



"I like the DX News best because
it's staples fold flat and are
easier to remove than those of
'the other club'. Please renew
my membership for another year."
(Bill Blazek, Maryland)



ON THE INSIDE.....

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NEW MEMBERS


- * Walter W. Tukkanen, 2907 Quinto Way, San Jose, CA 95124
- * Dennis Quinn, 25 Colton Dr., Buffalo, NY 14216
- * Mervyn Joyce, 35 Prout St., Camp Hill, Queensland, 4152, AUSTRALIA
- * Leslie L. Dickinson, 14470 E. 13th Ave., Sp. F3, Aurora, CO 80011
- * J. David Wood, 3065 Ladera Rd., San Bernadino, CA 92405
- * John Strang, 926 W. Jefferson, Auburn, IL 62615
- * Charles "Chick" Rogers, Rte. 6, Box 37, Bainbridge Isld., WA 98110
- * Robert S. Knox, Physics Dept., Univ. of Rochester, Rochester, NY 14627
- * Rodney J. LaFleur, Drawer C, Ville Platte, LA 70586
- * Albert S. Lobel, Box 1818, El Cajon, CA 92022


Welcome to the NRC, gentlemen, and please drop a Musing to Ernie Cooper to introduce yourselves!


RENEWALS


Connelly, Northup, Skinner, Beckett, Cox, Evans, Bruch, P. Williams

NOTES &c FROM NJPC

 The World TV-FM DX Assn. (WTFDA) has recently published an introductory booklet on VHF-UHF DXing called "Beyond Shortwave", which is available from Box 163, Deerfield, IL 60015. Cost is \$1.00.

 The IRCA Convention will be held this year in Seattle, July 19-20-21, at the Sheraton Renton Inn, in Renton, near Seattle. Room rates are \$16-20 single, \$24-26 double. Registration fee will be \$10-12. For reservations or information contact Bruce Portzer, 14056 5th Ave. So., Seattle, WA 98168. Phone is (206) 244-9361. Non-IRCA's also welcome.

 The ANARC Convention will be held this year in Bronxville, NY, July 5-6-7. Site is Concordia College campus. Registration fee of \$35 includes 5 meals plus banquet. Room fees (additional) will run about \$10.00 per nite double, plus \$5.00 meeting room fee. Additional info or reservations (we believe that fees must be paid IN ADVANCE) to 1974 ANARC Convention Committee, P.O. Box 501, Bronxville, N.Y. 10708.

 We have just received at presstime the final copy for the Glenn Hauser MexiGlenn list of Mexican AM stations. As of this moment, we expect to run same COMPLETE in our next issue, in two weeks. The log will be a pullout from the center, and will likely be also stapled separately to keep it together once it is pulled. We all thank Glenn for his hard work on this list!

international dx digest

Phone 703 - 354 - 2135 before 2200 EDT * All Times GMT * Deadlines Are Saturday

Judging from the lack of reports this past three weeks, this season is pretty much over (did it ever really get started?). I did some listening myself this past week and noted excellent signals from the Caribbean and Central America but nothing that hasn't been reported before. There's still some good DX to be had, and this is the best time of the year to try for Africans, if you can fight the static. If you hear anything interesting, let us know.

New stations, changes, skeds, etc.

ALASKA - New station at Anchorage on 1080 khz requests KANC. (Broadcasting)

ECUADOR - Radio Nacional del Ecuador, HCXY1, is currently operating on 640 khz with 10 kw from 1100-0400. They plan to expand their medium wave facilities during 1974 with 3 50 kw transmitters. Correct reports in Spanish are verified. Address is Casilla 82, Quito. (NZRDXL) Any info on this Dave Gleason? (ED)

GUAM - Guam Broadcasting Company has been granted a CP for a new station at Agana on 720 khz, 10000 watts, U1. Address on CP is Box 2890, Agana 96910. (Broadcasting)

HAWAII - KPUA Hilo, currently on 970 khz, has applied for a CP to move to 670 khz with 5000 U1. This cancels their request for a move to 620 khz. (Broadcasting)

GREAT BRITAIN - A new longwave station at Westerglen, Scotland has been noted testing with tone and carrier on 173 khz. Power is 100 kw. This transmitter will carry Radio 2, and is designed to improve reception in parts of Scotland where Droitwich, 200 khz is not well heard. It is thought that the 4 low powered stns on 1484 khz will close when this goes on RS. * * Radio Teesside on 1546 khz is now IDing as Radio Cleveland. * * BBC Radio Birmingham on 1457 khz now has a 10 kw transmitter, but is only using 5 kw at present. (Ken Brownless)

INTERNATIONAL WATERS (HOLLAND) - Radio Caroline is again back on the air, on 1187 khz. Sked is 2000 - 0500 GMT in English. Radio Mi Amigo (same xmtr/freq) is sked 0500 - 1900 in Dutch and 1900 - 2000 in English. Reception in Europe is excellent, and it is thought they finally have their 50 kw transmitter fixed. (Paul Foged, DSWCI)

IRAQ - The Baghdad transmitter formerly on 610 is now on 615 khz. (Tapsell, MWC)

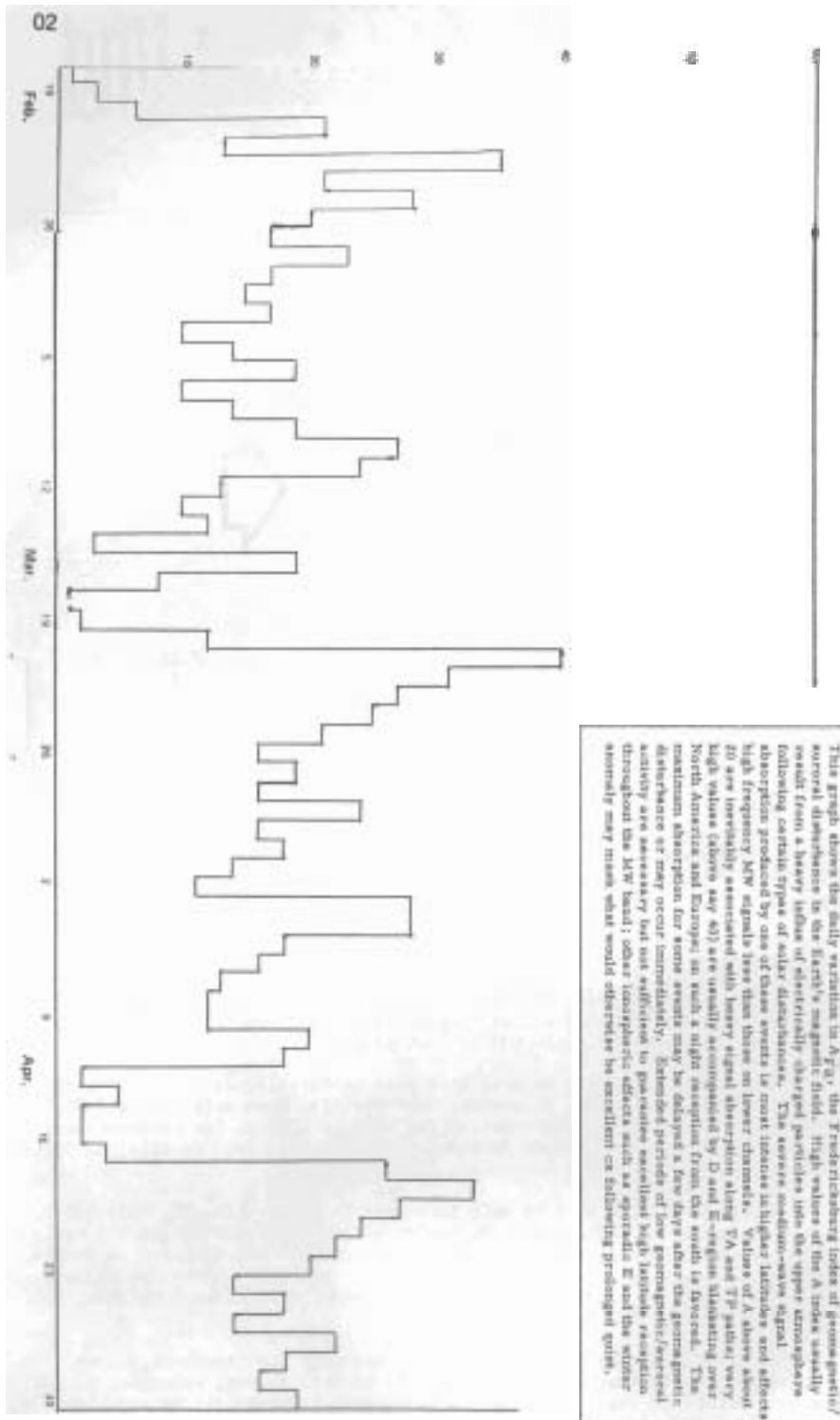
ISRAEL - According to an official schedule dated 2/1/74, Galei Tsahal (Israel's AFRTS) has closed their stations in South Sinai (1367 khz) and West Sinai (1286 khz) and has opened a new station in Central Sinai on 1286 khz. (WRTH) * * Jerusalem has now moved back to 677 from 674 khz. (Tapsell, MWC)

MALTA - Malta Broadcasting Authority is now using 5 kw on 998 khz in Maltese from 0730-1900. (MWC)

PUERTO RICO - FCC waived provisions of section 73.25 (a) (4) of rules, and accepted application of Arroyo Broadcasters for new AM to operate on 780 khz, unlimited, in Arroyo-Patillas, for filing. Arroyo requested waiver because its proposed nighttime 0.025 mV/m - 10% contour would overlap border of contiguous 48 states. * * New station at Yabucoa on 840 khz, has been granted WXEW. (Broadcasting)

QATAR - The power of the station on 674 khz is 50 kw. A new station is planned for 952 khz with 750 kw. (EBU Review via DSWCI)

SPAIN - The following Spanish stations have moved from 1133 khz: ECS9, Sevilla to 1025 khz; EFE31, Vigo to 1079 khz; and EFE33, La Voz del Mediterraneo to 1097 khz. (MWC)



04
SWAZILAND - Swazi Music Radio plans to increase power of 1376 khz to 300 kw. This transmitter is directional toward Natal. A new station is planned for 539 khz, directional toward the Cape area. (NZRDXL)

SWITZERLAND - SBC Beromunster is reportedly using 1000 kw for some broadcasts on 1562 khz. (NZRDXL)

USSR - Some additional changes via Denis Tapsell of MWC.

539 - Orenburg (ex 300, shown on 530 in 3/18 DXN)
647 - Omsk (ex 394, possibly unid in 3/18 DXN)
1115 - Moscow (ex 1367)
1142 - Kuibyshev (ex 809)
566 - Perm (ex 1088)

And now, what's actually being heard by our fearless reporters . . .

615 -BAHRAIN Bahrain Broadcasting Station, Manama, noted since 4/6 on this new frequency (ex 610) w/good signals in AA until close at 2000. Should be easier to Europe now. (Calkin)
640 -COLOMBIA La Voz de Santa Marta, HJBJ, Santa Marta w/mentions of Santa Marta w/KFI. No CW. 0435, 4/2. (Falconer)
700 -COSTA RICA TIHE San Jose w/R. Reloj ID 0246 4/8 w/WLW. (Falconer)
727.8-UNID LA 4/21 0310, apparently GH's catch, giving time as "Diez de la noche con 10 minutos en Panama" and MoR type mx, deep fades, lots of summer static. (Gleason)
735 -COLOMBIA HJCU Radio Melodia, Bogota w/continuous pop mx, ID at 0315 on 4/12, announced frequency as 740. (Objio)
860 -BRAZIL ZYD68 Radio Mundial, Rio de Janeiro, w/ads at 0030 on 4/12, also pop mx. Very good. R. Clarin off at this time. (Objio)
880 -DOMESTIC WCBS New York City at 0035 on 4/12 w/rx. Good. (Objio, both 880)
-PERU OBZLN Radio Union, Lima, very good w/ads at 0045 on 4/12 o/u WCBS.
890 -COLOMBIA HJCE Bogota 4/20 0330 w/ads and nice cumbias, ID saying "La Voz de Bogota quiere a sus oyentes." No WLS, low freq het from another LA. (Gleason)
930 -JAPAN JOKR Tokyo w/mx program and ID in JJ at 1959 and time pips on hour; good level. (Calkin)
960 -COLOMBIA HJHN Radio Sutatenza, Magangue on top of everything w/R. Sutatenza ID's. 0310-0330 4/8. (Falconer)
993 -QATAR Qatar Broadcasting Station at tune in 1555 GMT in EE, until 1705 w/ID in EE and into AA. Good level. (Calkin)
993V -MEXICO (Varies 994-996) XECC Ciudad Camargo, Chih., 4/23 0250-0410 s/off w/ baseball (Liga Mexicana). Very rough audio, impossible to zero beat carrier (severe het w/Quayaquil, who was very good 0410 and on w/rock). XECC is nominal 960, which is a long way from home. ID as "X E doble C". (Gleason)
1000 -BRAZIL PRE9 Radio Record, Sao Paulo, very good w/ads at 0150 on 4/12, nx and announcing an earthquake about 60 kms. SE of Lima, Peru. (Objio)
1010 -MEXICO XEWS Culiacan, Sin. Radio Fiesta (see verie section, I goofed! ED)
1031 -PANAMA HOS21 Radio Union, Panama, w/baseball game at 0214 on 4/12, 4VEH off at the time. (Objio)
1040 -COLOMBIA HJCU Bogota heard 4/20 0300 w/beginning of "Supernoticias" w/local and Colombian nx, much about Sunday elections. First time heard. Other SS in behind him. (Gleason)
1080 -VENEZUELA YVQJ Radio Barcelona, Barcelona 0215-0230 4/8 w/local mx. ID's as R. Barcelona and I ded several times as R. Venezuela. (Falconer) / (Objio)
-VENEZUELA YVNR Radio Universal, Maracay ID at 0407 on Sunday 4/14, pop mx.
1110 -MEXICO XERED Mexico, DF, "Radio Red" 4/1 0550 w/nortena mx, TCS in female voice, records and ID's in male voice. Public service anmts after all records. Best sig ever from this one. S/off 0600 without mention of call letters. (Gleason)
1110 -VENEZUELA YVXR Radio Mia, Valencia w/pop mx at 0438 on 4/17, strong as a local station. (Objio)
1133 -KUWAIT Kuwait now w/EE from 1700-2000 (ex 1630-1930) directed to South Asia. Good daily. (Calkin)
1160 -DOMINICAN REPUBLIC HIBG Radiolandia, Santiago w/pop mx at 0412 on 4/14, on after the celebration of Holy Week; was off Thur, Fri and Sat. (Objio)

1180 -BRAZIL ZYD65 Radio Globo, Rio, ID at 0332 on 4/12, some ads and pop mx.
1200 -VENEZUELA YVOZ Radio Tiempo, Caracas 4/1 0540 w/mx, time checks // (Objio) after each record. WOAI off and on w/OC. Someone else behind also in SS w/romantic SS music. (Gleason)
1248 -DUBAI Radio Dubai at excellent level w/ID in AA at 1600. No sign of the Oman station on 1247 mentioned in WRTH-74. (Calkin)
1270 -MEXICO Torreon (Gomez Palacio), Coah., noted 4/23 0445 w/promo for a contest on all the stations of "Organizacion Radio Laguna" which were given as XETB-1350, XETAA-920, XETOR-670 and XEWN, all in Torreon. (XEWN) (Gleason)
1325 -UNID Station w/SS talk 4/23 0435 but readable only about 10% of time, appeared // 725, but considerably stronger. (1548 was nearly 100% readable at same time). Presume the Columbia net station. (Gleason)
1360 -VENEZUELA YVTI Radio Catatumbo Internacional, Maracaibo, heard IDing at 0416 on 4/17, strong as a local station, pop mx. (Objio)
1380 -COLOMBIA HJMM Radio Reloj, Valledupar, pop mx, no ads at 0421 on 4/17 o/WLCY heard in the background. (Objio)
1412.5 -MEXICO XEAS Nuevo Laredo, Tamps. heard 4/21 0205 w/TCs, local ads and SS rock. Fairly good strength, no fades. Previously heard and QSLed on 1410, and heard on 2820 harmonic. Bad audio suggests spur. Nothing on 1407.5. Noted every night since. (Gleason)
1423 -UNID My mystery of last month appeared again 4/21 0207 w/cyclic fading carrier, tropical mx, SS talk. Loop bearing just a little south of XEAS reception on 1412. Must have poor modulation, as carrier at times was of reasonable strength. (Gleason)
1460 -PUERTO RICO WFBA San Sebastian s/off at 0430 on 4/17 w/La Borinquena, then SSB. (Objio)
1480 -MEXICO XEXU Ciudad Frontera, Coah. I've reported this before, but it points out how strange some XE daytimers are. On 4/20, heard s/off at 0245, 45 minutes after Phoenix SS, and probably 90 minutes after local SS! So don't rule out XE daytimers just because it is after local SS. (Gleason) Dave, I think XE daytimers are allowed to operate until 2000 local time. Believe this was part of the agreement between US and Mexico allowing US stations to use PSA's on Mexican frequencies. **Anyone have any definite info on this?(ED)**
1484.5 -MEXICO XECU Radio Mexicana, Los Mochis, Sin. 4/20 0215 w/ID as "C-U, Radio Mexicana" and a ranchera song, then 6 ads for local accounts and disappeared completely. (Gleason)
1520 -PUERTO RICO WRAI Radio Aeropuerto Internacional, San Juan ID at 0425 on 4/14 in EE and US pop mx. (Objio)

* * VERIFICATIONS * *

650 -HAWAII KORL Honolulu, Roycroft QSL in 9 days air. Air postage sent. (Horie)
850 -MEXICO XEZF "La Rancherita Contenta", see 990.
920 -MEXICO XEOK Monterrey, N.L. "Radiazo Mexicana" v/1 in 3 weeks from Dr. Luis de la Rosa, Gerente at Apartado 1111. (Gleason)
990 -MEXICO XECL Radio Mundo (also XEZF) v/1 after f/up from J. Jose Obezo, P.O. Box 1014, Calexico, California. XECL is 5 AM - 11 PM, XEZF 5 AM - 7 PM (PDT). (Gleason)
1010 -MEXICO XEWS Culiacan, Sin. "Radio Fiesta" v/1 after f/up from Francisco Buelina B., Jefe de Personal at Av. Obregon 173 Sur. (Gleason)
1130 -MEXICO XEHN Nogales, Sonora v/1 after f/up for 11/73 report from Elena M. de Manzanera at Apartado 744. (Gleason)
1187 -INTERNATIONAL WATERS Radio Seagull, beautiful color photo card of the "Mi Amigo", w/printed veri statement and data on reverse on Radio Seagull. V/s Peter Chicago, CE. 8 months for mint stamps. Letter received earlier saying card would be sent when printed. **Worth waiting for! (Calkin, Spain)**
1190 -SOUTH KOREA HMKX Team Radio, Seoul, photo card QSL showing the Kwang Wha Moon at night; full data. Pamphlet sent too. (Calkin)

- 1380 -MEXICO XEBCO Mexico, DF, v/q w/signature which seems to be Jorge Garcia (same address as XEBS-1410) and gives power as 5 kw. (Gleason)
- 1400 -MEXICO XEAB Santa Ana, Sonora, v/l in 3 months from Alfredo Martin Castro at Apartado No. 44. Says that new tower will be in operation in a short time, and he expects to have a better signal then. (Gleason)
- 1410 -MEXICO XEBS Mexico, DF "Radio Sinfonola" v/l in 2 weeks from Arturo Vanegas, Director Artistico at Insurgentes Sur 1870, Mexico 20. (Gleason)
- 1420 -MEXICO XEWE Irapuato, Gto. nice v/l after f/up from Jose Antonio Hernandez at Apartado 118, asking for more reports. (Gleason)
- 1430 -MEXICO XEWD Ciudad Miguel Aleman, Tamps. v/l in 2 weeks from Dante Omar Villareal G at Apartado 13. Radio Favorita is slogan. (Gleason)
- 1460 -MEXICO XEYC Ciudad Juarez, Chih. v/l after f/up for 11/73 report from Julio Montero M., Gerente at Apartado 278. (Gleason)
- 1466 -MONACO TWR. Interesting non-verie letter from Thomas E. Streeter of the Propagation Department. He states: "After having listened to the tape myself, our Russian department confirmed my suspicion that the Russian programming that you were listening to was actually Radio Moscow". For many reasons I find this hard to believe. Signal was very strong; it was heard at exactly the time TWR is sked w/RR; TWR was heard to s/on again at 0430 w/GG programming, same loop bearing and signal strength; the only Russians listed here are relatively low power and it is unlikely they would be signing off at 0400 Z. There have been many Russian changes lately, and it is possible that a high powered station could be operating on this channel. If anyone has any info, please let me know. Unfortunately, I don't have a copy of the tape. Any help would be appreciated. (ED)
- 1555 -IRAN AFRT Teheran sent full data personal letter from John C. McPherson, CE in 1½ months air for 3 IRC's. (Calkin)

The reporters for this issue . . .

Ken BROWNLESS - York, England
 Gregg CALKIN - Islamabad, Pakistan SPR4, Space Magnet
 Jeff FALCONER - Clinton, Ontario Kerwood 9R-59DS, SM-1
 Dave GLEASON - Scottsdale, Arizona R390A/URR, Sanserino loop
 Roger S. HORIE - Missoula, Montana HQ-180A, longwire
 Cesar OBJIO - Santo Domingo, Dominican Republic HE30, 60' longwire, 4' loop
 DSWCI - Danish Shortwave Club International
 MWC - Medium Wave Circle
 NZRDXL - New Zealand Radio DX League

Thats all there is for this time. See you in 14. 73 - DX - REPORT ! ! ! ! ! ! ! !

AND NOW FOR A WORD ABOUT THE N. R. C. CONVENTION

As you already know, the convention will be held in Toledo, Ohio on August 16-17-18, 1974. The actual site of the big gathering will be the Ramada Inn, Rte. 20, intersection I-75, Perrysburg, Ohio. To reach it, you get off the Ohio Turnpike at Gate 5, and go 6 miles west on Route 20, otherwise take I-75 to the Rte. 20 exit. Rates will be \$14 for a single room, \$17 for a double, and an additional \$3 for each person up to 5 in a room. Banquet will be \$6 for a choice of roast beef, chicken, or seafood on buffet. Meeting room and bar open until 2:30 except Sunday, which will be midnight. A beverage antenna site is just 7 miles away. More info next issue.....

Jersey station converts rock to religious radio

By
PHILLIP TRUCKENBROD

Religion can be as commercially viable as hard rock, one Jersey radio station has discovered.

Hackensack radio station WWDJ until this month had been one of six metropolitan area AM stations offering an all-rock format and the competition was still.

So earlier this year officials of the station decided to switch from all-rock to all-religious music and programming on the first of this month.

"It's been a very exciting two weeks," commented Larry Wasserstein, station manager.

"We lost some audience, of course, but we gained an instant audience in another area.

"We have been inundated with mail and phone calls

thanking us for what we are doing since the change," Wasserstein said.

"There is already one FM station in the area operating with a similar format, but AM is more portable since many people still do not have FM receivers in their cars, so we are reaching more people," he said.

* * *

An all-religion program format is not a new idea in radio — there are already at least 300 such stations operating in this country, according to Wasserstein.

WWDJ, however, is the first of its chain (Pacific and Southern Broadcasting) to adopt the religious format.

"At 5,000 watts we are considered a metropolitan area station and our signals travel into Rockland County, New York, out to Long Island and up into Connecticut and as far

south as Lakewood on the Jersey Shore," Wasserstein said.

"We found too much duplication with five other all-rock stations even in this giant market of millions of potential listeners.

"And there were already two all-news stations, two classical music stations, two good easy listening music stations, but we did feel there was a void in the religion area," he explained.

"This is an age of media specialization, as in magazine journalism, and here was an area not being fully served in our listening area — so this new all-religious format is a marriage of our responsibility to serve the public and our need for a different market."

Wasserstein said he felt his staff's background in general radio helped WWDJ to bring "a certain professionalism" to religious radio which all too often is not there.

Air time is given mostly to music which runs from traditional hymns to contemporary gospel music.

There are also some locally produced programs, such as "Inspiration Time," produced by the Hawthorne Gospel Church and broadcast on Saturdays from 8:30 to 8:45 p.m.

Just before that time spot on Mondays through Fridays at 8:15 p.m. is "A Look at the Book," produced locally by the American Mission to Greeks in Ridgefield.

On Sundays the First Baptist Church of Hackensack sponsors a half-hour broadcast and there is the possibility that WWDJ will soon begin to do

live remote broadcasts of services from area churches.

"We call ourselves 'the voice of inspiration in the metropolitan area,'" Wasserstein said.

At the moment the station's programs have a decidedly evangelical Christian tone, he admitted, because "the evangelicals know how to best utilize electronic media at the moment."

He indicated an openness to religious influences of other backgrounds, however, if professional programming could be found.

News, public affairs programs and community service announcements continue much as they did before April 1 on WWDJ, along with some programming of a non-religious

nature such as the popular telephone talk show "Bergen County Speaks," hosted by Gene Francis.

"We hope soon to begin broadcasting 24 hours each day and we already know the listeners are so happy to have a full-time (6 a.m. to midnight) AM radio station (970 AM) programming this way," Wasserstein said.

CLIPPING CORNER

editor.. Ernest R. Cooper
438 E. 21st St.
Carrier Route 56
Brooklyn, N. Y. 11228

musings of the members

They tune fine receivers - these NRCers so crack -
They tune in lots of far cities, towns, and some ports.
They all read DX NEWS - and turn to the back -
Cuz like in the paper - that's where there's SPORTS!

-STOUTFELLOW

RON B. SCHILLER - 1951 N.E. 28th Court - Lighthouse Point, Florida - 33064
Veries in from WMLT-1330 (returned report marked "you got us";
WTMA-1250 PP/c; WOKE-1340 v/q; YNP-1115 v/1 & "sticker"; WGTO-540 v/q after about
six tries over the years. Recent heard: 4/1- HICB-1050 5:55-6:04 w/SS QRM under.
WVAB-1550 s/on 6:31 u/WBSC/WAAY et al. 4/3- Unn WEAS atop 900 including WSWN @ 6:
45. Unn WRGM-1540 o/ZNS 6:35am. 4/4- YVMA-1070 s/on 6 03-6:25, R. Zulia. 4/7-
WYNG-1300 s/on 6:01 w/WMAK & others. WABB-1480 o/WRDW @ 6:30 WMS-1050 top-
ping WCFE/HICB @ 6:40. WYHI-1570 s/on 7, previously verified as WFEF & WPAP.
WTTI-1530 s/on 7:15 o/WCKY. 4/8- I was surprised to find WACO-1460 atop @ 1:49
till WENS signed ON! @ 1:52 (ugh!), then found WPNX for another try @ 2 & oddly,
HJJW, Bogota, also noted in that 1460 jumble. WMBR obviously was off. First
time I'd ever heard WFTL-1400 off but of "co's" the only thing I'dable was WQOS,
drat! Dakar-764 booming in @ 2:45; 1349 had a het but no audio. WREX-1530 s/
on 6:45 u/WCKY. 4/10- Un Zed Bee Vee Eye (ZBEV) s/on 6am. 4/12- WCCP-1560
s/on 6:30 u/WTAI. 4/13- YVNN-940 w/R. Rumbos & Punto Fijo Ide really ripping up
35-miles-away 50kw. WINZ! I copied them from 5:57 s/on till 6:12. An unusual
AM, western stations strong, i.e. KFI, KSL, and two unn New Englanders heard,
WPRO-630 @ 5:30 & WPOP-1410 @ 5:45. KOAM-860 o/HILR/WIVK 6:35-6:45am for first
Kansas heard here. 73.

KARL JEFER - 109 West White Street - Carrollton, Georgia - 30117
Greetings! I'm already missing those weekly DX NEWSes now - I
hope I'll be able to last through until Fall, hi. Quite a bit of DX to report
lately, despite generally deteriorating CX. The QRN is getting bad with all
this rotten weather, but all is not bad. During a T-storm 3/29, local pest WLBB
-1100 lost its 276' tower. They've been running an LW from the building to a
telephone pole. They tried lkW, but the pole caught fire thrice, so they have
settled for 250 to 125w. New tower is up, however. c Now on to DX. 3/19-
WSNE-1170 Ga. for first time @ 6:18-6:38pm w/c/w, then on to 1190, where WAMB
Tenn. & WAYD Ala. were fighting it out @ 7:16-7:30 when WAYD s/off. SRE DX
brought WONS-1410 Fla. briefly w/s/off @ 7:41. 3/23- WIRC-630 N.C. w/fair sig-
nal @ 7:20pm w/c/w, o/KXCK, then gone. MM 3/25 was nearly a bomb, except for
CJRS-1510 in WIAC SP, w/FF & EE mx @ 2:27-2:41. 3/26- WDLX-1150 S.C. very good
w/c/w, ads, 8:18-9pm. Also a weak signal u/WCAU @ 7:10-7:20pm, and with hopes of
it being my most-wanted KGYN, I listened on, but it was unn WILY, rats. 3/27-
WSAV-630 finally w/no sign of WAVU because Albertville was flattened by a
tornado a week before, hi) w/mx @ 7:14-7:35pm. 3/29- WLWN-1080 w/genune "Hick"
DJ & c/w @ 7:48-8 when they s/off, then to 990 where WROO heard in WNOX null w/rr
8:09-8:30. MM 4/1 nearly a bomb; WLOK-1340 dominating w/250w & talk show honor-
ing M. L. King @ 1:17-1:35am, also WOKE-1340 briefly u/WLOK @ 1:25. 4/5- WFLA
a surprise 5:05-5:30am w/severe WAVE slop. MM 4/8 a bomb - nothing! Veries: v/q-
KMMT, WILK, WOV, WGTO, CJRS. v/1- KOFO, WGAD, WHITE, WEW, WCOV, WANA. v/PP- WELR
WLSO, WIAQ, WLVN, WILX. 73s.

RAY ARHJDA - 6 Wilbur Avenue - North Dartmouth, Massachusetts - 02747

I have recently joined the ranks of NRC, so here is my first Musing
& a short intro: I'm 25, single, and work for New England Telephone as a tele-
phone repairman. DXing is done exclusively on the ECB w/an SX-122 & SM-1 w/a
General Electric P-990 as a backup RX. I've been a member of IRCA for seven
years & have DXed for about 11. My first QSL was from KSL in 1966. I'm a sea-
sonal DXer & do very little DX between April & September. Some recent veries
are: CBJ-1580 WPJD-1550 WVAB-1550 WGBB-1240 WAAB-1440 WTKQ-1320 KGMO-1550 & CHAM-
1280. Also, a very nice personal letter from WYLO-TEST mentioning my reception
was seventh best. I have already received selected NRC reprints & the NRC Night
Patter book & await the updated Domestic Log. I'll try to appear in these pages
frequently, & look forward to being a member of NRC for many years. 73. (Welcome
to NRC, Ray! We equally look forward to hearing from you for many years! -ERC)

CHARLES A. WOLFF - 4911 Proctor Road - Castro Valley, California - 94546

Here is a Muse from a brand new member out in California - the
San Francisco area. I started DXing in 1/73, worked for three months, then off
the air for 11, back on for the past month. So, for four months of real DXing I
have 103 stations, 17 states, Mexico, and Canada. Thirteen states plus Mexico
have verified, some letters still out. Some of my better catches: WHO Iowa; WWL
La.; WLS Ill.; WCCO Minn.; KOMA Okla.; WEAP & WOAI, Texas, etc. Also a number
of Cal. daytime stations; best is KEWQ from Chico area, about 150 miles, 500d.
They verified and sent a folder about one of their programs which fits right into
my QSL holder. Anybody in the NW who'd like a sharp v/q, try KRED-1480, Eureka.
Recent DX: 3/30- KACY, L.A. area, v/f back. 3/31- WCCO, Minn, v/q for my de-
tailed account of their 4:15am WX report. 4/4- KOFI-1180 Mont. KSWs-1020, N.M.
4/7-8 - Canadians in strong - worked CBR CKDA & CKVN. 4/9- I finally got KERN
Bakersfield. 4/11- WOAI, Tex. I've been hearing XETPA-690, but we hav a 50kw
"pest" here - KNBR-680 who gave them authorization to broadcast on five adjacent
frequencies, anyway? I use an ancient National NC200 full of extinct type tubes
& an LW. I worked my first 56 stations on a \$10 Realtone portable which looks
very strange with a 25' LW hanging out the back. 73s. (Welcome also to you,
Charles, and we look forward to many fine Musings from Out West! -ERC)

RICHARD WOLF - 7410 South 127th Street - Seattle, Washington - 98178

DX: 3/30- KGMI-790 w/end of Moonlight Serenade Show that ended
one hour early because some of the tapes were erased. KBRO-1490 w/cl mx before
power cut @ 10:26pm. XEBBC w/SS @ 10:30. KDON-1460 w/crazy DJ & rr @ 10:41.
CFUN-1410 w/its thing, rr, @ 11 w/ID as "14 CFUN", all unn. 4/11- KARM/KBRC-1430
even & mixed. One had female DJ & rr, probably KARM. KBRC w/NX @ 4pm. KSIM-
1390 w/MoR @ 1:05-1:14, unn. I was looking for KBRO-1390 but no luck. 4/12-
CFUN-1060 w/sports o/u KPAY's rr @ 12:40am. CFAC-960 w/Hockey Wrap-Up o/KALE @
9:50. CULB-940 w/NX @ 1 o/KFRE. KSEI-930 w/NX & 1-1:05, rr @ 1:06. WBEW-780
w/NX u/KRCL @ 10:31, unn. 4/13- KPQ-560 w/sports & MoR @ 2-2:08, unID u/KPQ.
I tuned in later & I'ded it as KSFO-560 w/NX to 3:05, then c/w KFXD-580 w/rr @
2:07-2:11. KHQ-590 w/rr @ 2:12-2:15. KOGO-600 u/pest CJOR w/rr @ 2:16-2:19.
Another rr pounder u/CJOR/KOGO - who they? Jim Critchett may be able to answer
this - cna ya? CKCK-620 o/u KGW w/rr @ 2:20. They outdid KGW once back in
August. FWX-750 is off because towers went down in high winds. (who? -ERC)
I got back into things again because I got time during my Spring vacation. I
take Electronics at Renton Vocational Technical Institute two nights a week along
with the regular High School grind. I am working on an article about the first
radio allocation plan of 1928-29 & certain stations' complaints, namely WGY's.
Oh, is WGY still owned by General Electric? ** With the coming shortage of good DX
sets coming, we just might have to go back to home construction. 73. ** Yes-RJE

BILL ANDRES - 101-25 115th Street - Richmond Hill, New York - 11419

I marched around metro N.Y. bargain-hunting after calling Lafayette
Jamaica and asking if they had any HA-600s left. They did, but decided to mark
it up \$18 on the phone. So I found a branch that hadn't marked it up, in Lyn-
brook. I'm not sorry I bought it. The sound is better than the HA-600, even
on the graveyards that were nothing more than a crescendo of blurs on the 600.
4/3 evening - St. Kitts-1265 @ 8:15. Then 4/5 - Shortly before noon, it pre-
sented me w/WJZZ after WVOX had been nulled all the way back to the New Rochelle
tollbooth. WJZZ was barely audible, but there. MM 4/8- A good one here, as I
heard SS on 1025, unID @ 12:50, then an ID from R. Colossal-1005 @ 12:54. Down
to 675 & TLJC, Sonora, @ 1:37. WPOP-1490 crashed in w/c/w @ 1:55, while next
door on 1500, WGIC, Xenia, O. was on, perhaps for emergency, relaying phone mes-
sages for what seemed AN, way u/WTOP's OC. I caught an ID from WDBN Ga. there
@ 3:12. SS noted on 975 @ 4 07, unID. XEMO made it in, needed here "La Voz
de Cuba" ID on 970 u/CKCH/WWSW @ 5:02. I started counting off domestics and list-
ing by state/province & tuned to 1370. It took some time, enough for needed WKIK
to arise out of WALK/WELW/WJWS/WFPA @ 6:52. Total U.S.-Canada that I positively
remember is 946, with some 65 tentative that I have to research.

Fred Nordquist - 302 Sandra Lane - North Syracuse, New York - 13212

Fifteen months have elapsed since my last report, so it's high
time to disclose what little DX was received here. Totals now at 635, states,
39 plus D.C., and countries, 31. New stations added to log were: 2/17/73- WLOR-
730 Ga. 6:13pm. 2/26- WCLS-1580 Ga. 11pm. 3/7- WSTX-970 V.I. EE 7:41pm. 3/20-

Nordquist
 W. Germany-1196, Munich, 6:50pm. Braunschweig-448 GG 7:10pm. I FM DXed the Summer of 1973. 11/6- HJEL-600 Colombia 7:42pm. 11/10- WPDK-750 W.Va. 4:20pm. 11/17- WJW-1140 Warsaw N.Y. 11/22- WAKY-790 Ky. rr 12:50am, CFGO-1440 WX 1:52 am, CKPY-1420 Ont. 2:03 NX. 12/30- WSUM-1000 Parma, O. s/off-SSB 5pm, WYB-1000 S.C. s/off @ 5:02. 1974: Bootleg WJZ-1200 w/UG (?? -ERC) in Syracuse U. dorm - messes up this frequency at night. 1/25- WDEL-1150 Del. RR 8:52pm. 2/10- WLLJ-1580 Tenn. 7:28pm. WHAM-1180 was off between 3:30 & 8:30pm for XR repairs, nothing but VOA & Mexico heard. 2/12- WISN-1130 w/NX 7:06pm. 2/15- WORG-1580 S.C. s/off-SSB 7pm. 4/17- WPIT-730 Pa. L&C w/s/off 7:58pm. All times in EDT. I spent first two weeks of April in St. Pete, Fla. & noted many powerful Cubans, etc. hogging the ECB. very few northern stations were heard from there. RK here is still the SX-110, antenna, 50' LW running NNE/SSW, & little-used 4' NRC Loop. That's all. 73.

BRIAN G. PITMAN - 11 Regent Street - Kingston, Ontario - KTL 4J6

Here we go with Muse #6 this season. DX is poor here and has been for quite some time, so what I'm reporting is a little ancient Veries since last Muse are v/l from 4VSH-1035, WJTN-1240, WMA-1590, KAMA-1060, WKIP-1450 WYLO-540, WPPA-1340, HLLR-860, KOFO-1220, WRCP-1540, & WSVS-800. v/q from KNOX-1210, GMP-1230 & WAXU-1580 signed card 'correct' & sent them back. On to DX. 3/21- WJZ-1200. 3/22- WELK/WETZ-1570 @ 6:45pm, & WAGO-1560 t sting from 2:46 to 3:30am EDT, amazingly strong signal. 3/23- WJNA-1070 @ 1:35am. Sorry I don't have any dates for these - I forgot to put them down. WQVA-1490 @ 7:15pm, CJUS-1240 @ 1:09am, WJSM-1270 @ 2am, WKIP 5:24pm, WJLL-1450 @ 5:30pm, WJTM-1590 @ 7:30 s/off, WJSM-1270 @ 7:55pm w/religion. Other catches are WSOO-1230 WJAX-1240 WCFB-1450 WJHJ r/c, KFVZ-1270, WJLJ r/c, KONO-850, WFOR-1490, & CJEX-1290. Totals now 995 - I'm trying desperately to reach 1,000 this year relying mostly on r/c's. If anyone wants SC's from "WS" or "JL" (??-ERC) please write. Also if anyone is traveling through historical Kingston en route to the Toledo Convention empty-handed, ERCCers Hank Zauf and myself would appreciate greatly a lift. We will of course pay our way and chip in for gas. If you're interested let me know by writing or phoning 613-542-3998 collect. This will be my last Musing for the season, so until next year, 73 & happy trails. *** Add "OK" b4 those letters, Ernie, -RJE

MIKE COLLINS - 2021 Main Street - Stratford, Connecticut - 06497

Fri. 4/12 a story cleared on the wire that the FCC is considering adopting rules which would prohibit any simulcasting of AM & FM stations in the same market from 6am to midnight. The story also said the FCC is considering applying the rule to stations licensed to cities less than the current 100,000 level. The only permissible simulcasting would be NX & public affairs programs. Even more interesting, in the interest of promoting longer hours of operation, the FCC is considering allowing stations to simulcast between 12 & 6am. This is the first time I know of that the FCC has taken a stand encouraging AMing. WWRJ-1260 is proposing to buy WRRW-FM Briarcliff Manor, N.Y. & to simulcast part of the time. They're paying \$25,000. WJDN-970 is now the 'new inspirational voice of the Metropolitan area' & is all-religion, as I'm sure all N.Y.-Conn. area folks know. WQQW-1590 is now carrying CBS Mystery Theatre five nights (Mon-Fri) @ 12:05am. WJZ-1390 also has it. MBS has a drama show these days too, produced by Rod Serling, called "The Zero Hour" & it's a five-night-a-week serial, five-part program with a complete story each week. Among those carrying it in this area are WJZR-1320 @ 7:05pm & WERI-1230 @ 12:05am & also WETT-1590 during the evening. WRRJ is one station which still has Dolly Holiday AM. I know they are few and far between these days. Most of the stations that used to carry it, however, like WJZ, WBT & others, are still AM - WJAL even calls its show "Nighttime" but it's not sponsored by EI. WJNP-1230 has the Yankees this year again. WJTC-1070 & WJPR-1270 are still on the Red Sox network, & WALK-1370 & WJTV-1390, L.I., N.Y., both have the Yankees weekends. WJCO-1240 is no longer on PMs 12-5am, & is now AM-6. WJPC-1410 has been off the past several MUs. I agree with Dave Gleason that the Musing section is the most interesting section of DX NEWS each week - I always read each one. No real DX this time. 73.

REMEMBER THAT THIS YEAR'S N.E.C. CONVENTION - IN TOLEDO - WILL BE OVER THE WEEK-END OF AUGUST 15-17-18, INSTEAD OF OVER LABOR DAY AS HINTS TO-FOR. MAKE THOSE PLANS TO COME TO TOLEDO AND BE AMONG THE HIGHMAKERS AT THE ANNUAL MEETING OF YOUR NATIONAL RADIO CLUB! IT IS A FUN-FILLED AND INFORMATIVE TIME, AND IF YOU HAVE NEVER ATTENDED SUCH A MEETING, THEN, FOR GOODNESS' SAKE, DO IT THIS SUMMER!

HERE COMES THE BRIDE!

NANCY GANTZER - 2301 Pacific Avenue - Aberdeen, Washington - 98520

Hello everyone. In answer to ERC's pleas, here's a Musing. This will be the last contribution of Nancy Gantzer's. No, I'm not dropping out of NRC - I'll just be changing my name. Bill calls our wedding his "initiation into the NRC". Kind of an elaborate way to join, hi. He'll introduce himself in a Musing soon after we're married. Now to DX. The biggest news is that I finally heard Alaska (after five years of trying from both coasts). 4/14-4am, KPQD-750 was heard w/ID & into NX following "The World Tomorrow." Other things heard include 3/18- 7:01am s/on-SSB of WRIN-1560, for my first Indiana from this location. 4/15- KGCX-1480 Mont. 3:35am ID during f/c. 4/17- KKKR-1440 Wash. s/on without SSB 9:01am using new calls (ex-KDNC). 4/20- KORD-910 Wash. 10:42 pm fair w/ad for Roy's Chuckwagon of Richland. KNBA-1190 10:52pm s/off following some sort of boating report, fair/poor u/KEK. 4/22- 2am, KF I-1240 w/NX & s/off 2:05 w/vocal Lord's Prayer. Until next time, 73. (Many many Happy Years, Nancy and Bill! -ERC)

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

A year has elapsed, I believe, since my Musing has found its way to these pages. It seems there has been enough time to listen now and again, but no time to Muse. My MW DXing began in 1967 and there are now 731 stations logged from this Houston location. An SP-600 plus an SM-1 are the principal items in my radio den. The Hammarlund has been ailing for a while, which accounts for only ten new entries this year. These are: 1/21- At 3:11am, KOKO-1450 Mo. NRC Special. At 3:41 AMJQ-730 R. Melodia. At 4:03, WJHJ-750 La. Via the Antioquia, & @ 4:17, HJKE-770 w/ "In Tequendam" Ids. 1/28- 3:32am, KPAY-1250 Ark. for KM-IBCA Special. At 4:18am, GMP-950 R. Musical National. 1/29- 10:25pm, HJCK-700 R. Subotana, WJW mailed. 2/11- At 3:30am, WJCK-1380 Ga. At 4:05, GJEB-1560 R. Melaj National. 2/13- At 5:58am, KJEB-1490 Ia. w/SSB & s/on announcements. In 1972 a receiving station was set up at a quiet weekend lake place about 140 miles NW. An RBB-1 Navy surplus RX, along with half a dozen longwires and the SM-1, are used. In less than two years 403 stations have been heard & IDed. In my next Musing some of these will be enumerated. Later, then.

JAMES E. CRITCHFIELD - 1103 North Street - Yreka, California - 96097

Between 3/28 and 4/27 only one reception report has been sent, to OKAY-1500, heard o/KKRX. Verifications have been received from WJOE-1080, who said mine was the farthest West report, & CHPQ-1370 Parkville, B.C., w/CHUB CM. Personally, I am very glad to see a "paucity of technical articles" in the DX NEWS. They can be read in CQ magazine and other technical magazines. I read DX NEWS for the news of reception from DXers in Ernie's columns, and the DDXD & IDXD, hoping for tips to help hear previously unheard stations, and to get verie signers. Another Canadian graveyard was added MM April 1 (no fooling!) with CFWB-1490 heard @ 4:58 to 5:04am s/off. (Campbell River, B.C.) Now that KKZZ-1380 Lancaster changed its call from KEVM it dominates the frequency here, evenings, folo by KBCH-1380 Lincoln City, Ore. KSPO-1230 surfaced for an ID @ 7:36 Thurs. 4/4. Five stations on 1570 heard in 17 minutes, 4/5: CHUB, Nanaimo; KLOV, Loveland, Col.; KKEE salinas; KQVR Lodi, both on @ 9am, & KACE-River-side @ 9:16. KAIN-1340 Nampa, Ida. has Mutual NX; KYJG-1230 is an Oe affiliate; KSTN-1420 is Ae; KCBK-1390 is not MBS, per the BYB; KSRV-1380 UPI. KJW-1250 Seattle s/on @ 9 SM 4/21; don't know s/off time. Many thanks to Ed Krejny for the Major BB League broadcasters. I heard KPLY-1230 with the Giants' game last night because of his list. KJNT-1400 Tacoma had the Islanders-Twins game Thurs. 4/18 to 5 EDT. Keep on DXing & reporting to the editors; happy staticless Summer.

TOM McCORMACK - c/o Miryams Farm - Tohickon Hill Road - Pipersville, Pa. - 18947

Note new address - everything should be sent here - phone number is 215-766-8037, about ten miles from Doylestown & three from Ft. Pleasant. (I used to knock around in Lumberville occasionally, Tom -ERC) I hope to meet some of the EC DXers - maybe a DXGT could be planned. Latest veries include: (all DX-ed from my home in W. Lafayette, Ind.) v/l- CKSL-1410 (plus v/q) KTLQ-1320 WHHC-1570 (286w. PSA) KHJN-1230-DX (thanks to those code IDs which I taped), WHYL-960 (plus v/q) WBUX-1570 WSAW-1470 (plus v/q) WKAQ-580, WSSA-1570 & WKCM-1140. v/f- WJAE-1250, WGOE-1590 (my second verie from him - he forgot the v/l they sent me five years ago!) & CFAM-950 (my tenth Manitoba verie - I also have him veried in '68 on the old 1290 frequency). v/q- CKSL-1410 WHYL-960 WSAW-1470 XEWA-540 KAAT-1090 XEPRS-1090 & WNDB-1150-DX. Holdouts this season include: KOWH-660

KIKZ-940 KCLW-1590 KFMJ-1560 KMAC-630 CHWO-1250 WMLK-1570 WDAE-1350 WDCN-1540
 KPLD-1360 WYTI-1570 WFRB-1570 WIXC-1140 WYMK-1380 WMGO-1370 CKXY-590 KPWB-1140
 KRLI-1140 KJAS-1170 KPAC-1250 KLEX-1570 WVOG-600 WJOE-1080-TEST XEX-730 XEW-900
 XETRA-690 XEB-1220 & several others. Can anyone help on these? One catch be-
 fore I packed up for Pa. 4/15- WPTX-920 Md. in OK @ 6:45am w/IDs & spots. I
 have tons of nice SCs, CMs & stickers for trade so sned on a batch and swap a
 mammoth package in return (plus my lists which I'll throw in too. Anyone who is
 in the Philly area feel free to stop-by - phone first, though. Would be nice to
 see ya, rap DK, etc. WHI-1480 bowed out & switched to c/w from rr. Great to
 be back & I hope to see more of the old regulars in the Musings more - so why not
 check in? 73s & peace.

PAUL MOUNT - 471 Emerson Avenue - Teaneck, New Jersey - 07666 201-836-1137
 The great Page has done it again. On 4/14-15 we talked/DXed on the
 phone for about two hours. I played my tape of WRVA & he detected CJTR in back
 of WVEVA (& a Cuban jammer on 1142). 4/15- WUNR-1600 u/WVHL, both w/religious pro-
 grams, 12:06am. CBJ he IDed for me, they were tentative, previously. 12:40-
 12:43am, CJTR w/carnival-like mx o/CHML. WINS went off @ 1. He got KTWI I be-
 lieve on 1030 w/WBZ off. He had WDR real strong. I found a hat up there some-
 where. But I can't count that as actual reception - it could have been others.
 Page (who says he hasn't heard a new station in two years) said that in looking
 in ten years of DX NEWSes, DJ stations were moso heard on the EC on the third MM
 of April. He WAS going to listen for 4QD, but getting tired plus thunderstorms,
 lots of QFN, deterred him. I tried but got WAAY instead. I was happy when I
 got WVKC on an ET then when I got WHHY, now 500w WAAY. What's next, WMSL? Hi.
 WAAY was rr, fair 3-4:10, not listening full time. WFED-1310 good w/CCR (?-ERC)
 Elvis on ET, 1 52-2:04am s/off. WCSC heard ID w/WX 2:16 battling WFEL & A loud
 TTR. I called them and played tape, said they'd verify that. 4/16- Someone
 w/rr u/WFBR, best signal aimed N/S. How about that? And all you smart people
 please tell me who on 950 has a DJ Jay Prestor (?) that isn't WIRX/WPEN/WWJ.
 4/23- WETT o/u WQQW. Mutual NX way o/QQ, 10:35pm WX, then lost till 11:23. I
 first thought it was WAKR & ignored it. I would appreciate any letters. Thanks
 for the welcome, Ernie. CFRB v/g. 73s - what are 816? (Two 408?? OERC)
 *** CCR is Credence Clearwater Revival (a group); 816 is undefinable...-RJE

RON MUSCO - 16 Chestnut Drive - Windsor, Connecticut - 06095
 DX has slacked off here due among other things to the purchase of a
 Heath 21" color TV kit in early April. March did see a few new ones: 3/24- WOSC-
 1300 Fulton N.Y. @ 7:03pm w/WAVZ/WFBR nulled but gone shortly thereafter. 3/27-
 WRHC-1550 in @ 7:30pm s/off way on top as others have noted. 3/30- CEZ-970 7:06-
 7:30pm w/WX, discussion program & concert way on top & first time ever noted on
 what had to be a good opening. 4/14 brought in WMAW-1340 Gardner, Mass. w/tele-
 talk, I've been after this one for a long time, heard @ 8:05pm. 4/15, on 1390 w/
 the Jubla nulled, WIAE gave a few IDs & may have been carrying EB 7:15pm but more
 important, WMAW Youngstown heard 7:42-8pm antenna switch w/spots & not much more.
 4/19- WCBM-800, Lawrence, Mass. finally after many tries v/7:25pm s/off mentioning
 FM, no SSB heard. Usually WIAE covers this channel. 4/22- WJF-540 Greenville
 Pa. w/IDs heard a couple of times between 7:34 & 7:44pm but no report taken, WJMC
 was too much. 4/23- Trying for N.H. on 1090 again, w/WBH partially nulled & WBBB
 IDs noted @ 7:22pm & what seemed like a record offer @ 7:27. 73 is c/w & w/WBH
 the same, things were hectic. For veries, see v/s column. (Figures! -ERC) 73.

RON B. SCHILLER - 1961 N.E. 28th Court - Lighthouse Point, Florida - 33064
 Veries total 1,698 with these received: WYTI-1530 v/1, stickers
 CM & a balloon! (Oh joy! -ERC) WACO-1460 v/f; KQAM-860 v/g; WNVY-1230 v/g for
 Fla. #120; WQMS-1050 v/f-CM; & WRCA-1390 PP/c. CX not too bad for domestic DXing,
 little rain here these days, hence little static. 4/14- WSIB-1490 ID o/all 5:30.
 4/15- WQOW-1150 AN virtually alone 3:21-3:29; WIRE-1430 3:43-3:56, I think WJNF
 under, also AN; WND-1260 AN 4:04-4:06 o/WWDC, w/WKOK off. WFLO-590 weak but
 clear 4:22-4:30 RS. 4/16- Ann KFRH-740 @ 6:15. I spent 4/17-23 in N.C. 4/25
 - WMLK-1570 6:25-6:30 o/XEFA. WTHO-1530 s/on @ 7 u/WCKY. 4/26- I finally bagged
 WAUC-1310 Wauchula, Fla. w/WGKR also new 6:52-7:01am. WTRL-1490 popped in @ 7:05
 & again on 4/27 @ 6:35. WETO-1490 briefly @ 7:05, verified years ack in N.J.
 as WJBS. 4/28- WKEL-1440, ex-WRHL 6:22-6:30 w/rr. WWAB-1330 7 04-7:18 w/WMLT &
 others. WMAA-1130 booming in o/Cuban 7:25-7:33.

NEXT ISSUE FOLLOWS IN TWO WEEKS. DEADLINE HERE WILL BE THURSDAY, MAY 16th.

THOMAS R. SUNDBROM - Box 205 - Willingboro, New Jersey - 08046

Long time, no write. Things have been status quo for a
 while, but recently several changes have come about. Probably the best news is
 that, as of July 1, I will be in the capacity of Dean of Students at Salem Com-
 munity College in Penns Grove, N.J., after having spent some 2½ years in the Com-
 munity College office of the N.J. Dep't. of Higher Education. The college is
 occupationally-oriented, and offers excellent programs in electronics, drafting,
 and scientific glass technology, among others. Area N.J. Del. Pa. residents are
 invited to contact me for further information, if desired. Some outside writing
 has also been done, with Davis Publications (Elementary Electronics and Communi-
 cations World) purchasing an article on tape recorders and DXing; the article will
 probably appear in EE. Other literary masterpieces are pending at Radio-Elec-
 tronics and HTLITW in Denmark; I'm hoping both will be accepted. Equipment chan-
 ges: A Norelco 150 cassette tape recorder, no longer needed, has been sold. An
 Autek Research Q-Box has been purchased; recognizing it is not a miracle device
 for AM reception (excellent on CW & SSB), the Q-Box has helped me in tailoring
 the audio output from the B&W #370 SSB adaptor (on the HQ-150) and the Realistic
 DX-150A receiver. An article has been prepared for DX NEWS, and it has been
 sent to the BJPC. A Data Engineering FMS-3 calibrator has been ordered through
 Olson Electronics, but probably will not come until May 1 or so as they've been
 back-ordered, expecting to ship on April 20. The Meissner #9-1076 Signal Cali-
 brator will then be retired or sold. Loggings have been sent to DDXD & IDXD; of
 note is a new country in ZBV-1-780 (after all these years of trying to get over
 the Cuban) this past March. 73.

KARL FORTH - 630 South Ardmore - Villa Park, Illinois - 60181

I skipped MMs 4/1 & 4/8, and was told CX were pretty good, so I
 "Aned it" 4/15. What results? Undoubtedly my best MM session this season,
 KUPD-1060 heard w/rr, taped slow ID & FM promo @ 1:53am. This one very much
 wanted. KPRE-940, another "tried for but never heard" was logged w/very poor
 signals w/s/off @ 2:59. On a phone tip from Dave Peterson, IRCA, CFQC-600 was
 heard w/potent signals o/the Cuban @ 3:53 w/rr, spot & promo. CKAY-1500 was
 heard from 4:03 to 4:11 w/NX, WX, detailed sports, and then brief s/off announce-
 ment. The signal was fairly strong but suffered greatly from a buzz-tone that
 WIAC had on. I wonder how many Eastern & Midwest DXers logged this one this
 past season? WJW-850 was noted w/WX & beginning of mx program @ 5:05, and WBBB
 -920 ended the morning @ 6:02 w/their s/on-SSB. Veries sparse, and mostly for-
 eign: v/q- WISM-1480 XMA-540 & v/1 HJKL-610 & v/f, HILR-860. Convention plans
 for this Summer are uncertain, but I hope to attend the IRCA Seattle Convention
 along with a trip out West. I will attempt to come to the Toledo thing. I've
 always had an insipid urge to visit the exiting state of Ohio, hi. C U later.

CURTIS D. ENGBERG - 80 Concord Road - Wayland, Massachusetts - 01778

Not a great deal to report here, mainly due to lack of time
 at the dials. Today is six months since my son's motorcycle accident, and he is
 still in the hospital. Although he is still paralysed from the waist down, he
 is up in a wheelchair much of the time. His biggest problem is a ruptured esoph-
 agus that has made it impossible to eat anything by mouth since the accident.
 Needless to say my time has been spent at the hospital rather than the dials, and
 now we are starting the process of adapting our home for a quadraplegic so that we
 will be able to take care of him when he is released from the hospital. I woke
 up unplanned on 2/11 long enough to hear "This is WCHL at 3:14" on 1360 while on
 TEST. 2/23 was a good evening for TAs with many of the mid-banders showing up
 between 8 7 8:30. 4/8- At 7:45 WREX-1530 s/off very I&C. Then at 8:15 up on
 1570, WSSA s/off in the clear followed about a minute later by WQX s/off, all
 three new ones here. That's all, but I done me duty, hi! 73. (We all sympa-
 thize with you, Curt, and we're rooting for his complete recovery eventually. ERC)

DAVE SCHMIDT - 42 Chelwynne Road - Castle Hills - New Castle, Delaware - 19720

Another double-spaced Musing for the Musemaster, ERC! (No, Dave -
 it's for EVERYBODY! Corn corn -ERC) 4/8- KJJO-1550 ET u/WAAY 2:35-2:48am. 4/
 18- WCFM-1280 f/c-TT 1:05-1:15:10am o/CHAM/WADO. 4/19- Tentative on TT on 1490
 belonging to TVL, noted 12:33-12:41am, tape replay shows WVLV ID for AM & FM &
 nothing more. Unn WNCA-1570 also noted on ET w/ID @ 12:39, taking care of the
 din there. 4/22- WCHS-580 noted running auction for Charleston Symphony, 12:40-
 1:09am s/off. WILM-1450 off again @ 12:01am, returned at approximately 1:50.

14
 Only WESC r/c heard. 4/24- WKBX-1500 on ET w/TT & mx 2:48am - off @ 3:01:50.
 Later on, a crack at past non-verifier WISL-1480, w/new report 7:58-8:18:20pm.
 This time, I called the DJ on the air - he said he would answer. F/ups: CFTR,
 WNEU, WHBQ, WBUD, & WEBB. CFTR report returned, didn't make it through the post-
 al strike embargo, nuts. Results: V/strange form from WBUD-1260, partially a v/w,
 the rest of it is the station's check printer, set on all zeros, printed on the
 report, and returned. It's a gem. Otherwise: v/m- WSUF-1580. V/1- KCIJ-1380,
 WGBB-1440, CKLY-910. V/q from WNDW-1150 (report of last year), & WFTT-1590.
 Also a real nice v/1 from WCCM-640, at Wilmington College. All of the rest to
 Frick and Frack. The Division of Consumer Affairs were contacted 4/25, my last
 hope at getting DPL to fix the noise. They said they are willing to help and
 have given me a few things to do. If my last efforts don't work, they'll take me
 over from there. Line noise was really there on 4/23 & 4/24 - it really took me
 to the end of the line with getting anything done directly with this outfit. The
 mighty ax has not rested its blow yet! 73s.

HARRY J. HAYES - 1418 West Mount Royal Avenue - Apt. 2 - Baltimore, Maryland - 21217
 I have an awful lot of DX to report. 4/6- 1:15pm, WDMV-540 Md.

weekly. 1:17, WVA-550 Va., 1:32 Miss., in good. WIP-500 in well 1:24. 3:38,
 WDET-1320 Pa. w/c/v & Mpl. 4/7- 1:55am, WGH-910 Ia. very strong, c/v. KLA-
 1010 Ark. w/SID "very day is ladies' day at KLA" mixing w/CFR @ 2:56. 3:20,
 WHP-1460 Fla. w/mess. 3:43, CKLY-1350 on, fair. 3:47, WHP-1290 N.Y. Day.
 4:02, CKLY-1380 on, good w/rr. 7:45pm, WGH-1590 Fla. s/off. 8:15, WBA-1570
 Ga. strong on s/off. 4/9- 11:29pm, CKLY-910 on, in well mixing w/WST. 4/10-
 12:40am, CPUC-1440 on, poor. 4/11- 8:15pm, WMY-1530, Miss. 4/12- Very good
 CX. 7:30pm, WDM-1530 N.J. 8pm, WHEZ-1370 Va. on s/off. 8:10- WHEZ-1150 Del.
 4/13- 1:45am, CJTR-1140 Que. s/WVA at times. 2am, CKCH-970 Que. in well. 2:10,
 WVA-1590 A-1 w/rr, good signal. WLL-960 Conn. @ 2:29. 2:44, CMB-960 Conn. &
 in good. 2:45, 960 tester w/MOR records turned out to be WFTC-960 N.C. "This
 is WFTC Kinston, N.C. We have been conducting equipment tests." 3:20, unID
 1550 tester being cut up by WAAY. 8pm, WPUV-1580 Va. s/off. 4/15- 12:05am,
 CJTR-1140 in like a local after WVA's s/off. 7:45pm, WREX-1530 N.C. in good.
 WCHE-1520 Pa. @ 7:46. 8:28, WNYC-830 strong, but deep fades. 4/18- WUOC-1270
 Md. @ 12:45am. 1:05, WCPM-1280 Ky. r/c. WSO-1280 Ia. good @ 1:10am. Is
 this old WISU? (Yes -ERC) 7:59pm, WKIN-1320 Tenn. poor w/rr, signal was rock-
 steady, however. 4/19- 8pm, WMNC-1430 N.C. 4/20- Many Cubans. CMKV-600 way
 u/WCAO @ 12:55am. CMQ-640 fair. 1:30, CMAN-550 very good. CMW-590 local-like.
 1:35, CMHQ-630 very good. 7:50pm, WNST-1600 W. Va. good. 4/23- Mystery. 11:
 29pm, strong unID killing WOWO-1190, then abruptly off @ 11:30 - who? UnID
 seemed to be playing rr, distortion was very bad. 4/24- WENO-1430 Tenn. @ 12:03
 am. 4/25- I've again revived an interest in Class IV channels, partially due to
 Bob Foxworth's excellent article. So far nothing unusual heard. 12:20am, WPTR-
 1450 Va. 4/28- 3:03am, CHOW-1470 on, in good - C-How". 3:24, WAXC-1460 weak.
 WMBR mixing in at times. That about concludes it. I expect to keep on w/MW
 over the Summer even though I hope to do lots of FM & TV if CX permit. I will
 be moving back to Pennsylvania for the Summer two weeks hence. Keep on typin'!

HARRY HELMS - 18 Old East - U.N.C. - Chapel Hill, North Carolina - 27514

Hello everyone. I must publicly thank Jerry Osborne of Ottawa for
 coming to my rescue w/a schematic & other info on my Hallicrafters SX-71 RX - in
 fact, an entire Sames "Photofact" folder, and for free yet! Jerry is another
 Hallicrafters man, using an SX-110. That particular model can often be found
 for around \$75-100 and makes a fine receiver for the money, both BCB & SW. Bob
 Foxworth's article on graveyard DXing was simply fabulous, & I hope serious con-
 sideration is given to including it in future New Member Kits. After reading
 Bob's remarks concerning LWS and graveyard DXing, I checked my logs and discovered
 that many of my better catches, such as WMID-1340, WFTL-1400, & WRHC-1400, had
 all been on a longwire or with the Realistic TRF. Furthermore, I haven't heard
 anything really unusual on the SM-1. No more mail to this address, & no more
 phone calls either - graduation is 5/12 & then I'll be on the road till next Fall.
 DXers along the EC - beware - I might be in your neck of the woods. 73 & have a
 good Summer & don't forget to let Ernie know if you hear anything!

THE "TOLEDO MUD HENS" - SEIGEL - MYERS - MERRILL - INVITE EVERYBODY TO THE 1974
 NRC CONVENTION IN TOLEDO, OHIO, WHICH THIS YEAR WILL BE ON AUGUST 16-17-18.

BRUCE BOOMER - Ga. Tech. - Box 30500 - Atlanta, Georgia - 30332

I still have to put in another month here before returning to an-
 other dull Summer in West Va. At least I'll be near all the Convention cities -
 Toledo, Columbus (NASWA) & Bronxville (ANARC) - so I might be able to go to one
 or more if any of my potential Summer jobs works out. Last week I got to talk
 to a DJ from R. Veronica who was in town to give Harry Nilsson an award at the
 press party for the world premier of Nilsson and Ringo Starr's "Son of Bracula."
 I was covering the party for our student newspaper and decided I'd rather talk to
 the DJ than rush Ringo with the rest of the crowd for an autograph. He told me
 Veronica, within a few months, will share time on a government XR as a listener-
 supported station. Already 300,000 listeners have sent contributions, and the
 DJ was confident that the success and popularity will continue. He thinks the
 people involved with R. Veronica are crazy to stay on the air, going some of the
 time without food. I finally visited my first AM station in Atlanta, WIIN-970,
 for another paper article. WIIN is now fulltime progressive rock & is rising in
 the ratings. (They recently had their first month of profit in the past three
 years). WIIN has put a scare into some of the FM stations, giving Atlanta prob-
 ably about the best selection of rock stations anywhere. For FM DXers, WABE re-
 cently raised its power to 30kw. WRFQ, a listener-supported station, is running
 15w now after losing the use of WQXI's tower. 73s.

ERNEST R. COOPER - 438 East 21 Street - Carrier Route 56 - Brooklyn, N.Y. 11226

No veries, but on that subject, I am now in the process of
 taking Gordon's good advice and I'm photocopying all my veries. It's going to
 be a long process, 'cuz I gotta do it gradually (in the office). I'm up to
 Georgia now, hi. Some DXing done, but all negative results - too bad I'm not a
 photographer, hi. 4/12- Just an ID from WKFD-1370 "serving the entire Narragan-
 sett Bay area" @ 6:22pm (What a claim to fame!) MM 4/15- A very noisy MM. Some
 sort of spur on 845a, didn't seem to be from dear old WABC, however. Unn CJTR-
 1140 was S-9 today. Ye Gods, another AN local - WVNJ-620 was at it w/MoR, down-
 tempo. UnID FFC atop 1230 much of the time, and back to bed early due to noise.
 4/19, SSS - A combo of WVA/WXVA holding 1550 down as I looked for WKOT, Kingston
 N.Y. in vain. MM 4/22- On 1190 @ 1:44 s/off, what I think was the Colombian NA.
 This was Colombia ER AM, but it was a big bust here - but I understand it was very
 successful there, hi. An unID Tter on 1090 @ 1:50 & on, weakish. A weakie on
 1530 @ 2:45, likely KFKK. TT-1580 3am on, could have been WCCR r/c. An earlier
 letter to them to address in NRC Log was returned "Moved - unknown." Where did
 they go? No WVNJ today. WDEM-1500 another of their infernal MM tests, off @
 3:19. And, rats, just in time to be too late on 680 as a Colombian was s/off @
 3:22 - I heard call letters given which seemed to be HJMA. 4/28- Sure enough,
 they weren't kidding - WWDJ-970 has in truth switched to Truth - all religious
 programming, even if only unannounced hymns back to back, but mostly it's the half
 hour canned-type broadcast - greeting, bible reading, a couple of hymns, a sermon,
 and then the touch, hi. I have never veried this one, so I took a report & am
 trying - also to talk them out of an old WJZ verie by sending them a PP/c for
 the defunct call letters. MM 4/29- Another nothing morn and WVNU-620 was doing
 the dirty old thing again - ANing. Canada is now on EDT so we don't have to wait
 till 2:05 to get rid of CBE, hi. WAAY-1550, unn, AN & quite strong these days.
 I understand they're on 500w non-directional these latter days, after the tornado
 took down their array. Unns WABE-790 on AN today (MoR), WESR-1330 on ET @ 2:03
 s/off, & WRCH-910 on AN w/down-tempo WFTC-style mx. "Rich music" they call it.
 WDRC carries the "poor music," hi. That's it - see you in a fortnight.

***TECHNICAL BRIEFS ***

Bob Foxworth

One of the products introduced at the Electronic Engineers show at the Coliseum
 in New York is a frequency counter made by the John Fluke Co. of Seattle. Called
 the Model 1941A, one of its main points of interest to the advanced DXer is the
 ability to be coupled to a receiver to directly read the incoming frequency. This
 is accomplished by pre-loading a number into the counter before it begins counting.
 (Counters normally begin counting from zero). An option, installed at the factory,
 allows the "input offset" to be inserted into the counter by switch closure. This
 procedure makes use of a signal generator unnecessary. Resolution can be varied
 from the nearest khz to the nearest Hz. Cost of the unit with the offset option is
 in the \$350 price class. This instrument also makes a very useful piece of test
 equipment. NRC hopes to evaluate the unit and publish detailed specs here soon. -BF

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Pirate TV Station Becomes A Lab Of Sea Research

By WILLEM VUUR

THE HAGUE (UPI) — Eager investors saw the man-made island rising off the Dutch North Sea coast as a monument to free enterprise and poured millions into it.

That was 10 years ago. Today it stands on six gigantic legs rusting in the seasons—a tombstone of pirate television but now promised a new life by the government which plans to make it a research center for waves and current.

The island, really a rig, was built at the Irish shipyards of Dutch shipping tycoon Cornelis Verolme who was a driving force in REM, the advertising exploitation company.

Verolme's idea was that since Radio Veronica, a pirate pop music station, was coining money despite government allegations it was illegal, a pirate television station would reap even greater rewards and presumably have just as little actual official interference.

Verolme and business associates set up the island just outside Dutch territorial waters, six miles off the resort of Noordwijk. They announced that the rig was owned by a non-Dutch company controlled from abroad and the owners had given the right to rent it to a people's shares trust. Veronica is still on the air after almost 14 years, but the TV pirates flopped.

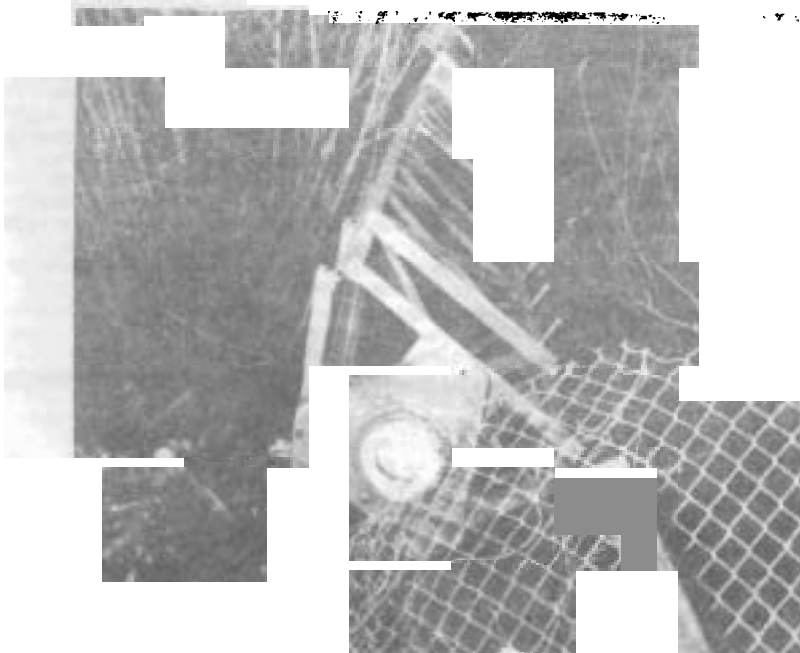
Now it appears Radio Veronica is doomed, too. Parliament recently approved a government bill to ratify the 1965 Strasbourg Convention banning pirate stations in international waters. As a result, Veronica will have to be closed down later this year. Indications are that Veronica's request for permission to become a legal land-based station will be denied.

CLIPPING CORNER

from the Carrollton Times-Free Press, 4/2/74
submitted by Karl V. Jeter



WIBB-WBTR's 276-foot tower was a casualty. The steel structure collapsed under the heavy winds and lay twisted on the ground. Damage at the radio station was estimated at \$30,000, primarily to the tower. There was only minimal damage to the building.



The tower of WIBB-WBTR collapsed under the heavy winds. The AM station was back on the air approximately 5 1/2 hours after the storm, operating on a temporary antenna.

Thomas R. Sundstrom

Wes Boyd, in his article "DXing Baseball Network For Fun and Profit," which appeared in DXN 4-22-74, alludes to one method of DXing the networks by using "your regular table radio to monitor the feed station. In this fashion you can cross check the network with the unidentified station to see if they are running the same commercial, etc." I wish to expand this concept, briefly.

In DXN of 10-20-72, Ray Moore, in his article "Receiver Hot-Rodding Hints" (reprint R-13), included a simple circuit for bi-aural listening. With two receivers and a set of stereo headphones, one receiver is tuned to the feed station while the second hunts for network participants. The feed station audio is kept low, and the brain "integrates" audio from both receivers. When a parallel is found, the second signal stands out quite markedly despite being buried in a jumble on a regional or graveyard pileup.

The feed station network breaks alerts one to "when to listen" to the network participants' audio, for as Wes indicates, this is the only time of interest to the DXer. Perhaps the most illustrative example of this was last season; monitoring of WHDH-850 for the Boston Red Sox as the feed turned up audio on 550 khz, which I know is WDEV Waterbury, VT, but WDEV is always buried by the Cuban, WHLM, and WGR and I just cannot get enough to hear an ID.

As an aside, Moore's circuit is also useful when hunting parallel MW-SW frequencies and, accordingly, carries a second recommendation. The "pips" used by Luxembourg are the only thing that usually show up on 1439 khz, but the timing can be heard on 6000 khz SW. Ditto for parallels on 1457 and 6200 khz from Tirana.

(30)

WNOB 1150 CBS RAD O

1000 w. DA•N - DAYTONA BEACH, FLA.

McGORMACKIN W. LAFAYETTE

THIS WILL VERIFY YOUR RECEPTION OF OUR STATION
ON MARCH 18, 1974, AT 156-217 AM E.

SIGNED *Ronald J. Fisher*

About a Canadian Graveyard Network
-Bob Foxworth

Here is some information about the 4-station network operated by the Evangeline Broadcasting Co., Ltd. whose headquarters are in Kentville, Nova Scotia. This is information about the 4 stations that were indicated as operating in parallel, in the latest Updater to the NRC Domestic Log. In a verification, the Engineering Director gave me the following details to pass along to the club. Here are excerpts from his letter:

"Now, about the Annapolis Valley, and in particular, Annapolis Valley Radio. The valley, geographically speaking, is approximately 115 miles in length, and 12 miles across, with a population of approximately 85,000 people, served by four AM stations, and one FM station, all an integral part of Annapolis Valley Radio. In order of seniority, CFAB in Windsor, 1450 khz, 250 watts omni; CKEN, Kentville, 1490 khz, 1000 watts and 500 watts night, permanent pattern. CKAD Middleton, 1350 khz, 1000 watts day and night with permanent pattern. CKWM-FM, 97.7 mhz, 18,000w. ERP, omni, horizontal, with a 67 khz subcarrier carrying a Muzak contract; CKDY Digby, 1420 khz, 1000 watts day and night, a permanent pattern, aimed East with only 40 watts on the tail. (This ought to be of interest to Stan Morss -ed.)

"The AM network is basically one programme, although each station has its own studio complex and can split away, usually in daytime for items of local flavour. The headquarters for the network is at Kentville, containing four control rooms and talk-studio facilities, whereas each of the regions (stations in each region) has one control room and talk studio, plus office.

"Ninety-nine percent of the commercials for the network are handled from Kentville, on a split system i.e. getting paid three times for the same minute. A three-way split would comprise one to CFAB, one to CKEN and one to CKAD and CKDY simultaneously. We envisage, in the near future, a four-way split, as business increases in the Digby area.

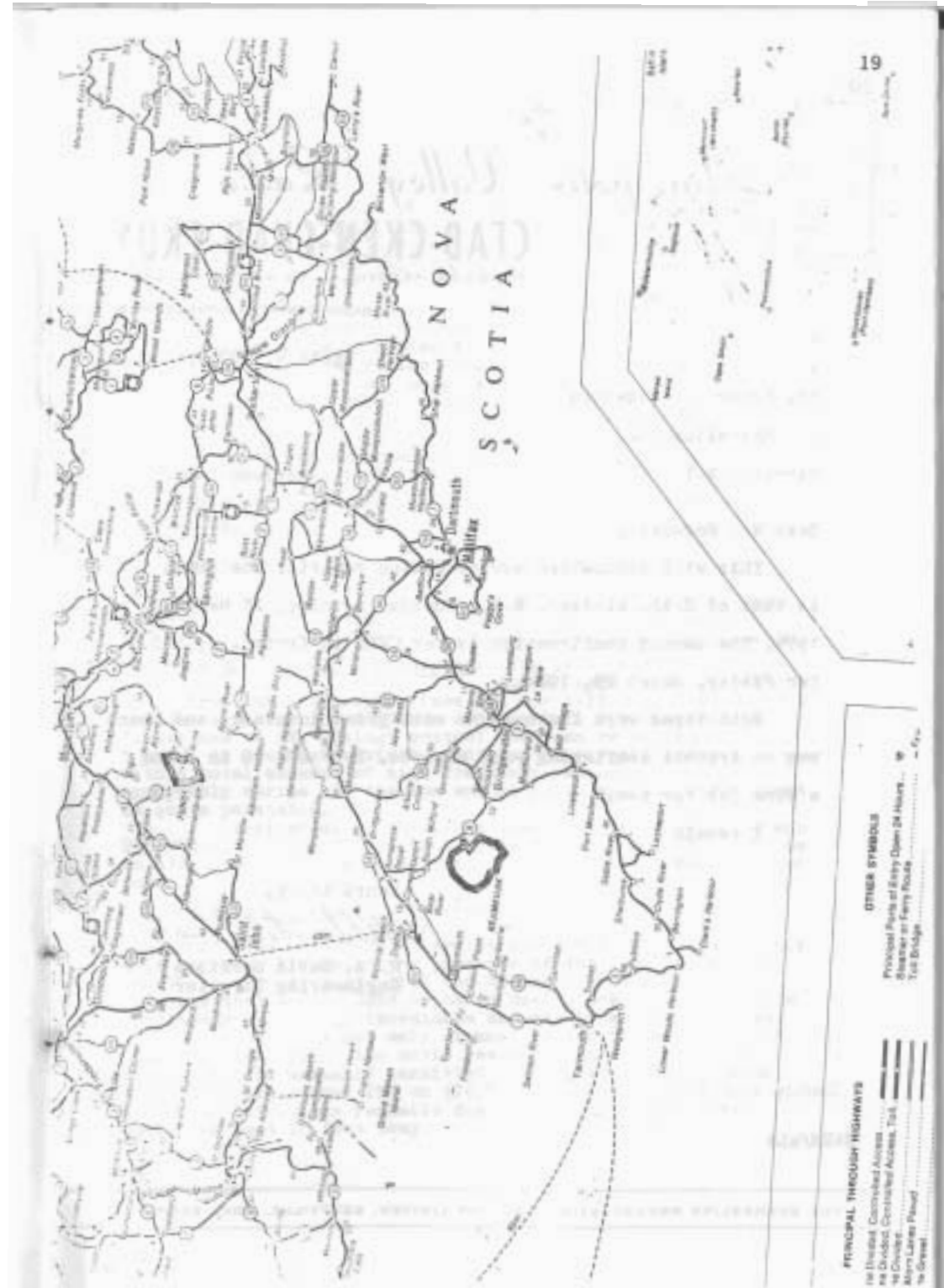
"CKWM-FM is separately programmed, mono, 85% of the day. The program content, during the daytime hours is a wall-to-wall music format with about 6 commercials per hour. This daytime operation is partially hosted by Engineering's versatile "girl Friday", Carol Daniels... We have given a great deal of thought to automation in FM, but unless economics dictates otherwise, we would much rather retain the idea of a real live person.

"The network is held together by a massive VHF system, for a two-way intercom, cues and general communications, plus long haul program feeds. The telephone company just has short-haul STL's and the one 25 mile long leg from Windsor to Kentville. All the rest is our own transmission.

"By now, you are probably thinking that I have a small army of technical types. On the contrary, we have two full time broadcast engineers, one part-time on a call basis, one building maintenance man for headquarters and of course Ms. Daniels. It gets hairy at times, but on the whole we manage quite well.

"This whole complex started December 13, 1945 with red-hot 100 watts, in Windsor, so that you can see we do not lack ambition; which leads me to the next topic. Having built all the radio stations necessary to do the job, which was in effect to bring the more than seventeen communities in the Valley into one big, cohesive force, we are presently constructing a brand new headquarters building in Kentville, containing the four control rooms, studios etc. The layout of the facility will be its unique feature, and we will be transferring existing equipment. We trust this essay will be of value to you and your club.

--H. A. David Morrison, Engineering Director.



EBC Annapolis Valley Radio

CFAB-CKEN-CKAD-CKDY

WINDSOR KENTVILLE MIDDLETON DIGBY

RADIO CENTRE, KENTVILLE, N. S.

April 4, 1974.

Mr. Robert L. Foxworth,
147 Marcellus Rd.,
Mineola, N.Y.

Dear Mr. Foxworth;

This will acknowledge two reception reports. The first is that of CFAB, Windsor, N.S., Tuesday morning, 26 March, 1974. The second confirmation is for CKEN in Kentville, N.S. for Friday, March 29, 1974.

Both tapes were listened to with great interest, and there was no trouble confirming your reports. Your GPR 90 is doing a fine job for you.

I remain

Yours truly,

H. A. David Morrison
H. A. David Morrison
Engineering Director

HADM/cld

A REVIEW OF AUTEK RESEARCH'S "Q-BOX"

Thomas R. Sundstrom

A Q-Box was ordered on March 18, and received on March 30, 1974. Copies of the specifications sheet, instruction sheet, and schematic have been provided to the NJPC for publication with this literary effort; I can only comment on the Q-Box from a user's viewpoint as I have no test equipment with which to verify the stated specs.

I believe Mike Hardester's comments in DXN of March 18 were based upon comments by NNRCer W.R. McIntosh (Granada Hills, CA) using a Q-Box with an Allied SX-190; that statement appeared in a portion of the NNRC BCB pages which I edit. Mike was unaware of a later comment (which I never got around to publishing) by McIntosh that he was using the Q-Box incorrectly (attempting to drive a speaker directly). Upon reading the instructions, McIntosh stated he was reasonably happy with the unit... much the same conclusion that I've reached.

Let's talk about the results with individual receivers:

HQ-150: Results are only fair, in my opinion. Between the crystal phasing options and the Q-multiplier, there seems to be little left for the Q-Box to do in the way of cleaning up signals. During the period of evaluation, only IA signals were noted; the Q-Box does "tailor" the audio response to make the signal sound a bit better on the weaker "splits." Virtually the same so-so results with the HQ-140X.

HQ-150 with B&W #370 SSB adaptor: The Q-Box was found to be most useful when taking audio from the SSB adaptor (see DXN for 1-14-74). As I stated in that article, the #370 has a 3 khz (+/- 1.5 khz) bandpass filter and an AM "gating" control that can be varied + or - 5 khz. As you might expect, audio on AM signals tends to "boom" with a total absence of high frequency response. The Q-Box apparently strips off the low end as well, and the end product is quite palatable.

Incidentally, the Q-Box does as advertised on CW and SSB signals in the SW spectrum, cleaning up the #370 output as an add-on to what the selectivity controls in the receiver can do.

Realistic DX-150A: The Q-Box was of most benefit with this receiver. A Heath SB-620 "Spectrum Analyzer" tied into this otherwise unmodified unit, using only a LW antenna, displayed the presence of the usual IA splits on 675, 725, 834, 1035, 1125 and others... but rare are the evenings that audio could be heard due to the relatively wide bandpass resulting in inordinate amounts of sideband splash.

The Q-Box not only cleaned up the "tinny-sounding" audio by "tailoring" the audio response range to "fit" the signal, but it actually permitted me to listen to Nicaragua on 675 through strong ITV on 676.57 khz. Not a tremendous signal, mind you, but it was readable despite a 315 in² color TV operating just 10 feet away.

With the SB-620 attached, we delved into the 40 meter Novice band to see what the Q-Box could do. I believe it performs up to specs. In a nutshell, I could crank the Q-Box selectivity control to a point where only one CW signal was being heard at a time despite the SB-620's display of equally-strong signals within a half khz; open up the Q-Box and several could be heard, but still at lesser strength than with the DX-150A running "barefoot."

SSB tuning took a bit of getting used to. Whereas the Q-Box did not materially help the HQ-150 with the #370 in the sideband mode, shaping of the audio bandpass did help the DX-150A. Tonal qualities changed slightly, but who knows what sounds "right" in this mode? The advantages of listening to one signal at a time far outweighs the slight tonal shift.

BC-344D LW (.15-1.5 mhz) receiver: I was a bit disappointed in the Q-Box's performance on this receiver, as I was expecting results as I had experienced with the DX-150A in the 40 meter CW bands. Not so, for all I can say is that the Q-Box again, in "shaping" the audio bandpass, made some of the low-level signals (beacons) a bit more pleasant to listen to.

This, perhaps, is an unfair statement. There was a lot of atmospheric static (a front moving through) and ITV to cope with. The BC-344D sorely needs a noise limiter, and I've not yet bothered to attach the "noise blanker" (now hooked to the HQ-150 and the #370) built from a circuit in the 10-68 issue of Popular Electronics. Further, I could not reduce the gain of the BC-344D enough to prevent overdriving of the Q-Box; detuning the antenna circuit remedied the problem of splattering somewhat, but this was sacrificing sensitivity.

Obviously more evaluation is needed and, as time permits, I'll play some games with this LW receiver, the Q-Box, the "noise blanker," and the antenna. If the membership professes interest, those outcomes will be reported via the DXN at a later date.

Summation

Am I happy I bought the Q-Box? Yes.

I believe the Q-Box has a reasonable expectation of aiding those DXers with the less expensive receivers, but it is most assuredly not a "miracle device" for AM reception.

Were my listening post not as complete as it is, and perhaps I am fortunate in this respect, the Q-Box would be one of my lower priorities. Second receivers, tape recorders, or frequency markers (such as the Data Engineering FMS-3); all would rank higher on a "want list." However, now that I have the Q-Box, I shall retain it.

Those who also DX CW and SSB signals would probably move it higher on your list of "wants." Fortunately, the Q-Box is less than a \$20 bill and, as such, should not put a dent in too many wallets.

Questions... drop me a line at Box 205, Willingboro, NJ 08046. A supplement for NJPC will be prepared if necessary.

Q-BOX OPERATING INSTRUCTIONS...READ CAREFULLY

Your Q-BOX is a quality product, fully tested before it left the factory. Read instructions carefully to obtain its maximum benefit.

HOOUP. Plug the Q-BOX into your receiver phone jack, and headphones into the Q-BOX. To keep battery life high, the Q-BOX is not designed to drive a speaker or low impedance phones. Standard 2000 ohm phones are ideal, but phones down to 1000 ohms (DC) give adequate volume. An (old) HI-FI amp or small transistorized power amp (available from Olson, Allied, etc) must be used with a speaker. Many power amps have excessive gain and will pick up small hum voltages from the Q-BOX. The circuit in figure 1 will reduce the external amp gain. Figure 2 shows the circuit to use with low impedance headphones.

OPERATION. Frequency response is essentially flat with the selectivity control fully counterclockwise. Fully clockwise, selectivity is typically 25 Hz. Unlike positive feedback circuits, which increase gain as selectivity increases, Q-BOX gain is essentially constant at the 800 Hz center frequency, regardless of selectivity--as the selectivity is increased all signals not at 800 Hz drop drastically. The desired signal must be tuned "on the button" to 800Hz or the unit will not appear to have sharp selectivity. Tuning will require some practice. With the selectivity control only 25% rotated, selectivity is also high--about 150 Hz. Thus, a 25% rotation, or even less, will produce adequate selectivity under many conditions and make tuning easy. Receiver gain (volume) should not be set any higher than necessary to produce adequate output. Overdriving the unit produces spurious outputs from signals outside the 800 Hz center.

THEORY. Refer to the schematic. The small tolerance resistors and capacitors at the left form a precision twin-T null network. The transistors form a high-gain amplifier with negative gain. There is a large amount (45 dB) of negative (degenerative) feedback except at the twin-T null frequency (800 Hz). The negative feedback produces low gain except at the null frequency, and a peak in the overall frequency response! The pot controls the amount of negative feedback.

IN CASE OF TROUBLE. Replace the battery, reached by removing the four panel screws. Be sure your phones measure 1000 ohms or more on an ohmmeter. Make a careful physical inspection of the wiring. Look for broken wires, parts touching and shorting, etc. If the trouble cannot be located write and describe the symptoms in detail, as well as the type of receiver and the load used. Do not return a Q-BOX to the factory without receiving written permission first, since we can usually tell your problem without seeing the Q-BOX.

OTHER USES. A battery or power supply up to 20 volts may be substituted to produce slightly more audio output; but an ext. power amp is recommended to produce more power output, if desired. Do not use more than 20 volts for power or connect the input or output to a DC voltage exceeding 20 volts, as this may destroy components.

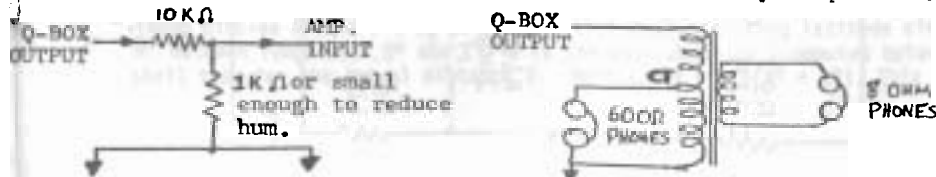


Fig. 1. Pad required when driving some power amplifiers.

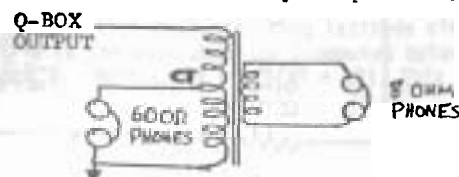


Fig. 2. Stepdown transformer for low Z phones. Transformer 2K-6K CT: 8 ohms. A 6 V filament xfmr works in a pinch.

EASY DX CALCULATIONS ----- de Ghoti, Ph.Dx

A number of articles have appeared in past bulletins explaining how to compute the great circle distance between two points on the Earth's surface; for example, the distance between a BCB station and a DXer's location.

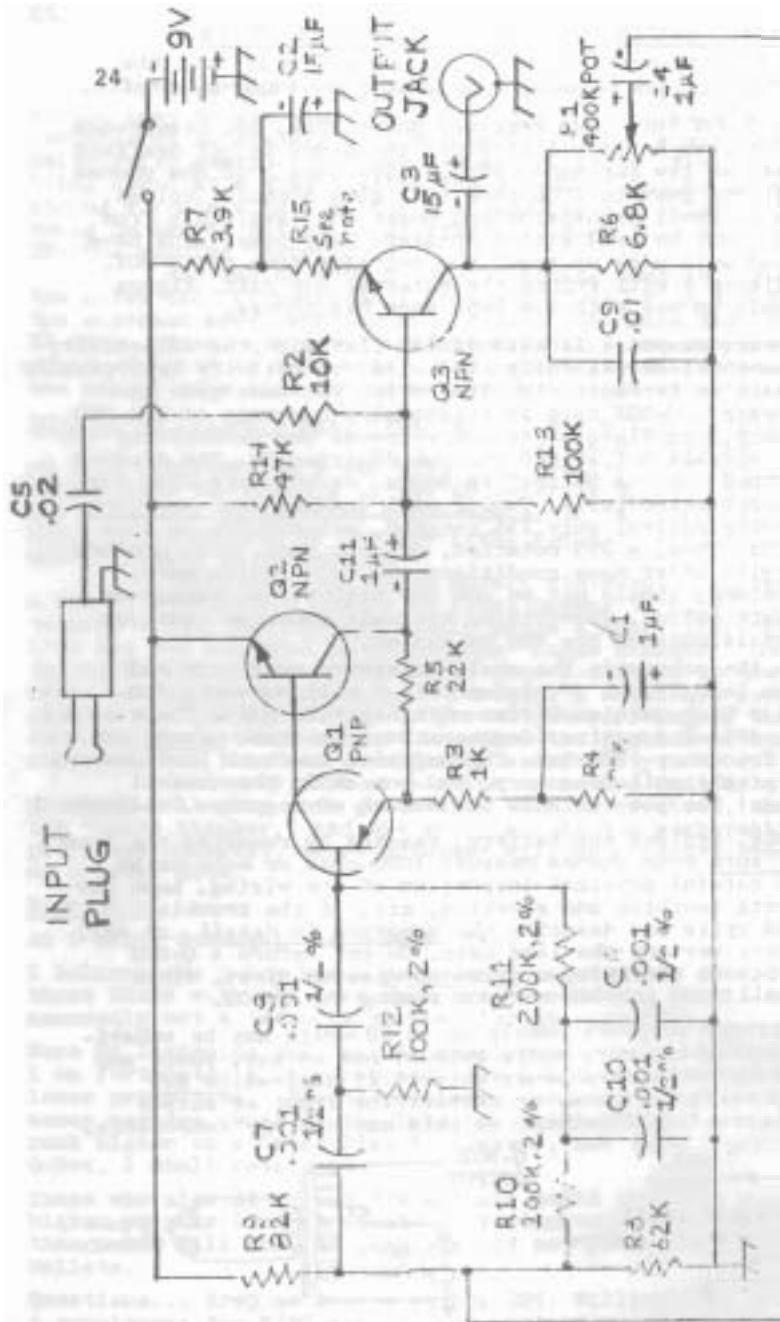
Presented here is a simple equation whose accuracy is basically "good" for much of the work of a BCB DXer -- especially the Domestic DXer. It is simple in that it requires little effort to compute. Without explaining in detail the error analysis of the equation with respect to those for calculating the great circle path, a brief description of its background derivation and some examples will be given.

First, the mean value of the radius of the Earth is about 3957 statute miles. This means the circumference of an Earth great circle is equal to $2\pi(3957)$ or 24862.56 miles. Every great circle can be divided into 360 one-degree arcs, so that each degree on a great circle of the Earth corresponds to 24862.56/360 miles or 69.06 miles/degree. If we reduce this (for computational convenience) to an "even" 69.0 miles/degree, the Earth's radius would be reduced to 3953.41 miles or a reduction of 0.09% which will be taken as acceptable for this development. To recap: We assume each degree of an arc on a great circle of the Earth corresponds to a distance of 69.0 statute miles on the Earth's surface.

Second, a circle of longitude is a great circle of the Earth passing through both the North and South Geographic Poles. Thus, there are 69 miles for every degree on longitude circles.

Third, a circle of latitude on the Earth is not a great circle, save for the 0° Latitude circle which corresponds to the Equator. The radius of a circle of latitude whose latitude is L° is equal to: $(R)\cos(L^\circ)$ where R is the Earth's radius. The circumference of such a circle of latitude L° is then $(2\pi R)(\cos(L^\circ))$ miles and there are $(2\pi R)(\cos(L^\circ))/360$ miles per degree on such a latitude circle. But, $(2\pi R)(\cos(L^\circ))/360$ is equal to $(69)(\cos(L^\circ))$ miles per degree of latitude on such a circle. Since latitude satisfies the inequality: $-90^\circ \leq L^\circ \leq +90^\circ$, we have the inequality: $0 \leq \cos(L^\circ) \leq 1.0$ so that the number of miles per degree of a latitude circle will be less than 69, except for the Equator, $L^\circ = 0^\circ$, where there are 69 miles/degree.

Fourth, let R_x (receiver) and T_x (transmitter) be two points on the Earth's surface whose coordinates (Latitude $^\circ$, Longitude $^\circ$) are (A°, B°) and (D°, E°) , respectively. Thus, diagrammatically (in the Northern Hemisphere) we have Figure A, below, where D is the great circle distance between R_x and T_x ; d_1 is the distance measured along longitude circles B° and E° between latitude circles A° and D° ; d_2 is the distance measured along latitude circle A° between longitudes B° and E° . d is the approximation (computed below) we shall take for the actual distance D . Define: $L^\circ = 0.5(A^\circ + D^\circ)$. This

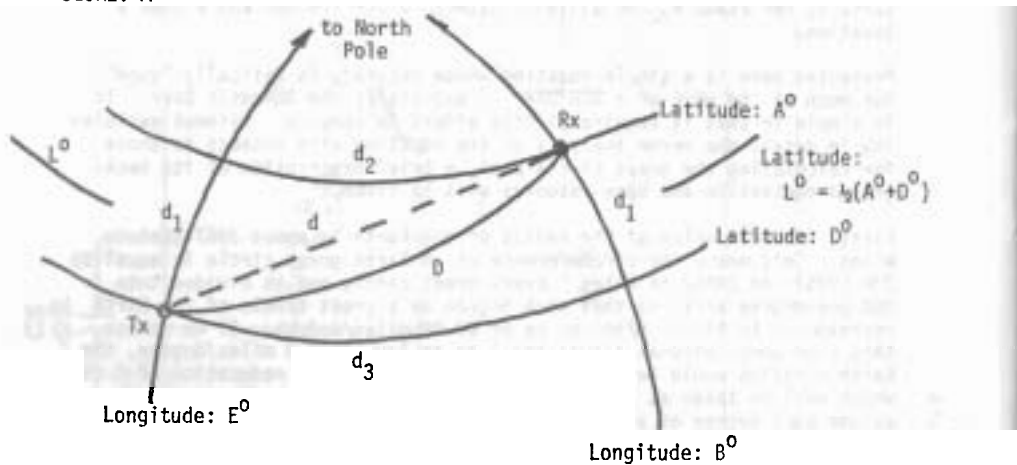


NOTES:

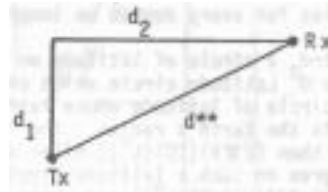
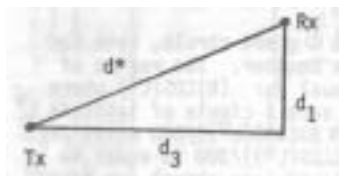
1. R15 is factory selected.
2. C6, C7, C8 & C10 are factory matched to $\frac{1}{2}$ % tolerance.
3. Resistors are 10% except where otherwise noted. Smaller tolerance resistors in the tolerance band may be substituted.

corresponds to the latitude circle midway between latitudes A^0 and D^0 (which is indicated in the above diagram). Note that d_2 , in the diagram, being higher in latitude, closer to the North Pole, is 2 less than d_3 .

FIGURE: A



Define d^* and d^{**} as follows:



Since these are taken to be right triangles, from the Pythagorean Theorem we have:

$$d^* = \text{SQRT}(d_1^2 + d_3^2) \quad \text{and} \quad d^{**} = \text{SQRT}(d_1^2 + d_2^2)$$

where SQRT denotes the square root function. Also note that, as shown, the approximation d^{**} is less than the approximation d^* since d_2 is less than d_3 (in the Northern Hemisphere). From above we can write:

$$d_1 = 69(A^0 - D^0); \quad d_2 = 69(B^0 - E^0)\text{COS}(A^0); \quad d_3 = 69(B^0 - E^0)\text{COS}(D^0)$$

miles. We define a better approximation to D than d^* or d^{**} , namely:

$$d = (69)\text{SQRT} \left[(A^0 - D^0)^2 + \left[(B^0 - E^0)\text{COS}(L^0) \right]^2 \right] \quad \dots \text{ miles}$$

where $L^0 = \frac{1}{2}(A^0 + D^0)$.

Note that from the right triangles above and the Pythagorean Theorem:

$$d^* = (69)\text{SQRT} \left((A^0 - D^0)^2 + (B^0 - E^0)\text{COS}(D^0) \right)^2 \quad \dots \text{ miles}$$

$$d^{**} = (69)\text{SQRT} \left((A^0 - D^0)^2 + (B^0 - E^0)\text{COS}(A^0) \right)^2 \quad \dots \text{ miles.}$$

An examples of calculations for d and d^{**} : Rx @ South Bend, IN with $(A^0, B^0) = (41.62^0, 86.22^0)$ and Tx @ Jackson, MI with $(D^0, E^0) = (42.18^0, 84.43^0)$. Then:

$$d = (69)\text{SQRT}((41.62 - 42.18)^2 + ((86.22 - 84.43)\text{COS}(\frac{1}{2}(41.62^0 + 42.18^0))))^2$$

$$= (69)\text{SQRT}((-0.56)^2 + ((1.79)\text{COS}(41.90^0))^2)$$

$$= (69)\text{SQRT}((0.31360) + ((1.79)(0.74431))^2)$$

$$= (69)\text{SQRT}((0.31360) + (1.33232)^2) = (69)\text{SQRT}((0.31360) + (1.77508))$$

$$= (69)\text{SQRT}(2.08868) = (69)(1.44523) = 99.72 \text{ miles.}$$

$$d^{**} = (69)\text{SQRT}((-0.56)^2 + ((1.79)\text{COS}(41.62^0))^2)$$

$$= (69)\text{SQRT}((0.31360) + ((1.79)(0.74757))^2) = (69)\text{SQRT}(0.31360 + 1.79063)$$

$$= (69)(1.45060) = 100.09 \text{ miles.}$$

The actual great circle distance: 99.80 miles.

We now show by examples the kind of accuracy that d , d^* , d^{**} give with respect to the actual distance D . It will be noted that if $D \leq 750$ miles or so, that d^{**} can be used without much error which allows $\text{COS}(A^0)$ to be computed once and for all and is thus a constant in all calculations.

EXAMPLES

Rx location is taken to be Louisville, KY: Latitude: 38.19^0N , Longitude: 85.52^0W so that $A^0 = 38.19$, $B^0 = 85.52$, and for d^{**} , $\text{COS}(A^0) = \text{COS}(38.19^0) = 0.78595$ or 0.786 .

Tx: Station	Latitude: D^0	Longitude: E^0	D	d	d^*	d^{**}
C64KFI	33.88	118.01	1892.12	1837.1	1884.8	1786.9
C65KORL	21.30	157.86	4382.93	4487.8	4794.3	4092.6
C65MSM	36.00	86.79	166.63	166.5	166.9	166.1
C66KFAR	64.87	147.82	3063.82	3246.6	2592.6	3847.6
C70MLW	39.35	84.33	102.58	102.5	102.2	102.8
C71KIRD	47.40	122.44	1954.80	1974.4	1837.7	2100.7
C72MGN	42.01	88.04	295.46	295.2	293.5	296.9
C76MJR	42.17	83.22	300.42	300.2	298.7	301.6
C82WBAP	32.94	96.99	738.54	738.7	756.6	719.8
C88MCBS	40.86	73.99	640.71	640.7	629.3	651.9
C88KRVN	40.52	99.39	757.06	757.3	745.1	769.2
C102KDKA	40.56	79.95	339.32	339.1	334.7	343.5
C112KMOX	38.72	90.05	247.68	247.5	246.6	248.4
C118KOFI	48.20	114.25	1590.59	1605.9	1490.9	1704.3
R137WDEF	35.04	85.34	217.77	217.6	217.6	217.6
R160MKWF	24.58	81.73	965.84	965.3	968.7	961.3

so for D on the order of 1000 miles, the approximation d is "pretty good".

----- de Ghoti, Ph.Dx



editor.. Wes Boyd
 980 W. Liberty
 Girard, Ohio 44420
 WES BOYD 216-545-4543
 JERRY STARR 216-534-1394

First, a few comments to the membership: Our next deadline for the next DDXD is 5 June. Also, please note the above fone numbers. Last issue Wesley listed his name with my number for reasons known only to himself. Anyway, it was interesting to see what kind of weirdos call Wes. You may want to jot these numbers down somewhere should a similiar faus pax occur again. Remember Blackstone's Funeral Home? - Starr Onward:



r c's

HEARD:

- 1st MM: WBRN-1460 w/lk TT (DS)
- 1st TM: WHGR-1290 (JP)
- 1st FR: WSLT-1520 w/lk TT (DS) KFVS-960 w/lk TT (DS&JF) WHBG-1360 w/lk WWBZ-1360 (JP&DS)
- 1st SU: KCII-1380 w/lk TT (DS)
- 2nd MM: KZNG-1340 (TM) WCAZ-990 (JMP&NRC) KKIN-1000 (JS) WATS-960 (DS) KWKY-1150 w/lk TT (GF) WELI-960 (NRC)
- 3rd MM: WPJD-1550 (GF) WDIC-1430 w/lk TT (GF) WBTS-1480 (NRC)
- 3rd TU: WAHT-1510 w/lk TT (DS) WHOL-1600 w/lk TT (DS)
- 3rd TH: WCPM-1280 wlk TT (DS) WHII-1570 (FW)
- 3rd FR: WBBK-1260 w/dialtone (DS) WCDL-1440 w/lk TT (DS)
- 4th MM: KAMA-1060 (HWB&DS) WCCR-1580 (BW&GF) KTHS-1480 (NRC) KWYR-1260
- 4th WB: WCFR-1480 w/lk TT (DS)
- 4th FR: WSKE-1050 (BW)
- 4th SA: KBRS-1340 (NEC)
- *4th TU: WHSC-1450 w/lk TT (DS) This station listed for 3rd MM and has been heard here by HWB on 4th MM. Anybody know what the story is here?

changes

CANADIAN POSTAL CODE ADDITIONS:

- 570 CKCQ BC V2J 2K1 1300 CJME SA (Box 1300) S4P 3B9
 - 580 CKWW ON N9A 1E2 1440 CFCP BC location: Courtenay, not Comox
 - 600 CFQC SA S7K 1X1 1490 CFWB BC (922 Dubeau St) V9W 2L6
 - 1090 CHEC AB T1J 4A3 All from CGB
- And speaking of Canadians, as of 4/28/74 The Province of ON is on EDST (CGB)

CHANGES:

- 620 WETE TN now AN-6 w/teletalk 0000-0600 (BW)
- 840 WXEW PR call letters granted to CP
- 1090 KKYN TX Plainview, call granted WMTY SC now on RS per PW
- 1170 KFNW MD granted CP to move here from 900
- 1260 WPHB PA Net: Ae per DS
- 1270 WVOY MI Charlevoix new call, ads in trades say air date late summer
- 1350 WZIK PA MM s/off 0105 per TRS WKIX VA Sked: 0500-0201 (DS)
- 1360 WEBB MD on 1KW non-DA days to 7/1/74, has been on special authority for this facility since 3/70, has CP for 5000 DA-D and move transmitter site. FCC hit this station with 50 plus technical violations and heavy fines. (JS)
- 1410 KJCH TX Cleveland granted new station, 500 D3
- 1440 WAAB MA Sked: 0500-0103 per TRS
- 1460 KSO IA now C&W 24 hours, seems off MM (HWB)
- 1480 KPHX AZ CP to 1KW day, PO: 500 D
- 1530 WQLW IL Flora delete CP and call
- 1580 WCLS GA announce MM SP: 0025-0400 (BW)

RADIO STATIONS WGIC-WBZI
 P. O. BOX 99
 Xenia, Ohio 45385

MORE CHANGES, APPLICATIONS, ETC:

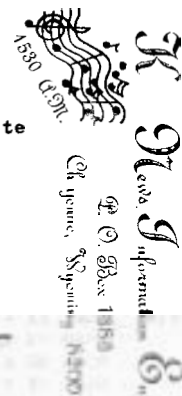
- 540 WQFO FL application for 50KW d, drop CR facilities
- 590 WEEI MA application to move XR site to present WHDH XR site and bi-plex into existing WHDH DA system. Hummmmm (JS) 830I

- 680 KOMW WA application for 5000 D, PO: 1000D
- 730 WFNW KY install new XR
- 790 WSGW MI CP to 10/1
- 940 WEOO VA CP to 8/3
- 950 WKTS WI Addr: 3811 Kohler Memorial Drive
- 960 KLAD OR Application for 5000 U2, add new night XR site
- 970 WHA WI move XR
- 980 WSIX TN CP to 9/9
- 1010 WGUN GA CP to 6/28
- 1110 KPAL LA Address: 1610 Military Highway
- 1190 WGCH TN CP to 9/30
- 1240 KFOR NE install taller tower
- 1280 WWOK FL CP to 6/14 and modify CP for taller tower
- 1330 WLOL MN CP to 6/5
- 1480 WMQM TN install new aux XR
- 1570 WHRF NY seeks WRCN
- 1590 KYOK TX install new XR
- KIKN TX CP to 7/30
- 1600 -CP- PA Bedford requests WAYC
- 1530 WKDC IL CP to 8/21 (out of oder, sorry)

sunset & evening

- 900 WEAS GA 4/21 w/C&W 1945 after WFLN s/off to 2000 s/off w/SSB (TRS)
- 1080 WEEP PA 4/10 briefly atop 1949-2000 s/off, had C&W mx (DS) 817! 4/1 finally 1956-2000 running RR type mx, finished Pittsburgh for me (JMP) Are you sure, WEEP is 100% C&W (JS)
- 1110 WKEG PA 4/18 1950 w/local spots (JF)
- 1140 WCLW OH 4/18 all alone 1930-1943 w/MoR (JF) KS00 SD 4/7 good 2045-2100 w/uptempo MoR (JF) WIXX TN 4/28 in WRVA null thru WNEW/WCAR slop w/C&W 2010, s/off 2014 and banjo stinger, no SSB (HWB)
- 1230 WCRO PA 4/1 fair 1952 w/C&W, first time during regular sked (JMP) Hmm? WCRO has always been Top 40 before, change? And, yes, they were in 1952 (JS) 835
- 1250 WEER VA 4/10 noted 1938-1945 w/RR, female DJ, lotsa ads (DS) WARE MA 4/9 in WTAE null w/ID 2100 o/u SSer, looking for WKBR all evening, not heard altho CKBW strong in WCFL null (DS) What the hell does that mean? (JS) 829
- 1270 WORX IN 4/4 o/u WXYZ 2000to 0030 of 4/5 for tornado watch (JF)
- 1390 WMPO OH 4/10 finally o/u WFMJ, gave ID 1945 (JF)
- 1440 Unid ?? 4/1 heard w/bidding show, VA mention at 2015 (HJH)
- 1450 CHEF PQ 4/15 noted 2100 w/Radio Chef ID (JF)
- 1470 KLCL LA 4/7 very weak u/CHOW 2300 w/MoR & C&W (JF)
- 1480 WISL PA 4/24 w/RR and Jack Jambor Show 1958-2018 pattern change (DS)
- 1500 WGIC OH 4/6 w/mx 2114 o/WTOP/WDEE, on late for tornado disaster, heck of a way to log a station (BW) Amen (JS) W B I W Redford, Indiana
- 1540 WBNI IN 4/18 fair o/WPIR 2020-2030 w/MoR (JF)
- 1550 WYNX GA 4/1 noted quite weak 2015 (HJH) WRHC FL 4/7 1945 s/off heard, clear but fadey (HJH)
- 1560 WKDO KY 4/30 noted on top w/ s/off, no SSB 2019, 4 min late (HWB)
- 1570 WGLX OH 4/30 in CHLO fade 2013 in s/off, then what seemed to be a hymn (HWB) Anymore, you can't tell the hymns from the hyers WCZN MI 4/30 2014 for s/off, WVCX-FM 105 mention, no SSB (HWB) (JS) WSSA GA 4/7 noted 2000 w/"Behind the Nx" announced as serving Atlanta, mixing w/ WTQX I suspect (HJH)
- 1580 WCCR IL 4/14 good w/ s/off 2030 after WAMY off, FM promo for 94.5 (BW) WAXU KY 4/18 alone 2010 w/promo for Charlie Pride concert (JF) WJVA IN 4/12 on top 2100 at s/off (JWB) WTTR WI 4/12 w/ s/off 2101 (JWB)
- 1600 WNST WV 4/30 in bits o/u WNEU/WWRL 1942-1945 w/sports and C&W (HWB)

ATTENTION DX FREAKS: WLS-890 gives full ID in SS Sundays at 2354 following local SS program, odd addition for your tape files. Fool your friends, ~~WFLN~~ your enemies, confound your mother. Garf!



midnight to sunrise

580 WCHS WV 4/22 noted 0030 w/Auction for Charleston Symphony, s/off 0109 o/u WKAQ (DS) Oh boy! I can hardly wait to hear the Charleston Symphony (JS)

600 CFCQ SA 4/15 strong w/RR 0353 o/Cuban, spot & promo, etc per fone tip from DP (KDF) Was the DP right off the boat? (JS)

WFRM PA 4/24 s/on 0600 w/ SSB in/out of QRN w/Cuban loud, poor (TRS)

730 WPAL SC 4/7 s/on 0615, no SSB o/WFMC w/carefully enunciated unannouncement (TRS) In what language? (JS)

740 KTRH TX 4/9 o/KRMG w/CBL QRM, nx 0035, VOP 0045, s/off 0100 (KJ)

850 WJW OH 4/15 w/wx, into mx 0505, KOA back 0506 (KDF)

900 CKTS PQ 4/7 in weakly 0053 w/C&W and marathon broadcast in CHML null, had s/off 0100 (DS) Short marathon

910 WGBI PA 4/7 noted strong 0154 w/C&W just before 0200 s/off (HJH)

WSBA PA 4/22 dominant w/promo for Secret Sound Contest 0235 (BW)

WOKK MS 4/22 w/ID 0100 then nx, faded up for ID, gone olo2 (BW)

Unid ?? 4/27 w/FF nx/sports o/mess 0103-0105, rough u/WSBA/KGLC/etc DF ne/nne (HWB) W K B V

930 WBBB NC 4/15 fair 0602 w/SSB and s/on (KDF) Richmond, Indiana

WOKY WI 4/1 ID 0326 as "alternate morning XR tests" w/OC 0325 (BW)

WMEL FL 4/1 CBS nx logo 0330 to local/state nx, wx, ID 0331 (BW)

WPTX MD 4/11 0645 w/lotsa DC info (TM)

930 Unid ?? 4/17 TT here 0031-0056 way u/WBEN/WPAT/WEOL/WKY, no DF, possible ID 0056, call similiar to WMEI and announced FC, nothing listed, also had Unid s/off w/ SSB 0057 that seemed to be WBCK (HWB)

940 KFRE CA 4/15 poor 0259, only portions of s/off heard (KDF)

950 Unid ?? 4/8 ET/TT/OC 0035, weak in/out of QRN, DF WNW (TRS)

WPEN PA 4/8-4/20-21 noted ET/OC/TT 0015-0035 (DS)

960 WFIR VA 4/5 think has s/off 0102 u/KFVS RC, noted before RC but not after (DS)

970 WFLA FL 4/5 good despite bad WAVE QRM 0505-0530 w/RR (KJ)

1000 KKIM NM 4/8 FC/TT 0210-0220, has indeed moved to 2nd MM per v/1, sez was moved to 2nd MM in Jan 74 (JS)

1010 KLRA AR 4/7 mixing w/CFRB 0256, at times on top, C&W mx (HJH)

1060 KUPD AZ 4/15 nice slow ID w/FM promo 0153, RR mx, weak but clear (KFD)

+1070 CHOK ON 4/22 w/wx 0109, s/off 0110 o/u WIBC, log change (BW)

1090 KAAZ AR 4/8 ET/OC, w/ID 0230 (JMP) 815!

1140 WQBA FL 4/22 w/ID 0039 u/WRVA OC, lucked into this one (BW) 4/29 w/ another OC/ET w/IDs every 10 minutes 0140-0155+ (HWB)

1240 WCOU ME 4/8 atop most of AM w/C&W, this should be getting out to other EC members (JMP)

1250 WGL IN 4/22 w/full ID on announced ET 0254 thru unid MoR & TT (GF)

1270 KFJZ TX 4/22 finally heard w/RR 0251, then fone call, maybe giveaway contest, then more RR, ID 0218 (BW) 827! HaHa

1300 Unid ?? 4/15 thing s/off 0202 w/ATB, who? (KDF) Who cares? (JS)

+1300 WYNG NC 4/21 w/ s/on 0600 just ahead of WFBR, only heard call letters before WFBR plopped on carrier, thus change log on WFBR sked (TRS) OK (JS)

1310 WISE NC 4/15 0313 taking fone calls on announced DX test o/u CKOY and giving location as 90 Lookout Road 28804 (GF) 4/22 on ET 0158 on top, asking for calls (DS)

1340 WLOK TN 4/1 dominating 0117-0135 w/talk show honoring MLK (KJ)

WOKE SC 4/1 this heard u/WLOK w/ID 0125 (KJ) Log change, sez off 0015

1350 CKLB ON 4/7 noted w/good signal 0343 w/RR (HJH)

WSMB LA 4/9 o/CKLB in partial WSLR null 0145 during KCHR RC w/C&W (HWB)

1370 WKIK MD 4/21 u/o WSPD w/RR, ID 0030, then 0033 s/off (BW)

1380 CKLC ON 4/8 noted AN w/MoR & RR, automated sound, on top, possible log change (DS) W E A T

1410 WPOP CT 4/22 noted on w/OC most of AM (DS) Marion, Indiana

CKSL ON 4/8 w/RR in/out w/WING, WPOP off, possible KQV off as no talk noted (DS) Note: KQV changing ownership, may have some sked changes, still RR but now running "14-K" promos, guess where they stole that idea.

1420 WTCR KY 4/5 o/WHK/WBSM 0117-0145+ on PoP, ID 0130 (DS)

WBSM MS 4/22 w/wx 0249, ID 0250 u/WHK OC, UPI Nx 0300 (BW)

1450 WILM 4/1 off again 0001-0300 per announcement. 4/8 off 0001-0111 4/22 off 0001-0150 (DS)

WKIP MT 4/20 tent on NRC FC arrangement, heard lk TT w/frequent breaks 0029-0045, DF OK but no audible ID (TRS)

1460 WPVL OH 4/22 TT 0142, OC 0144 then ID as ET (BW) 4/22 ET/TT 0100-0115+ (FW)

WOKO NY 4/22 ET 0115-0130+ many IDs (FW) 4/22 ET 0145 w/C&W mx (GF)

WMBR FL 4/7 way u/messly 0320, also heard another C&W station, should have been WOKO, no ID but wx w/cold temps (HJH) May also have been KSO.

1490 WSSB NC 4/21 in WBCB null came up 0046-0048 w/several IDs and promo

WTVL ME 4/19 ET/TT, possible FC 0033-0041, ID at end (TRS) seemed to be for AM-FM (DS)

1500 WKBX NC 4/24 ET/TT/OC/C&W 0248 o/WDEE/KSTP, off 0302 (DS) 826 (JS)

CKAY BC 4/15 w/nx, wx, sports and brief s/off 0403-0411, fairly strong w/much WLAC ET QRM (KDF) 818 to you to (JS)

1510 WLKR OH 4/22 w/ s/on 0600 w/SSB, easy thru WLAC who was in the process of selling Bibles and just before WJIC s/on, assume WLKR has a PSA now (TRS) No, but they did buy a Bible. Must have been their 50 watt PSA. Maybe you should buy one too (JS)

1570 WBUX PA 4/15 o/CHLO/GFOR 0015-0030 w/ET (JF)

WHRF NY 4/21 s/on 0600 ahead of WQTW/WYTI, quite good til WQTW hit the button (TRS) Technical lingo, huh? (JS)

WLSC SC 4/24 s/on w/SSB 0558, was atop for almost complete s/on announcement, followed at 0600 by WQTW/WYTI/WBUX and at least three other SSBs (TRS) Did they hit the button? (JS)

WNCA NC 4/19 way o/CKLM 0027-0130+ w/PoP, ID 0030 (DS) 832 kid!

1580 WSUF NY 4/18 quite loud on 10KW ET 0045-0130+ w/C&W (DS) Ho Hum (JS)

WHEX PA 4/25 o/CLS on ET/OC 0030-0045+, ID e/5 min (DS)

WAXU KY 4/9 w/ s/on, no SSB 0701, good signal (KDF)

Unid ?? 4/21 w/ lk TT 0110+ o/u WCLS breaking every 5 min or so, if IDs, unreadable thru 0130, weak, seemed co-linear w/CLS and in noise so DF difficult (TRS)

1590 WEHH NY 4/22 s/on, no SSB 0559 thru others (TRS)

1600 WAPX AL 4/15 s/off made it thru 0158 (JF)

PIRATE:
1595.5 believe in Phily area, noted 4/13 2330 tune-in to 2345 s/off, super strong 10 o/9, loops E/W, easily heard on portable too (TRS)

NOTE: To SC collectors, WHOT now has a new SC, a SASE to me will bring you a copy. (JS)

NOW: Some late info in from CF & JC

670 KBOI ID MM s/off now 0306

990 KKIS CA now s/off 0304 daily

1000 KOMO WA seems off every MM now

*1020 KSWS NM daily s/off 0200, may have RC w/lk TT 1st SU 0201-0210 (CF)

1090 KING WA off MM 0300

1180 KOFI MT off daily 0208

1500 KXRX CA seems NSP

1510 KGA WA off MM 0300

KSOM CA has s/off 0258 on MM, then GBA

1540 KPOL CA MM s/off 0300

Wesley also sez CF & JC have confirmed that KPNW-1120 does run drama on MM 0400-0430 as heard here a few weeks ago. Another OR for ECers to try.

KEGG
P. O. BOX 600
DAINGERFIELD, TEXAS 75638

THE GREAZER!
Dave Schultz

And that, my little friends, concludes another stellar DDXD. We trust it has been of some help to you. If not, 817! May I pass on one tip to any future editors out there: Never, never try to type a DDXD while tasting the wonders of Jug Apple Wine. It majes the keyx hard to fund a\$ tim&s Hj hu the &hhr4@kchry jauoo ' & 6jUhhmemk (JS)

And as we work our merry way towards the end of this DDXD we present a buncha' late CRTC-FCC info.. Foist all da' FCC's sthick..

Applications::

1070 TX Friona 250 wt. days 1220 TN Memphis 250-D (nonprofit)
1190 WI Amery 5K-D (1 K-CH) 1400 FL Perry 1000 250 U-1
Have an application at Arroyo-Patillas, PR for unlimited operation on 780 Khz but power is unknown.

Initial decision for 1530 Carrollton, Ga., -500 D, and final grant in Tracy, Calif. for 500-D on 710 Khz.

Call applications and grants...

1080 Anchorage, AK--seeks KANC
1150 KPNG TX, granted change to KSUZ
1440 KDNC WA, granted change to KXXR

Still more applications and such..

620 KPUA HI seeks move here from 970--5K 5K U-1 (see 670 item below)
670 KPUA HI modify application to move to 620 to read 670- still 5K U-1
1020 KGBS CA again requests 50Kw DA-2 (U-4) (recently refused by FCC)
KSWs NM again requests 50Kw nights & new site (recently refused by FCC)
1380 KWK MO requests reduction in night power to 1Kw & move site
1480 KBOX TX requests increase in night power to 1Kw.
*1230 KWXYZ WA move transmitter site (outta order, sorry.)

And a final FCC action lets WTTX VA to move the site to State Rd. 1032.

Now for da' stuff from da' CRTC gang..

GRANTS:: 1400 Mackenzie, B.C. 1000 250 U-1 EE (owner: CKPG 550)
1400 Baie Verte, Nf. 40 40 U-1 (LPRT) (Assume feed is from CBN)
1420 CJMT PQ increase power to 10,000 2,500 U-2 (PO: 1000 1000 U3)

Also have a grant for an FF station at Bagotville, PQ (Frequency unknown)

Hopefully I'll keep records in line by listing the following applications up for hearings in the near future.

620 C*** PQ Rimouski -FF- 10,000 5,000 DA-1
730 CKLG BC Vancouver..seeks 50,000 50,000 DA-2
810 CHQR AB Calgary....seeks 50,000 50,000 DA-2
C*** MB Winnipeg...seeks 10,000 10,000 DA-1 (Bi)
990 C*** YUKON--Ross River--40 40 U-1 (LPRT) EE
1000 C*** PQ Rimouski.. FF 10,000 10,000 DA-2
1190 C*** PEI Charlottetown..10,000 10,000 DA-N (EE)
1280 C*** AB Calgary.. EE 10,000 10,000 DA-1
1290 C*** PQ Matane.. FF 10,000 10,000 DA-1
1360 C*** PQ Ste-Marie de Beauce.. FF 10,000 5,000 DA-1
1380 C*** PQ Cap-chat..FF 1,000 1,000 DA-1 (repeater for Matane 1290 above)

The latest CRTC info here has a list of many LPRT's. However the info is different from that in the NRC log. Hopefully we got all the typos and none are left in the following list. All are 40 watts U-1

540 CBKO BC Coal Harbour 1290 CBGL PQ Mingan
630 CBKU BC Kelsey Bay (Sayward) 1350 CBKY BC Keremeos
690 CBOI ON Ear Falls CBGO PQ Anuanish
740 CBKR BC Parsons 1380 CBGJ PQ Riviere St Jean
CBKW BC Jaffray CBGB PQ Gaspé
860 CBKZ BC Clearwater 1420 CBGR PQ Point Menier
CBXD AB Edson CBGC PQ Grand Vallée
CBXX AB Rainbow Lake 1450 CBKS BC Cache Creek
CBDA BC Ft. Nelson CBGP PQ Natashquan
CBDH SA Uranium CBGG PQ Sheldrake
880 CBDV NWT Pine Point 1490 CBGI PQ Magpie
900 CBKV BC Radium Springs 1530 CBGH PQ Rivière-au-Tonnerre
CBUL BC Lillooet 1550 CBGE PQ Rivière-au-Renard
990 CBOW PQ Maniwaki CBGK PQ Longue-Pointe-de-Mingan
CBFW PQ Joutel CBGQ PQ La Romaine
CBFV PQ Clova
1080 CBKX BC Sorrento
1150 CBWR BC Rogers Pass
1200 CBQB NWT Rae
1270 CBFL PQ Maniwaki

And I found the following corrections for a couple non-LPRT stations up there..

1340 CFLW NF Wabush U-3 250 250
1450 CHEF PQ Granby U-3 10K 5K
1490 CKGO BC Hope U-3 250 250

KFQD 750 RADIO ANCHORAGE



FAITHFUL FOLLOWERS AND CONTRIBUTORS:

HJH: Harry J. Hayes, Baltimore, Md.-Trans-Oceanic Port.
CGB: Gordon Bailey, Ridgeway, ON, SW500, longwire
JWB: Joe Brauner, Punxsutawney, PA, SX99, longwire
JEC: Jim Critchett, Yreka, CA, SPR4, 2-foot loop
JF: Jeff Falconer, Clinton, ON, Kenwood 9R59DS, SMI
KDF: Karl Froth, HQ160, SMI, 100' LW, Villa Park, ILLLL.
GF: Geof Foxx, North Olmsted, OH, SX62A, SMI
KJ: Karl Jetter, Carrollton, GA, DX120, LW, SM2
TM: Tom McCormick, W. Lafayette, IN, equipkent unknown
JMP: Jim Poterba, Yardley, PA, HQ200, SMI
DS: Dave Schmit, Noo Kassel, DE, HQ913, SM2
TRS: Tom Sundstrom, Willingboro, NJ, HQ150, SM2, DX150, HQ140, LW
BW: Bruth Winkelman, Man, WV, Allied A2515, SMI
PW: Paul Williams, Athens, GA (I've heard your recordings, Paul - JS)
FW: Frank Wheeler, Erie, PA, equipment unknown
JS: Jerry Starr, Hubbard, OH, HQ180, 4-foot loop
HWB: Wes Boyd, Girard, OH, HQ180, 2-foot loop
MF: Marfley Furd, Elkborg Heights, OH, HQ904, 9' whip
AB: Great Cosmic Mellotron of Truth, Furpo, ID, equipment expensive
CB: Captain Barfo, McDonalds, PA, HQ904
GOODNIGHT ALL (snort) have yourself a happy....or....just have yourself (JS)



OTTAWA, KANSAS 66067

Now HQ will do it:

Handwritten notes: 73' W 3 E, WES & JERRY



A LOOK AT THE PRESENT THRU THE PAST....

Throughout the past several years, the various publishing committees of the NRC have kept up a position of silent government; based upon the theory that the government which governs least governs best. This theory has been close to the fore in NRC operations for nearly twenty years. At this point in time, it seems appropriate to discuss this matter openly, here in DX NEWS. To our knowledge, there have only been occasional references to the matter and method of governance in these pages in recent years. While the old-timers are aware of the theories and reasons behind our current form of government, many of the comparatively newer members may not be. With this in mind, we'll open the discussion with a quotation from Abraham Lincoln, to wit:

" I go for all sharing the privileges of the government who assist in bearing its burden."

This sums up, in few words, the substance of the NRC's government since the mid-1950's. Those persons whose time and efforts are freely and willingly donated to keeping us afloat, be they publishing committee, editors, or regular contributors or authors, are the selfsame persons who make or help to make, the decisions. In the operation of a hobby club of any sort, when all-volunteer labour is involved, this sort of government seems to predominate over any other form. One can't easily label it, but 41 years of continuous service can't be ignored, and that is the NRC's record to stand upon.

The basic concept of a DX club, as we see it, and as our predecessors have seen it, is to offer the most accurate, the most timely, and the most variety of DX information as can be within the obvious limitations of time and money. We have striven to do just that over the years. One of the first clubs with offset printed bulletins, the NRC has also a number of other "firsts" to its credit, namely the Domestic Log, the LA Log (now out of print) and the Night Pattern Book. The NRC has proven to be one of the most prodigious sources of technical and feature articles for the benefit of novices and old-timers alike. It cannot truthfully be argued that our form of government is either inefficient nor failing in its purpose: service to members and to the hobby.

From shortly after its inception in 1933, until the mid-1950's, the NRC had a constitutional government and elected officers. At that time the club's membership was much smaller, and the hobby was far less complex. In the mid-1950's, the last elected government of the NRC found itself in a position where it could no longer continue to operate the club (even then, government was minimal, as the officers were elected to produce and to serve, not solely to govern) and the NRC was in danger of folding. At that time, a former officer, then retired, Ray Edge, volunteered to operate the club in order to pre-serve it. There could be no choice, and Ray continued to operate the club until he once again retired from his officership in 1964. His dedication and tirelessness in solely operating the club kept us going. This was the functional start of the current form of government, which, for lack of a better description, was, and is, a government of necessity, as since that time there has never been any open competition for the workload of an ever-growing and ever-improving club. The policy was, and is, that when any other group of members who have proven themselves to be responsible, and capable of operating the club present themselves in time of need, they simply assume the responsibility.

Thus it was when Dick Cooper took the reins in 1964, and thus it was when the first BPC took over under the leadership of John Callarman when Dick was forced to resign. In 1966, it was also in 1966, at the Montreal convention, when the assembled membership overwhelmingly re-affirmed the decision of the 1959 convention to continue to operate without a constitution as had been the case since 1959. Backtracking a bit, we go back to the 1963 convention, when a group of dissident members in attendance proposed a re-institution of constitutional government. As is unfortunately sometimes the case, none of the club's officers at the time were in attendance, and the conventiongoers proposed a new constitution and instituted a referendum. According to the new constitution, ratification by 50% plus one of the total membership would be necessary for passage.

This poll, which was taken not by an existing officer, but by one of the conventiongoers, since no officer had been there, did not attract even close to 50% of the membership's response, even though a majority was reported to favor the constitution. In view of the small response, and the fact that only the one partisan ever saw the votes, the NRC government chose not to make any changes. The result was a splitoff of the dissident members to form what they then considered to be the legitimate successor to the NRC, the NRCI (just add the word "incorporated") Shortly afterwards, when it became evident that the NRC had not suffered materially from the split, the new club became today's International Radio Club of America (IRCA) which is also still governed by constitution and Board of Directors as it was then.

In 1968, NRC underwent another publishing change, as John Callarman had to step down. Several members proposed a merger between the NRC and the IRCA, but the feelings still ran high over the democracy/governance issue, and the matter was ultimately dropped, and the most recent BPC, headed by Gordon Nelson took over. In 1968, the first Domestic Log appeared, and in 1969, the first offset DX NEWS. Several subsequent editions of the Log later, a Latin American log later, a Pattern Book later, the BPC, depleted by moving of some of its members, and wearied by the drain of being both publishers and the technical centre of the club, called for a new committee to take over the NRC. The result was the present group here in North Jersey. In each transfer, there was necessity, and in each there was only one group which felt able and willing to continue the task substantially unaltered.

In the main, there are not really a large number of major decisions where the choice isn't dictated by absolute necessity. Dues increases are unfortunately necessary. Reprinting a Log is also, as are New Member Kits, and many other logistical matters. Traditionally the editors help in these decisions, as do some of the most active members. The decisions which are made with these additional persons are few, because there are few decisions to be made where there are two nearly equally valid alternatives. In the case of what time standards to use in DX NEWS, whether or not to give any credence to tapes as a form of proof of reception, whether or not to count logs from more than one disparate DX location, and how to count countries and provinces for DX purposes are all examples of issues that have been or are being studied by committee and which will be reported out either to convention or referendum, or have been already. The only dictatorship we know is that of necessity, and we trust that it is all that we shall ever know. We have not in the recent past, nor do we now, feel a compelling need for a highly-structured and complex constitution and governmental system. We could conceivably institute a constitution which would serve to set forth in writing what is done now, but that likewise seems unnecessary. It is our feeling, as it was the feeling of the BPC, and as it was the feeling at the 1966 Montreal convention, that any form of government which is instituted for any purpose and at any level should exist to serve the people whom it purports to govern, NOT to enslave them to it as a ritual. Should there come a time when such a change is needed, then it will doubtless be proposed, and, if it is truly necessary, it will receive the necessary support of the membership. If there should ever be a time when there is significant sentiment to codify our form of government into a written constitution, we will be ready.

In closing, we should like to note that any comments on this essay will be read and considered, and, if we are requested to do so, we will print these insofar as they do not violate the standards of taste, benefit to the hobby, or repetitiveness; and we would further like to our country's first President, George Washington, who said in defense of a low-profile government:

" Government is not reason; it is not eloquence; it is force. Like fire, it is a dangerous servant and a fearful master. "

We in the NRC believe that our primary concern should be DX and naught else.

PROPAGATION NOTES

In a continuation of our propagation study report of several issues ago, we are now able to present data based on a much greater period of time, as well as to present data for both the Fredericksburg A-index and the planetary A-index. Initially, we presented a correlation of the Ap as had been presented in the Medium Wave Circle's bulletin "Medium Wave News" by comparing the numbers of days in each month over a certain period when the index was 5 or less, 6 to 19, and 20 or greater. Subsequently, we presented a similar chart reflecting the A_{pr} for June 1971 to January 1974. We will now present a composite of the A_{pr} data for the period 1/1/70 through 12/31/73. The letter A represents the number of days with an A_{pr} of less than 5; B represents those days with an index of 6 to 19; and C those days when the A_{pr} was greater than 20.

	1970			1971			1972			1973		
	A	B	C	A	B	C	A	B	C	A	B	C
January	23	07	01	13	16	02	13	18	03	07	19	05
February	18	10	00	11	14	03	10	15	01	02	19	07
March	17	10	04	12	18	01	09	22	01	04	17	10
April	10	19	01	07	18	05	10	18	02	03	11	16
May	09	21	01	12	15	04	07	22	02	05	18	08
June	10	19	01	10	18	02	06	22	02	05	17	08
July	05	21	04	08	23	00	13	17	01	05	22	05
August	12	16	03	09	19	02	04	22	05	07	19	05
September	10	19	01	06	21	03	09	18	03	08	19	03
October	12	18	01	09	19	03	09	17	05	05	18	07
November	13	16	01	16	11	03	08	18	04	09	19	02
December	23	07	01	14	15	02	16	13	02	15	13	03

From these figures, one can readily compare the year-to-year or month-to-month changes in overall conditions. Again following MWC, we will break these down into semi-annual totals:

	A	B	C
Spring 1970	87	86	08
Fall 1970	76	97	11
Spring 1971	65	99	17
Fall 1971	62	108	13
Spring 1972	55	117	11
Fall 1972	59	105	20
Spring 1973	26	101	54
Fall 1973	49	110	25

Again, a pattern becomes rather obvious if one but looks at these tabulations.

We also introduced another set of figures previously which purported to be an indicator to be known as the "monthly mean A-index". We meant "Monthly Median A-Index" although apparently no one brought the error to our attention so perhaps no one caught it. At any rate, we present herewith for your perusal the median A-indices for the A_{pr} January 1970 through June of 1971, where we began the list last time.

1970	July	1971
January - 11.5	August - 21.5	January - 12.0
February - 7.5	September - 27.0	February - 13.5
March - 51.5	October - 10.0	March - 11.5
April - 22.0	November - 10.5	April - 19.0
May - 12.0	December - 16.5	May - 16.0
June - 11.5		June - 10.5

Bear in mind that these figures reflect the difference between the highest and the lowest values of A_{pr} in the month in question, so that they serve only to indicate the range of fluctuation of the index. These figures must be used in conjunction with the monthly average indices in order to be useful at all. The monthly averages of A_{pr} for the same period are listed below:

1970	July	1971
January - 4.871	August - 12.967	January - 8.322
February - 4.535	September - 9.483	February - 8.178
March - 11.677	October - 8.366	March - 7.871
April - 10.033	November - 8.612	April - 10.866
May - 7.419	December - 7.833	May - 10.451
June - 8.933		June - 7.866

We also dealt with some other important figures, namely the number and duration of periods of relative geomagnetic quiet during various semi-annual periods. We have already presented the data covering the periods from June 1971 to December 1973, and will now supplement that with the data for January 1970 to June 1971.

Spring 1970	- 5, 6, 10, 7, 5, 3, 17, 4, 3, 4, 4
Fall 1970	- 3, 5, 3, 4, 4, 3, 6, 5, 9, 5, 8
Spring 1971	- 8, 4, 3, 3, 3, 3, 3, 3, 3, 3, 3

These figures are the lengths of time in days when the A_{pr} was 5 or less during each season. For the purpose of this presentation, the term season refers to the six month periods January to June and July to December.

As we likewise noted in one of our earlier discussions, the monthly averages can be combined to yield quarterly, semi-annual, or annual averages, although these naturally become increasingly insignificant as we increase the period of the average. We will present them here for 1970-73 for their curiosity value only:

	1970	1971	1972	1973
1st Quarter	7.027	8.123	8.200	14.336
2nd Quarter	8.795	9.727	10.096	17.247
3rd Quarter	10.272	9.270	12.200	11.683
4th Quarter	7.191	8.645	9.229	10.108
Jan.- June	7.911	8.925	9.148	15.791
July - Dec.	8.731	8.957	10.714	10.895

Annual	8.321	8.941	9.931	13.343
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Even with these sorts of "ballpark" figures, the steady deterioration of DX conditions over the past two seasons is evident.

In our previous discussions, we mentioned an article written by Gray Scrimgeour, which set up the periodicity of residual auroral quiet as well as the contrasting high and low values of A_{fr} in a most effective manner. We are now able to display figures recorded since his study in 1969 along with his results to yield a long-term comparison covering the better part of the most recent 11-year sunspot cycle. For the purposes of this chart, the letter a signifies the first half of the calendar year, the letter b the second half. Likewise the term low is defined as $A_{fr} \leq 3$; high as $A_{fr} \geq 15$.

1/2 year	Average length of undisturbed periods	Number of low days	Number of high days	Δ (Low-High)	Longest period continuously below A = 15
1965b	16.6 days	61	14	47	49 days
1966a	17.0	57	14	43	58
1966b	7.3	33	37	-04	31
1967a	8.6	47	33	14	29
1967b	7.3	29	31	-02	18
1968a	5.0	18	46	-28	30
1968b	8.7	32	35	-03	42
1969a	9.0	24	30	-06	42
1969b	12.8	46	18	28	26
1970a	10.1	51	16	35	30
1970b	7.5	38	25	13	22
1971a	7.8	34	31	03	22
1971b	8.4	39	30	-09	20
1972a	10.2	21	25	-04	24
1972b	9.8	34	37	-03	34
1973a	4.3	14	84	-70	11
1973b	6.6	24	49	-25	20

Thus, we can see very quickly that the A_{fr} fluctuations do not correspond very neatly to our concept of the 11-year sunspot cycle, although they do seem to correspond a bit more closely to the actual experiences of DX'ers.

We have presented these data in the hopes that they may be enlightening to some of the membership, and likewise that they may prove interesting enough to perhaps stir some further analysis. We do wish to emphasize that the A_{fr} is not the gospel indicator of DX conditions. We have figures prepared, and we hope to run them in the near future, which make the same correlations and comparisons over the period 1970-73 on the planetary A-index A_p which generally averages somewhat higher than the A_{fr} . Most DX'ers who have studied the area of propagation over long periods of time have concluded that there are additional factors, perhaps as yet not isolated, which are at least partially responsible for DX conditions. The reader who is interested in pursuing the matter further is initially advised to read a copy of Gordon Nelson's article on limitations of the use of the A-index in radio propagation predictions, which is available from NRC Reprints.

-RJE

KHDN 1230 KC

South Central Montana's
Best Buy and No. 1 Salesman

PHONE 665-1277
P. O. BOX 389
HARDIN, MONTANA 59034

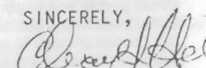
APRIL 16, 1974

MR. TOM MC-CORMACK
275 LITTLETON ST.,
WEST LAFAYETTE, IND. 47906

DEAR TOM,

THIS IS TO CONFIRM YOUR RECEPTION OF KHDN'S TEST ON MARCH 18, 1974 FROM 1:02 AM TO 1:22 AM MDT ON 1230 KHZ. YOUR REPORT IS VERY ACCURATE AND CONSIDERABLE AND WE ARE HAPPY TO VERIFY YOUR RECEPTION. AT THE TIME OF YOUR RECEPTION WE WERE OPERATING WITH 1000 WATTS NON-DIRECTIONAL FED TO A 200 FOOT TOWER. WE WERE GLAD OUR SIGNAL SKIPPED DOWN YOUR WAY AS THIS IS QUITE AN UNUSUAL OCCURENCE WITH ALL THE 24-HOUR QRMING STATIONS ON 1230!

THANKS A LOT FOR THE COMPLETE REPORT AND BEST OF LUCK IN THE FUTURE.

SINCERELY,

CHARLES J. HEIT
PROGRAM DIRECTOR
KHDN RADIO

CH/CS

Transmitters an electrifying building worry

By WAYNE SWANSON

Imagine cuddling up for a night's sleep, only to be jarred from your dreams by a rock and roll beat.

That is just one of the disturbing phenomena that have occurred in an unincorporated area between Westmont and Downers Grove.

The causes of these strange events are three towers responsible for sending the signal for radio station WCFL thruout the Midwest.

It used to be that only open fields surrounded the three towers. The transmitting station, at 39th Street and Roslyn Road, northeast of Downers Grove, dates back to the early 1930s, and it has been only in the last decade that homes have replaced cornfields as its neighbors.

Now the transmitter is on the edge of a rapidly developing area, bounded on three sides by residential neighborhoods. And some strange things can happen.

The men who are responsible for making sure WCFL is heard at frequency 1000 on the AM radio band also must take responsibility for answering occasional complaints from neighbors that Larry Lujack is broadcasting from light switches and rock and roll is reverberating from aluminum siding.

James Loupas, director of engineering for WCFL, said the transmitter has been accused of being the mysterious force behind various unusual events in the area. He said there is one man who blames the station for fouling up his gas heater, but Loupas is careful to limit the kinds of things that he will accept responsibility for.

"There's an initial shock when people look at these towers," Loupas said. "They are too amazed and afraid of the power generated to do much about it." Either that, or they come up with wild complaints that the laws of physics would not allow, he said.

Some WCFL officials are wary of talking too much about the towers because they are afraid people will begin calling in with new exotic maladies to blame on the transmitter. But Loupas is quick to admit that in an area within a mile of the transmitter some strange things can happen.

This include such things as "talking" ductwork for heating systems, conduit for plumbing, and aluminum siding. But he points out that these problems can be solved by bonding surfaces together so they don't lend themselves to transmitting WCFL's rock beat.

Another problem is that when the electric wiring is put into some homes, it is not grounded properly. As a result it lends itself to sending out music, news, and commercials thru light switches, electrical appliances, and electrical outlets.

Loupas said that his men have been working on the problem of a woman who is serenaded at night with rock music coming out of her electric blanket.

Another major complaint is from people who say their televisions are being affected. These complaints are more difficult to deal with because Loupas asserts that the transmitter cannot interfere with the television signal because of the wide difference in frequencies.

"If there is a problem, it is due to a flaw in the television," he said. "Manufacturers don't take into account this kind of environment, but in almost every case they can do something to correct their problem."

Loupas said that in cases where residents call about a problem, WCFL personnel will go out and check on the problem and offer advice for how it can be remedied if it has been caused by the transmitter. But he also admits that the transmitter generates a fantastic electrical field that is bound to have an effect on the area.

One of the most effective means he has to demonstrate this power is to take visitors to a small enclosure in front of one of the towers that transfers the current from the main transmitter building to the tower.

He instructs visitors to keep their hand in their pockets and stay by the door so they don't touch anything they shouldn't.

He then points a bare fluorescent light bulb at a series of coils and other electrical equipment. The result is that the bulb lights up as bright as if it were plugged into a normal socket.

All that electricity is generally harmless, except when its concentrated in a specific area — which is what the towers do in the area of northwest Westmont, Loupas said.

As a result, Loupas has found it necessary to appear at occasional zoning hearings in

Westmont to discourage certain types of developments.

In December Loupas helped discourage Westmont from allowing a developer to construct an 11-story apartment building at 36th Street and Cass Avenue.

Loupas told the zoning board that the building was in one of the areas of highest intensity of electrical current. It would have made a nice antenna, and would be highly susceptible to turning light switches and electrical appliances into WCFL outlets, but it might not be the best place to live.

Earlier last year, Loupas helped discourage the idea of a hospital in the same general area, arguing that interference from the transmitter could have a dangerous

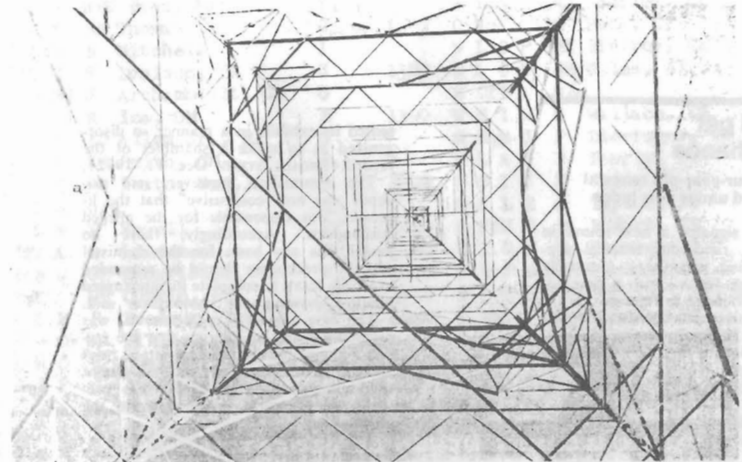
THE TRIB Fri., Mar. 29, 1974 1 3

effect on the sensitive equipment necessary in medical work.

"We could never really control the side affects that all that power would generate," Loupas said.

Loupas said the relationship with the neighbors is always going to involve problems due to the energy the transmitter releases in the area. But he said that occasionally rumors begin to circulate that WCFL is going to move, and that generates more concerned calls than any problem.

"They may not like the towers, but at least it's an open space that will not be torn up for more houses," Loupas said.



A look thru the culprit, a WCFL transmitting tower. (Trib photos by Wayne Swanson)



Loupas at the transmitting station.

In Brief

Ratings fallout of DST. Television viewing declined in daytime, held steady in prime time and increased in late evening during month daylight saving time went into effect, according to Arbitron Television. As result, it said, TV buyers and salesmen may need to revise their traditional seasonal-adjustment factors in buying and selling on results of February-March sweep measurements. Arbitron noted switch to DST occurred Jan. 6 and said analysis of its January measurements in 21 major markets showed homes using television declined from January 1973 levels by average 10% in Monday-Friday 9 a.m.-to-noon Eastern time period, and by 4% to 5% in afternoon and early fringe (noon to 7:30). There was no change in average HUT level for 7:30 to 11 p.m., but gains of 4% for 11-11:30 and 5% for 11:30 to 1 a.m.

Heading for home

The mighty and the lowly of major league baseball were not completely squared away on broadcasting coverage as season opened last week. The champion Oakland A's belatedly signed with KEEN(AM) San Jose, Calif., to originate for a network of 18 other radio stations, but was still negotiating for a TV outlet as of last Wednesday. The San Diego Padres' first TV game was to be carried last Friday on XETV(TV) Tijuana-San Diego pending a definite contract. Padres' radio is being originated by KOGO(AM) San Diego, part of the \$43-plus million that the major leagues will realize for radio-TV coverage in 1974 (BROADCASTING, Feb. 25).

Broadcasting Apr 8 1974 32

KAYE will get another chance

FCC orders four-year-old renewal case remanded under new judge

The FCC has signaled a new round in the drawn-out, rancorous renewal proceeding involving KUPY(AM) (formerly KAYE) Puyallup, Wash., with a new administrative law judge to referee.

The commission set aside the ruling of Judge Ernest Nash dismissing the renewal application of KAYE Broadcasters Inc., and granted KAYE's appeal to the extent of remanding the proceeding to a new judge.

The commission also said it would serve no purpose to consider the propriety of Judge Nash's order excluding KAYE's then counsel, Benedict Cottone, since Mr. Cottone has since withdrawn.

Mr. Cottone and Judge Nash had battled bitterly during two previous rounds of the hearing, which began in July 1970. The climax was reached in September 1972, when Judge Nash ordered Mr. Cottone from the proceeding and, when KAYE was unable to obtain another lawyer over a weekend, dismissed its application for failure to prosecute.

In the formal order he issued in December, Judge Nash said KAYE had sought to wear him down with a strategy of disruption and disorder, and had pre-

sented its exhibits in a manner so disorganized as to make a shambles of the record (BROADCASTING, Dec. 11, 1972).

The commission, however, said evidence was not "conclusive" that the licensee "was responsible for the alleged misconduct." Accordingly, there no longer was any basis for the dismissal and the proceeding should be remanded to enable KAYE to complete its interrupted rebuttal showing, the commission said.

The case against KAYE's renewal was originally based on charges that the station had violated the personal-attack rules and the fairness doctrine, and had sought to discourage local residents from presenting unfavorable information to the commission.

The FCC called for a prehearing conference within 30 days, and the start of the hearing within 180 days. It warned KAYE against unreasonable failure to comply with the directive or subsequent agreements.

The latest round will include a new issue added by the commission—to determine whether, as a result of several recent changes of top officers, there was an unauthorized relinquishment of control of the licensee.

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No appeal. FCC denied petition by WVCB(AM) Red Lion and WKUR(AM) Media, both Pennsylvania, which sought reconsideration of commission's rejection (in September 1973) of their application for review of June 1973 Broadcast Bureau ruling that stations failed to meet their obligations under personal-attack rule. Bureau, whose ruling came at request of stations, found that in Jan. 27, 1972, Life Line program, stations broadcast personal attack against United Church of Christ and failed to notify UCC of that fact or offer UCC reply time.

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CLIPPING CORNER

VERIE SIGNERS

Table with columns for station call letters, names, and other details. Includes entries like '540 C Bq E F LC Leclair', '570 W F S O G Scott, PD', '610 K Rq K E M Langnet, CE', etc. The table continues down to '1200 Y Vq Q Z Bob Rangel, Rel. Int'l.' and includes a note at the bottom: 'BECOME A COMPLETE DXER - VERIFY! SEND YOUR V/S IN TO E.R.COOPER THIS SUMMER!'