



DX News

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"After due consideration whether to join the NRC or the IRCA I decided upon the NRC because of its bulletin. I hope to become an active member and Muse often." (Eric DiRicco, Pittsburgh)

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WE'RE BACK ON SCHEDULE!

Following the unavoidable delays in production of the last two issues of DX NEWS we're back on schedule once again... We've pulled back the deadlines to where they've been in previous months: copy must be here on Wednesday, goes to the printer on Thursday, and is mailed out on Saturday. We appreciate the fine cooperation of the membership and sincerely regret any Specials that might have been missed... We've been informed by Russ that he's holding what little material he's received since it's not enough for even a page of DDXD. We've been unable to reach Foxy but presumably he's doing the same thing this week. The next issue is May 16th; the schedule given last issue will now be in effect.

*GPN

SPECIAL TEST INFORMATION *

From Hank Bennett comes word of a series of special tests from KVBR:

KVBR, Brainerd, Minnesota, will be testing their 1 kw transmitter on 1340 kHz expressly for DX'ers (no club or other affiliation was mentioned). Reports will be verified, if correct, and if accompanied by a SASE. All reports should be addressed to Mr. Mark Parsons, Chief Engineer, KVBR, 1340 Ransford Building, Brainerd, Minn. 56401.

The tests will be conducted on May 22 and 23; again on June 10 and 20, 1970, at the following times. Please note the length of the SHORT transmissions: 0030-0040; 0100-0110; 0130-0140; 0200-0210 0230-0240; 0300-0310; and 0330-0340.

(EST)

FRIENDLY DX CONTEST NOTICE *

Note that FDXC contests end on May 28th, 1970 at 0011 EST.

The FDXC form(s) you have in hand at contest closing will be scored with NO point deductions for omitted channels. Enter the date: May 28, 1970 on all form(s) you hold on that date and then mail them to the contest manager before the final mailing deadline stated in FDXC rules. It appears that overall NRC vs IRCA standings can be affected by these "last" FDXC scores.

Winners will be announced at 1970 club conventions and prizes will be distributed pending such announcements.

-Dave Fischer

NOW AVAILABLE FROM NRC HEADQUARTERS:

New high-quality NRC stationery (two colored - blue with black); good quality bond paper; available in packages of 100 sheets for \$2.00 plus 20¢ for postage.

New NRC domestic report forms; newly redesigned with modern wording for the best possible verification returns; packages of 100 sheets for \$1.25 plus 20¢ for postage.

(Also coming in the next few weeks will be new DX explanation slips and logging sheets for your den - prices next issue)

Outstanding orders for NRC stationery and report forms will be filled at the old prices so those who have already ordered need do nothing extra.

GEORGE C. GREENE - 1527 Sunset Avenue - Akron, Ohio - 44301

Hi. DX here has been coming along real decent since last Muse. New stations heard are these: 3/11- Very Auroral CX that AM brought me my most-wanted domestic, WFUN-790, @ 2:34am. 3/19- That date gave me WEIF-1370 w/ usually-dominant WSPD nulled. MM 3/23 was one of my best MMs ever, w/ten new loggings. XEMC-860 @ 1am w/religious programming, KRAK-1140 @ 2:30am, CJRS-1510 strong w/FF most of morning KKH-1550 @ 2:58am, KGA-1510 way u/CJRS for State #45 at 3:01am, WNOR-1230 atop the mess @ 3:15 w/rr, KTKI-990 w/Indiana ballgame promo for Ariz. #2 @ 3:44, CFOX-1470 finally @ 4am, KLEO-1480 w/ET @ 4:13am, and the big catch of the morning, my first TA ever heard here in Akron, BBC-1214 w/a very good signal @ 1:12am (also noted the next AM 3/24) w/rr. 3/30- XEMR-1140 covered 1140 @ 1am, WYSL-1400 atop 1400 most of the morning for a new logging, WCVU-1350 @ 2:31am very far u/local NSP WSLR (actually, this logged w/the loop tilted at an angle, in addition to the "regular" null). 3/31- WMSC-1050 on car radio @ s/off @ 6:30pm. Other unnn stations of note heard lately: Many Floridians noted the AMs of 3/10-11, along w/lots of semi-locals - obviously some kind of Auroral. TT on 1540 on 3/15 w/CW IDs @ 2:58am, probably WNIO, I'll have to check tape; c/w ET w/very strong signal @ 3:30am on 570 on 3/23 who looped in a South-erly direction - anyone have an idea who this was? Not-usually-heard WJAR-920 noted @ 2:02am on 3/26. WIS-560 @ 12:30am on 3/30. Only report out lately has gone to local WKST-1280. I guess that's it. QM collectors, please write. 73.

JOHN PINCKNEY - 2903 School Street - Alexandria, Virginia - 22303

Hi again! It looks like I am the only one who has NOT logged either Tarawa or R.N.I. Now to DX: New veries: v/q- WCCO CFRX WBT WLW (one of my quickest, heard 8/22/69, postmarked 2/4/70) CJCX WOWO KMOX WGN CBOT CJBC. v/c - WBEU. At: J. Murley, CFFB DX heard on well-tuned can opener, Ventures Album, & I&Con Broxidient electric toothbrush, hi. I had a nice chat with ERC (who dat, hi). Good news, NSPer WDC will be off all MM: in May, is everyone happy? If anyone writes me, remember mail service here has been bad since mid-July. I even found mail in a sewer. 73s.

JOHN W. HOOPERHEIDE - 3 Marquette Drive - Marquette, Michigan

On 4/1 I stopped by WCCN-1370 Neillsville & had a good visit w/SM. They have r/c on third Wed. 1-1:15am EST w/TT w/Phelps Frequency Measurement out of Minneapolis. Put get them quick, boys- because they are discontinuing in favor of a daytime f/c. They may even discontinue the April disc. They mentioned Buffalo N.Y. was for their March f/c and furthest report was Hawaii. Aurora in tonight 4/2. I was just comprehending this would be a week w/no new logs, but an SS on 940 was XEQ who for some reason or other I had forgotten to log & so not skunked after all. In SS on 1015 kc/s. was interesting. They'd give TCs regularly in the middle of records. I assume this is ERVOZ & R. Reloj was mentioned - so not a new log as I had hoped for YSC. Other SS g. its noted around 12 on 965 (R. Managua?) & 1025 (Calli?) 975 R. Athena. MM 4/6- There was someone w/EST on RS behind CKCY-920, had SID w/a woman's voice @ 3:05, call sounded like WGST, but not at all sur. I didn't think they were AN. New log on KAKC-940 u/WFSW w/their "Mystery Show" @ 3:50. I thought they were silent on MM. WHIS-1450 Port Huron noted on new AN show as recently reported by others. They may be NSP now.

ROBERT ROSEN - 83-55 Woodhaven Boulevard - Woodhaven, New York - 11421

Greetings fellow DXers. This is my first Musing, so here is the intro. I'm 17, a Senior at Stuyvesant High School in New York. I've been MW DX-ing for six months now. My RXes are a Hallicrafters SX-71 & a Hallicrafters SW-

500. My totals are 136/90. Recent veries are: v/q- WELI WHDH KFJZ WROW WGR WJ (5 $\frac{1}{2}$ [redacted]). Do WARM WSTR WHOR WZUM WCMB CHEX & WNYC QSL? Recent DX consists of the following: 3/24- 10pm, WTEL-860. 3/26- 9:43pm, WELA-1530. 4/1- 2:06pm, WGLI-1290. 4/5- 12:37am, WSM-650. 4/7- 5:45pm, WRUN-1150. 4/10- 11:15pm, WFEL-1390. I just got the SX-71 so I should be hearing more DX than with the SX-500. I've attempted to build two loop antennas w/no success at all, so I'm using a longwire antenna. Could anyone help me? Before Easter I had a chat w/fellow NRCer John Javetski. I would like to hear from fellow NRCers, so write to the above address, if possible. Well, that's about it. As the NRC members in West Allis, Wis. will say after looking around for Hasbrouck Heights, WAWA: "Where are we at? 73s & good DX. (Welcome to the NRC, Robert! We hope to hear from you often for Musings - please double-space? -ERC)

RANDY SEAVER - 540 C Street - Apt. 10 - Chula Vista, California - 92010

Greetings, folk. Some news from the West, the Home of ERBA. A1- some DX from Acapulco (did anybody else DX on his honeymoon?) RX was a Bendix Navigato-420 transistor. Local stations are XEBB-600 R. Acapulco; XEKU-710, R. Kookoo (with cuckoo sounds before each ID); XEGI-1340, La Voz de Acapulco; XEKJ-1400, R. Mar, I think. U.S. stations heard in the evenings were KFI-540 (after midnight EST) WSM-650 KTRH-740 (best U.S.) WSB-750 KOB-770 WBBM-780 (after 12) WFAA-820 WHAS-840 KOA-850 WNL-870 KRIO-910 WSLI-930 WRLD-1030 KMUX-1120 KWKH-1130 WCAI-1200. Loggings besides Mexican & U.S. were KJB/XELO regular eves, Belize regular eves, strong but w/XELA QRM, TGJ-880. Some notes on the Mexicans: XEMH-590 is "R. 590". I had a good SS on 810, Tampico? XELA-830 plays all cl. mx. I got an ID on 850 for XECU, R. Fiesta, no record of it in the logs. XEUN-360 heard 10:30pm 3/22 w/EE opera. Add KPRC to above U.S. list (950); "H-M" ID 3/23 on 1010, I've heard it from San Diego before, likely XEHL Goadalajara, good signal "H-M" likely an ad); loud unID SS on 1140, no idea who. U.S. rr on 1170; 1180 had two SSES, one R. Felicidad-XEFR D.F., the other, ?? XEFR had an interview w/Reston Gomez of San Diego Xadres in SS. XEVIP-1560 w/EE CBS NX. Acapulco is rather delightful. Our room was up a flight of 76 stairs from the pool. We went to see the high-divers at La Quebrada one eve, another night we went to Jai-Alai, another to Hilton for drinks, another on a moonlight cruise of Acapulco Bay. Busrides cost 50 centavos (first class bus) or 40¢ second class bus, taxis less than 10 pesos for a 2-3 mile ride, yet drinks cost 12-20 pesos (A peso is 8¢ U.S. coin-of-the-realm). We had an interesting fun time, complete w/ticket snafus, and the inevitable language faux-pas, the typical trinkets, & no Montezuma's Revenge. One last note. I was married on 3/21 to Linda Leland from San Francisco, a school teacher in Coronado, across the Bay from San Diego. I've told her all about you clowns in the radio clubs (she's even met most of the ERBA type - she thinks you're all harmless, ha!) and have the OK to continue my rather checkered DX career. 73. (Atta boy, Randy! -ERC)

FRED NORDQUIST - 302 Sandra Lane - North Syracuse. New York - 13212

Several new stations logged during the last two weeks. 3/27- WCKL-560 N.Y. unid 5:01pm. 3/28- WMIM-1590 Pa. s/off around 6:17pm. 3/30- UnID-640 s/off w/FF NA & organ IS, probably Guadeloupe, 9:33pm. 4/5- KCMO-810 Mo' ID u/WGY SSS 7:43pm, KVOO-1170 OK NBC Monitor u/WVVA @ 7:50 before directional change. I noted Dick Biondi still on WCFL around 7:45pm. KS00-1140 S.D. with World Tomorrow u/WRVA (State #38) @ 8:05pm. 4/8- WBSC-1550 S.C. Id heard @ 10:28 pm u/CBE QRM. Totals: 438; states, 38. Demanding job and five-month baby girl keeps DXing down to minimum. High station density in NE doesn't help much, either. Altazimuth loop does real nice job on nulling locals & those 50kw. power-houses. Better hit the dials before the Summer QRM sets in. 73.

It's hard to believe, but this is ALL the Musings in as of deadline date, 4/14/70, only two pages' worth! We'd like to ask the faithful to get behind us and Muse for the next issue. We'll soon be on Summer sked, natch, and we do not have the dates for these here in Brooklyn, but let's all keep Musings all Summer! Please!

C O N G R A T U L A T I O N S

to RANDY SEAVER on his recent marriage to the former Miss Linda Leland. The date was March 21st. Our very best wishes to Randy and his bride for many many years of wedded bliss!

We'd like to renew our pleas for more Musings from you - please be sure to double space them, to make it a bit easier on the Eyes of Brooklyn, hi. Please do not include any verie signers' names in your Musings, nor include personal asides not in reply to a DX question in them, for they will be deleted. Send the verie signers in with your Musing, though, on a separate sheet of paper, also double-spaced, with frequencies listed, and the abbreviations we use in the DX NEWX column of Verie Signers. It seems only about ten or 12 of you have been sending in your v/s - what's wrong with the rest of you?

NEW YORK METS' BCB BASEBALL NETWORK

680	W I N R	Binghamton, New York	1320	W A T R	Waterbury, Conn.
730	W D O S	Oneonta, New York	1350	W N L K	Norwalk, Conn.
620	W V M T	Burlington Vermont	1370	W E L V	Ellenville, N. Y.
970	W J R Z	Hackensack, New Jersey	1400	W S T C	Stamford, Conn.
1230	W G N Y	Newburgh, New York	1340	W B R E	Wilkes-Barre, Pa.
1230	W H U C	Hudson, New York	1460	W O K O	Albany, New York
1290	W G L I	Babylon, New York	1450	W K I P	Poughkeepsie, N.Y.
1050	W S E N	Baldwinsville, New York	1550	W B A Z	Kingston, New York

If you have the radio networks of other baseball clubs, please send them in for publication in DX NEWS.

ERNEST R. COOPER - 438 East 21 Street - Brooklyn, New York - 11226

Veries: v/PP- WCMA-1320, and v/q & CM, & Deutschlandfunk-1268, Neumunster, Germany. Not much DX, but a few tries, anyway. The evenings of 4/5, 4/7 & 4/8 produced enough u/WHOM (local) to log WADR-1480 between 6:25 & 6:45pm s/off. They're mostly c/w. 4/9- I finally got a log on a 1000k daytimer, which is not easy w/local 50kw. WINS-1010 using their news ticker as background for mostly all their all-talk NX. I picked up WIMS-1000 6:19-6:30 $\frac{1}{2}$ s/off, for a report. After they went off, WI00 was in, but not well enough to log. They had some interference, too, probably from WIQT. WIMS is MoR, WI00 is rr. I'm now working on whatever daytimer it is who s/off @ 7pm on 1140 kc/s. u/WRVA. They're MoR. Another daytimer s/off @ same time (7pm) on 1150 w/SSB. MM 4/13, another Blue Monday as far as DX was concerned - nothing new or exciting, except WINS-1010 was off until about 2am. WSPD was off RS but Tting. 4/14- I was off today for the Opening of the Baseball Season at Shea Stadium, and tried some DX, but just about every US station was on with NX on the moon capsule's failure. There was a Tter u/WKBN-1520 around 12:15am, but I couldn't dent that tremendous signal to get any IDs, if given. That's about it here, gang - we need more Musings, so won't you take up your pens, pencils, crayons, chalk, or whatever you write with, and double space a few lines for the next DX NEWS? C U N 7!

The NRC 1970 Convention is coming along - we hope you'll be coming along, too, to Hasbrouck Heights, New Jersey, where the N.Y.-N.J. NRCers will be hosts to the gang. Make those plans early so you won't miss out. Planned, among other things, is an outdoor DX-a-thon, with electricity to power the big communications receivers which'll be on hand! This, of course, on the Monday morning of the Labor Day weekend. Watch the pages of future DX NEWSes for more details, but in the meanwhile, be sure to make arrangements to get in on the shenanigans.

REMEMBER, USE E.D.T. DURING THE SUMMER MONTHS IN MUSINGS OF THE MEMBERS! E.D.T.!

CANADIAN BROADCASTING CORPORATION
SOCIÉTÉ RADIO-CANADA

Radio Station CFFB
Frobisher Bay, N.W.T.
April 14, 1970.

Mr. Ross L. Hansch,
5013 Risser Road
Madison, Wisconsin
53705

Dear Mr. Hansch:

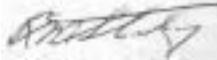
We apologize for not having regular confirmation cards. According to the information you have sent us, there is no doubt that you have received C.F.F.B. Frobisher Bay, (1200 KHZ - 250 Watts)

Reception was very poor due to strong interference from WOAI and a Cuban News station. Although we were heard in some Mid and Western States, No confirmed reports are available in Eastern Seaboard states.

We are hoping to broadcast another "Special DX Program" in late fall, when transmitting conditions in the Arctic are at their best.

Thank you for the interest shown in C.F.F.B, and should you require any information, please do not hesitate to contact us.

Yours truly,


Robert M. Stanley
Manager.

THE KOB PROBLEM

by Paul K. Hart

The dispute between KOB in Albuquerque and WABC in New York concerning the use of 770 kHz is one of the most bizarre situations to face the Federal Communications Commission. Dating from 1941, this sometimes bitter battle is in large part due to oversights and hasty decisions by the Commission itself. Throughout the FCC files, the case is referred to as "the KOB problem". The following is a condensation of the history of this dispute taken from the permanent files of KOB and WABC at the FCC in Washington, D.C.

KOB began broadcasting in 1922, and in November of 1928 was assigned to 1180 kHz using 10 KW on a night share-time basis with KEX. In November 1939, KOB's license was modified to unlimited using 10 KW on 1180, and in May 1940, KOB was granted a construction permit to go to 50 KW with Class 1 designation (still on 1180).

The first NARBA meeting brought strong objections from Mexico to KOB's operation on 1180 and the assignment to that frequency was determined to expire in November 1940. The search was on to find a permanent frequency for KOB which by that time had built a history of broadcasting service to the Southwest. It was proposed by the FCC that KOB operate on 1030 kHz with 10 KW day and 10 KW night directional to protect WBZ. Both WBZ and KOB objected, since 1030 would become a class II frequency and both stations would be 1B instead of 1A. Measurements were then taken in Albuquerque of signals received from WBZ and WCAU (then on 1200). WBZ was consistently stronger, and the idea of putting KOB on 1200 was carefully examined. As a result of the NARBA conference in January 1941, WCAU was moved to 1210 so that WOAI could use 1200, but Mexico objected to KOB's use of 1210. In February 1941, a proposal was made for KOB to use 1030 kHz unlimited non-directional with 10 KW. The FCC issued the license on March 29, 1941.

On April 23, 1941, KOB filed for a Special Service Authorization (SSA) to use 50 KW day and 25 KW night (both non-directional) on 1030. This was granted in June 1941 and KOB operated for several months under these conditions.

Already the seeds had been planted for KTWO's license on 1030 and KGYN's on 1210, but the results would be almost 30 years in coming. The Commission, caught between KOB's long broadcasting service and the lack of a permanent frequency assignment acted on October 31, 1941 and amended KOB's SSA to allow operation on 770 kHz. WABC (then WJZ-see note) immediately appealed the decision but was denied a hearing on the basis that the assignment was temporary, and a re-hearing would be held if any permanent arrangement was to be considered. The FCC prepared to make detailed measurements to determine the best assignment for KOB, but World War II intervened, and activity was suspended. KOB was subsequently given successive SSA's to continue to operate on 770, and in February of 1944, KOB filed for permanent assignment to 770. WABC asked for a delay in any

Note: For the sake of clarity, the call letters WABC are used exclusively for the station in New York on 770 kHz, even though owners, call letters and network affiliations have changed since the beginning of this dispute. KOB changed owners, but has kept the same call and network affiliation.

decision by the Commission and KOB and WABC worked out a "gentlemen's agreement" as follows:

1. KOB would not push the issue of permanent use of 770 if,
2. WABC would not object to further SSA's until the issue was finally settled.

Everyone agreed to work for a prompt resolution of the problem, but WABC then filed for a dismissal of KOB's request for permanent assignment to 770. No decision was ever reached on WABC's request. The lines of battle had been well established, KOB continuing to use 770 by a series of SSA's, WABC constantly objecting. In 1955-56, the Commission held extensive hearings in an attempt to determine an assignment for KOB. The possibilities examined were very numerous, but focused mainly on 1030 and 770. In most of the testimony, the overriding factor was that KOB's programming and NBC affiliation was unduplicated in most of their coverage area. Other services in the Southwest were also much less than those available in the Northeast. Considerable favor was also shown toward WBZ, since there was no duplication of WBZ's programming. It also seems that the Commission was becoming annoyed by WABC's declining program standards and continuous objections and attempts to circumvent the Commission by resort to legal action. After tremendously complex and lengthy proceedings, the issue was still unresolved, and the FCC granted KOB a further SSA to continue operation on 770. WABC was hopping mad, and appealed to the U.S. Court of Appeals, the District of Columbia Circuit Court.

The Court ruled in favor of WABC and the Commission was directed to eliminate KOB's interference to WABC which was often severe in WABC's outer coverage area. The Commission immediately directed KOB to apply for a directional antenna for night operation, protecting WABC. KOB indicated agreement, but asked for a decision concerning permanent use of 770 as part of the application. On November 26, 1956, the Commission directed KOB to comply or cease operation. On April 26, 1957, KOB began nighttime directional operation which continues to the present.

In February 1958, a motion by WABC to re-open the record was denied by the FCC. On September 5, 1958, the Commission directed WABC to file for use of a directional nighttime antenna to protect KOB, and asked KOB to file similarly to protect WABC (which they were already doing). Since that first notice, WABC has ignored the Commission and repeatedly filed for license renewal every three years using 50 KW unlimited non-directional. The Commission has granted renewal each time, but with the renewal notified WABC that they should be directional nighttime.

On February 7, 1966, the Commission sharply advised WABC to begin construction of a nighttime directional antenna, advising in detail methods of measurement and reporting of results required. WABC has continued to ignore the Commission on this subject. KOB is now owned by Hubbard Broadcasting which also owns KSTP in St. Paul and a smaller station in Florida. Hubbard formally filed for construction of a station in New York on 770 kHz in which they propose operation in full compliance with the FCC's directives to WABC.

In March of 1969, a letter was sent to Rosel H. Hyde, Chairman of the FCC by Joseph M. Montoya, U.S. Senator from New Mexico asking to be informed of the status of the dispute. Mr. Hyde's answer stated that there was no proposal before the Commission to change KOB's frequency, to give it less protection or to restrict it to less facilities than those now operating. The present facilities authorization was stated as 50 KW non-directional day and 25 KW directional night on 770 kHz. He further

stated that any change in KOB's status will be at KOB's request for greater facilities or greater protection on 770 or possibly on another channel.

At present, it appears that a precarious balance exists that none of the parties are willing to disturb.

If the Commission forces a showdown in Court, KOB's use of 770 may be held illegal on the grounds that WABC was not allowed a hearing when KOB was first assigned to 770. SSA's or not, 29 years' use of a frequency must be considered as more than temporary. The Court decision in 1956 directing the FCC to remove KOB's interference with WABC must still smart, but indirectly must also be counted as supporting KOB's claim to some permanent rights to the frequency.

KOB most likely would rather not cause a showdown. The best deal they could get would be protection from WABC at night which really doesn't bother them very much. It seems very unlikely that Hubbard could get assignment of 770 in New York or that KOB could get assignment to any other frequency better than 770. The possibility does exist that KOB could be denied use of 770 altogether, and the whole series of events would have to start over on another frequency.

WABC is in trouble with the FCC now, ignoring repeated orders to go directional at night and the permanent file contains many letters from listeners complaining about WABC's programming. If they force a showdown, they might be forced to comply with the FCC order to directionalize at night which would cost them about 25% of their present night audience. The remote possibility exists that the FCC might honor Hubbard's proposal for a station on 770 in New York and revoke WABC's license. KSTP and KOB both have relatively good records of service and favorable response from listeners.

The most recent action seems to be on the part of WABC to have legislation introduced in the Congress to deny 770 to KOB. It appears that Congress is unwilling to involve itself in the dispute

It appears that the situation will remain unchanged for the foreseeable future. Complaints and suits are bound to continue, but it seems that no better permanent solution exists than the present arrangement. If the relationship between WABC and the Commission doesn't improve, WABC might be after all forced to use a nighttime directional antenna, but even that could be indefinitely postponed by appeals; it has been successfully ignored for 12 years already. The odds are that "the KOB problem" will never be fully settled, as each of the parties risks an adverse ruling in the event of a full legal test of the basic issues.

Don Kilroy: Your "Ramada Inn" - 1600
is WUNR.


REPORTEDLY IN OPERATION

NEW CALEDONIA. Radio Noumea is now being well heard throughout the Pacific area on 670; this is believed to be the 25 kw station originally planned for operation on 730 kHz. (Wood; NZDXRL)

LIBYA. Radio Libya's second one million watt transmitter was to have begun testing on March 14th, according to an announcement over Beyda-1124; freq not given. **There have been no reports of new unid Arabs recently so this new Tripoli transmitter may have been delayed or have chosen an unfavorable frequency.** (Editor)

BRAZIL. Currently reported Brazilian split channel stations include: ZYZ6, R. Espinhaes do Patos, on 1469; ZYB48, R. Liberdade de Caruari, on 1472; and ZYK31, Radio Continental do Recife, on 1371. (ARC; EBU)

GILBERT AND ELLICE ISLANDS, Radio Tarawa lost a transformer in March and operated for some time with the old 50 watt transmitter; according to N. Z. sources, Tarawa is now back on with the new high-power transmitter again. (NZDXRL)

FRANCE. The English music paper "Disk" reported a new station operated by students at Lille University. It is called "Radio Campus" and reportedly operates on 428 meters (which corresponds to 701 kHz). Schedule is 1400-1800 EST on Tuesday and Thursday; no power given. (Terry Greenhill)

INTERNATIONAL WATERS (ENGLAND/HOLLAND). Radio Nordsee, whose out-of-band operation on 1610 kHz has been logged as far away as New Zealand, picked up anchor on March 23rd and left the Dutch coast. **The Mebo II sailed to England and dropped anchor 6 miles from the Essex Coast.** The 1610 kHz transmissions reportedly caused severe QRM with coastal and rescue traffic in the new location and, faced with the possibility of action by the Royal Navy, Nordsee suddenly went off the air on March 27th. **She then reappeared on 1578 kHz - a channel shared with Italy, Portugal, and Norway.** The new channel was supposed to cure the QRM problem, said Frederick Hasler, Vice Chairman of the Campaign for Independent Broadcasting. Said Hasler, "All these other stations have low-power output, and it is unlikely that R. N. I. will interfere with their transmissions", **But on April 15th the BBC announced that there had been complaints from Italy, Norway, and some coastguard stations about the 1578 channel; apparently the modulation is not too good and there is excessive splash from Nordsee. The British Ministry of Posts and Telegraphs has put on a mobile jamming transmitter to JAM Radio Nordsee; the jammer is heard under Nordsee in the evenings by Ken Brownless in York. He says the jammer is "slightly varied pitched jamming" and at times overrides Nordsee when the latter fades. On April 16th they went off again, announcing**

that they planned to return on "217 meters". This would be 1385 kHz; the present whereabouts of Nordsee not known at this time. (Culled from many sources; particular thanks to Ken Brownless of MWN for many reports)

ANTARCTICA. For the first time McMurdo residents can listen to live local radio via the 50 watt station WASA. This station formerly carried only taped programming but the studios have recently been moved to improve coverage and the programming is now live. **They operate 16 hours a day, 7 days a week. What is the frequency? (NZDXRA)** We originated the information on this station some years ago in IDXD; the latest frequency that we've seen reference to is 610 kHz. **There is also another station in McMurdo, KMSA, running a big 15 watts on 1500 kHz. I have tried several times to get further information on these Antarctica stations, both from McMurdo and Washington, but no reply at all. Reception of these stations, even in New Zealand, is rather "liffy" since these stations are located deep in the Southern auroral zone...** (Editor)

INTERNATIONAL WATERS (NEW ZEALAND). Radio Pegasus, off Canterbury coast operated on 1300 kHz with 100 watts and 880 kHz with 200 watts. Reception on 880 was good in New Zealand; address was given as Box 2564, Christchurch. (NZDXRA)

PROJECTED OPERATIONS

INDIA. During the 4th Plan, expected to be completed in 1972-1973, AIR will have 32 new transmitters; 16 of medium-power, 11 low-power, and 5 mobile. Besides these, civil works are in progress on the super-power station at **Rakjot and the masts have been erected. The main transmitting equipment is being shipped from abroad soon, and the transmitter is expected to be in operation by the end of the year. Work on two high-power stations at Aligarh is in progress; the first to be completed in June, the second in September. High power transmitters at Jodpur and Simla are expected to be in operation by September and June; the high-power station at Alleppey should be on by the end of the year; and the one in Gorakhpur is likely to be set up in 1972. (SCDX)** With all of these high-powered units coming on, there's a chance that India will finally be logged in North America when we get back to sunspot minimum in 1973-1974... (Editor)

CYPRUS. Cypriote radio officials have begun negotiations with SOMETRA, i. e., Societe d'Etudes radiophonique monegasque, to set up a relay station of Radio Monte Carlo on Cyprus to cover the Near East; for the past 4 years the 1466 kHz Monte Carlo outlet has been blocked in the Middle East by the powerful station in Odessa on the same channel. **The projected station will be as much as 100 kw. (SCDX)**

WEST GERMANY. In 1969 a commercial company in Saar asked the Deutsche Bundespost for permission to start a station on 917. Now Hessischer Rundfunk has asked for permission to begin operation on 917 from Rimberg, Hessen to improve reception there. **According to press reports, Radio Ljubljana in Yugoslavia (the dominant occupant of 917 at the present time), has agreed to**

share the channel with the commercial venture if they got a share of the profits! (ARC)

GREECE. The VOA's new Kavala relay is under construction now; this one will be used to improve coverage of the Balkans and the southern part of the Ukraine. According to some sources the power of this new one may only be 150 kw. (ARC)

CLANDESTINE STATIONS

VOICE OF IRAQI KURDISTAN. This station, which has been transmitting in a number of Mideast languages since 11/25/68 (and formerly from 9/10/65 to 5/26/66) has been off the air since March 23rd. This station transmitted in a number of spots in the top end of the band but as far as we know was never heard by any DX'ers even in Europe. (Editor)

RADIO LIBERTAD! I'll quote it just as it appears in the March issue of the Finnish DX magazine, DX-Kuuntelija: "AMERICAN VIRGIN ISLANDS: R. Libertad is said to be broadcasting from St Croix on e.g. 1550 kHz. Addr: 2113 Ocean View Branch, Miami, USA or Box 5650E, Caracas. (EA)". "This is the first information we've seen in over a year to indicate that this most secret of the Caribbean clandestine stations may still be in operation. This 1550 channel has never before been reported to the best of my information, and it's unclear who "EA" is who contributed this information. I know for a fact that Libertad was not operating from the Virgin Islands when I visited there some years ago; this Finnish item should be treated with considerable caution unless it's confirmed independently - I've seen too many cases of incorrect information originating from this source in the past. Will some of our Caribbean area members please check the 1550 region for traces of Radio Libertad in the early evening hours? (Editor)

LATEST ITEMS FROM THE EBU (Exclusive to the NRC)

628.9	Turkey. Cukurova, 300 kw, nominally on 647 now here.
809.1	India. Unid station heard here.
800.29	Unidentified. The same station noted by your Editor last fall has been logged by EBU; they too are not able to identify it although it may well indeed turn out to be a Spanish station - this one was only heard in France and Belgium.
1061	European USSR. Saransk, 50 kw, now operates here.
1155.1	Egypt. Beni Suef 2, 50 kw here.
1286.2	Czechoslovakia. Rimavska Sobota relay of Prague is now slightly off-frequency.
1319.6	Nigeria. Enugu, 10 kw, now enough off-channel to be separable with triple-mechanical filters.
1447.6	Mali. Bamako now here; still unheard here this year.
1562	European USSR. Leningrad now operates here.
1586	USSR. Tartu now here with 15 kw.

Italy faces radio war with Monte Carlo

By
LESLIE CHILDE
in Rome

A COMMERCIAL radio war may soon break out between Italy and Monte Carlo. At stake in the David-and-Goliath battle is at least £700,000 clear profit to be picked up every year from advertising.

The matter has now reached the Italian Parliament, where a question has been tabled asking the Ministers of Post and State Participation to resume commercial broadcasting from the long defunct Radio San Remo.

San Remo is on the Italian Riviera, a short car drive away from the principality of Monaco, which is ruled by Prince

Rainier and Princess Grace.

The parliamentary move, made by the Liberal party, is termed "urgent" because one of its main aims is to stem the flow of advertising money out of Italy, whose economy is now being drastically weakened by a flight of capital.

What has prompted the action is the growing success of "Radio Monte Carlo," which is now beaming 12 hours of pop music to Italy every day, with highly profitable advertising contracts. Between the remarks:

Until four years ago Radio

Monte Carlo limited its Italian language transmissions to two hours a day. Now its 12 hours of broadcasting daily are beamed towards Italy's nine most prosperous provinces.

Italian radio is state-run and its dull standards can only be compared to the B.B.C. fare of the late 1940s. So more and more Italians are tuning into the brighter programmes from across the frontier.

Cashing in on this, big Italian firms are spending more and more money to advertise their products on this station instead of in Italy.

Radio San Remo was set up in the 1930s, and its studios and transmitters are still there. After the war, however, when Italian radio and television became a State monopoly, it was closed down. Now its facilities are used only as a "booster" point.

One reason for the move to undercut Radio Monte Carlo's popularity is that it also carries cigarette advertising, which is banned in Italy, where, incidentally, tobacco is a state monopoly.

Backers of the plan to resurrect Radio San Remo say it could quickly become operative again after technical modifications and the hiring of staff.

from Sunday
Telegraph 3/29

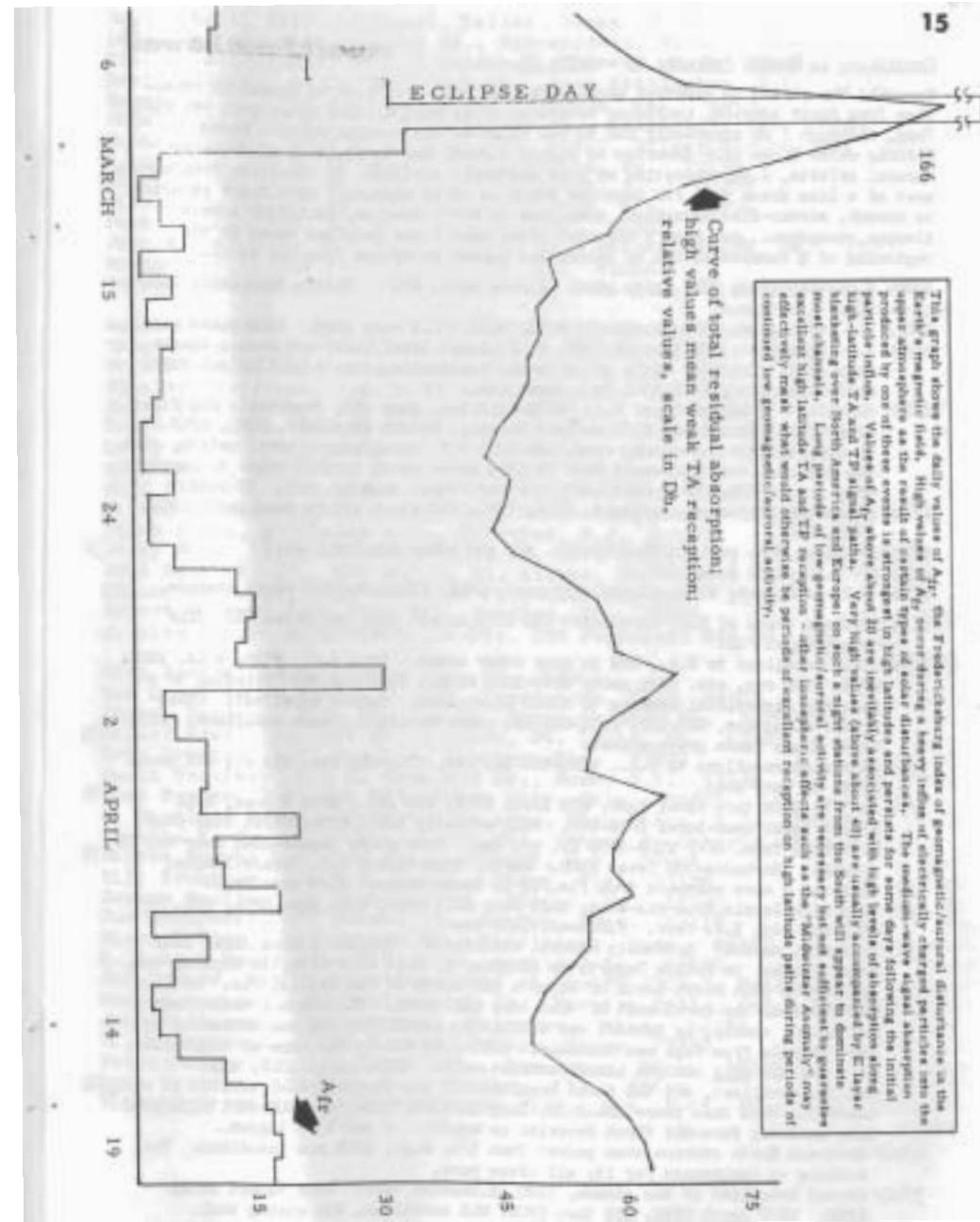
DX CONDITIONS

Following the massive auroral upset of March 7-9 we experienced a period of unusually low activity which permitted us to observe the decay of the absorption unimpaired by new precipitation activity. TA's began to re-appear around March 20th and several good high-band openings were noted that week. A new disturbance began about March 26th and auroral activity has continued at a fairly high level since - see graph on opposite page. We have also shown the first "R" curve of total residual absorption; the higher this curve the greater the amount of residual absorption in the auroral zones and thus the poorer the high-latitude reception.

The following is from Medium Wave News of England:

There was a severe AURORA STORM on March 8/9. Coastguards at Flam-borough Head said that the Northern Lights display was the most vivid for several years. **It seems that the onset was noted during the evening of the 8th when very bad flutter-type fade was noted above 1400.** Luxembourg was weak with rapid fading. We have notes from Ehart Goddyn in Holland for the 9th, but first a report on York reception. Many signals were fairly constant but below normal strength. Beromunster-529 was very weak; Horby-1178 was dominant here, Luxembourg weak also. Germans and French the same with Middle East reception being better in both countries, as were Portugese stations. **We did not have any of the type of fading experienced on the 8th - absent on the 9th but in Holland, it was being experienced - one day later - with the same fluttery fading noted on BBC (908, 1088, and 1340), Brussels-926, Luxembourg-1439. Horby-1178 was not dominant in Holland but instead Greece and Spain. The NA path was dead after the 7th with South America being dominant plus Asiatic loggings being noted on the following days.**

(Editor's note: because of the skewing of the Earth's magnetic poles, Central Europe tends to experience the same degree of severity of auroral storms as we do here on the East Coast of North America in spite of our lower geographical latitude. **The events in Europe are very similiar to those experienced here: overhead auroral blanketing tends to knock out the regular high power locals - especially stations to the North. The only stations then able to skim in under the blanketing layer (see page 29 of DX NEWS No. 25) are those from the Near East and North Africa-Iberia, plus the low-angle multiple-skip rays from South America. Thus on an "auroral night" in Europe the stations in the Middle East take the place of the enhanced Caribbean signals we experience here in North America.)**



report from hawaii

Conditions in Hawaii February 20 - March 22.

General: The period in question began with continued very good to excellent reception from North America, including reception of my most distant N.American yet(CBA). Then, although I am supposedly far to the south of the auroral belt, a Monday morning which I can only describe as highly auroral was noted, with classically auroral effects, i.e., reception of rare southerly stations, no reception from north-east of a line drawn very far west and south in North America. Conditions reverted to normal, winter-like reception, dominated by North America, including superb Alaskan reception...not what I expected after what I had imagined would be the beginning of a consistent run of spring and summer reception from the South.

- 2/20: E.C. very good, WNEC quite good. Alaska good, KFQD. Middle East good, Tehran-895.
- 2/21: E.C. very good, WQXR excellent, WAVE, WKCY, CKLW very good. KFQD quite good.
- 2/22: E.C. excellent: KYW through CFCN, KMOX almost level KPNW(very rare); Alaska very good. Yet some signs of southerly tendencies, too, e.g. KSON(not KKEY) dominating 1240, KDJW-1010 Tex. excellent.
- 2/23: Excellent to all parts of N.A. WIFE-1310 Ind. over WRR, reportable for first time. KSTN thru local KCCN without looping. Alaska excellent, KJNP, KFQD. My most distant N.American ever, CBA-1070 N.B.(according to verification, mine was the most distant report ever to CBA; never heard in NZ); other E. Canadian stns good: CFOX, CEM. Excellent to other areas: Ecuador, etc. NZ good.
- 2/24: N.America continued excellent, CKLW, KDKA, WBZ etc. Alaska excellent: KFQD, KPAR, KINY.
- 2/25: Still on N.A. peak: WCOV-1290 Wis. r/c and other new loggings.
- 2/26-27: N.A. still excellent.
- 2/28: E.C. excellent, WCBS; Alaska very good, KPAR, KFQD; Pacific above average.
- 3/1: Northern areas of N.A. excellent: WBZ semi-local, CJCA dominated KHJ, CKLW almost equal PJB.
- 3/2: Still excellent to N.A., and to many other areas. From N.A., WCBS, WCLS, WSUN, WPNX, CFRB etc. etc. very good; WTRU-1600 Mich., WOKY-920 Wis. pointing to a possible directional opening to Great Lakes area. Canada excellent. Other areas: S.America, SRS-725, Fiji-890 and other Pacific, Alaska excellent, KICY, KFQD; 2 new Texan graveyarders.
- 3/3: Continued excellent to N.A., WDMG-860 Ga. new, KDDD-800 Tex. 250 w.; KYW level CFCN; NZ very good.
- 3/5: As 3/3: KPRE thru local KAHU, KYW level CFCN; WSB exc., WCBS v.good, WFLA almost level semi-local KPFA-970. WMOX actually level KPNW, first time ever. WATO-1290 Tenn. r/c, WTCO-1450 Ky. r/c new. Cuba good; jammer-1140 over all on channel. Barbados-780 level WBBM. Partly directional Fla./Cuba/W.Indies.
- 3/6: Signs of a move westward from Fla./WI to Texas/Mexico. KDJW excellent.
- 3/7: Very high levels from Mid-West; KKJO over KKH-1550, KXEL over KPOL, etc. CBXQ-540 40w. B.C. fair. R.Hauraki-1480 new.
- 3/9: Suddenly, aurora! Extremely auroral conditions. Imagine a line drawn from Nome, Alaska, to Prince Rupert, to Calgary, to Salt Lake City, to Topeka, then meeting to East Coast south of Atlanta but north of Eau Gallie, Fla. Not one station from the north-east of that line was heard. WLS(which I understand was heard, weakly, in Denver) was definitely inaudible; 890 was dominated by loud signals from Fiji and Colombia. CFCN-1060 was on the edge of audibility. KICY was the only Alaskan heard(farthest west). Fla. good: WSUN, WMEG. S. America excellent, and the first Brazilian of the season, PRG-9 on 1100 in well. Australia best this year: 2NA-1510, long unheard, 2RE-1560, 4d etc. SIBS-1030 long unheard; Peru-854 first Peruvian in months. 4 new YV's logged.
- 3/10: Northern North America even poorer than 3/9, e.g., CFCN now inaudible. But nothing to compensate for it; all areas poor.
- 3/12: Second Brazilian of the season, 1180. N.America back! KMOX almost level KPNW. WKYC level CFAX, KYW thru CFCN; WLS excellent, WBZ coming back.
- 3/15: Alaska back again, KFQD very good. KMOX level KPNW. CFCN very good.
- 3/16: Northerly ex; WFTN-Wis. 1580 Test good, CKCY-920 Ont. new; Alaskans good to excellent: KICY, KENI, KPAR, KPRB, KFQD. CKX-1150 very good. NZ good.
- 3/17-22: Average North American cx. Richard E. Wood

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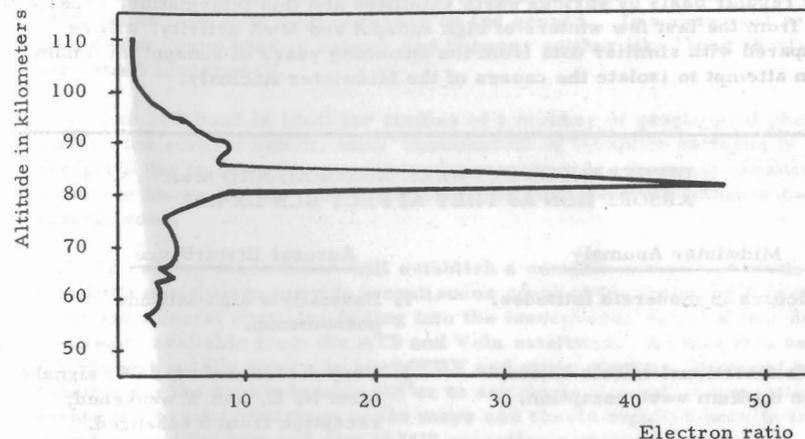
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Auroral and MWA Absorption

(continued from DX NEWS #25)



Rockets carrying equipment to measure the number of electrons at various heights were launched on both normal winter days and on a day with severe Midwinter Anomaly absorption. The graph above shows the ratio of electron concentration on the MWA day to that measured on a normal day. Note that there is a very great enhancement in the electron content in the region of about 82 kilometers (51 miles); in that region the electron concentration is 47 times as large on the MWA day as on a normal day. The great absorption produced by the electrons in this region is believed to be responsible for the Midwinter Anomaly.

The rocket experiment results shown above indicate that there are major alterations in the lower ionosphere associated with days with strong Midwinter Anomaly absorption but that the additional absorption seems to be restricted to a very thin "shell" of electrons around 51 miles above the ground. Note on the diagram on page 24 in DX NEWS number 25 that the

site of the extra MWA absorption is in the same region of the ionosphere where auroral absorption occurs but that the latter involves a much more substantial section of the ionosphere.

What causes this strange layer of ionization at 51 miles? Why does it appear only in Midwinter and why does it come and go randomly from day-to-day? A number of very complex theories have been advanced to answer these questions but none have met with wide acceptance. Meanwhile research continues on the Midwinter Anomaly at many scientific institutions and it will just be a matter of time before the causes are worked out. Vast quantities of scientific data are now being accumulated on a regular basis by various earth satellites and this information, especially that from the last few winters of high sunspot and MWA activity, will be compared with similar data from the upcoming years of sunspot minimum in an attempt to isolate the causes of the Midwinter Anomaly.

DIFFERENCES BETWEEN AURORAL AND MWA ABSORPTION AS THEY AFFECT BCB DX'ING

<u>Midwinter Anomaly</u>	<u>Auroral Disturbance</u>
1. Occurs in moderate latitudes.	1. Basically a high-latitude phenomenon.
2. No directional effects known on medium wave reception.	2. Very directional on BCB; signals from N, E, and W weakened; reception from S enhanced.
3. Ill-defined boundaries.	3. Well-defined southern edges.
4. Only covers fraction of globe.	4. Worldwide in both hemispheres.
5. Occurs only in local winter.	5. Can occur any time of year.
6. Comes and goes randomly from night-to-night.	6. Onset is random but recovery is slow and well-defined over several days.
7. Independent of daily variations in geomagnetic activity (A_{fr}).	7. Very closely related to geomagnetic activity.
8. Absorption due to electrons in thin layer of ionosphere.	8. Absorption due to increased electron concentration in extensive regions of ionosphere produced by auroral precipitation events.

SUMMARY

In the preceding 23 pages of text, graphs, and illustrations we have attempted to explain in as simple a fashion as possible the scientific origin of several unique patterns long observed in medium wave DX reception. While a vast amount of work has been done to explain the factors controlling shortwave reception, very little serious work has been done on medium wave reception and thus the MW DX'er is in a unique position to study and provide data on many still unexplained facets of medium-wave propagation.

Earth satellite data just now becoming available indicates that there are even more unusual and unexpected quirks and aspects to medium-wave propagation than have been observed on the ground. In a very real sense the medium-wave band is unique and behaves neither like "long shortwaves" nor "short longwaves".

The MW band is ideal for studies of a number of geophysical phenomena such as the auroral extent, etc.; examination of reception patterns in TA reception due to auroral zone expansion now provides the most sensitive technique known for the determination of the southernmost extent of the auroral zone.

In coming years NASA will establish a complex network of stationary satellites designed to provide a continuous count of the incoming flux of solar and auroral particles falling into the ionosphere; some of this data is already available from the ATS and Vela satellites. As this data becomes quickly and readily available over WWV and other stations, it should be possible for the knowledgeable DX'er to anticipate auroral precipitation events and to take advantage of the maps and charts supplied here in DX NEWS to understand the how and why of MW reception patterns. A greater understanding of auroral and other MW phenomena should permit the DX'er to seek out specific DX stations and to reduce the number of tentative loggings also.

Another intriguing possibility is the use of geomagnetic data (which has been recorded for more than 100 years - long before the invention of radio!) to provide a measure of confirmation or denial of specific tentative or questionable loggings made many years ago. Throughout the history of the BCB DX hobby there have been many interesting and often frustrating "tentatives" and "unknowns" which have never been resolved one way or the other. In some cases it may be possible through examination of the geomagnetic data of the period to shed light on some of these receptions - although great care will have to be exercised in view of our still very limited knowledge of many of the factors involved.

Fortunately for us all there is still no chance whatsoever for complete prediction of MW DX reception; because of the many random physical processes involved no one will ever be able to predict exactly when a particular distant station will be heard - no matter how many satellites and computers are used. Understanding of the physical basis of MW DX propagation can lead to more loggings, fewer errors, and a renewed appreciation of just how unique the BCB really is!

WHERE TO OBTAIN GEOMAGNETIC DATA

Until WWV begins broadcasting geomagnetic data the primary source for A_{fr} and other geophysical data of interest to the MW DX'er is the U.S. Government's Space Disturbance Forecast Center in Boulder, Colorado. They mail, free of charge a weekly report containing much important geophysical and solar data including aurora, solar flux, and geomagnetic data. While much of the material in this weekly report is highly technical and requires a great deal of background for interpretation, the information we have supplied here in DX NEWS should be enough to make the publication useful for the technically oriented DX'er. Ask for the "Preliminary Report and forecast of Solar-Geophysical Activity"; available upon request from the Space Disturbance Forecast Center, ESSA, U.S. Department of Commerce, Boulder, Colo. 80302. The latest values of A_{fr} are available during working hours from ESSA by telephone; the number is 1-303-447-1000, extension 3171.

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A list of about 50 more important ancillary references on the topics of auroral precipitation, MWA, MW propagation studies, and related topics will be supplied by the author on request.

APPENDIX I. Location of the Auroral Zones.

As we have seen, the exact Southernmost edge of the zone of auroral absorption determines the geographical patterns in MW DX reception of the sort we have been discussing. Knowledge of the location of this boundary will permit the TA and TP DX'er to predict with remarkable accuracy just which high latitude stations will and will not be audible; during high levels of auroral precipitation activity the location of the zone controls overhead blanketing in North America and knowledge of the location will be of great aid to the domestic DX'er in anticipating just which domestic stations will be heard on "auroral nights".

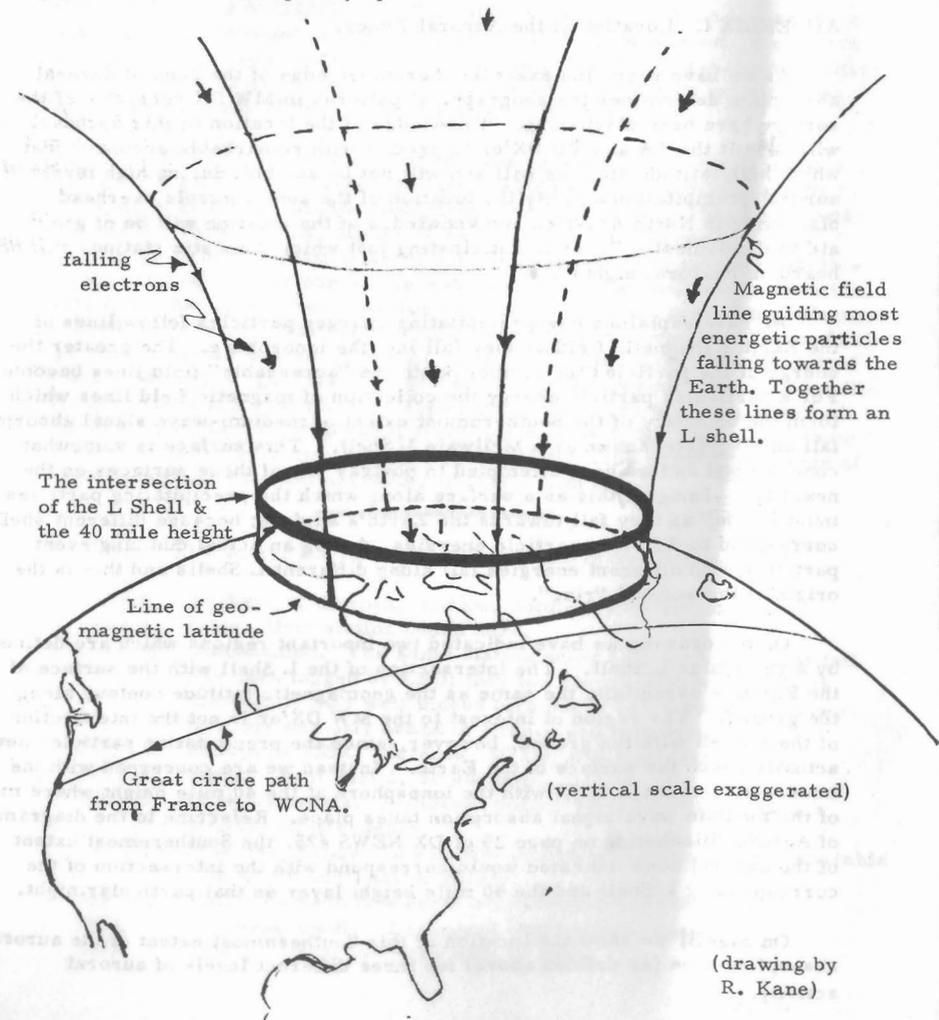
We have explained how precipitating charged particles follow lines of the Earth's magnetic field as they fall into the ionosphere. The greater the energy of the particles the further South the "accessible" field lines become. For a particular particle energy the collection of magnetic field lines which form the boundary of the Southernmost extent of medium-wave signal absorption fall on a surface known as a McIlwain L Shell. This surface is somewhat cone-shaped and we have attempted to portray one of these surfaces on the next page. Imagine this as a surface along which the precipitating particles must "slide" as they fall towards the Earth's surface; because different shells correspond to different particle energies, during an actual dumping event particles with different energies fall along different L Shells and this is the origin of the auroral "ring".

On the drawing we have indicated two important regions which are defined by a particular L Shell. The intersection of the L Shell with the surface of the Earth is essentially the same as the geomagnetic latitude contour along the ground. The region of interest to the MW DX'er is not the intersection of the L Shell with the ground, however, since the precipitating particles never actually reach the surface of the Earth. Instead we are concerned with the intersection of the L Shell with the ionosphere at the 40 mile height where most of the medium wave signal absorption takes place. Referring to the diagram of Auroral Blanketing on page 29 of DX NEWS #25, the Southernmost extent of the auroral zone indicated would correspond with the intersection of the corresponding L Shell and the 40 mile height layer on that particular night.

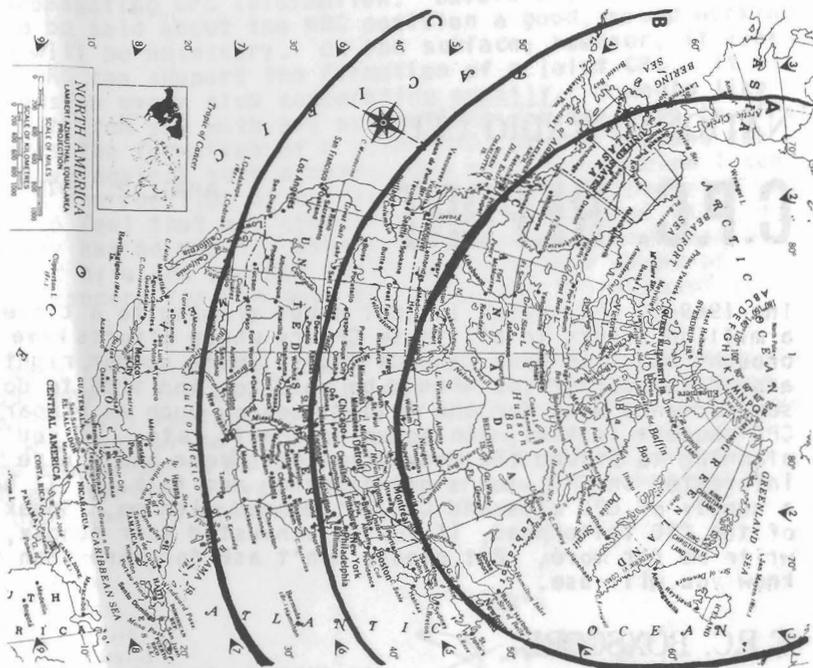
On page 31 we show the location of this Southernmost extent of the auroral absorption zone (as defined above) for three different levels of auroral activity.

Bear in mind that the actual signal absorption takes place some 30-40 miles above the surface and that signals from the south can graze in under the absorption at low angles. We are preparing a set of world-wide maps of the location of the auroral zones and these will appear in DX NEWS soon.

The following diagram shows electrons falling into the ionosphere along an L Shell located far to the North. This particular L Shell location is roughly the position of the auroral zone following a very long period of auroral quiet in a year of sunspot minimum. Under these conditions even very high latitude paths such as those from the West Coast to Europe still pass to the South of the zone of auroral absorption. We've shown a typical WCNA-TA path such as those frequently open in 1963-1964.



LOCATION OF AURORAL ABSORPTION ZONES FOR MW DX RECEPTION



- A** Light but significant auroral activity. Domestic reception is normal; TA reception from Iberia and Southern Europe unaffected; Northern Europe and Scandinavia blocked however. On the West Coast, reception from stations in the Far East and Pacific is unaffected. During years of moderate to high sunspot activity this is pretty much the furthest North that the auroral zone retreats; only a few nights a year does it fall back further Northward and permit reception from Scandinavia and Russia in North America.
- B** High auroral activity. Air typically 30 or higher. The presence of the auroral absorption zone greatly reduces the strength of signals from the North, West, and East if they must pass through the absorption. Signals from the South at low angles (e.g., from the Caribbean) pass under the auroral absorption and are well heard. TA paths are totally knocked out. On the West Coast, reception from Japan and China is unaffected; DU signals on low angle paths can penetrate as far North as Washington state without absorption.
- C** Very high auroral activity. Air typically over 100. Band appears essentially "dead"; auroral zone extends so far South that even Caribbean signals are subjected to auroral absorption.

NATIONAL RADIO CLUB

C.P.C. REPORT

APRIL 2, 1970

The 1969-70 CPC season is just about drawing to a close, a million thanks to all those CPCers whose efforts have brought about so many fine DX tests. With summer right around the corner you should be able to find time to do some advance work for the 1970-71 season such as preparing CPC request letters, lining up prospects, etc. If you're planning to attend the Convention this year and you're interested in CPC, let's get together and talk. I'll have a supply of CPC kits and CPC letterhead with me. Speaking of the CPC letterhead, if you've exhausted your supply, write me for more. But please don't ask for more than you know you will use.

C.P.C. BOXSCORE:

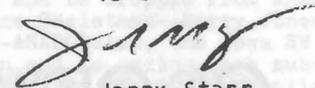
....will appear in the next CPC REPORT since I haven't completed the final tabulations for the year. It looks like the NNRC has come out of left field with a red hot CPC. Working under the handicap of monthly publications the NNRC CPC has come up with some of the outstanding DX specials of the season, a salute to them from the NRC.

On the subject of other club's CPCs, I've received several letters favoring a joint CPC embracing all the BCB DX clubs. There are several factors to consider, both pro and con. First on the list of unanswered questions is "How much effect does inter-club competition have on CPC work?" In other words, does the will to out-do other CPCs spur members to work harder than they would if they were all members of the same CPC? I'd be interested in hearing your thoughts on this matter. On the pro side, there is the elimination of a great deal of duplication with each club's CPC members writing to the same stations, etc. A joint CPC would mean a bit more work for each member (notifying each club of tests arranged rather than just one as most members now do) which could be a minor hang-up, but it would certainly mean a much more uniform means

of propagating CPC information. Before anything concrete could be said about the NRC position a good, sound working plan will be necessary. On the surface, however, it looks like NRC can support the formation of a joint CPC. It all depends on every club cooperating equally. I would like to hear from you with any suggestions you may care to offer towards the formation of a joint CPC; or any reasons you may have against such a move. One possible problem I can see is the reaction of certain members of another club who seem to feel that any cooperation with any other club in any way has no merit. Even a good working plan could be botched by a few who put their own interests ahead of their concern for the good of the hobby. Think about it.

So much for this time, don't forget to write your thoughts about any of the above. The next CPC REPORT, the season wrap-up will feature portions of your thoughts and letters so, when you write, please let me know if you want your name and comments to appear here in CPC REPORT, we won't use any portion of your comments if you wish them not to be published so please indicate. Thanx!

73's



Jerry Starr
c/o W H O T Radio
Youngstown, Ohio 44505

Much has been happening in ANARC in the last few months so here goes a rather long report.

Nominations are now open for the office of ANARC Executive Secretary--this office is open to anyone active in the DX hobby. Nominations may be made only by ANARC representatives so if there is someone you feel should be nominated for this office you should make your views known to one of NRC's 3 reps (Tom Holmes, Gordon Nelson or myself). The election will be Oct. 20 with each rep having one vote.

The 1970 ANARC Convention will be held in Bellwood, Ill. (near O'Hare Airport)--complete details when they are received.

The ANARC Abbreviation List has been on sale for some time now with \$20. turned over to ANARC in March. This 38 page list is available for \$1.25 in U.S.A. and Canada, \$1.50 in Central America and Caribbean, \$1.70 in South America and Europe and \$1.90 elsewhere. Make checks payable to ASWLC and send to ANARC Abbreviation List, %ASWLC, 16182 Ballad Lane, Huntington Beach, Cal. 92647, USA. More details in DXN, 2/14/70, pg.2.

The 1970 ANARC budget has been established with resulting dues of \$1.50 per 100 members (or fraction); thus NRC's share is \$7.50.

Disappearing clubs department:

NYSDXA was dropped from ANARC in January under the rule that says a club that misses publishing its bulletin for three times in a row can be considered inactive and be dropped from ANARC. CIDX has apparently not published since Christmas--Barry Jones resigned as publisher in February. A non-ANARC club, the Iowa SW DX Club, is soon discontinuing publication and is ending each subscription as it expires. Those of us who were at the NRC Convention in St. Louis last year know of the ISWDXC and realize what a loss this will be to the hobby. Also, RLA (another non-ANARC club) has apparently not published for several months.

IRCA President Mike Northam has made several suggestions as to what ANARC could or should be doing: 1)Educating radio stations and DXers as to the views and problems of the other, especially in regard to reception reports; 2)Public relations, both by acting as a liaison between the broadcast industry and the DX hobby and by being recognized by the national electronics media (PE,EI,etc.) as a voice for the hobby; 3)Assisting clubs by possibly providing a centralized publishing facility and/or by lobbying for things like 2nd class mailing privileges for the clubs; and 4)Coordinating and distributing information on stations, changes, etc. both from FCC information and directly from stations via a survey.

WTFDA is selling a log of NA TV stations--available for 75¢ from WTFDA, Box 5001, Harbor Station, Milwaukee, Wis., 53204. The WTFDA's 1970 convention will be in Dunkirk-Freedonia, N.Y. in Aug.

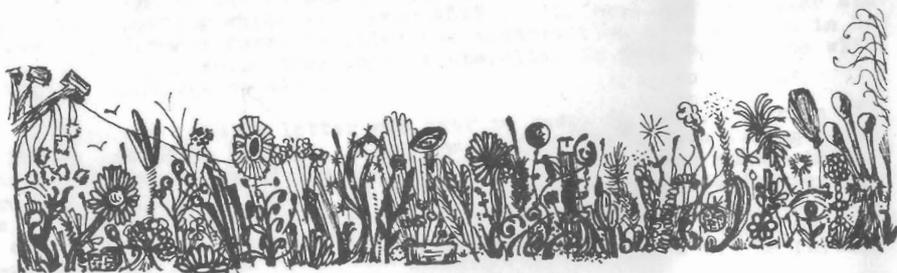
The ANARC QSL Committee has been re-established under the chairmanship of Ed Pyatt (Box 510, Morehouse College, Atlanta, Ga., 30314) and Kris Lemna (2005 Concord Rd., Muncie, Ind. 47304)--complaints regarding QSL policies of stations can be sent to these two men. Others on the committee are Richard Murphy, Mark Koukol, John Herkimer and Michael Lynch.

Out of your radio,
into your hearts.

its

NRC's CPC

GLORYOSKY



Recent results from the QSL Committee's questionnaire sent to LA stations: R. Barquisimento (690)--SS,EE,GG and II reports accepted, SINPO and IRC both OK; R. Brasil Central (1270)--PP reports preferred but EE is understood, don't use SINPO.

From across the big puddle comes some info from ANARC's European counterpart, the EDXC. The EDXC is establishing several committees, among them being a Publication Committee (for gathering info on DX orientated publications), a Technical Committee, a Propagation Research Committee, a DX Programme Committee (to review and criticize "DX" programs broadcast by stations) and an Advertiser List Committee (to produce lists of commercials broadcast on LA stations). Also several EDXC members may work on the ANARC QSL Committee as EDXC won't have its own QSL committee. EDXC has published a list called "DX Clubs of the World"--available (as long as supplies last) for 1 IRC from EDXC, Box 14110, Helsinki 14, Finland.

Those of us in NRC who have been quite pleased and proud of our new offset printed DX News may be shocked to learn that we have been outdone by the Soumen DX-Kuuntelijat r.y. which publishes a bulletin with color offset pictures of QSL's and pennants.

The project to display veries at the Smithsonian has been cancelled due to too few offers of veries.

As with every organization of its type ANARC has a continuing need for volunteers to help with various projects and to serve on the various committees. Anyone wishing to help ANARC should contact Gray Scrimgeour (227 Hanna Rd., Toronto 350, Ont., Canada) as he can advise you which areas are most in need of help. It is a good way to learn a lot about ANARC and the other clubs that comprise it.

Phil Sullivan 152 Third St. Leominster, Mass.

NEW AIDS FOR THE MW DX'ER:

For the international DX'er, the new FBIS Log is now available from the Government Printing Office. The format and accuracy are pretty much the same as last issue - excellent and moderate, respectively... This station list is prepared by the CIA and reflects our national priorities in international relations quite accurately: weak in Latin America, good for Europe, and very good for the Middle and Far East. Part I lists all AM stations - both SW and MW - by location; Part II lists the same stations by frequency. These lists include Canadians (including LPRT's) but no U.S. stations. Each list is \$1.75 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.

For the Domestic DX'er, the new NRC Log, now being prepared and proof-read will be the ultimate reference source...

SUPPORT THE CPC!

175
175
175
350

R F Pollution By Glenn Hauser

Pollution has surged into national prominence as one of the most vital issues of the decade -- that is, pollution of the air, water, soil -- the environment. But little outcry has yet been heard against another form of pollution, intangible but insidious.

Radio frequency (RF) pollution is a mushrooming problem which has already severely restricted the variety of stations a person can listen to. As it worsens, the public will have to rely more and more on local stations only, which have the power to cut through the slush caused by manmade noise and interference.

I'm not talking about the growing preponderance of blah programming, or of the congestion caused by too many stations in too little spectrum -- that's another problem.

RF pollution refers to the growing menace of noise and interference invading the short and medium wave bands. It's getting worse -- as 'civilization' progresses -- because of the neglect of electronic and automotive manufacturers and service personnel.

Here is where the Association of North American Radio Clubs (ANARC) can and should serve as a national lobby representing the interests of radio listeners. Just what are the offenders? Television sets, fluorescent lighting equipment, high voltage electrical distribution equipment, and a myriad of devices from electric shavers to fish bowl heaters. Plus a good portion of the vehicles on the road.

Let's look at the offenders one by one.
Televisions sets. High voltages are required to produce a good picture -- in the tens of kilovolts, in fact. This power goes into the horizontal oscillator circuit, which in most sets is poorly shielded. As a result, AM radios anywhere near the TV set, sometimes for blocks around, are beset with "swish" all over the dial (at harmonics of the 15.75 kHz horizontal oscillator frequency). The peaks are often so broad that hardly any clear spectrum remains between them. A listener lucky enough to be away from a house full of boob tubes may still find one of these TV sweep harmonics fouling up and confusing the reception of weak signals.

Colour TV's -- now selling like wildfire -- are even worse because they require much higher voltage. And they operate on a slightly different sweep frequency, which happens to put every fifth harmonic within $\frac{1}{2}$ kHz of a "trans-Atlantic" medium wave channel, i.e., one used in European/African allocations and hence of prime interest to the medium wave DX'er. Just try DX'ing on 566, 629, 692, 755, 818, etc. in a colour-TV infested area.

And TV set pollution is often so severe that it extends high into the shortwave bands, too.

Like most aspects of pollution, there's a cure for this, requiring the spending of money and effort. TV sets can be shielded so that a comparatively small amount of radiation escapes the cabinet. A foil lining inside the cabinet can work wonders, as can improved design from the beginning. TV set manufacturers should be required to meet much stricter radiation standards. But there will still be the problem of so-called "repairmen" who fail to replace tube shields properly, and jack up the voltage to compensate for a weak picture, thus not only increasing pollution but heightening the danger of shock and X-irradiation. Sure, the poor listener can take some steps to alleviate the effects of pollution, at his end, but the place to stop it, obviously, is at the source.

Fluorescent lights have experienced an explosion of popularity -- they're cooler, whiter, and more efficient than incandescents. But they get old and gassy and make a horrendous buzz in various parts of the medium wave and short wave spectrum. Starting transformers also cause the buzz.

Here again the solution is simple -- better design, perhaps a built-in filter to keep the buzz from feeding into power lines. Right now, it's a good bet that fluorescent tube makers (if they're aware of the problem at all) laugh off

any idea of putting some of their precious profit back into cleaning up their product.

Ignition systems in internal combustion engines are another source of noise -- which often hits short wave and VHF listeners with an ear-splitting razz without any warning as the engine starts up. Clean spark plugs and a grounded hood eliminate the problem. The former could be part of state safety inspections; the latter should be a factory feature of every vehicle rolling off the assembly line.

Power companies -- already in hot water for air and water pollution -- must be recognized as prime RF polluters, too. Every transformer in their electrical distribution network -- indeed, every loose connection -- is a potential noise emitter. And since power lines reach everywhere -- especially into radio listening equipment -- any malfunction in the systems affects a wide area.

The answer to this is two-fold: improved equipment design, and a greatly increased maintenance programme. Most power companies already have a small staff to handle interference complaints, but they are seldom effective or concerned with eliminating the root of the problem. Usually the noise level they find tolerable is intolerable to the person who wants to be able to monitor weak signals.

Any motor with brushes can produce radio noise, once wear and dirt set in. Again, better design, shielding, and maintenance is needed.

Any device with a thermostat in it is likely to produce anything from periodic loud clicks to a constant stream of obliterating radio noise. This includes electric stoves, fish tank warmers, electric blankets, central gas heating systems, and so on.

Yet again, improved design and shielding should solve the problem, if anybody cared.

The list of electrical appliances that wreak havoc upon the RF spectrum is endless, but let's take just one as a representative example. The electric shaver. There are 2 kinds: one that produces noise that totally obliterates everything from long wave to VHF; and one that doesn't. I know; I've had experience with both. The solution to this is too obvious to state; but it would probably infringe on some manufacturer's vested interest to phase out the offending type -- so concerted action is needed to have any hope of getting anything done.

Which brings us to the practical aspects of fighting RF pollution.

Every radio listener can only stand to gain from the reduction of artificially produced RF noise. Hence, every SWL, DXer, and casual AM listener should get busy writing literate letters explaining the severity and seriousness of the problem to congressmen known to be concerned with pollution. And to the major electronic manufacturers, and so on.

Other pollution-fighters have demonstrated that if enough people are aroused enough at least some start can be made to alleviate the problem. It's just a question of how dedicated we radio listeners really are.

RF pollution is perhaps the most insidious pollution of all: it affects the mind of the victim, by narrowing his horizons, his sources of information -- usually without his even being aware of it!

Here is our chance to make a contribution to cleansing our rapidly deteriorating environment, and with pollution an issue capturing the attention of the general public, the time to act is now.

Thanks, Glenn. Such a job is almost impossible in so many ways. I recall that there have been cases where large electrical installations (factory motors, etc.) have interfered with airport communications and the government agency responsible for control of RF noise has successfully removed the noise source. But the physical threat to life was pretty strong, and this gave the necessary motivation for action. That's what's keeping the air and water pollution campaigns going just now - real threats to our existence. A look at charts showing white noise now, and noise levels measured earlier in this century show a drastic increase! Any comments, or formal proposals? KGS.

VERIE SIGNERS

A - C. Mohr	D - K. Lyon	1350	W Cmb A	T. Shaddock, AE	A		
B - R. Karchevski	E - L. Kruse	1360	W M N S	M. Ceci, CE	A		
C - A. Merriman	F - C. Reno		K E Y Z	C. L. Schofield, CE	F		
	G - R. Fritz		W L B K	J. F. Cerny, CE	G		
	H - E. Cooper	1380	C K L C	A. Aufleger	A		
620	W H E N	R. Gardner, CE	F	W OmW	R. S. Ming, CE	A	
680	W A P A	R. Taylor, CE	F	1390	W N U S	S. Schott, CE	G
690	X EqT R A	Jose L. Rodriguez, CE	B	W E A M	E. Butterbaugh, CE	F	
730	C JfN R	W. Parker	D	1400	W RqJ N	S. D. Fisher, CE	G
740	W P A Q	G. E. Pike, CE	C	W OqN	M. D. Thurlow, CE	F	
780	W AfV A	W. Ashley, CE	E	1410	W L S H	J. W. Angst, VP	F
800	W S V S	C. E. Wilson, P	C	1430	W TqT T	J. Perry, CE	A
810	W EfK G	J. M. Hay, SM	E	W IfL	T. Perryman, GM	G	
830	W CqC O	u/u	B	WqI RmE	G. W. Trout, CE	G	
840	W HqA S	u/u	B	W H I L	K. Atkins, CE	F	
890	W IqS	R. Huberty, CE	B	1440	W AfA B	B. Bartlett, CE	FC
960	K F V S	D. Slinkard, QM	G	1450	C F J R	J. A. Radford, MD	A
	W EqL I	u/u	G	1470	W M M W	J. M. Brownstein, VP, GM	A
970	K AfK C	R. Castle, TD	G	W S R O	M. T. Avante, CE	A	
	W AqV E	u/u	G	W B I G	W. G. Barnes, CE	C	
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1050	W L I P	G. A. Dodge, CE	G	W K N D	E. Smith, NxD	H E	
	X EqG	u/u	G	K T H S	D. Patterson, CE	E	
1060	W HqF B	M. Robinson, TD	E	1490	W TrV L	D. D. Brown	A
1090	W WqS D	R. W. Moody, GM, CE	E	1500	W GrM F	D. Cornett, E	A
1110	W J S M	Mrs. Margaret Ferry	C	K SqT P	u/u	G	
1130	K WqK H	F. Page, PD	G	1510	W P U T	G. Blaken, ACE	A
	W IqS N	B. Johnson, CE	E	1530	K E C K	Mrs. Pam Reutzell, S	C
1150	C J R C	D. Bazinet, GM	G	W CqK Y	A. Lentz, CE	G	
1170	W WfL E	A. M. Faust, SM	A	W TqT I	B. Cagle, PD	E	
	K S T T	P. Blair, CE	G	1560	W K O G	F. Billings, SM	AEGH
1220	C KqC W	K. MacConnell, CE	A	K R B B	S. Davis, Personality!	C	
	W Cnd Q	D. Bartram	A	K T U I	T. Orr, PM	E	
1240	W T O N	C. P. Blackley, Lic. A	B	1562	Swiss qe	J. H. Chisholm	H
	K AfS L	J. D. Smith, CE	B	1570	K L L A	J. Coburn, M	C
1250	W AqR E	B. B. Sandy, CE	A	W B E E	J. R. Burdeau, CE	G	
	K TcM S	u/u, CE	B	C K L M	Pierre Chouinard	F	
1260	C FqR N	R. E. Wilson, Prod D	A	1580	W Cfr V	S. Geitznauer, CE	C
	W FqB M	R. W. Flanders, CE	A	1590	W AqK R	I. L. Knopp, CE	G
1270	W LqB R	B. Zehring, CE	G	*1310	W LqQnb	E. F. Terwilliger, CE	A
	W T I D	H. Wood, CE	D				
	K F B D	J. Deangio, M	E				
1290	W P V A	M. Ogburn, MxD	A				
	W C O W	J. D. Rice, P	D				
1310	C F G M	B. Carnegie, AE	A				
	W Cfa M	A. Allen, CE	A				
	W JqL K	F. Huber, CE	A				
	C H G B	Muriel Lavoie, S	F				
	K NqO I	M. L. Wilde, CE	DG				
1320	W IqL S	J. Whitacre, CE	G				
	W HfH O	R. Jorgensen, CE	E				
1330	W I B O	F. E. Penny, VP	A				
1340	W C S R	L. E. Munn, CE	D				
	W JrP F	A. Ferrari, O	D				
	K X E O	P. J. Null, E	D				
1350	C K L B	W. C. Marchand, VP, TD	A				

Be sure to send in your v/s for a future listing, weeding out, please, those used in the column recently. Please use the small letter verie-type abbreviations, & the abbreviations for the type of job at the station held by the v/s. Please put your name on the list, sent in along with your Musing, and double-spacing here helps, too. We thank those of you whose efforts in sending in v/s have kept this column alive. Why not have more members participating? Others, join in, and send your v/s to Ernest R. Cooper, 438 East 21 Street, Brooklyn, N.Y. 11226. Thank you. SET YOUR SIGHTS ON HASBROUCK HEIGHTS!