN DURHAM Hamilton, is first up with a very nice list: HCJB 26020, Xining 6500, Changsha 4990, Urumqi 5440, RFE Gloria 15145, Fides 4845, Iceland 12175, Berlin 21500, Guarani 6175, Tanjungkarang 3395, RM Khabarovsk 17720, Nanning 5010, Rangoon 5985, Lisbon 6185, SRI 21585, 15125, IBRA Malta 9650, Dubai 21470, 21485, NHK Sines 15245, Sweden 11955 and Bremen 6190.

LINDSAY ROBINSON Invercargill, has logged ten in the past month and verified KTRW Guam 11840, HCJB 26020, BBC 9825, and Paris 25820 with pennant. Guam was country no. 116 for Lindsay! Sorry, last months notes missed deadline.

JACK SEARLE Haumoana, has verified Sweden 21690, AWR Colombo 11800, HCJB 15405, 11900, Tashkent 11785, REE 15200, Turkey 11955 with badge and pennant, Vietnam 14992, RBI 17700, Portugal 6185 and for new countries RCTU Dubai 21485 and Voice of Lebanon 6550.

DENE LYNNEBERG Titahi Bay, has been active with 40 reports out and verifies in from RRI Sorong 4875, Dubai 21500, RM Frunze 15535, CPBS 6790, 5320, 7095, 10245, 11040, 11100, 11330, 11610, 12015, 15550, 15590, 15710, Fujian Front Station 6765, 5240, 5265, Peking 11445, 15520, Poland 3955, HCJB 3220, 26020, Agricultura 9630, Voice of Lebanon 6550, TWR Manzini 11740, FEBA 11860, Abidjan 7215, BBC Masirah Island 17770, Bremen 6190, RN Bonaire 17695, Afghanistan 15075, TWR Monte Carlo 9495, AWR Andorra 6215, AWR Luxembourg 6090 and Austria 21500.

BARRY WILLIAMS Auckland, has QSL'd Noumea 11710, Kabul 15075, RM Blagoveshovensk 11790, Quinhai 4940, Yunnan 4760, Chile 17795 and HCJB 26020.

PAUL EDWARDS Wellington, lists verifications as East New Britain 3385, Casino 5954, HCJB 3220, 26020, Agricultura 9630, Guyana 5950, Voice of Lebanon 6550, Cameroon 4925, RIAS West Berlin 6005 and Bremen 6190. Some good ones there Paul!

JOHN MAINLAND Wellington, has verified Dubai 11485, Madrid 9600 and Gaucha. Thanks John!

JOHN CAMPBELL Devon and Sweden (wouldn't mind having those two locations after my name! has verified Capital 3950, HCJB 26020 plus hobby pirates Cobra 6240, Caroline 6275, Free City 7315, Thistle 7315, Weekend Music 7335, Victoria 7350 and Liberty 7350. Thanks John!

CECIL SYMMES Wellington, has verified HCJB 26020 and Voice of Lebanon 6550 for country no. 105!

ARTHUR CUSHEN Invercargill, has verifies back from AIR 15110, Madrid 9600, Austria 21725, Voice of Lebanon 6550, Norway 6185, RNZ 15485, Belgium 15380, Madrid 11730, Moscow 29057, Tashkent 11785, SRI 17750, 17830 and those two Auckland Pirate FMers heard at Convention '80.

BRYAN CLARK Auckland, has three in from Bremen 6190, RSA 17745 and Caltinisetta 7175. Hi!

CHRIS HATTAN Auckland, lists his QSLs as RSA 17780, 15220, ORF 21655, RFI 17850, Denmark 15165, Chile 15110, HCJB 9745, Veritas Asia 11775, Japan 11875, ERT 9640, RM Minsk 15490, Vinnitsa 11735, BBC Ascension 11860 and one from Sarawak 7160.

MICHAEL WILLIAMS Adelaide, SA has sent six out and has QSL'd Moscow 21530, SRI 21520, HCJB 11900, RSA 15220, RA 17870 with 40th Anniversary Card, RCI 17820, Habana 17855, RBI 21540 and Solomon Islands 5020. Good to hear from you Michael!

PAUL SCHNELL Palmerston North has six reports out and verifies in from Bucharest 11940 with keyring, Prague 11855, Sofia 9765, Austria 15560, IBRA 9760, RN Bonaire 9715, Lopik 17605, RSA 17780, and Solomons 5020. Sorry Paul, notes arrived too late last month for inclusion in May issue.

TONY MAGON Invercargill, has logged one and verified HCJB 26020. Tony has a Sony ICF6800W arriving soon, so plenty of DX should follow. A great set Tony, that's what I use, hi!

ARTHUR DE MAINE Auckland, has just one this month from Turkey 11955 with a pennant.

MARK NICHOLLS Auckland advises two reports out, and is out at his letterbox now awaiting the replies!

14

JIM BENZONI Hamilton, begins Mailbag page no. 2 with 18 reports out, and varies in from FEBC 11765, SRI 21695, AIR 15165, IBRA 9670, KTWB 17770, Tirana 7080, RBI 15100, RA 11855 with Anniversary Card, BBC Kranji 3915, Warsaw 3955, RM Moscow 9450, Armavir 21450, Voice of Lebanon 6550, HCJB 26020, TWR Monaco 9495, and these for new countries - BBC Masirah 15310, Kenya 4934, and Dubai 21485 for country no. 105!

TIM AUSTIN Bluff, in his first report to this section, using a Sanyo RP-4500 has made a good start with QSLs from Tirana 9615, RFI 25900 with pennant, WYFR 11855, Budapest 17710, RCI 11830 with 35th Anniversary Card, IBA 11637, 21500, HCJB 21480, NHK 9505, RAI 15330, and Peking 15120, 7470. Welcome Tim!

MIKE SMITH now back in Christchurch wonders if anyone may be selling a Drake SPR-4, if so to contact him at 51 Springs Road, Chch 8004. Meanwhile QSLs back from RBI 15115, Norway 21730, NHK 15195, ORF 15560, SRI 9535, RM Moscow 6030, 21590, 11630, 15460, Vologda 15350, Voronezh 15305, Kenga 17805, Frunze 15535, Simferopol 17810, Baku 17825, Lvov 17780, Blagoveshensk 9580, Krasnoyarsk 6010.

RAY CRAWFORD Invercargill, but currently herding in some great DX at the Southern Cross DX Club Convention in South Australia has 15 out and varies back from AIR 9535, 11770, SRI 11950, 17750, Greece 9530, 9640, DW 21500, 21600, Greenland 9575 (great one Ray, should have listed as a 'QSL highlight') Dubai 21500, Voice of Lebanon 6550, Rumbos 9660, and Ondas Azuyas 4980.

LEIGH MORRIS Palmerston North, reports a quiet month, with Malta 9670, Dubai 21485, RIAS 6005 and Voice of Revolutionary Ethiopia 7165.

DAVID HUGHES also Palmerston North, has them back from Moscow 11630, 9565, 7370, 12010, 12075, 11820, 11715, 9610, 15305, 17880, 15385, 17730, VLH-11 11880, Israel 11637, KGEI 9615 with pennant, Excelsior 9585, and for new countries Belgrade 15240, Sorong 4875 VOFC 17890 with pennant, Fides 4845 and Dubai 21475. Good!

PETER JONES Hamilton, has QSLs in from SRI 21545, IBA 15105, 15585, East Sepik 3335 with pennant and stamps, Turkey 9550 with pennant, ORF 15385, Finland 9645, DW Koln 5960, Kigali 21540, Dubai 21485, La Cruz de Sur 4875 and Rabaul 3385 for country 100 QSL'd. Nice going Peter!

BILL JOLLY Kawerau, has one out and two in from RBI 21465 and Turkey 11955 with pennant.

PAUL ORMANDY Oamaru has logged two and is at present waiting for the varies.

LES BOYD Wanganui, in the past two months has sent 15 out and verified Sofia 11750, ORF 15440, New Hebrides 3945, HCJB 11835, WYFR 15130, Vatican 9625, RBI 15100, Peking 15125 and RSA 17780. Notes missed closing date for May Les, arrived 9/5.

IAN CATTERMOLLE Blenheim, has that nice one from Apintie 4795, also Peace & Progress 17785, Vienna 15440, 12015, NHK Sines 15245, Pyongyang 9977, HCJB 9705, Moscow 21725, 21465, Athens 21455, Lebanon 6550, Oslo 15345, Chile 9550, Lisbon 21475, Dubai 21485 and Vanuatu 3945, 7260. Independence Day for last one is 30/7.

LANCE JOHNSTON Christchurch, has reports out to 11 and three in from Vanuatu 7260, Dubai 21485 and HCJB 26020.

JACK FARROW Lower Hutt, has received QSLs from Radio Moscow 7240, 9450, Austria 12015.

BRIAN WEBB Upper Hutt, has no reports out due to receiver difficulties, but has had success QSL-wise with WYFR 21615, ORF 15225, 15560, Noumea 3355, 7170, KGEI 15280, SRI 6165, 15125 15305, VLH-11 11880, KTWB 17705, 11840, IBA 15105, 15585, NHK 15235, 21640, KBS 9580, 11725, Lisbon 21475, REE 9630, Norway 15175, and RN Bonaire 6165.

JIM GORMAN Papakura, has sent 18 away and has verified SRI 21570, Portugal 6185, RM Yerevan 5940, ORF 12015, NHK Sines 15245, Norway 15345 Tashkent 6025, 11785, HCJB 15405, 15415, IBA 11637, RFI 17850, Peking 9860, UN Greenville 6055.

M.L.V. BURKE Christchurch, has a big list with VLW-6 6140, VLI-6 6090, VLQ-9 9660, VLH-11 11880, VLH-9 9680, Peking 15125, 11725, 9460 HCJB 26020, NHK 11875, 15235, 15285, Port Moresby 4890, RSA 21535, REE 11880, Solomons 5020, Vila 3945, 7260, Austria 21460.

OWEN CULLEN Hikurangi, has one from HCJB 26020 Thanks for sched Owen, greatly appreciated.

FRANK CROW Los Angeles, USA has varies from SRI, Singapore, RSA, NHK Tokyo, 5 from RFI, RN Madagascar, RN Bonaire on 3 freqs, Sweden, NBC Port Moresby, HCJB 15250, 26020, Israel and Finland. Thanks Frank, welcome to the section. Your comments will be given to the Chief Editor, and will action address adjustments. Remember to list freqs of your QSLs, and report as often as you can, thanks for interesting comments.

BEST OF THE MONTH

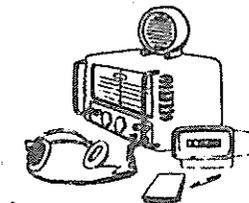
UNDER 9 MHz Abidjan 7215, 112 Points Dene Lynneberg

OVER 9 MHz (you guessed it) HCJB 26020 138 Points - Lindsay Robinson, Jim Benzoni Cecil Symmes, Lance Johnston, Dene Lynneberg

15

SHORTWAVE BANDWATCH

with BARRY WILLIAMS of Auckland



A very good month this month with 29 contributors so I added my two loggings and made 30, the first time since Auckland took over the Shortwave section that we have reached 30. Because of so many contributions to Bandwatch we have had to edit out quite a few. Very pleasing to note that the unidentified on 6076 khz in the May issue has been identified by several League members. This sort of original contribution to the Times is what makes the magazine a respected publication amongst the DXers of the world. This month we see increased listening on 90 and 60 metres. From my own observations here in Auckland, 60 metres has been the best heard for several years. Let us hope it is an indication of a good winter. Also the increased listening on 40 metres has produced several interesting loggings. The logging of the month would be Zanzibar 3339 khz by Arthur Cushman and Ray Crawford. But there has also been a station logged on 3338.5 khz. Lets hear from other DXers as to what they can hear around these frequencies.

All times are GMT. Add 12 hours for New Zealand Standard time. Freq.in khz.

Table with columns: FREQ, TIME, COUNTRY, STATION, PROGRAM AND RECEPTION DETAILS, UNITS. Contains various radio frequency logs and reception reports.

FREQ	TIME	COUNTRY	STATION	PROGRAM AND RECEPTION DETAILS	INITS
4762	0414	PERU	OCX4W	R.Inca del Peru, Lima, fair with English pops Other Peruvians heard on 4790, 4815, 4860, 4885, 4996, 4896, 5040 and 5050 khz.	PO
4765	0446	BRAZIL	R Nacional	Cruzeiro di Sul, good with pop music till s/off 0502 with full ID in Port. Also clear ID 0458. This station previously inactive.	DF JA
4765	1924	LIBERIA	ELWA	Good with English ID. Previously 4770. 3277 khz also heard at this time in African language.	BC JA
4777	1902	GABON	Libreville	Program of French light songs. Clear past 2000	FE
4785	1918	USSR	Baku	poor in Arabic under Tanzania.	DH
4785	0435	COLOMBIA	HJLW	Ecos del Combiana, Ibaque, Regular good sig. with plenty of Spanish pops.	PO
4788	0410	DOMINIAN REP.	R.Norte	Santiago. heard one day only. Very good with EE/SS pops. ID as "La Musica del Norte."	PO
4790	0458	PERU	R.Atlantida	Good with usual Spanish program.	JS
4795	0800	BRAZIL	R.Aquidauana	very good sig with musical program	RC
4810	0455	VENEZUELA	R.Popular	Good in Spanish. DH / Heard to 0409 with s/off and anthem.	DH PO
4820	0430	HONDURAS	HRVC	La Voz Evangelica. English Gospel, s/off 0500	PO
4820	1930	ANGOLA	R.Nacional	Portuguese program.	AC
4820	0920	COLOMBIA	R.Guataruri	very good at s/on this time.	RC
4840	0604	PERU	R.Andahuaylas (Tent.)	Heard 19/5 with election result one night only. No IDs. Poor improved to 0615 then silent period. tune out 0622 due noise. 800 watts in WRHB.	DF
4845	0458	BOTSWANA	Gaberones	Fair local language with hymns till fade out 0525. Heard with EE ID and nx. Difficult to verify.	PO BC
4865	0500	CARRIER	only	very strong with no audio. Maputo?	PO
4880	0500	SOUTH AFRICA	SABC	Africans Service, Anthem then news	JS PO
4890	0800	PAPUA NEW GUINEA	NBC	with native news and sports results. 1907 opening with march till 1930. strong signal	PO MN
4905	0855	BRAZIL	R.Relopio	Federal Many IDs with time checks every minute	DF
4905	0915	BRAZIL	R.Araguaia	all over Relogia Federal on the Brazilian ant	RC
4920	0630	AUSTRALIA	VLM4	ABC, good signal MB / Ex.signal PO / 0746 music Very strong signal with music 0848 PS /	DF JW
4929	0410	UNIDENTIFIED	Latin	with Ecuadorian type Quecha music. Who?	PO
4934	1955	KENYA	Voice of Kenya	Mombassa? good in local dialect. Short news followed by hymns and Koran. S/off 2015. (There is some confusion as to the location of this station. has anyone verified 4934 as definitely Mombassa? Ed.)	DL
4940	1400	CHINA	Guinghai	EE/CC lessons at 1400.	BW
4944	1745	VIETNAM	Hanoi	weak with talk program	AK
4985	1111	MALAYSIA	Penang	English and Malay program. 1130 news.	DM*
4990	0420	NIGERIA	Lagos	NBC First African in. English news and highlife music to past 0510. PO / very good 0500. DF /	DF
4990	1930	SOUTH AFRICA	RSA	IS and ID Fair sig. CS / 1900 Portuguese	MN
4990	2040	VIETNAM	Hanoi	PS in EE with special freq. ann. Fair sig.	DL
5003	0530	EQUATORIAL GUINEA		Spanish ann. and ID.	AC
5003	0350	BOLIVIA	CP48	La Paz Poor, Only early evening Bolivian heard	PO
5005	0507	EQUATORIAL GUINEA	R.Equatorial	Bata, with occasional SS ann. This frequency alternates daily with 4926 khz and on Sundays has a religious service in SS. African Church music.	PO
5005	1130	COSTA RICA	TIFC	s/on with Spanish music.	AC
5010	1336	SINGAPORE	Singapore B.C.	Fair with music program	FC
5015	1230	USSR	Vladivostok	Home Service, Russian V.G with music	FC
5015	0350	PERU	R.Moyobamba	heard with good sig. Peruvian election results	RC
5035	0445	PERU	Tarapoto	Radio Imagen, New station. Pop music	AC
5050	1000	COLOMBIA	La Voz de Yopal	very good. many ID's.	RC
5052	1340	SINGAPORE	Singapore B.C.	Fair signal.	FC

FREQ	TIME	STATION	COUNTRY	PROGRAM AND RECEPTION RESULTS	INITS
5055	0315	COSTA RICA	TIFC	Faro del Caribe, fair English to s/off 0350, Also s/on at 1100. // 6175, 9645 khz.	RC
5240	1400	CHINA	Fujian	Front station. Good in Chinese with ID then news.	DL
5520	1440	CHINA	CPBS	1st Program, Good in Chinese. 1500 ID and news	DL
5860	1243	CHINA	CPBS	1st program. // 5880 khz. Good splash from jammer	DL
5882	0442	ARGENTINA	R.Rivadavia	Poor Spanish music and IDs.	JM
5900	1201	CHINA	Fujian	Front station with relay of CPBS bc to Taiwan. good in Chinese. 1215 back to own programing.	DL
5960	0400	CANADA	RCI	strong with English program.	JB
5960	1237	CHINA	Yunnan	PBS, Good in local dialect.	DL
5980	0600	SIERRA LEONE	SLBS	IS ID and music. 0615 "Voice of Salvation" in English. Lybia absent.	LM
5995	0620	GREECE	VOA	Kavala, English news.	CS
6005	0430	GERMANY	FED. REP.	RIAS. Good in German. ID etc.	CC
6010	0810	PERU	R.America	Spanish music and IDs. Poor copy due tp het.	CSOC
6020	0622	USA	VOA	Grenville, French DJ program, Fair	CS
6020	0445	PERU	R.Victoria	Poor in Spanish, QRM CC / 1120 news. frequent IDs and adverts. QRM	DF
6025	2034	PORTUGAL	Lisbon	Fair with English news.	CS
6030	1550	UGANDA	Kampala	Fair English commentayr 28/5. Irregular.	LM
6050	0500	SPAIN	REE	Spanish with news. very strong.	CC
6056	0610	PERU	R.Continental	Pleasant music and adverts. ID 0626. VG.	DF
6057	0840	UNIDENTIFIED	Heard	20-22/5 with orchestral music and very few IDs. Fair strength. / Also Latin on 6065. "Rio Plata" heard	MS
6070	0620	CANADA	CFRX	Toronto, Full ID in English. Music and wx. poor	LM
6070	0900	INDONESIA	RRI	Jayapura good with music and talk.	RC
6075	0800	COSTA RICA	TICAL	R.Rumbo //525 khz. Excellent signal. Many IDs and call signs given. Gave address as apartado 140, Cartago, Costa Rica;	RC PE JM DF
6105	1530	TANZANIA	Dar es Salaam	ID and English news, weak.	LM
6105	1250	MEXICO	XEQM	ID Time check and talk. Fair	LM
6105	0415	GERMAN	FED. REP.	RFE News in Italian.	AC
6120	1130	NICARAGUA	Zinica	ID and TC. Program "Musica Ranchera". Fair	LM
6135	0540	TAHITI	R.Tahiti	Island music, // 15170	FC
6151	1100	CHILE	R.Nacional	Very good swamping ABC at this time.	RC
6200	1120	CHINA	CPBS	1st program, fair in Chinese, Het QRM.	DL
6200	0345	ALBANIA	Tirana	VG signal	ME
6230	1855	AFGHANISTAN	Kabul	in local language Pashtu / Dari? Fair	DF
6500	1200	CHINA	R.Peking	good signal	LR
6974	1110	CHINA	Nei Monggal	PBS, Huhehot, fair improving good mongolian	DL
7095	1335	CHINA	CPBS	1st program. Chinese fair with het. QRM.	DL
7160	1430	MALAYSIA	R.Kuching	Sabah with English news, fair.	CC
7180	1640	SINGAPORE	BBC	"English by Radio"	CS
7200	0530	MOROCCO	VOA	Tangier, "Breakfast Show" Good.	CC
7205	1540	ZAIRE	Lubumbashi	French commentary and Afro music. No ID heard VOA here 1600 onwards.	LM
7220	1124	MALAYSIA	Penang	//4985 khz, 1130 news, VG on new frequency	DM
7225	1327	PHILIPPINES	FEBC	Good in Mandarin, 1345 EE/CC lessons.	DL
7225	0350	RWANDA	DW	relay, good till 0420 when tuning signal of Tunis. English 0430 with DW African Svce. //9565 khz.	DF
7225	0430	TUNISIA	Tunis	Koran to 0440 then music. Arabic, very good. // 15225 when checked 0510.	DF
7250	2015	VATICAN	R.Vatican	IS then ID French, poor.	CC
7260	2000	GERMAN	DEM. REP.	RBI Good English news.	CC
7270	1450	MALAYSIA	R.Kuching	English announcement then local dialect.	CC
7275	1000	KOREA	R.Korea	News and music strong English. JG / 1405 fair in Indonesian, slight QRM R.Moscow. DL / 1003 English VG. AK.	AK

FREQ	TIME	COUNTRY	STATION	PROGRAM AND RECEPTION DETAILS	INITS
7420	1800	USSR	R.Minsk	, 1810 English snnc. requesting letters & reports	DH
7504	1201	CHINA	PBS	, 1st program / Good standard Chinese , //7516	DL
7770	1059	CHINA	CPBS	, 2nd Program , Good 1200 station ID and TC .	DL
8300	1100	CHINA	R.Peking	, s/on External Svce. Cantonese , RTTY QRM ,	DE
9560	0200	SWITZERLAND	SRI	, " Dateline " English . strong signal	LE
9575	0514	PORTUGAL	Lisbon	, Strong in English to 0530 . JM OC JB DH AC	AC
9578V	1555	ZAMBIA	lusaka	, IS Anthem and ID . English news , Afro music	LM
9585	1033	USA	AFRTS	with sports news .	JG
9610	0200	SOUTH AFRICA	, RSA	, English to NA . Fair QRM Oslo to 0230	JM
9615	0630	USA	KGEI	, Excellent with Spanish news .	OC
9650	0340	GREECE	, VOG	, Good level with English news .	OC
9770	1000	HAITI	4VEH	heard through R.Australia news at s/on .//11835	RC
9745	2145	IRAQ	Bagdad	, Fair with English program .	MB LR
9765	0430	BULGARIA	R.Sofia	, English news & comment . Poor signal .	LE
9785	0500	USSR	RM	, News and mailbag , good	JG
9915	0119	GT	BRITAIN	BBC , Good with Comment . English .	JW
9977	0924	KOREA	NORTH	Pyeongyang , Fair in English	MB JW
11705	0247	SWEDEN	R.Sweden	, VG in English . Baltic news , " Mailbag	DM@ JW
11705	1128	JAPAN	R.Japan	s/off in Spanish over R.Australia .	DF
11705	2159	USSR	, R.Havana	via R.Moscow . English to Europe , Fair sig.	JM
11785	0230	LEBANON	, Beirut	, English news & music . Strong with QRM	LM
11830	1815	KOREA	SOUTH	, R.Korea , Good signal to Nth.Am.	FC
11835	1135	URUGUAY	El Spectador	, (incluar with SLBC off) ID as " transmite	
			CX14 El SpectadorMontevideo ,Rep. Oriental del Uruguay	LM
11840	0230	GERMAN	DEM.REP.	RBI English to 0315 .	AC
11885	2030	TURKEY	R.Ankara	, New frequency , Poor copy	AC
11885	0030	URUGUAY	SODRE	, Opens with English Svce. Poor copy , s/off0058	BC
11895	2045	TURKEY	R.Ankara	, New frequency , severe QRM .	AC
11890	0832	PHILIPPINES	FEBC	, DZHB , News , side QRM HCJB 11900	PS
11920	0610	IVORY COAST	Abidjan	, Fair in French // 7215 khz .	DF
11900	0630	ECUADOR	HCJB	, Good with religious program	KN
11945	0845	NEW ZEALAND	RNZ	, " New Zealand Calling "	MW
15105	0500	ISRAEL	IBA	Very strong with English news .	LB
15185	2100	USA	WINB	, Religious , English poor signal	LE
15430	1930	FINLAND	Helsinki	, English to Europe up to 2000	AC
15485	1945	NEW ZEALAND	External Service	, good after Pakistan s/off 1930AC	
15582	2230	ISRAEL	IBA	Good in English. / 2350 VG relay Home Svce. JS	MW
17870	1037	INDIA	AIR	, VG signal English . ID & news 1037 .	DM@
21465	1300	GERMAN	DEM.REP.	RBI Eng.to SEA // 21540 ,17700 khz	OC
21505	2229	HUNGARY	Budapest	, " Hungarian for S.Am ." Poor signal	JM
21560	0350	ITALY	RAI	, English news and music .	LE
21635	2000	ALGERIA	, International Svce	of R.Algers excellent in English .	
			Spanish from 2030 . 1972 since last on 13 metres .		BC
News flash - late item just phoned in .					
3255	1918	LIBERIA	ELBC	reactivated . ID at 1930 . Fair signal ,RTTY QRM BC	

A John Allechin ; PE Paul Edwards ; MN missing name ! DL Dene Lynneberg
S Cecil Symmes ; RC Ray Crawford ; MS Mike Smith ; PO Paul Ormandy
W Barry Williams ; MB M.Burke ;DM@ Don Mitchell Vic. ;JG Jim Gorman ;
R Lindsay Robinson ; DH David Hughes ; JB Jim Benzoni ; CC Colin Campbell
M Leigh Morris ; AC Arthur Cushen ; JW Jim Webb ; DF Duncan Fraser ;
C Frank Crow LA,USA : LB Les Boyd ; PS Paul Schnell ;KN Ken Newton ;
C Owen Cullen ; MW Michael Williams ; BC Bryan Clark ;JM John Mainland
S Jack Searle ; AK Arthur Kindell ; Sorry I had to edit so much of the
DF notes out . Ran out of room and time .

ARTHUR CUSHEN'S SHORTWAVE REVIEW

Reception of a new station in Costa Rica. Major schedule changes for broadcasts from E.st Germany and new frequencies for Portugal and Turkey are featured this month. This is part of the script of New Zealand Calling, broadcast at 0530 and 0845GMT on Monday June 2 and 16. All times are GMT, 12 hours behind NZST. All frequencies in kHz.

ALGERIA: English now noted at 2000GMT to 2030 on 21635kHz. At the same time Arabic is broadcast on 21725.

BRAZIL: Radio Nacional at Brazilia has added two test transmissions in English at 1900 and 0200GMT. The full schedule is - 1900-2000 and 2000-2100 15125kHz, 2100-2200 15280; 0200-0300, 0300-0400 15290kHz.

DUBAI: Tests continue on the new frequency 21700 with a relay in Arabic, 0600-1100GMT.

FINLAND: A new programme magazine called "Voices" is shortly to be published and a free sample copy is available by writing to "Voices", P.O. Box 226, SF-00171 Helsinki, Finland.

GERMANY, EAST: RBI with English 0230-0315 now using the new frequency 11840 as well as 11890, 11975. Spanish noted on a new channel 6070 at 0300 but better on 6040.

GUAM: A new DX programme "DX Listeners Log" is now on the air in three transmissions each week from KTVR, P.O. Box 66, Agana, Guam. The broadcasts are Thursday 0100 on 17855; Friday 0915 11840 and Friday 1445 on 15365. A special verification card is being issued.

ITALY: Rome Radio transmissions to the Pacific in English 0350-0410 on 11905, 15330, 17795. In Italian 0830-0930 9580, 11810, 15330, 17780 and 21690 and 2050-2130 9570, 11800 and 15400.

LEBANON: Voice of Lebanon verifies with a letter and programme schedule, operates on 6550, 0410-2130 with English 1815. The address is Box 165271, Achrafieh, Lebanon.

MALTA: Ibra Radio with the mailing address Box 62, Bedford, England, heard with English on 9510, 2015-2115 Monday-Friday. Also noted with European broadcasts at 1800 following English identification on 11745kHz closed at 1900GMT.

MONGOLIA: Ulan Bator well received in English 1220-1250 on 12070 and 6383kHz with a repeat 1715-1745 on 11860, 6383kHz.

POLAND: Warsaw changed its slogan to "Radio Polonia" recently, heard very well in English 0200 and 0300GMT when using 6095, 6135, 9525, 11815 and 15120kHz.

PORTUGAL: Lisbon using several new frequencies noted in English 0300-0330 on 11925, 15120, 0500-0530 9575 and 11925; 1800-1830 17880 and 21530. Portuguese to Australia 0925-1100 now on 21645 replacing 21700.

SEYCHELLES: FEBA has several new frequencies and afternoon transmissions are 0155-0300 15405; 0300-0445 15400; 0445-0520 15360 are some of these heard in this area.

SPAIN: The DX Programme is broadcast on Sunday 2050GMT on 9765, 11840 and repeated 2150 on 7105, 9765 and 11840. On Monday 0045 9630, 11880 and repeated 0505 on the same frequencies.

TURKEY: Ankara in English 2030-2130 on 11885, 11895; 2200-2300 7215, 9515, 15250 and 15360.

UKRAINE: Radio Kiev has been heard at 2000-2030 with English on 11880. Also announcing as using 7175 and 9560. At 0300 to North America English is on 11735, 11790, 15180, 15405 and 17870kHz.

VATICAN: English to Australia and New Zealand 2210-2225 is now on 9615, 11830 and 15120kHz. During the Pope's visit to Africa 9625 replaced 9615 for several broadcasts while 15120 has replaced 7235.

..sign off..

with JOHN MAINLAND

(20)

COPYRIGHT BBC Monitoring Service items designated BBC MS are copyright and may not be further reproduced without BBC MS permission.

ALBANIA Radio Tirana's external scc transmissions in Standard Chinese are currently heard on the following fqs: 0500-0600 16230,14320,10510;1100-1200 16230,14320,10510;1300-1400 14320, 10510.

BBC MS

NORTH KOREA The Korean Central Broadcasting Station, North Korea's domestic scc from Pyongyang, is noted from 2000-1800 on new 9662.

BBC MS

PAKISTAN Azad Kashmir Radio's 4,980kHz channel is in use for pxs in Kashmiri and Urdu from 1415-1800. Relays of R. Pakistan's domestic scc newscasts in Urdu from Karachi are carried from 1500-1520 and 1745-1755.

BBC MS

ZANZIBAR A 50kw transmitter has been registered with the ITU to broadcast as follows: 1500-2100 on 6015, 9525, 11735, 15165, 17755 and from 0300-1500 on 9525. David Hughes via RCI 28/4

VENEZUELA In December 1979 the Spanish news agency EFE carried a report that Radio Nacional was to close due to lack of funds. The station was last heard to broadcast on 6170 in the latter half of January. Recent checks reveal no trace on 6170. The station is believed to have closed.

BBC MS

ALGERIA All Algerian radio pxs are now heard one hour earlier. This includes external service txs. Radio Algier's txs in EE and SS are now heard from 2000-2030 and 2030-2100 respectively on 11810, 11740, 7195.

BBC MS

BOTSWANA/USA The United States has signed an agreement with the government of Botswana for the erection of a Voice of America relay station. The new station VOA's third on the African continent will be designed to reach a wider audience in southern Africa where signals are currently weak. The site is unknown at this stage but previous reports have suggested Francistown. R. Ginbey RN DX 8/5

HOLLAND Beginning this May Radio Nederland launches its new px for listeners in Asia. In place of "Asia Special" which used to be broadcast on Wed we now present "Mainstream Asia". It's every Fri at 1430 GMT in our Asia tx.

GREENLAND According to a QSL from Radio Greenland they have deleted all their sw frequencies effective March 1st, except 3999 kHz. Don Moore RCI DX 11/5

MOROCCO/FRANCE France has decided to set up a radio station in Morocco similar to that of Africa No.1 in Gabon. The project was to be carried out by the French state-owned company "Sofirad". The report added that the radio station would broadcast in African languages and would function in collaboration with the African service of Radio France Internationale. BBC MS

UNITED ARAB EMIRATES Arab Gulf Information Ministers have called for a study into the possibility of the establishing a joint radio station to broadcast foreign language pxs to Europe and Asia.

BBC MS

POLAND Since 9th May the external service of Polish radio from Warsaw has been announcing itself as "Radio Polonia".

BBC MS

PAKISTAN Radio Pakistan has introduced a new scc in Urdu for listeners in the Gulf and Middle East. It is broadcast from 1800-1900 on 21605 and 17660. This scc originates in Islamabad. BBC MS

VOICE OF TURKEY EE May 4th: 1200-1300 17860, 15185; 1330-1430 17860; 2030-2130 11895, 11885; 2200-2300 15360, 15250, 9515, 7215.

BBC MS

PERU Radio Imagen in Tarapoto first went on SW in January 1980, on 5035. According to a letter/QSL from the station, its sked is 0930-0500 daily, but s/on can vary to as late as 1000-1030. Power is 1kw.

Ralph Perry, U.S.A., (SCDX 29/4)

PUBLICATION "Voices" is a new international magazine devoted solely to international broadcasting. Every month some 50 pages of reading, reviewing and commenting on SW radio, including a preview of special programming scheduled for the month ahead, as well as a fq check-list to keep up to date with the latest changes. As well as plenty of articles about broadcasting and broadcasters. A year's subscription costs \$16,30 DMK, 3900 Yen or 7 Pound. There is also a special three month subscription period. "Voices" will begin publication this summer, and all subs will be sent airmail. As a special introductory offer, anyone who writes and asks will be sent one free copy of "Voices". The offer is limited to one copy per person and is open only until the end of June 1980. The address: Voices, Box 226, Helsinki 17, Finland. SCDX 6/5

VOICE OF VIETNAM EE Hanoi: 0700-0800 9840, 7512, 6384; 1000-1030 12035, 10080; 1800-1900 15010, 10040; 2030-2130 15010, 10040. BECMS