

VOLUME 40

# DECEMBER 30, 1972

NUMBER

"I have been a member continuously since joining in 1951 and want to extend my thanks and congratulations to the Boston clan for a job mighty well done." (Duane McMurray, Iowa)

#### IN THIS ISSUE ...

Limitations in the Use of the A Index for MW DX'ing, I - Gordon Nelson

#### NEW MEMBERS THIS WEEK ...

- \*C.F. Adamson, 103 W. Main St., Bldg. 9, Apt. 3, LeRoy, NY 14482
- \*Fred Spurrell, 647 SW 132nd, Seattle, Wash. 98146
- \*Robert Dykes, 9230 Kenilworth, Houston, Tx., 77024
- \*Wm. Krakow, Physics Department, U. N. C., Chapel Hill, N. C. 27514

Welcome to the NRC, people; we hope to be reading of your DX activities often here in DX NEWS.

# SCHEDULE FOR DX NEWS ...

This issue is going to the printer at least a day late; we are holding for the arrival of Page Taylor's IDXD section which at this moment has been in the mail for 4 days Special Delivery from New Jersey to Boston... We take our regular one week skip next week and then resume weekly publication until late spring.

#### 1973 DOMESTIC LOG PROGRESS REPORT ...

The final updated copy for the new Domestic Log has been received at HQ and is now being Xeroxed to produce the copies to be sent to the proofreaders. Additional copies are being sent to the members who have volunteered to help prepare the alphabetical/frequency tabulation. Format, size, and price will be roughly the same as for the previous edition - the only major change is the alphabetical call/freq tabulation. More info next time...

#### ANOTHER SMALL ISSUE ...

We may be the largest MW DX club but you wouldn't know it from the size of some of our recent issues... The only things we're holding here at HQ are some technical articles dealing with patterns; they're being retyped and redrawn to render them suitable for reproduction... The Editors and Publication Committee are waiting to hear from you - why be quiet and shy..?

#### CREDITS ...

Publication crew for the last couple of issues: Chuck and Jackie Rossier, Grace-Anne Stipe, Ray Moore, Hal Robie, Diane Nelson, Big George and GPN...

# HQ LOSES ITS OWN AMAZING GRACE ...

One of the BPC's most faithful workers, Grace-Anne Stipe, will be leaving our ranks very shortly... By the time you read this she'll be Mrs. Victor Benoudida and on her way to live in Paris where she'll keep us up to date on the European scene. Best of luck to Grace-Anne and Victor and we'll really miss her around here!

#### TROUBLE RIGHT HERE IN RIVER CITY ...

Compared with the goings-on in some of the other DX clubs things are usually pretty quiet here in the NRC - we just keep grinding out DX NEWS, special projects such as the Pattern Book and the Logs, and try to find time to continue our own DX'ing and research efforts to improve the state of MW DX art... A couple of unpleasant items have come to the attention of the HQ crew recently, however, and since they have implications beyond just the NRC we feel they should be aired. The first is a letter from Richard E. Wood:

"It has come to my attention that my NRC Musing of Aug. 29, 1972 (Vol. 39, no. 31 of DX News) was rudely plagiarized, without my permission or my being informed or sent a copy of the issue in question, by the Arctic Radio Club's MW Eko of Oct. 2, 1972. Since this plagiarism of my material was done without my knowledge or my being informed, I expect an explanation and an apology. Likewise, I expect NRC to prevent future incidents of this kind. If this is not done and my Musings are liable aga again to be subjected to such misuse, I will no longer be able to support NRC and will have to reconsider my status as a member. It should, incidentally, be remembered that ARC is not an open club dedicated to furthering DX-ing, but a closed self-styled elite group whose elitism seems to be furthered by plagiarizing other people's material in a discourteous manner. May I look forward to your early and specific reply?"

We feel that several points warrent comment. The Musing in question concerned Wood's recent trip to Alaska and reception conditions during that time. "Plagiarism" is a very serious and emotion-laden charge, yet all of the English language dictionary definitions we can find stress that plagiarism is the use of material created by someone else vet claimed as one's own work... Yet the Musing in question was fully credited to "Dr Richard E Wood"; perhaps then we'd like to suggest that it's nothing as serious as plagiarism but the definitely lesser sin of reprinting without the permission of the author .. ? The interrelationship between the various DX club publications is quite casual. The NRC maintains exchange relations with most of the major DX clubs interested in MW DX throughout the world; vital information and relevant articles have been freely exchanged and reprinted for many years, always with due credit given to the original sources. Over the years our own IDXD section has profited greatly by the material originated by clubs such as MW Circle (England). the two New Zealand clubs, Arctic, the Benelux club, etc. By the same token these overseas clubs - all volunteer and nonprofit efforts such as the NRC - have drawn heavily on DX NEWS. Many of the new items appearing in our IDXD section are immediately picked up by the overseas clubs; likewise many of the original technical

articles appearing in DX NEWS - especially those by GPN - have been reproduced in various overseas bulletins. We feel that such an exchange of information is vital to the continued growth and progress of the MW DX hobby.

Wood demands that we apologize and "prevent future incidents of this kind". Fine, Richard, but how? The item in question was reproduced from DX NEWS without our knowledge or consent; how are we to go about preventing other individuals or organizations from reproducing material originated in DX NEWS? And why should the "plagiarizee" have to apologize for the sins of the plagiarizer?

We have sent a letter to Arctic requesting that they refrain from reprinting material originated by you, Richard. Otherwise we will continue to leave our material freely available to the clubs with which we maintain an exchange relationship; once we begin to limit the availability of material originating here in DX NEWS we can only expect the like in response - to the detriment of all we believe...

We cannot control the eventual destination of material appearing here in DX NEWS; once DX NEWS hits the Post Office it's out of our hands both literally and figuratively. All we can suggest is that members who contribute material to DX NEWS and wish to deny it to specific other clubs ADDRESS THEIR GRIEVANCES TO THE OTHER CLUBS AND NOT TO THE NRC.

The delicate theme of interclub relations has also been raised in a second communication recently received at HQ. It appears that a number of members sharing joint membership with another DX club recently got together and decided that merger between the NRC and the other club is "necessary in the not-too-distant future" and has begun "investigating the XXXX constitution for loopholes to consummate a merger quickly if need be." This group has even decided on the structure of the new merged club and the bulletin format. Who'll get the responsibility and workload of publication is not made clear except that it won't be anyone in the group that's trying to engineer the merger. Should anyone have the timerity to question these fiats, a simple and efficient solution will be imposed: "Political considerations and individual soap-boxing should be cast aside in the higher interest".

During the more than 4 years that the Boston Publishing Committee has been shouldering the responsibility and workload for the production of DX NEWS and the operation of the NRC it has been our policy to refrain from any and all interference with the operations of other DX clubs. DX clubs are complex and fragile structures made possible by the volunteers who give freely of their time and resources to keep the wheels turning behind the scenes every week... The Publishing Committee does not believe that the NRC has any right to tell another club how it should be run and does not attempt to do so.

The activities of this group are totally without the approval or sanction of the NRC Publishing Committee. We deplore this premeditated and calculated attempt to interfere with the operations of another DX club and wish to make our position perfectly clear to all parties concerned. Merger is a bit like Utopia - easy to talk about but surprisingly difficult to actually attain. We seriously attempted a merger four years ago but it didn't work out; we still believe that a merger might well be in the best interests of the hobby and are always willing to discuss the nuts-and-bolts of such an arrangement with duly appointed representatives of other clubs.

1/8 KDDA-1560 (see below) AsMasileBelle ke/c Power 12:01 - 5:90 N R C Mon. Jan. 8 WGIG 500 U-2 Pawtucket, R. I. 550 2100 + 3100 250 D-1 Great Barrington, MissN R C 8 ws Bs 653 1,000 U-2 Jackson, Mississippi N N R C 1:30 - 1:00 Sun. Jan. 14 W J D X 5,000 U-4 Panam City, Florida N N R C 2:00 - 3:00 Thu. Feb. 8 WPCF 1430 1:01 - 2:00 Mon. Feb. 12 KOTA 1380 IRCA 5,000 U-2 Rapid City, S. D. 5,000 U-2 Fort Smith, Arkansas N N R C P:00 + 12 KWHN 1320 5,000 U-2 Billings, Montana NNRC 4:00 - 5:00 Tue. Feb. 13 KGHL 790 Mon. Feb. 19 WKIG 1580 1,000 D-1 Glennville, Georgia NRC 3100 - 3115 NNRC 3:00 -5,000 U-2 lake Charles, La. Sat. Feb. 24 K L C L 1470 NNRC P:00 + 500 U-4 Dover, New Jersey Mon. April 2 W R A N 1510 3:00 - 4:00 IRCA Mon. Jan. 8 K D D A 1560 500 D-1 Dumas, Arkansas

WCNG-550. Duane Burnham, WCNG, 96 John St., Cumberland, R.I. 02864.

KDM-1560. Alan W. Bastham, G.M., KDDA, Box 215, Dumas, Ark. 71639. 312-834-7015

WSBS-860. Thomas Jaworski, NxD, WSBS, Great Enrington, Mass. 01230. We Jon't have the time, but we BELIEVE it will be 2:00 to 3:00, E.S.T.:

Check Mon. Jan. 15 and/or Jan. 22 for possible silent morning by WWRL, and if so, then look for these stations to TEST:

157 M C P K 1600 1,000 D-1 Chesapeake, Virginia N R C 2:30 - 3:00

Mon. Jan. 227 K L E B 1600 1,000 D-3 Golden Meadow, In. N R C 3:00 - 3:30

550 D-1 Sag Harbor, L.I. N.Y. N R C 3:30 - 4:00

We are trying to find out from WWRL about that promised Monday silent date, so if we get the dope and don't have time to get it into DX NEWS, do check those three Mondays, for one of them MIGHT just be the one!

WPCF-1430. First 15 minutes will be their frequency check, then will follow some music and frequent IDs, and plugs for the Newark News Radio Club. Reports go to Mr. Reed Kinney, Assistant Engineer, WPCF Radio, Bay County Broadcasting Co., Inc., Box 1430, Panama City, Florida, 32401.

Info, Gene Vonderembse, of NNRC.

CAROLINA COUGARS BASKETBALL NETWORK WBBB- 920 Burlington WBBO- 780 Forest City WWGP-1050 Sanford WNOS-1590 High Point WBIG-1470 Greensboro WPTF- 680 Raleigh WLOE-1490 Elen WISE-1400 Wallace WIAM-900 Williamson (from Bob Grubbs, I think) SEATTLE SUPERSONICS BISKETBALL NETWORK KOMO-1000 Seattle KBKW-1450 Aberdeen KXLY- 920 Spokane KXLE-1240 Ellensburg KTT -1280 Yakima KPQ - 560 Wemtchee Kale- 960 Tri-Cities (from Charles Mohr) HEARD SINCE LAST ISSUE 1400 CBXII ex=1490 1490 CJCR Coleman, Alberta "AN" SITUATION

OMS. 610 C H N L GPU 1230 C ? N L GPU 1260 C F R N AN-6 (rr) 1400 C ? N L GPU 1540 K B E S SPU, noted on MMs

Very sincere Christmas, Chanulah, and New Year's wishes to all members of the NRC, And, let me once again remind you that Musings has been getting rather skimpy. The so-called "record" of 20 pages a few issues back was not really a record, as it was a combination of two weeks' copy from here in Brooklyn. This section is in need, men! List your DX day by day, and frequency, and be kind enough to double-space!





CHRIS LUCAS - 407 Elmwood Avenue - Ithaca, New York - 14850

DX CX have been quite good, at least for domestic DXing, although I miss the Aurora of a few weeks ago. Loggings for past seven days: 11/28- WIFC-1370 N.C. @ 5:14pm. 11/29- WIIA-1580 Va. @ 5pm, WSPF-1000 N.C. @ 5:16; WJAX-930 Fla. @ 5:30pm, WTHB-1550 Ca. @ 5:30 s/off, WLOR-730 Ca. @ 5:45pm, WNOE-1060 Ia. o/ KYW @ 5:54. 11/30- WOIO-1060 O. @ 4:40pm, WFII-1070 Tenn, @ 5:02, WPTF-680 o/WINR @ midnight. 12/1- WQIZ-810 S.C. @ 5:13pm s/off. 12/2- WRNL-910 Va. @ 4pm, WSIG-790 Va. @ 4:08, WKYB-1000 S.C. @ 4:56, surprise in WGGH-1150 III. @ 5:35pm, WSAO-1550 @ 5:45, WTVN-610 0. very good @ 6 (maybe still on day pattern by mistake, but a welcome log here anyway). 12/3- WOKO-1460 N.Y. @ 1:31pm o/u WAXC on daytime skywaves while local WTKO-1470 was running taped shows with low modulation and no highs; hence, no splatter. WOKO calls it self "OK Country", and apparently IDs with call letters only on hour and half hour. I had to wait about 45 minutes for that ID, as I missed the one on the top of the hour due to WTKO splatter (running live NX or something). WGPA-1100 Pa. @ 4:26pm, WJSM-1110 Pa. @ 4:28 s/off, WTBQ-1110 N.Y. s/off a couple minutes late @4:32 doing quite well against WBT for 250w. WRAR-1000 Va. @ 4:45 s/off, WIOO-1000 4:45 s/off also, for Pa. #84, WHNC-890 N.C. @ 4:59pm, WFMO-860 N.C. @ 5:17 s/off. 12/4- WGNG-550 R.I. in nicely on longwire @ 1:16am, SSS, WOWW-1380 Conn. @ 3:59pm, WDMV-540 Md. @ 4:25, WIIX-540 N.Y. @ 4:28pm for N.Y. #99, WBBO-780 N.C. @ 5:11, KFAB-1110 Neb. @ 5:49 very nicely w/loop. 12/5- I am listening to RX w/longwire as I type this & nust logged CFRS-1560 Ont. @ 1:35pm mostly u/WQXR, but they faded up with promo for turley giveaway for clear ID. Much to my chagrin, WADD-1560 is yet unlogged here, D-1 @ only 90 miles. (I think they're D-3, Chris -ERC) (Protecting WQXR I'd guess) Total loggings now at 560. There are so many to hear it's hard to choose a frequency to listen to while DXing. The 11/25 DX NEWS arrived here five days late, & apparently there was no 11/18 issue. What happened? For new DXers interested in a good low-cost rig. let me say I've had the Lafayette HE-30 for 92 years now & find it very adequate for domestic DX. It has been replaced by an all-transistor model, which I believe is equally good, and sells for about \$100. 73.

(No name, single-spaced) - 2766 Lyle Street - Sarasota, Florida (no Zip) CX here are better. I DX mostly during the daylight hours. I have added to my DX den a new loop. I built a frame out of 12" doweling & 2-inch plywood. It strads over 6' tall and is 48" from each corner, diagonally. (It's a diamond loop). (How many carats?? -ERC) I also devised a clever base by cutting a sheet of plywood to 24" x 24", put a small caster on each corner, and find a section of pipe about 18" long & a matching flange. The flange is bolted to the base and the pipe is screwed in, when the main shaft is dropped down the pipe, the loop will stand up. The loop has ten turns, tuned with a 265 uuf capacitor & a 115 uuf disc capacitor. Also, since it is an imductive coupled loop I have two turns for coupling to the RX. I don't have an amp on the loop, but one will be added later. Feedline is a two conductor shielded broadcast microphone cable, and does the job well. The loop also has popeicle sticks wound in the tank a la NRC Loop. This is the first loop I've ever had, and after eight years, I can say "Throw away that longwire - build a loop! Loops are Boss!" I have also bought a Realistic Patrolman 7B hi lo band monitor and it is tuned to our local S.O. (sheriff's office) all the time. Veries for November: WMOB-840 Ala. WINK-1240 Fla., KCES-740 Cal., KBAT-680 Tex., WREC-600 Tenn., WLBE-790 Fla., KRMG-740 Okla., WBCP-980 Fla. Well, I'll pass along a Merry Chris tmas, Happy Chanakah, Happy New Year for Kathi (my wife) and myself. 73s.

WE BELLEVE THERE WILL BE A WELK'S HIVTUS AFTER THIS ISSUE FOR CHRISTMAS. IT IS SORT OF CLICHE-LIKE, BUT HOW ABOUT A NEW YEAR'S RESOLUTION TO MUSE REGULARLY in '73' INCLUDE YOUR DX DAY BY DAY, AND DOUBLE SPACE, AND STICK TO DX SUBJECTS. THANK YE

ISAAC MAVES - 10113 Pillot Street - Houston, Texas - 77029

For the most part, CX have been good. However, last MM 12/4 an approaching cold front pumpre the atmosphere full of static. In spite of it, a log on KCRY-1530 Cheyenne, Wyc. was taken @ 2:48am. Two entries in the logbook from the Houston address lately are WLIL-730 Lenoir City Tenn. @ fam just before the XEX booming s/on signal. On 12/4 a long-sought TICAL-525 Costa Rich was monitored from 9:30 to 10:30pm. The call letters were mover recomized, but mention of "k. Pumbo" and Cartago were Prequent. This was easy listening to start with, but deteriorated as it got later. I can't believe it's only the listed 250w. One of the musical offerings was a vocal appropriately entitled "Feliz Mavidad." We enjoyed a week vacation at the lake, during which I got in one fruitful MM session 11/27, the best catches being KNOW-630 Denver 3 3nm; KNOK-530 St. Louis 6 3:01, using the SM-1 to null Denver; Baisen Monsermte, Colombia-650 @ 3:27, interrupted by MEM Tring; KTOK-1000 Oklahomn City @ 5:15am & WNOX-990 Knoxville @ 5:21am. Other DXing highlights: 11/28- A Mexican on 760 IDing as XEDGO, R. Capital, @ 7: 56pm w/WJR underneath, a new state in WNBC-660 N.Y. @ 11:08pm, & a good signal from KFI-640 at 11:38pm, w/the Cuban nulled somewhat. KENN-1390 Farmington, N.M. has an unusual s/off musical selection in the male/female duet of the ancient "All Through the Night" @ 1. Day DX has been intriguing, catches like the following making it so: KLOV-1570 Loveland, Col. on 11/11 @ 9:28am I&C. I have monitored this 1,000 watter several times since; hard to believe! XELO-800, KCMO-810, KOB-770, WBBM-780, WGN-720, WIW-700, WMAQ-670, WNAD-640, XEBX-610 can all be heard here days. The SM-1 generally furnishes a stronger signal but also pumps in more noise than the Boverage. Much metal in the radio shack must be considered, however, See you again through the Musings section soon.

JOHN A. CALLARMAN - 1122 Maple Street - Mount V. rnon, Illinois - 62864

A little DKing is being done, as I start a new log. A recently purchased reconditioned HQ-180 and a 160' longwire into a degenerate loop tune for instructions a few years ago from Fish (who apparently believes there are enough women in the nation) makes up my new den. I've cried twice to build an Alt loop antenna, and though the directions are simple, I can't seem to make it work. What's Joe Worcester's address? (DX Stamp Service is now run by George N. Robertson, W2AZX, 83 Rider Parkway, Ontario, N.Y. 14519 -RRC) First entry in new log is KJAS-1170 o/WLH, which used to be dominant daytimes, on 9/24. I also logged my daytime dominant on 810, WMTS. On 10/3, I heard WKAR-870 from 6:47 to 6:59 s/off, o/WWL. Night of 10/4 I found WETE excellent atop 620 8:19-8:34; KFAL-900 logged 10/5 6:10-6:20pm; KHOZ-noted there signing off @ 7:29, followed by WDDT @ 7:30. On 11/9, KXJK-950 dominated channel to 5:57 c/off, call definitely KXJK, not KWKJ as had been previously reported. A Texan on 940 to 6:14 s/off w/1,000w must have been KATQ. WHOS-800 heard w/s/off in progress 11/11 @ 5:44; WSHO then dominated to 5:58 s/off, and any chance of further logs on this channel gone then, w/PJB's s/on. 11/13- WSLI dominated 930 @ 5:55 with Radio 93 million-follar mx. WMOB-840 heard to s/off 5pm u/WMAS, but poor. On 12/3, routine three for collection taken in regular daytimers WDXN-540 KSD-550 & WKYX-570. I worked 1590 @ SSS for WAIK @ 5:30 s/off, WWUN then dominant, followed by KDEX s/off 5:45. Incidentally, WFIW-1390 & WMIX-940 December s/offs are 5:45, 15 minutes beyond the Wesolowski SRS/SSS maps. WMIX license matches the maps in 22 of 24 cases - good job - and thanks to Don Erickson, I've replaced my lost maps. I've decided (for various reasons) to join the non-verifiers, and get my hobby kicks from logging, taping, & maybe an occasional Club report. Best. (Welcome back, John: Mu e often, ch? -ERC)

DAVID KABLE - 29247 Waldensa - Wickliffe, Chio - 44092

The last few nights I've noticed how choppy 740 is, unlike usual CBL-740 in crystal-clear, so on 12/4 © 8:25pm there was a severe squeal on that frequency, so I tuned it in, & about 738, there is a C ban! I wasn't sure at first, but 8:30 rolled around & I heard the same ghostly ID that CMQ gives! Do they know they are off frequency, or is it trying to jam 740? The clear channels are getting jammed up. I am only 225 miles NE of Cincinnati, yet I can hear hets u/700, & for a few seconds it sounded like a graveyard! Does everyone like Cleveland's new WWWE (old WKYC-1100?) They ID 25 "3W-3". I like the old calls better! If CKLW had

PJB's power, their slogan "The Big Might" wouldn't be questioned! At least 640 is worse than 800 - at least from here! This is it for a quick Muse, so keep tuning!

Please note by new postal code. Ottawa is making another attempt at please note by new postal code. Ottawa is making another attempt at postal zones: It looks like they mean business this time, hi. There is not much DX to report in the way of new catches, but CX have been favourable. 11/16-WHVL-1600, 5:29pm s/off, and I ... a good report on 11/22. NM 11/20- Good E/W reception. CFAM-950 1:06-1:25am, only interference was from WBBF. This MM also revenled that the S-120 can really perform well under such conditions (actually my set is a Sears model 11/29 but it amounts to an S-120 with an S-meter). CFAC-960 was in easily topping channel, level with WBBF-950, but was unn here. KOA-850 had tremendous signal, but was unn also. What was the station on 1530 w/c/w mx u/WCXY/s OC arojnd 2:15am? It was weak and did not stay in for Long. 11/26- I did not try for WJVA-1580 as was unn. That was actually one of my first semi-decent DX catches, back in 153. MM 11/27- ET on 1310 beginning @ lam with Bob Dylan LP. I think they said WORC. 73,

JEFF FALCONER - Box 63 - Clinton, Ontario

Hi! DX lately has been wonderful and isstill picking up. Here's what's happening in the way of DX: 11/26- ht 5:20pm EDF (EDF? -ERC) I heard a weak ID from WHYZ-1070. Also KBCA-830 @ 5:28pm w/WCCO, fair signal. On 11/28 WCMP-1150 w/ID @ 5:25pm in WSLR/CKLB mess. 11/30 saw WJMS-590 @ 5:13pm fair w/WX, & WKTY-580 @ 5:24pm w/CKWN. I heard WKBA-1550 z/off w/CBE 11/29 @ 5:14pm. I found CX of efternoon of 12/2 commige. There were covered stations in the Wis.-Ill. area according in. As soom as I heard on ID of WTM:-1530 C meen, I knew CX were good. At 2:14pm, WTHU-1600 w/spot for a supermarket in Muskegon along w/WNEU. At 2:35pm I as surprised to hear WMIR-1550 o/CBE/WSHN w/spot for a store in Burlington. At 3pm WHOW-1550 IDed completely in the clear. WMPP-1470 w/ID@ 3:17, o/WOHO. I finally got ID from WHII-1100 was u/WWWE (e -WKIC) @ 4:12pm. At: 4:59, WHFI-1440 w/bccutiful sigmls w/NBC Monitor. At 5:05pm WAUK-1510 in the clear w/spot for Waukesha State Bank. That was some of the best daytime DX I've done in a long time. 12/4, At 5:15pm, WMAX-1480 s/off fair w/ HBC & @ 5:25 KWAY-1470 w/c/w w/ WOHO. Recent veries: v/q- WISN WAMY WGAC WMC WIOR & CJIC. v/1- WJVA WANB WEDO KOLM WISO WSML WBEO. Until next time, 73s & best of DX. Do you know anything about the New Member Kit? I've been a member almost a year & haven't received it

CHRIS HANSEN - 1312 B Carman - Columbia U. - New York, N. Y. - 10027 Greetings to the membership - especially to the silent majority who do not Muse - let's hear from you! I would like to add a PS to my last Musing about carrier current college stations. I have been talking to the CE of WKCR-590 here at Columbia, and there are some very strange things which happen when you let electrical wizzards loose on equipment. Once in a while a tinkerer will, whether on purpose or not is impossible to prove, increase the power of the XR. The CE cays the last time that happened he got a report from Syracuse! Perhaps someone, either in Upper Manhattan or in Newark across the Hudson, would listen for WKCR; they would be interested in receiving reports, unlikely as it may be that they will be received. The address is: CE, WKCR-AM - Ferris Booth Hall, Columbia University; They broadcast 5pm to 2am EST. This station is very important N.Y. N.Y. 10027. to Columbia since the FM outlet is broadcast downtown, and the GM Building blocks any signal from being received on campus! Great planning. I have gotten a verie from CHAL-900. I am fooling around with assorted loops to increase my reception here in a cinder block building. I hope none of you is in a cinder block building. It is very frustrating. If anyone has any suggestions for improving reception, please write. Thanks a lot, & 73s & best DX.

ROBERT M. GRUBES - 3908 Cheru Avenue - Decatur, Georgia - 30034

Just a note to let you know I'm still alive; it's the DXing that's dead. With a growing family, job, & poor health I can't seem to find any time. I note the Atlanta Flames (not Falcons) hockey outlet is the 11/25 DX NEWS was unknown. It is WGST-920. 73s. (Sorry you're not feeling your bast, Bob, but we all hope it'll be very soon that you will bd! -ZRC)

JIM HAYES - 9 Henry Street - Wilkes-Barre, Pennsylvania -- 18702 11/24 - A great day for daytime DX. 12:40pm, WKBW-1520 N.Y. very strong at times. WTOP-1500 D.C. fair @ 12:44. 12:50, WBRW-1170 fair, WKBW locallike @ 3:30. 4, WKCY-1300, Harrisonburg, Va. w/c/w. 4:05, WPVA-1290, Petersburg. Va. w/c/w. 4:45, WMCR-1600, Oneida, N.Y. weak on s/off. 11:45pm, strong hets on 780 1040 & 1160. 11/29- 4:58pm, WYAL-1280 N.C. on s/off. 11:10pm, UnID-760 u/WJR in SS giving time every minute w/a device that ticks off seconds like WWV, faded @ 11:22. A real mystery! Conversation was carried on through minute, unlike WWV. (That's "The Cuban Minute Man", Jim - AN-NSP -ERC) 11:33pm, strong het against 740. 12/2- WLET-1420 Ga. @ 4:40 w/c/w, dent for verie. 12/3- inter-like CX are back when 540 becomes active. 4:28pm, WLIX-540 N.Y. 4:33, WPIK-730 Va. in strong. 5:04, WBSC-1550 S.C., not heard since last December, also a very cordial verifier. 5:22, WSRF-1580 Fla. very weak. 12/4- 4:52pm, WEET-1320 Richmond w/c/w in strong. 5, WARQ-1540 Cleveland heard on s/off. I was looking for WRGM-1540, but no luck yet. I received my Night Pattern Book and it really explains a lot of mysteries. Maybe I have some kind of complex but it seems that most stations have their nulls toward the Wilkes-Barre/Scranton area. I hope to get a Day Pattern Book when

JAMES E. CRITCHETT - 1504 Glenwood Drive - San Diego, California - 92103
From 10/24 to 12/11 reception reports have gone to KTCM-1380,
Salinas, Cal. for their morning program from 9:48 to 10:05em EST 11/18; to KRKT990, Albany, Ore. for ETs from 3:56 to 5am on 12/1, and to 4QD-1550 Emerald, Gsld.
Australia, for programs heard from 4:30 to 6:05em MM 12/11. Verifications have
been received from KFQD-750 Anchorage, KWSR-810, Rifle, Colo., KHAI-1090 Honolulu
for f/up of 6/12 receiton; from KXCW-1420 Hot Springs, Ark., also a f/u\_ for 6/21
FT. Since 9/17 on my Drake SPR-4 I have heard 462 stations ID. This indicates a
good RX, to me. 4QD is my farthese one. My weakest one is a Low Power Relay
Transmitter (IPRT) on 540. At s/off CBU is mentioned. Is this CEXQ, Ucuelet, B.
C. or the new one in Coal Harbour, B.C.? Very weak, u/KNOE/HJKA. The other new
one here is KBES-1540, Bellevue, Wash., AN-SPU with young lady announcer 12/11.
Best wishes for a Happy Holiday Season to all in the NRC.

that comes out.

Cesar F. Objio - Calle 34, Casa #30, Cristo Rey, Zona 5, Santo Domingo, Dominican
I have just received my copy of Issue #6, 11/25. I also received
a copy of Issue #32, 9/23/72, courteously sent by HQ! Thank you, gentlemen!
I had not received that copy. This Musing is only to make a correction to Ernie
Cooper about my address. Please see as it is written above, it is Cristo REY, not
BAY, as he wrote in my last Musing. Rey means King, and Bly means Bahia. Please
make this correction as I don't want my mail from friends to get lost. C U later.
(Sorry Cesar - my mistake! The eyes are getting OLDER & OLDER! -ERC)

Ernest R. Cooper - 438 Hast 21 Street - Carrier Route 56 - Brooklyn, N.Y. 11226 Nice v/1-SS from YND-675. Here we go, for another week's DX. all wrapped up in MM 12/11. Unn WINA-1420 TEST on, but only about even w/WESM & o/WHK. No sign of WSUF-1580 @ 1:45am rise-time. By golly, Stan Morss is right as usual. There ARE two FFCs ANing on 1230 MMs. I haven't IDed either one yet, but I have seperate logs on them - one has a basso-voiced announcer. I hit 1090 @ 2:40, and found WMWM already on, and I hit 1090 again @ 4:35am, and found them still on! I would hope they were heard coast-to-coast, S 7-8 here with quite a fade, for a welcome new logging. R. Punto Fijo-940, YVNN, as usual the two weeks before Christmas, s/on by 3am, and in the clear except for slopover of WPAT-930. I didn't get a log this week - but I gotta do it 12/18 or wait another year, hi. I did take a log on another early Venezuela Advent s/on, in Ia Voz del Taschira. I had them 4:08-4:32 with no sign of XEOY, but mucho slopover from WEIS-1010. Other channels noted with early s/ons from Venezuela were 1080-1110-1020-740. I think the 1110 is R.dio Mia, and not R. Carupano, the one usually heard evenings. I'll let you know next Musing - that is, if I find out, hi. So, we'll C USE in two weeks, and I hope it is a very wonderful Holiday Season for everybody, DX-wise and otherwise. Please ressurrect this column from the abyss in which it has fallen by supporting our efforts and desires to make more of an effort, by MUSING!

# LIMITATIONS IN THE USE OF THE A INDEX FOR MEDIUM WAVE DX PURPOSES - PART I

\*Gordon P. Nelson

The fact that high latitude MW signals become weaker during periods of geomagnetic/auroral disturbance has been known for many years although a detailed explanation had to await recent research insights.<sup>2,3</sup>

The state of the Earth's magnetic field - quiet or disturbed - has been measured on a regular basis at magnetic observatories throughout the world for centuries. Because of this long history, a bewildering variety of ways to quantify the disturbance in the magnetic field have been devised and used. There's the K index, the A index, the C index, the K index, the Q index, and many more... Some measure the degree of disturbance on an hourly basis, some refer to 3-hour periods, and some of these indices give the average magnetic disturbance over an entire day; some refer to the disturbance as measured at one particular site while others combine data from many sites to produce a world-wide disturbance index. Each type of magnetic index has its own advantages and disadvantages depending upon the application; the plethora of indices in use or proposed suggests just how difficult it is to measure something as complex as the state of the Earth's magnetic field with a single number!

Because of past articles here in DX NEWS, the indices used by most DX'ers to predict high latitude MW conditions and to anticipate the onset of "auroral conditions" featuring enhanced reception to the south are the  $A_{\rm BO}$  value transmitted over WWV at 18 minutes past the hour and the  $A_{\rm FR}$  value given here in DX NEWS almost every issue. These are the easiest—to—obtain indices but not necessarily the best for the MW DX'er; over the past decade the author has experienced fine Transatlantic reception on days with  $A_{\rm FR}$  values in excess of 50 - not because of any particular odd, quirk of propagation, necessarily, but due to the oddity of the A index described in this article...

The A index is a daily index which measures the average geomagnetic disturbance for the GMT day (beginning at 7:00 PM EST). Consider now the following hypothetical but realistic situation. The geomagnetic field has been quiet for several consecutive days and absorption in the auroral oval is low. During the evening hours here on the East Coast (after 1900 EST) the TA's are booming in and reception is fine from West Africa to Sweden and Norway. At noon (EST) the next day we're suddenly hit with a violent geomagnetic/auroral disturbance and the band is wiped out totally for several days...

Since the A index is averaged over the entire GMT day, the A for that day will be quite high due to the disturbance which began late in the (GMT) day; the fact that high latitude conditions were excellent before the onset of the disturbance will be masked by the storm-induced elevation of the A index. Unfortunately the A index is quite sensitive to this sort of effect; even a brief and inconsequential period of upset in the geomagnetic field during the course of a day will tend to elevate the A index in spite of the fact that the field may have been quiet during the first 23 hours of the day...

Happily there is a simple way around this artifactual problem for those DX'ers seriously interested in auroral research. The technique to be described will permit the MW DX'er to obtain an equivalent A index for any 3-hour time period or collection of 3-hour periods. With this technique the MW DX'er would have been able to compute

the equivalent A index for the initial fraction of the GMT day preceeding the onset of the disturbance at noon. This will yield a much lower value of A consistent with the quiet conditions during the preceeding evening and effectively eliminate the irrelevant elevation in the A value due to the storm. Of all the magnetic indices the A is especially designed to permit meaningful comparisons of geomagnetic/auroral disturbances between reception periods of differing duration.

DEFINITION. The equivalent A index,  $A_E$ , for any 3 hour period or collection of periods,  $\left\{\begin{smallmatrix}T\\A\end{smallmatrix}\right\}$ , has the same value as would the regular daily A index if the geomagnetic disturbance level during  $\left\{\begin{smallmatrix}T_A\end{smallmatrix}\right\}$  remained the same for the full 24 hour period.

To get the equivalent  $A_{\rm E}$  we make use of the 3-hour K indices supplied by the Fredericksburg magnetic observatory. Each of the eight 3-hour periods of the GMT day has a K index value which is a measure of the geomagnetic activity during that 3-hour time block. A typical sequence of K values for a particular GMT day might be 1-1-0-5-8-9; the first number is the K value for the 0000-0300 period, the second digit is the next block (0300-0600), etc. K values range from 0 for a very quiet and undisturbed 3-hour period to 9 for a major disturbance. The following table is used to convert from a batch of K indices to a 3-hour index called the  $A_{\rm K}$  and then to the equivalent A index, the  $A_{\rm F}$ .

For the K value in each 3-hour time period simply look up the corresponding  $A_k$  value, add them all up, and divide the total by the number of 3-hour blocks; this will give the equivalent A,  $A_E$ . Fredericksburg does this for the entire 8 K values for the GMT day and the resulting equivalent A index is the familiar  $A_{FR}$  index.

Consider for example our hypothetical day which was very quiet until a major storm hit at noon (EST); a typical Fredericksburg K set would be 1-1-0-1-0-5-8-9. The disturbance begins to show in the K of 5 for the 1500-1800 GMT (= 1000-1500 EST) time block. The  $A_{\rm FR}$  for the entire day, including the storm onset, would be:

Time Block	K	Az	
0000-0300	1	3	
0300-0600	1	3	
0600-0900	0	0	
0900-1200	1	3	697 + 8 blocks = $A_{FR}$ = 87
1200-1500	0	0	TX
1500-1800	5	48	
1800-2100	8	240	
2100-2400	9	400	
Total:		697	

The equivalent index for the first half of the GMT day when things were quiet and the TA receptions possible would be calculated in a similar fashion:

$$3+3+0+3=9$$
 and  $9+4=2$ 

which is the equivalent index, the A p for the first half of the day before the storm.

Thus instead of the seemingly remarkable occurrence of TA reception on a day with an A<sub>FR</sub> of 87, we find that the A index for the day actually would have been only 2 if the storm had not begun at noon and conditions had remained as quiet as they were during the first part of the day.

This simple example shows one of the several potential pitfalls awaiting the DX researcher who simply seeks a correlation between published A indices and past MW receptions on particular days. Without a thorough understanding of the origins and properties of the various magnetic indices it's quite easy to draw misleading conclusions about the degree of correlation between high latitude reception and the state of the auroral oval.

#### REFERENCES

- 1. "A radio transmission anomaly; cooperative observations between the United States and Argentina", J.H. Dellinger & A.T. Cosentino, Proceedings of the IRE, October, 1940.
- 2. "Geomagnetic Measurements during the past 4-1/2 years", K.G. Scrimgeour, DX NEWS. 1/24/70.
- 3. "MW signal paths, parts I-IV", G.P. Nelson, DX NEWS, 3/8/69, 2/28/70, 3/21/70, 4/25/70.
- 4. "Geomagnetism", Chapman & Bartels, Oxford University Press, 1962.
- 5. The Fredericksburg K indices are published weekly in the Preliminary Report and Forecast of Solar Geophysical Data; available free upon request from the Space Environment Services Center, Space Environment Laboratory, ERL, NOAA, Boulder, Co. 80302.

#### NONTRIVIAL FILLER FROM HQ ...

Father Jack Pejza (one of the NRC's dozen-odd physicists) has questioned one of the equations in GPN's recent Daytime DX article - the equation for the maximum skip distance in Footnote #22. The equations is correct; the seeming problem is due to the fact that we expressed the inverse cosine function in radian degrees instead of degrees of arc. All of these problems in ionospheric geometry are simplified by the use of radian angular measurement instead of the more familiar "360 degree" unit... One radian degree is equal to 360/(2m) conventional degrees; in the future we'll try to be more careful about making the angular units we use more explicit. \*\*\* From England comes word that NRC'er Geoff Trower has identified the Paraguayan station on 645 kH: that's stumped our best North American experts; he's ZP19, Radio Caaguazu, 5 kw, located in Coronel Oveido. The latest WRTVH shows his nominal frequency as 640 and gives the address as Ruta Mcal Estigarribia Klm6 1/2, Coronel Oviedo. That's about 72 miles SE of Asuncion way out in the boondocks... The next problem is getting a QSL past experience has shown that getting a verie from Paraguay is about as easy as extracting Martin Borman... By all means send stamps from the DX Stamp Service; half a \$10 bill might help too... (remainder upon receipt of QSL). \*\*\* Bill Bailey point out that the WWV ABO index is transmitted at about 18 minutes and 20 seconds past the hour and not at 19 minutes as we have recently stated numerous times. That may well explain why we usually miss the index when we've tuned in at 19 minutes, hi!

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Deadlines for IDXD reporters: Fridays, 12/22, 12/29, 1/5, 1/12. Last minute tips by phone to: 201-838-5721 (no collect calls, pse) Reports:

- Venezuela. Rosario, (Edo. Zulia), "Radio Perija" now on this new freq. and AN w/native mx. Way over "Horizonte" (HJKA-ed) in Miami. (Ronald F. Schatz, Miami, FL) ...
- (NRC LA Log lists IVOV, 5 kw., location Machiques-pt) Colombia. Barranquilla, HJHJ, "R. Libertad" has been begging listeners for reception reports on its new 50-kw. signal promising a "gallardete" (triangular pennant-rfs) for the
- trouble. (Schatz, FL; Collins R-388/URR, LSCA)
  W. Korea. weak 1120 12/9, not //655 (Pete Taylor, Calif.)
- (Chongjin listed per IRCA Foreign Log-pt) N. Korea. Pyongyang excellent 1005 12/9; still the most consistent and durable. No sign of the Russian up through
- 1115. (Pete Taylor, Mill Valley, California)
  \*\*\*660.4 Unid. Bo audio hrd, but something is clamoring around here at various times 12/9 1000-1100. (Pete Taylor, CA) (noted
  - here also, but no clues as to identity-pt) Unid. IA O/WHAS 1005 12/9 but not for long. Sounded like a Brazilian. (Pete Taylor, CA). (HJBI often rptd here, Pete;
  - PRH9 a possibility, though.-pt Gilbert & Ellice Islands. Tarawa OK at 0930 12/9, but experiences deep and erratic fades - not even a BFO at times. (Pete Taylor, CA).
  - M. Korea. Wonsan, 3 low pips, and one high one at 1000 time signal. Not //655. Very loud, 2nd best to 655; unaffected by KRVN 00 1025 12/9. (Pete Taylor, CA)
  - Unid. IA w/old time piano 1023 12/9. KRVN 00 on 1025 so I lost perspective; could have gone into LA mx which was still heard w/WOBS after KRVN OC. (Pete Taylor, CA). (sounds like widely-hrd new Cuban, CMAF, Pinar del Rio, according to RFS' report in DXM, 12/7-pt)
  - 1035 M. Korea. Fair to good 1025 12/9 not //655 or 877. (Taylor, CA) 1210 China PRG. Sounded like anthem 1043 12/9; then man/woman talk then another soft march. Has Ryden's hum (IDXD 12/7) but this may be caused by het from other OCs. Only other audio was WCAU, and China was off about 60 Hz. Hum/rumble was always there even during audio fades. Beat against WCAU varies, so something in there is drifting. Excellent at times, and
  - appeared to be in KK. (Pete Taylor, CA)
    1329.3 Brazil. Belem, PA, "R. Liberal" has been in well every
    night so far without fail for a while before E20 0830. Strong, clear audio w/bubbly DJ, hi-pitched spots and native sambas. Good bet for a rare geographical area. (Schatz, FL)(Call listed ZYE25, 10kw., nom.1330 per NRO LA Log-pt)
  - 1340 Guantanamo Bay. is still on EDST, but not the rest of Cuba;
- "MEE-id", as they say in Boston. (Schatz, FL). (Perhaps AST?-pt) Saba, Wetherlands Antilles. "Voice of Saba" still noted on top of "Kelkboom" w/2-Hz het. c/d (close-down-pt) varies 0145-0200 daily, which is quite early. (Schatz, FL)
- \*\*1475 Haiti. Port-au-Prince, "Ia Voix du Peuple" noted AN SM 12/10, possibly for the Holiday season. Sounds like a West Africanvery exotic. Normal c/d is 0600. (Schatz, FL)

Please send those reports, ladies and gentlemen! Paucity of reports this week dictates brevity of section ... 73, pt



Greetings again folk. Looks like a good-sized section this time. Next issue will be in two weeks as the holiday skip has materialized. Cx turned abruptly auroral again 12/10-11 after a week of good high-latitude cx. As the week progressed, the aurora got worse, Abo of 29 MM 12/18 per WWV. Yeach.

#### call applications

950	WXLN-MD	req. WCTN	1540	CP -OH	req. WIRE
1220	CP -OK	reg. KKMC	1580	KB30-TX	req. KRZI

** 530 K⊋2XUB	(Calif) Los Angeles Airport stns noted several months back
	to run by cable and radiate to cover cars on roads approach-
	ing 'port now on air per Broadcasting . (Call sign per Hauser
	in TRCA DXM)

- 940 LPM-MC CP is on per v/l. (Ron Musco, Windsor, Ct.)
- 1400 WELL-IN CP: 1000/250 UL
- 1490 KRAR-AR ANT: U (ex-SII)
- WEEGG-SG CP is on.
- 1580 WWWH-IL ex-WKKD

#### midnight to sunrise

44	570	MCBN-OH	Noted off AN NM 12/11. Have been off several MMs in addition
			to reg. Tu AM SP. OC on & off 12/11 whilest working on their
			new antenna farm. (Jerry Starr, Youngstown, Ohio) ** Welcome
			back, Jerry - RjE

- Tentative, looping NW w/ contemp. mx, vy wk, abt S3, crushed by YVLX s/on 0353 12/4 (Jim Poterba, Yardley, Pa.)
- Copied s/on nice 0730 11/25. Cuban gone, KTBC not yet on 590 KBCJ-00
  - daytime power. (Paul K . Hart, Ft. Worth, Tx.)
- Tester noted 12/11 0051-0104 w/TT, no IDs, may have been same 600 unIB one noted 12/4 0125-30, who ?? (RM)
- Hrd Oh2O 12/3 w/rr o/unID RM (Richard N. Allen, Billings, Ok) 610 HILT-IX \*\* Welcome to DDXD, Richard - format of submission is fine-RjE
- 620 W3M-FL Hrd 0500 12/3 W/nx u/CKCK (RNA) 630 Strong w/WiAL nulled fighting it out w/ KXOK. -190 temp. Fisrt
- time hrd here 12/9 0230 (J.P) U/CIPC most of time, surfaced above ard 0240 12/9, several IDs
- clear. (J.P) 490 At 0602 12/5 w/FF nx u/WITRA & KEOS (RNA)
  - KONTF-ES S/on hrd 0645 12/5 (RNA)
- Tio Station" hrd 0330 11/14 w/mx, nx @ 0400, o/HJCU. CKAC-PQ Presume this is the FF hrd u/CHIR 0125 12/1 (RNA)
  - "Dolly Holiday" to 0530 12/1, then "The World Tomorrow", o/ CKDM, HJCU. (RNA)
- CKLG-BC 0156 12/1 w/rr o/CHIR & HJCU. (RNA) The CBX -AB S/off w/ Oh Canada & GSQ 0300 12/10 o/KCBS. Last time hrd was 8/28/61 on 1010k. (RNA)
- KSSS-CO ID copied nice @ 0103 11/27 for 1st log just after KTRH s/off
- ) These two alone here battling it out most of AM 11/27, 790 KCEE-AZ strongest ever hrd here, alternating atop channel (PKH) KABC-CA
  - WLSV-NY Tentative on 12/11 listed f/c 0027-h3 off, then OC. No audible ID, looped right direction. (Tom Sundstrom, Willingboro, NJ)

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790 KGHL-MT Tentatively hrd w/ f/c 0245-57 o/u another tester. (RII)
EOO CKLM-ON He Oh3C 12/2 w/rr o/NJB. Only hrd S'is w/XFPCK off. (RMA) ***
              Re the XELO-XIBOK thing, Richard notes that the call change
              was effective 12/4. Ins as "The Big Rock in In Paso", etc..
860 WDIII-GA S/on 0500 11/14 w/SSB then c&w mx o/unID SS. (RNA)
900 CJVI-BC W/mx 0238 12/1. Nx, wx 0300 o/MRT. (RNA)
     CHIL-ON Hrd Oh00 w/nx, sx, 2 radar wx, then mx 12.2, plenty of will
              & KGLC splash. (RMA)
     WSWN-FL Mrd 12/11 0010+ w/TT pulsing at rate of a telephone busy signal
              and complete ID thru CHAL, a surprise here, fair sig. (TRS)
 920 MOKY-WI 0520 12/3 w/rr o/unID QRM. (RMA)
              Noted w/ ET 12/4 0206 w/ ID, TT (RM)
              Noted w/ ET 12/11 0110-0125 ID w/TT. Call to stn. said testing
     WPTX-MD
              new modulator tubes in 5kw rig. (R1)
 960 WERC-AL Hrd 0606 12/3 w/rr o/unID RM. (RNA) ** Note new call RNA-RjS
     KMBZ-MO ET 0100-0400s/on 11/27. Sometimes off completely, said was
               special maintenance period. Assume 3rd MA SP is still ok, as
               All again 12/4, 11. (TKH)
 990 CBW - B S/on Oh Janada 0700, then CBC Info Radio wx,nx,sx 12/5 (RNA)
1010 CBR -AB S/on 0800 12/5, then CBC Info Radio wx,nx,sx o/XEHL (RMA)
               Assumed the one u/CFRB-WINS w/ s/off : GSO C306 12/4, weak,
               looping west. (JiP)
1090 MANI-OH Noted on 0156-0330 12/11 w/ caw on TEST. Signal vy gd. (Dave
               Schmidt, Wilmington, DE)
               Like a ton of bricks 0303+ 12/11 w/ caw mx on TEST. (JS)
               On early w/ TEST 0145-0345 w/ ofw mx almost non-stop. Exc. sig
               +5/s9 completely dominating freq. (TRS)
               Early w/TEST 0256-0307 'til clobbered by WTIC sidebands when '
               they started playing mx. Bh that, WAWN was +15/9 w/ oww (RM)
               Copied well here 12/11 w/ c&w mx, few IDs (PKH)
      KTGO-ND TEST 11/27 not copied. Did it run ?? ( KH)
      KING-WA ID copied 0330 11/27, but too weak for tape. (PKH)
               1000 Hz TT, DT, OCs noted 0130-0235 at times o/WRVA. Looped
1140 unID
               generally west. Hard to tell more due to jammers. 12/9 (TRS)
      KGEM-ID W/Ai nx 0103 12/2 cov red by URVA 0105, caw mx 0107 u/WRVA.
               Gone Oll7, atop w/ ID Ol20 & killing SEVA w/ cow (Bruce Wink-
               elman, Kansas City, KS)
1150 CKX -MB W/wx 0125 12/2 w/ temp -120. Really solid w/ID 0131 (BW)
      CXOC-ON W/rr from the "Grey Cup City" 0303 11/26 o/ R. Mexicana ORM.
1240 WCBB-NY Noted 11/27 w/no sign WBAX 0121-30. RR w/ no spots. (RM)
      KWJB-AZ (CP) Copied wk IDs 0326,0355 12/11, running test. Asking for
               calls. Very weak, sounded like 250 watts. (PKH)
      KAKE-KS ET, ID copied again 0122 11/27. Tremendous, local-like signal
               as usual. They test a lot, but usually few IDs (TMH)
      MINN-KY Copied ID 0400 12/11. Hrd weak bu, but never good enuf for
               tabe. (PKH)
               Hrd w/rr 0315-0532 12/10 w/unID TM. Had nx, wx on hour. (ENA)
      CPRUI-AB
               Is now 24 hrs. SP 11!, ex SP TU 11 (John Oldfield, Edmonton, AB)
      Mild- Hrd 0531 12/2 w/TT o/unID OFM. (RNA)
       Semi local AN 12/11 w/oldies. Have hrd via grapevine that this
               will soon be W. Sun, Mon Als only. (JS)
              ET again 0200-0207+ 12/4 (PKH)
1300 KMEANN
               Jaught ID in s/on 0503 11/27 (TIM)
       MOCD-TIL
               Testing and ChOO 12/4, vy wk & in heavy static. (PKH)
1310 STIN-IZ
      Testing irreg. Ils 11/27, 12/4, but IDs seem to get fewer and
               farther bewteen (PTI)
       3/off as per sked 11/27, 12/4, but AN 12/11 tho' sounded like
               an extended test session. (PKH)
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NORG-MA ET 12/11; only ID hrd 0020. Mk u/ Canadians. (PM)
                 First time ever noted here w/rr, jx, etc. u/VEEL 12/11 0315
         WTLB-MY 12/11 ID 0018 in midst of ET, w/TT, OC. Good, several others
                  on freq. (TRS)
         WEEL-VA Is now AN MMs, so probably MSP. Noted again 12/11 0313 w/rr
        LMOJ-FL First time this season w/ cow AN show 0310 12/11. Way atop
                  after MJAS off (DS)
  KQIL-CO 'Must be AN 'M. Copied dominant most of 12/11 AM (PK'!)
         KHAP-NA S/off copied 0208 11/27 (PKH)
   1350 WSAI-OH Killing WDRC w/ET w/rr 12/11 0130 (DS)
         CHBC-NB S/on strong o/WDRC here, 12/9 0500. Brief annot, then into
                  nx roundup - good sig. (JMP)
   WAEE-IN Atop freq. 12/11 w/ Drake-type rr format, noted 0108. (DS)
                  W/ top 40 at unreal level, 20/s9 local-like 0205 12/11 (JS)
        KENN-NM TT here 0205 12/2 t/in. ID 0208 in severe KUDL slop. (EW)
         KHOB-NM ET/TT 0430-45 12/4, vy strong even w/ hvy static, lousy cx.
   1400 KXIV-AZ S/off copied 0211 11/27 (PKH)
         WLLH-MA 12/11 t/in 0320 w/TT, ID for ET 0331, then more TT. (TRS)
         WPAY-OH L&C 0220-35+ 12/11 w/ HI (JS)
        KWBB-KS S/off copied 0100 12/8, and off by 0100 12/11, so must be
                  daily OlOO s/off. (PKH)
         KAHL-NE Testing again from b4 0224 to 0251+ 12/11 (PKH)
         KRIG-TX S/off copied 0200 12/8 and 11, must be daily s/off. S/on time
                  anne'd as 0700. (PKH)
         WIZM-WI Copied to nice s/off 0105 12/11 w/ WUNI-KWBB off, able to
                  override WING-KRIG. (PKH)
   1120 WLNA-NY Hrd w/TEST 12/11 w/WHK, WBSM 0139-58 w/IDs, TT (RM)
                  Hrd 12/11 TEST w/ TT 0035+ . IDs hrd 0035, 0040, etc. o/
                  all others, incl. another TTer, unID. (TRS)
                  TEST took quite a beating here, Noted 0133 w/TT, mx, IDs
                  roughly every h mins. Interference from WHK. WBSM & once even
                  KTOE!! (DS)
                 Good signal @ Oll 7 12/11 even without nulling local WIL!
        CFGO-ON
                  1450. rr format. sounded like CKLW. (DS)
         WHIN-AL Must be AN MM, copied AN show w/ ferme DJ; "The Dutchess". In
                  vy well, esp. after Wiki s/off, 12/11. This pattern not in PB.
         WCHB-MI Noted w/ET-OC & ID 0237+ 12/11 (JS)
        WNIO-OH ET/OC 0145-0210+ 12/11, no IDs of modulation, but strength and
                  loop sez was them. (JS)
   KEGO-UT ET/OC w/healthy sigs, ID 0248 12/11 as "This is KETO, first
                  with the best". (JS)
                  Noted ET w/mx 12/11 0213 off, then back on 0228-50. Two quick
                  IDs given right in middle of records. Strong sig, but wk audio.
         KKJO-MO RR all alone 12/9 0330 b4 KKHI took over (JMP)
                                                                           (DS)
   1560 KRCB-IA Concluding ET-mx 0139 12/11 (JS)
         KPMC-CA W/ ad for truck stop 0234 12/9, then ID b4 c&w mx, at a solid
                  s3 w/ no sign of pest WDXR. (BW) ** WDXR is now off by then-RjE
   1570 CHUB-BC W/HH (hockey, hi -RjE) 0124 12/9 vy fady w/XERF semi-nulled.
                  also o/u 3 TTers. Freq. local mentions in game, commentary Olho,
                  nx 0150, finally ID 0206. None of TTs ID ed in that hr. (BW)
WCLS-GA Noted s/off 0000 12/10 while waiting for WSUF DX, so change
                  log. (TRS) ** 0000 12/10-11. hi - RjE
         MSUF-MY DX not hrd 12/11. Should have blown needle off meter here (TRS)
                  Apparently not on, as I noted last week (RjE)
                  Evidently not on. Checked 0120-30, only KLOU there 12/11 (JS)
         KICU-LA 12/11 w/rr mx request show, IDs > TCs C225,0243,0249. Good sigs
                  on peaks w/ WCLS off. (TRS)
                  Now off IMS 0259-0458 per annot. 12/11 (DS)
         KDAY-CA Again noted 0301 w/ID into wall-to-wall top 40, then f/out
                  12/11. (DS)
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1590 VROZ-VA Noted W/ TER COLS-CLOS and still on 0305 11/27, stop everything, (TT)

# sunset & evenion

730 MECR-GA W/ he Comell ax, local ad, more Comell 1726, then s/off 1729: 30 12/18 (35E): WPAL-5C Erd w/ soul mx, voice-over ID 1707 12/18 (RjE) WEW -190 Hrd C pt level 1713 12/2 w/mx, wx then ID o/MARC (BW) MON-MN Mind II in TEN mull 171h 12/h, then into55-type nx, weak but stable sig. (E3) 1180A-10 Hrd s9+ 1728 12/4, ID after Coke ad 1730 (BW) WIDE-AL W/ID 1731 12/4 then ade w/EDA & others. (EN) CJBC-ON W/FF 2310 12/6 m/KOAH (HHA) WY.ED-NC Atop w/ ciw 1708 - 1715 s/off 12/18 (R51) MASS-HE W/town 1755 12/h, prayer 1750, vocal Lord's Prayer 1759, s/off annot 1881. Annod 0700 s/om. (BW) DATH-HC U/ey loud WIAT w/ 6 or 8 30-sec. spots 1656-59, then stop w/nx, wx. ID. SID. ad 1700-06 after WAAN off 12/16 (EJE) 1098V-VA Briefly up & over Wate u/ 1D 1652 12/18 (RJL) WSFF-HC SID o/u thill into Mor. 1706, 12/11 (EJE) 1000 Will-AL State mx, follo WVOV m/off 1732-3 12/11 (L51) WXTN-Y3 Popped up for ID o/WC7L 1750 12/11 (RJE) 1010 WHEN-GA Hyd w/ olw mx, 1 and u/HHS 1725 12/11 (RJE) MPMS-WV Strong in WMIC null w/rr, several erots, Equal to UNIC at times, 1710 12/3 (Jrf) WEHE-SH Hed loud, distorted w/ nx stop channel on tape replay while trying to pull tape on WRE. 1956 12/6. (R15) Hrd w/local ads 1535 12/13 briefly atop channel (RJE) WEAD-IEC WIEN-PA Brd w/ m/off up 0/ all 1662 12/13 (F3E) "LIM-UT by latest closest unbrd knocked off w/ s/off armet after WffR-1250 s/off removed alon 12/11 1630 (845) social 300 LPHL-NY Copied clean ID here 1830 12/5. Sent tape, and they confirm, but can't figure why had 90 kdz. low. Never my such sours on these frens. bl. any ideas ??? I was definitely on 1300. (FER) see If they had lotes shows going on, spurs are such more likely then - you could've caught a brief intermittent X5 grar, -755 Finally had w/ jx, sx 1627 22/11 (EJE) SIALY-IIY Atop w/ m/off no 538, Will mulled 1659 12/7 100% readable(JTF) WELV-VA Septed ID 1830 & s/off 1845 12/2, poms, is 55, (FDH) MINUB-TX xxx 1300 Copied s/off 1745 11/26, ID as "x-triple-L". (PGE) Soff annot up atup 1755 11/23, relig. page continued after ELLL-TE 1500 ED734-193 annot to carrier cut. (36) Long wanted, atop channel w/ s/aff no SSB by YL anner, plugging Fg 1645 12/9 (J.D) MINTE-PA WARG-OH Almost alone w/ s/eff, black format 1700 12/9, another longwanted one (JU) MUFL-NG Minne w/ s/off annet, by male anner 1715 12/9 (JUF) Will-IL Surprising at this level way o/EXEL-IFTR @ m/off 1730 12/9(ATP) WFMI-IA Atop briefly w/ Atlas Transmission spot, then dw 1721 12/8, then WHIZ took over (JTF) S/off a minute or two after others at that time w/ El promo MD3N-II 1717 12/5 (河戸)

1580 ETR7-TA Copied nice s/off 1545 11/21 w/ pers in 35 (PCH)

KEIA-HI W/ID 1895 11/25 then into mx, even w/ and above HTH (NV) NYUP-AZ W/ID then ax 1855 11/26 irred by LTIA ID (BI)

Please remember to list your equipment for use here in DOFD for time to time as an additional feature....

#### P/C I

377 THESE: 4th SA: WALD-1370, EBRS-1340 : 2nd TH: WID1-940

DECEMBER: lat NY: INL-790; lat SU: KCII-1380; lat TH: MLSI-900 ( POH notes that this is not monthly as not had many times, may be angual or sent-angual) 2nd M: WEF-1500; 2nd FT: KXIT-1410; 3rd Mt: WESK-1600, UP W-1470;

WHES-ILCO-ID 3rd Sat AN COCC-COLS w/TT per stn. via Thrsco-

### ADDITIONAL CHARGES!

+ 950 KHRJ-ID ex-KATH

+ 1390 CHOO-CM SGF: s/off COOD daily

+ 1500 CKAY-8C CF: 5000/1000 U

Dome to Ho 12/ some the about the rear new log should be forth oming. Once all contributors to LOND to edit out receptions of class 1-A clears, locals, semi-locals and results receptions from our subjections unless the sented are data charges. Only exception to this is f/cs, which we want all of, whether or not they're had every south. UnIDs are welcome to, but only if they have emif program details to be identified by so come else. All submis ions not conforming to the above WILL HE EDITED here, especially when there's a arre-column. Hoping that the New Year will be mother good III year for all, we'll say

73's until '73 1

Attention serious Beverage antenna freaks! If you've set up a Beverage or are planning to do so in the near future please read on ... There's at least a 50/50 chance that your far end termination resistor is doing more harm than good. While conducting experiments on the HQ 6600° Beverage antenna in New Hampshire BGK and GPN have developed a simple technique to determine just how well a Beverage antenna has been terminated. If you're not completely satisfied with the back lobe supression of your terminated Beverage antenna or want to know just how efficient your Beverage termination is, drop a note to HQ. We've developed both a simple empirical technique and the full analytical justification to determine just how well a Beyorage is terminated and our findings will appear in DX NEWS within a few weeks. Since several groups are seriously concentrating on Transauroral receptions with North-ward - directed Beverages during the winter solstice (12/21) period, we'll be happy to send them an advance copy of the article so they might take advantage of the technique immediately. Just drop a note to GPN at HQ.





EDITOR: r.j. edmunds box 946 wayne, n.j. 07470

Greetings again, folk. Due to trying to avoid the vagaries of holiday mail service, this column goes out on Tuesday 12/12/72. Next column will likewise be run through on Tuesday. This one also contains a first for this season: Your editor has finally DX ed Domestically....

#### sunset & evening

	540	EWMT-IA	Long oww schtick then stock rpt. to 1745 s/off 12/6 (Page Tay-
	560	CFOS-ON	lor, Butler, N.J.) (Also RjE)
	200	UFUS-US	Hrd w/rr, several local spots & ID u/WFIL whilest looking in vain for long-sought WCKL. (RjE)
	620	WLB2-IE	Strong in a heretofore-nonexistant WVNJ null w/ State sx rpt
			1721-30 12/8. Also an unID MoR u/both. (RjE)
	690	WZAP-VA	Hrd atop channel w/ID 1700 in passing while searching TAs on 692, 12/8 (RjE)
	730	WPAL-SC	
	790	WLSV-NY	Hrd atop channel w/ s/off SSB 12/9 1645. (RjE)
	800	WJAT-GA	Ad for Swainsboro Bank & local nx, 1717 11/29 (PT)
	810	WQIZ-SC	Comm. for Harley's Radio & TV in Harleyville 1710 11/24 follo
			by stn promo for Monck's Corner appearances. (PT)
		KCM0-H0	
	850	WIDE-AL	
			Up just for s/off and FM promo 12/1 1730 (MC)
			Hrd 12/5 1627 w/ s/off (RjE)
	930	WIHD-DE	
0.0		WONE-FA	
		WIZE-NY	
		WSGC-WC	
	10.0		Hrd w/ c&w, local ad u/MPAT 1655 12/7 (RjE)
	300		SID atop channel (i.e. CBM, hi) briefly 1650 12/7 (RjE)
	-000	WESA-FA	
	330	WETS-SIC	
	2000	AV-TUAN	
	1000		
	1060	WOOJ-SC WOTH-TA	
	7000	WAS TH- IN	Hut in Framingham 1611, then s/off 1615 12/5 (RjE)
	1080	MICH-BON.	12/5 1635 w/ local ad. Appears to be NN format (PT)
	1110	ASHO-SA	
	11,30	MCBX-NC	W/ local HS sx 1650 atop WNEW 12/5 (PT)
		WIDA-DA	
	1150	MEDIC-ID	
++		TERM-TE	ex-XHM. Mrd w/ ID, local ad 1548 12/5 (RjE)
	1220	MES-IS	Mrd w/ s/off w/ Perry Como's "Lord's Prayer" (a la WHTI-1610) as "anthen" 1558 12/6 (hjs)
	1250	AV-ULTV	
	4879	MINE-300M	Hrd w/ local ad and promo 1649 12/4 (RJE)
	1969	WYAL-BC	Hid W 16641 and and promoting 12/4 (NJL)
	2000	- HARLINGE	Wilkes-Barre, Pa. ) ** Welcome to DDXD, Jim - RjE
	1200	W19-80	SC state nx alone on channel 1800 11/29 (PT)
	2670	W-T3-30	no posse in grane on custifier 1000 TIVEN (LI)

really couldn't be anything else. (PT) Hrd w/ c&w, ID 1631 12/7 u/o WCOJ. (RJE) Hrd w/ c&w o/u WCOJ, o/WCED 1638 12/7 (RJE) Hrd 12/2 1615-1700. Weak at first, but gained in intensity unti vy good level 1644. Had c&w format. (JH) Finally hrd wk u/WRAN then up after WRAN Patt./Pwr. chg. w/ s/off annets & SSB 1629-31. Another closest unhrd.(RjE) Hrd 11/24 1705 w/SC state nx alone on channel (PT) Strong but w/ some fades 11/15 when hrd wk;658 s/off after c&w pgmg. (JH) Simultaneous c/cf6 11/01 1800	
vy good level 1644. Had caw format. (JH) Finally hrd wk u/WRAN then up after WRAN Patt./Pwr. chg. w/ s/off annets & SSB 1629-31. Another closest unhrd.(RjE) Hrd 11/24 1705 w/SC state nx alone on channel (PT) Strong but w/ some fades 11/15 when hrd wk;658 s/off after caw pgmg. (JH)	1
Finally hrd wk u/WRAN then up after WRAN Patt./Pwr. chg. w/s/off annets & SSB 1629-31. Another closest unhrd.(RjE) Hrd 11/24 1705 w/SC state nx alone on channel (PT) Strong but w/some fades 11/15 when hrd wk;658 s/off after c&w pgmg. (JH)	+
Hrd 11/2h 1705 w/SC state nx alone on channel (PT) Strong but w/ some fades 11/15 when hrd wk ;658 s/off after own pgmg. (JH)	
Strong but w/ some fades 11/15 when hrd wk ;658 s/off after c&w pgmg. (JH)	
1560 MDCP-80	r
Simultaneous = (-88 77 (0) 7000	
Simultaneous s/off 11/24 1800 = to WXXR. (PT)	
1500 KTW-M Local quality alone w/ o&w 1915 11/29 w/ comm'ls for Az. land buys. (PT)	
Hrd w/ sx, ad, s/off 1745 12/4 (RjE) (RjE)	
1590 WHPA-PA My closest unheard w/ s/off u/WEHH s/off, WMIM mx 1629.30 12/6	

# sunrise & Cayline

Hrd 1310 12/5 s9 w/ FF talk, MoR (PT)
Hrd w/ FF rr 1315 12/5 (PT)

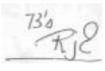
# midnight to sunrise

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WFAA-TX Wx ending 0240 follo by up-tempo MoR 12/4 (PT)
     CBU -BC Potent w/ Halifax Symphony Orchestra Concert follo by ID 0130
              12/9. Taped w/ Cuban on reduced pwr. (PT)
      Tentatively the one w/tele-talk u/KCMO w/WUY off 0050-0115
              12/4. Poor sigs, but gotta be him. (Wes Boyd, Youngstown, Ohio)
 WJAC-PA Seems to s/off SSB 0205 daily, only WKIX, WJW, KOA AN here/(Boyd)
 860 KONO-TX Great sigs well o/XEMO AN 11/30 (Boyd)
 MORD-SC Killing freq. in KGLC mull; poor WRCH there, no WRNL-WSBA etc.
              12/2 (Boyd)
 WPEN-PA Noted s/off 0158 12/4 giving s/on time as 0500.... (Boyd)
      WBBF-NY Fairly good & all alone MM 12/4 Ohll buried by unID TT Ohl6 (MC)
1150 WJRD-AL ETing 12/4 w/TT-rr-OC 0240-0305+, few IDs (Boyd)
1170 WWVA-WV Off??? 12/3 Su AM 0500-30+ w/ only KV00, KSTT & unID SS there
WGAR-OH Off beyond 0400 12/4, Also off 11/30 past 0330 (Boyd)
      CKCW-NB Poor u/CHSC c&w, but is AN now. Hrd 0240-0335+ 11/30. (Boyd)
WSPR-MA Fair on 12/4 TEST o/u KFJZ w/ IDs every 10 mins. (Boyd)
1160 WPON-MI Noted still AN c&w 12/2-3 (Boyd)
1530 KPCR-10 On ET-TT & C&W 0320-30+ 12/4 well o/KFBK (Boyd)
1550 WIRV-KY Vy good 12/2 0215-0300 w/ IDs, oldies in ET (MC)
WDXR-KY Hrd well 0145-0200 s/off 11/26. XEVIP either off or inaudible.
     WSUF-NY DX TEST arranged by me was apparently not on. Checked 0050-
               0105 12/11, but nothing of interest there - starting off this
              CPC season just like most of last season was - a series of no-
               shows... (RjE)
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Some f/c here, but will hold them for next issue . Changes as follow:

KLOU-LA Now s/off 0300 MMs noted 12/4, goodbye KDAY. (Boyd)

600 WICC-CT Best times for SPs Sun AMs 0300-0600 or 0400-0500 (MC) + 910 CFCR-BC ex-CFJC (IRCA)



Thassit for now - this may be included w/ another IDID in one issue as the business of a Christmas skip is still nebulous, and better 2 in 1 issue than none in one, hi.