



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

Volume 44 Number 31

Monday, Sept. 25, 1978.

STATIC FROM HQ

Thanks Atlanta and hello St. Louis!! The convention, for the few who missed it, was super thanks to the hard work of the Atlanta gang. There are photos inside and a convention report will follow next issue, as soon as Karl gets sober or married (whichever! Hi!) As for St. Louis, those at the convention voted to allow the Gateway City to host the 1979 convention for NRC, so make plans now! Some early details are inside...in other stuff...LAD Ira Green is going to take the plunge and is engaged to marry in November (Congrats, Ira--hope she likes DXing!)...and last but not least Bill Hale is the new Graveyard DX Achievements Editor. His first column will appear shortly in these hallowed pages--support him at 1451-B Faith Drive, Rantoul, Ill. 61866. Thanks to Harry Hayes for his work as editor on this column--Harry, you did a Hale of a job!

wolf j.

CPC TESTS

- October 9 Monday WAVC-1350 Warner Robins, Ga. 0200-0300 with 5 Kw. Test will include tones and frequent IDs. Prepaid calls to 912/923-4261. Verie by prepared cards only. Card must include return postage! Report to: Chief Engineer, WAVC, Box 916, Warner Robins, Ga. 31093. Arr: Ray Arruda.
- October 9 Monday WNVL-1250 Nicholasville, Ky. 0200-0230 with 500 watts. The test will include distinctive music and tones. Veries to: Ed Lipson, Chief Engineer, P.O. Box 247, Nicholasville, Ky. 40356. Test arranged: John Hoogerheide, who shows that them that snoozes loses as Lipson is a friend of Ted's but he forgot to ask!
- October 16 Monday KFU0-850 Clayton, Mo. 0230-0315 with 5 Kw. Voice IDs and public affairs type shows used for test modulation. No other details. Veries to: John Fischer, CE; KFU0, 801 DeMun Ave., Clayton, Mo. 63105. Arr: Arruda.
- October 30 Monday WSKI-1240 Montpelier, Vt. 0000-0100 with 1 Kw-ND. Test will be Tijuana Brass music with frequent IDs and 1000 Hz tones. Veries to: Tom Cheney, Program Director, WSKI, Box 487, Montpelier, Vt. 05602. Arr: Harley Steward.
- December 18 Monday KDLG-670 Dillingham, Alaska! 0515-0615 with 5 Kw ND. Test to include tones, voice/code IDs, DX gab and some Eskimo gab (it sounds different than WMAQ, we're told, hi). Prepaid calls to: 907/842-5281. Veries to: Les Robinson, General Manager, KDLG, Box 670, Dillingham, Alaska 99576. Arr: Eddie Ryan, GWDXA.

THEY JOINED

Welcome to these new members--please Muse soon so we get to know you!
Terry L. Krueger, 84 Winter Park Drive South, Casselberry, Fla. 32707.
John Kirchman, 417 Franklin Way, Dinuba, Calif. 93618.
Marc Kulbacki, 2434 Alexandra, Windsor, Ontario, Canada.
Dave Pruden, 1408 Michigan Ave., Bay City, Mich. 48706.

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AM SWITCH

New Editor Next Time
JOHN D. BOWKER
14 CANOE BROOK DRIVE
PRINCETON JCT., N.J. 08550

Hi everyone...

Well, this is my last AM SWITCH but the editorship is passing on to the very able hands of John D. Bowker. Before we get to the information at hand, let me say a big THANK YOU to all the members who have made being editor a joy. Your kind letters of encouragement were very welcome and your tips made a very important contribution to the column and the club as a whole. A special THANK YOU goes to John D. Bowker, your new editor, without whose help and encouragement this column would not have been possible.

A number of factors contributed to my decision to drop my editorship-- chief among them the fact that my wife Jeanette is pregnant and the new Dier in the house will occupy much of my time after the first of the year. Increased responsibilities at work also played a part in the decision-- another pharmacist and myself will be responsible for drug distribution to 40 intensive surgical and cardiac care beds after the first of the year. Some of the membership may not be interested in my reasons but I felt I owed an explanation for my retirement at such an early age! Now to my final AM SWITCH.....

NEW STATION APPLICATIONS

670 HI Hilo	1070 MT Plentywood	1170 MI Dimondale	1530 AR Yellville
770 AK Valdez	1090 WI Bloomer	1230 AL Florala	1540 VI St. Croix
790 AB Rogers	1090 WI Rice Lake	1250 CO Fraser	1600 PA Jersey
910 KY Saloma	1130 AL Carrville	1330 WA Bremerton	Shore
990 FL Miami	1130 SC Hilo to Head	1410 PR Aguda	
1010 AL Dora	1140 TN Blountville	1420 TX Granbury	
1050 GA Conyers	1140 KY Salyersville	1520 MS Amory	

CALL LETTERS GRANTED:

1130 KY Murray CP granted WSJP	1340 DC Washington, granted WYCB
1060 TN Newport CP granted WNPC	1450 WV Madison granted WWBB

John D. Bowker reports that WYCB is on the air.

CALL LETTER APPLICATIONS:

930 KITE-TX seeks KCCW	1470 WWML-PA seeks WRML
1330 WLWL-MN seeks WRRD	1570 WAPL-WI seeks WVMS
1470 KUTY-CA seeks KUXX	

CONSTRUCTION PERMITS GRANTED:

710 WQBL-VA CP: D1 10000/	1450 KVEN-CA CP: U2 5000/5000
1110 WBCA-AL CP: D3 10000/CH:2500	1520 KXEB-MN CP: D4 10000/CH:10000
1190 WHRL-FL CP: D1 1000/	1570 WJES-SC CP: D1 1000/ ch 119D
1300 WWCV-OH CP: U4 500/500	1580 KZIA-NM CP: D1 10000/

ROBBILL RICH CALL LETTER GRANTS:

630 KMMB-ID ex KIDO	1240 WSOX-MA ex WOCB	1450 WIIN-NJ ex WFPG
970 WFUN-OH ex WREO	1310 WEIO-NJ ex WQTK	1460 KCAN-OK ex KELR
1050 WHGI-GA ex WAUG	1320 KQIQ-CA ex KLAN	1470 WQQT-FL ex WDCL
1150 KDLP-TX ex KSUZ	1320 KKOJ-MO ex KADI	1490 WUDE-VA ex WVEC
1230 KFLR-AZ ex KRIZ	1330 WCPQ-NC ex WKVC	1500 KXVQ-OK ex KOEN
1230 KGAM-CA ex KGEE	1380 WNVB-CT ex WCWW	1530 KQNK-KS ex KNBI

OTHERNESS FROM THE MEMBERS:

620 WDMC-NC format now MOR (BT)
1340 CPOM-PQ now apparently off the air--not hrd on trip to Quebec City (TK)
1360 WSAI-OH format now CWM ex T40, change due 21 August (RK)

Mike Hardester reports that there is a possibility of a test once KTRB-860 gets the xmtrs for their CP for 50000/10000. That would be a great help for us easterners.

AM SWITCH page 2.

Also from Mike Hardester comes the following information from the Fresno Bee radio/TV page. Perhaps some of this information will be helpful to DXers.

580 KMJ 24h, N news on the hour, "music and news" format
620 KNKS 24h, CWM, ABC nx :35
790 KXQR 0600-SS, BFL
900 KBIF 0600-SS, REL/GOS
940 KFRE 24h, "music", ABC nx :00
980 KEAP 0600-SS CWM to 1300, MEX to SS, M nx :30
1220 KLIP SR-SS MB nx :00
1340 KMAK 24h CWM "games and contests"
1130 KRDU 24h REL/BFL/"country gospel"
1300 KYNO 24h "contemporary mx"
1430 KARM 24h CWM M network
1510 KIRV 0600-1800 EZL/"contem sacred mx"
1550 KXEX SR-SS SS programming
1600 KGST SR-SS SS programming

73

Bruce Winkelmann

I got all the way thru the information above and realized that all times listed are Pacific time and not ELT--what a way to finish AM SWITCH but please don't make me type this over, hi.

REPORTERS THIS TIME AROUND:

JDB John D. Bowker	Princeton Jxn, NJ
MH Mike Hardester	FPO Seattle WA
RK Richard Kenneally	Cincinnati OH
TK Tim Kerfoot	Weston ON
BT Bruce Tindall	Chapel Hill NC

Again, let me take this opportunity to thank each and everyone of you who have reported changes to AM SWITCH while I have been editor. It's been alot of fun the past 14 months and I sincerely hope that this column has been a help to the Domestic DXers of the NRC. Please give your support to your new editor, John D. Bowker.

DOMESTIC DX DIGEST

RAY ARRUDA
47 BURT STREET
ACUSHNET, MASS. 02743
(617) 998-3958

A brief section this issue, with some fine tips. Next deadline is set for 9/23. Welcome to Richard Wright, and welcome back to one of NE Pennsylvania's finest....Harry Hayes!

SPECIAL

570 WMOA NY NEW YORK - Now carrying the Larry King MBS Show AM-7. (ERG)
690 OBP PQ MONTREAL - was noted AM w/OL mx ///-CBN-940 8/5, & w/EZL 8/7. (ERG)
810 WGY NY SCENECTADY - is off MMs, but back on by 0200 for ETs w/mx. (ERG)
850 WJW OH CLEVELAND - has deleted their 7-11 PM talk show in favor of BFL/MoR mx. (LMP)
1080 WTIC CT HARTFORD - was off AM both MM 8/14 & 8/21. (ERG)
1110 OKJD ON SARNIA - is now being noted SMs in WBT's SP, even QRMING them on MM 8/21. Previously, their nite pattern an absolute zero here. (ERG)
1260 WBBG OH CLEVELAND - EX-WMGO now using new call and talk show format. Has big band mx on Sat nites. (LMP)
1340 WIOB DC WASHINGTON - EX-WFAN now back on the air w/Soul. (WPT)
1410 WPOP OT HARTFORD - has RS SP every SM starting @ 0306, lasting until they're finished, usually an hour. (ERG) (ERG)
1420 WBSM MA NEW BEDFORD - off some SMs irregularly, off 8/6, on 8/20.
1500 WTOP DC WASHINGTON - noted ANing as of 9/4. (WPT)
1600 WIXY MA EAST LONGMEADOW - to be NSP C&W when they get their nitetime 2,500 watts going - oh joy, oh ecstasy! (ERG)

SUNSET TO MIDNIGHT

(BPS)
 580 WOHS WV CHARLESTON - 8/19 2240-2301 xint on RS, no sign of WKTY.
 810 WPRD VA CROZET - 8/27 s/off after WEDO, good signal 2015. (HJH)
 910 WDOR WI STURGEON BAY - 8/26 1959-2000 xint S-8 at s/off, rptd.
 1350 WDRR VA PORTSMOUTH - now heard here midday on top O&W. (ERC)(BPS)
 1390 WRXV NY RIVERHEAD - On top here @ 1300 7/31 w/local WFLM
 "broken" & WOAT underneath. (ERC)
 1460 WKAM IN GOSHERM - 8/25 2113-2121 xint on RS, no KSO, rptd. (BPS)
 1470 WBTX VA BROADWAY-TIMBERVILLE - 9/5 1930 good w/MOR mx/s/off. (WPT)
 1520 WFXM VA JAMESVILLE - 9/5 1915 s/off, good w/ments of XR 5 mi.
 SW of Exmore. (WPT)
 WHIC KY HARDINSBURG - 8/19 2043-2045 fair u/KOMA/KMPL w/s/off,
 new. (BPS)
 WIBG NJ OCEAN CITY-SOMERS POINT - in all day here w/adult contemp.
 mx & many spots for Jersey Shore. (ERC)
 1530 WDJZ CT BRIDGEPORT - 8/5 1957 first time heard w/EZL mx.
 S/off at this time w/good sig. (HJH)
 1560 WTNS OH COSHOOTON - 8/27 2025 in w/a whole bunch of others
 u/WXR, rr mx, wx rpt & IDs. (HJH)
 1580 WTTN WI WATERTOWN - 8/27 2045-2100 in & out all alone w/good
 peaks. Soft rr, Watertown ment. on s/off & note to
 advertise on WTTN. (HJH)
 WYFA NY PATCHOQUE - noted all day w/adult contemp mx, few spots.
 Are they doomed to fail ala their predecessors WSUF &
 WRAQ? (ERC)

MIDNIGHT AT THE OASIS

640 WFLD OH AKRON - mostly talk LSR-LSS, noted on ET/TT/OG 8/9
 0005-0100. (LMP)
 KPI CA LOS ANGELES - noted 7/9 0505, 7/23 0530 and most
 recently 8/14 0150-0200 w/religion followed by local
 mx & wx. Some splatter from Cuban/WSM. (LMP)
 660 WNDQ NY NEW YORK - 8/14 0100 noted off the air. (LMP)
 670 WNAQ IL CHICAGO - 8/14 0100 noted off the air. (LMP)
 910 ONLY ON LINDSAY - 8/26 0045 fair u/WRNL w/spot, call letters
 heard twice in 30 sec. (WPT)
 WARI MN BANGOR - S/off @ 0202 SMS w/SSB, noted SM 8/5. (ERC)
 1160 KBL UT SALT LAKE CITY - 8/14 0220 fair signal w/Nite Cap. (LMP)
 1200 WOAI TX SAN ANTONIO - 8/6 0020 fair w/religion. (LMP)
 1280 WARK ME GARDINER - noted AN on Fri. 8/4 w/rr, but not noted
 since. (ERC)
 1300 WMAK TN NASHVILLE - only this noted here MMs, a great spot
 for some DX Tests. (ERC) I have difficulties here with
 WFBM. (RA)
 1350 WSLR OH AKRON - 7/21 0100 off air, but Eting w/OG/TT. (LMP)
 1400 WSGA GA SAVANNAH - often tops this spot w/rr around 0230-0400. (ERC)
 1420 WIMI IL MURPHYSBORO - 9/1 0634-0639 fair on ET/TT. (BPS)
 1490 WOPA IL OAK PARK - 8/21 0000-0002 briefly off w/XR trouble,
 back on @ 0002. (BPS)
 1580 WPGO MD MORNINGSIDE - 8/23 0615-0618 xint o/CBJ w/s/on. (BPS)

Don't forget the 9/23 deadline, which happens to be my mother's birthday.
 So make the both of us happy by sending along all your recent catches!!!

Thanks go out to...

ERC Ernest R. Cooper, Provincetown, MA
 LMP Louis M. Poda, Akron, OH
 HJH Harry J. Hayes, Gouldsboro, PA
 BPS Brian P. Sharwood, Elmhurst, IL
 WPT William P. Townsend, Washington, DC
 RW Richard Wright, Sacramento, CA

HQ-180, SM2, Loop
 Guardian 7700, TRF
 Trans-Oceanic, SM2
 TRF, SM1
 TRF
 ???

Bob Rocket Ray A

WMAD
 1550 RADIO

INTERNATIONAL
 DX DIGEST

CHUCK HUTTON
 P.O. BOX 2087
 DECATUR, GA 30030
 (404) 633-1198
 (BEFORE 2300 ELT)

Times are GMT. For ELT subtract 4 hours. Deadlines are usually Monday.

IDXD wouldn't be IDXD without tons of boring station changes, so I happily present the following....

Arctic Radio Club: Ecuador HCJBI La Voz de los Andes is on 690, ex 700, and now uses 50 kw. Sked 1000-0600. 1255 HCEB1 Ondas Carchenses has a power of 5 kw and is on the air 1200-0600. 1345 R. Paz Y Bien (I know, the "y" shouldn't have been capitalized-CH) has the calls HCPB6 ex HGPS6, uses 10 kw, and broadcasts 1030-0400. (to borrow from Glenn Hauser, don't you believe it. I get at least a carrier from the 1 and 2 kw Ecuadorians, whereas I get nothing from the "10" kw Paz y Bien-CH). Uruguay 690 CKB is now 24 hrs with 25 kw. 850 R. Carve CX16 transmits 0925-0500 with 50 kw. Venezuela the Venezuelan Information Services, Venpres, reported on May 16 that the Minister of Tourism and Information had announced that a 1000 kw station with the largest coverage in Latin America would be set up in the northwestern area in the Paraguana part of Falcon State. This tx is believed to be the former R. Millon tx, which was indeed rumored to have been packed off to Venezuela. (Stand by for the usual amount of BS associated with the Millon affair-CH). 1120 R. Republica ex 1310. 1330 YVOY R. Los Llanos to 5 kw. Colombia 730 R. Melodia uses 50 kw and is a member of Cadena Lider de Colombia. (WRTH doesn't list the members of the smaller chains, to the best of my knowledge. HJBL 1160 is the only other member I can recall offhand-CH). 1190 HJCT La Voz de la Costa is part of Cadena Radial Sarmiguel. 1250 HJEM La Voz de Corozal now uses 3 kw, sked 1200-0600. 1350 HJDS Ondas de la Montana is part of Cadena Lider de Colombia. 1400 HJKM Em. Mariana transmits 1200-0430 with 1 kw. 1460 HJJW transmits 1100-0600 with 5 kw. 1480 HJZZ R. Palonegro sked 1200-0600. 1510 HJZA R. Estrella is part of Todelar. 1520 HJLQ R. Minuto is back to 1 kw and is part of Cadena Radial Sarmiguel. 1530 HJDN R. Cine is the correct name. Along with 1440 HJNZ it forms Radiosistema Federal. 1550 HJZI R. FANTASIA can sadly only be heard between 1200-0600. 1560 HJLP R. Espacial also transmits 1200-0600. 1600 HJJH R. Ciudad Milagro is part of Cadena Super. Dominican Republic 1100 HIRJ R. Jimani "La Voz de la Provincia de Independencia" has been testing since Feb. 1, 1978. Sked 1100-0300. The owner, Rodolfo Lama Jaar, is DX'er Victor Jaar's cousin. (Victor is a former NRC'er if I recall correctly--CH) 1130 HIRL R. Exitos is now 10 kw. Honduras 920 HRZV R. Fabulosa ex 900. Sked 1300-0600. HRMH 930 reported here, ex 1010. USSR location for the new stn on 1187 is Kusur. 1331 an unid stn with Majak was heard at 0230. From the EBU Monthly Report in Arctic, 567 Iran heard plus the Senegalese stn on 1224 that is believed to be in Ziguinchor. 1224 was heard by the monitoring stn in Caversham, England so it surprises me that it has not been heard in NA yet-CH. Sri Lanka TWR started regular transmissions on 890 with 400 kw August 5. Reception has been very good as far away as India. Syria 927 Al-Hasakah is new and on the air 0455-0130. 953-a new stn has started up in Dayr az Zawr. It is much stronger than the previous tx. Thailand 923 broadcasts JJ 1530-1550. Tunisia 1570 Sfax started up with 2 x 600 kw 6-6. S/off is 0030-0040. It is assumed to be a relay due to the echo sound. Malta 1554 Cyclops resumed broadcasting. 6-26. Deutsche Welle is still broadcasting AA 0500-0700 and 1500-1850. 1485 Bugibba was noted here, ex 1484. Morocco 1043 Rabat ends Spanish at 1800 and then into French until well past 2400. Nigeria Federal Radio Corporation replaces NBC. Enugu 620, Ibadan 575, and Sokoto 557 all s/on at 0530. 756 Radio O-Y-O sked 0400-0100. 827 Anambara Broadcasting Corporation also ID's as ABC, Enugu and s/on at 0530. 1017 Congola Bcd'g. Corp. also ID's as R. Yola, sked 0530-2215. Rhodesia 1002 Radio III has been retimed 1845-2000. Romania Botosani 602 is now in operation with 50 kw. Saudi Arabia 548 Duba 0400-1700, 611 Curial 0400-1700, 899 Gurial 0400-2300. Tests have been monitored for these stns, consisting of religious talks, Koran recitation, and OC. Sehegal 1304 signs on as early as 0500. Spain RNE is testing in Valencia with 2 x 25 kw on 773 at El Palmar.

Arctic Radio Club news, continued.... International Waters 962 R. Mi Amigo/Caroline has been using 80 kw since the first week in August. The planned move to 558 seems far off. 1538 The Voice of Peace is back on the air, but the financial picture is worse than ever. 1565 a new pirate named R. Delmare is operating with 500 watts off the Dutch coast. "As soon as possible" power will be raised to 7 kw. Libya Hebo II now airs Koran programs from Libyan Radio. Sked is 0700-1900 w/100 kw. Cameroun Bertoua uses 971 from 0530-2300. Douala 1106 s/on at 0530 with FF and EE ID. Cyprus 1502 BFBS is sked 0459 (Sun 0559)-2230 local time, with the carrier on AN. Czechoslovakia Topolna 272 is operating 24 hrs during September with 1500 kw. Testing during the last weeks in September with 750 kw carrying the Hvezda pgn. Egypt is jamming Israeli broadcasts on 737 and 1025. Gabon 1554 Libreville and 1575 Tchibanga s/on 0600. West Germany Langenberg 719 will close down 9/30/78 and will not return to the air until June of next year at the earliest. 648 and 755 Braunschweig have been out of service since May. East Germany the new superpower on 1575 has been testing since mid-June. Albania 1457 Durres has dropped all relays of Radio Peking. Angola 1232 and 1313 E. Regional da Huila sked 0545-2200. 1295 E. Regional da Menongue sked 1200-1500 and 1800-2300. 1502 E. Regional da Benguela sked 0450-2400, announces 1578 in // but not heard. 1502 seems to be 10 kw. Belgium the new tx on 1124 is indicated as "La Louviere" with 10 kw. BRTI broadcasts from 2345-0015 in Dutch and French. Bulgaria 647 Plovdiv now 2nd pgm with 30 kw. 746 Petrich now 1st pgm with 500 kw.

Via Distance: Iran 638 R. Azerabadegan is now using 800 kw, sked 0045-2100. Location is Bānab. 1566 Bandar Abbas uses 100 kw. Morocco 1232 is no longer The Voice of Morocco but is R. Tanger, a commercial stn. Nigeria R. OYO 756 ex 656, sked 0400-0100. Solomon Islands Honiara 5015 ex 5020. (for those looking for a 1030 // -CH) Spain 1324 R. Peninsular, Campo de Goblratr here. 1565 EFJ51 R. Juventud de Huelva here. Syria 953 Deir el Zor now back here, ex 827. France 674 Marseilles upped to 600 kw. 1241 Marseille now 150 kw. Great Britain 1594 R. Manx no longer using this freq. Brazil ZYK278 R. Gaucha now 100 kw. 830 ZYF32 now 10/5 kw, ex 760. Cuba according to the BBCs the R. Liberation chain consists of 630 Santa Clara, 640 Granma, 640 Habana, 650 Santiago, 730 Holguin, 740 Pinar del Rio and Camaguey, 900 Ciego de Avila, and 1030 Guantanamo. Lastly, a note in the bulletin indicates that many of the Arabs were heard on new frequencies during August.

The Dick Clark "American Bandscan" from Dominican Republic: 670 HILD R. 670, San Pedro is now on the air. 760 HL.. is still testing. The stn is directional. 830 HILB is directional. 860 HILR R. Clarin is 50 kw days and 10 kw nights. 950 HIG is inactive. 950 HIBA R. Popular is here ex 920. 1530 HILN R. Action, Santiago is 24 hrs NSP. 1410 4V.. a new Haitian is here. 1470 HIUP R. Cumbre, Villa Tapia ex 1190. 1410 HIAE La Gran Musical, ex R. Tricolor. Hey Dick-how many of the DR stns are directional???

From HCJB's DK Party Line: New Zealand 830 add LYK, 970 add IYE, 1010 add LZK and IZF, 1510 stn here is 3YR not 3JR, 970 delete LZK, 1010 delete LYK, 1050 delete IYE, 1440 delete LZK, 1590 delete LXI, 1330 add LXI. Tnx Bob Foxworth for passing these along.

Richard Wright passes along: KXEG 1010 in Tolleson, Arizona ID's as "the new 24 hour KEG" in SS, with the required full legal EE ID on the hour. This stn is part of the chain that owns several Mexicans, so Richard also obtained the following information: KEG 1050 operates with 10/150 kw, DA night with the main lobe at 20 degrees. XEG 950 is DA-1 not DA-2, ditto XETRA and XEPES.

Changes from the WRTH LA Newsletter: Mexico 1170 XERT now R. Grande ex Su Estacion Amiga etc. Nicaragua 660 delete Mi Preferida (Cornoza laughs last-CH), 920 Mundial delete, 1160 R. Libertad, San Salvador ex 1390. Panama 1060 R. Titania ex Musical 76. Argentina 780 LU14 now 25 kw. Brazil 830 R. Cultura, Belo Horizonte ex 740. 1030 R. Princesa, Lages is new with 5 kw. Colombia 1005 R. Colosal listed their calls as HJDI. 1170 R. Lemaya now 2.5 kw. Ecuador 995 R. Luceso has a new address: Casilla 5037, Guayaquil. Paraguay ZP35 reported on 1427 ex 1430. Costa Rica 575 R. Nacional de Costa Rica is new. (Heard well for a few days last spring, but they have not been on the air since unless they drastically reduced power-CH) 1240 R. Barahona now uses 5 kw. Haiti 640 4VJS is new with .21 kw, ID is La Voix du Peuple. 740 R. Lumiere is in Pignon. 885 new is 4VCS, Independence with .3 kw in Conaive.

Oops, 640 is in 2-au-P. 895 4V3 is now R. Trans-Artibonite with .5 kw. 930 delete R. Variete. 940 new is 4VLS R. Saint Marc in Saint Marc. Power is .4 kw and sked is 1300-0300. 1020 new is 4VJH R. Petion-Ville in Petion-Ville with .25 kw, sked 1100-0100. 1090 R. Nationale here ex 880 with 20 kw. Sked 1000-0500. (Wonder if they meant 1080, where they were heard last spring?-CH) 1090 delete La Voix de la Revolution Juvalieriste. 1150 R. Caraibes now .25 kw. 1170 new is 4VRS R. Soleil in 1-au-r with 10 kw. Sked 1000-1400 and 2200-0400. 1190 4VAF La Voix de la Grand Anse now .2 kw. 1210 R. Progres is 4VLS, with a power of 1 kw. 1250 delete R. Diff. Haitienne. 1280 delete R. Capois la Mort. 1280 R. Metropole is 4VA with 3 kw. 1370 new is 4VGN R. Diff. Cayenne in Les Cayes with 1 kw. 1385 4VARI La Voix du Nord Ouest is here. 1475 La Voix du Peuple is sked 1100-0500 with 500 watts. 1500 delete R. Select. 1500 ex 1110 is R. Citadelle 4VBD. Chile CD134 reported on 1335 ex 1490. Venezuela 1120 R. Republica ex 1310. Dominican Republic R. Ocoa on 1100 ex 1340. Guatemala R. Momesteno 1380 ex 1360. Honduras R. Fabulosa on 920 ex 900. Nicaragua R. Titania on 725 ex 730 per the stn itself. Bolivia 610 R. San Gabriel now 10 kw. Chile 900 R. Nacional de Chile ex R. Noble. Colombia 1190 La Voz de la Costa belongs to Cadena Radial Sanmiguel. Honduras 1130 R. Mambi is HRQD with 1 kw. LV del Junco is on 930, ex 1010. Argentina 720 new is R. Nacional de Cruzeiro do Sol in Porto Velho with 10 kw. 670 new is R. Nacional de Tabatinga with 10 kw. Brazil 840 new is R. Nal. do Porto Velho with 10 kw. 1010 ZYJ263 uses 10/5 kw.

From Tune-In: new Hebrides on 1420 in Vila has raised power to 2 kw. Within a year the power will be raised again to 10 kw and the 2 kw tx will be sent to Esperito Santo as a relay tx.

Veries from Juergen Trochimczyk of West Germany: Trinidad and Tobago letter from Mataroo Dass, CE requesting reports on their new 50 kw CCA tx! Venezuela R. Sensacion, Caracas letter from Renaldo Arreaza Almenar, Director General.

No name means its from Connelly....

- 529 ALGERIA Ain Beida in noise, seemingly // to stronger 548; SAH present 0029 8/25. (Connelly) Down in these parts 529 is always much the stronger of the two-CH
- 539 UNID Maybe Libya-occasional African or AA mx and screaming, mostly just het 2344 8/24. (Connelly)
- 540 NICARAGUA Managua YNOW fair w/R. Corporacion ID, then mellow SS vocal 0415 8/30.
- 548 ALGERIA Oran poor in slop w/male chanting 0135 8/23. Fair w/a-capella screaming/chanting 0027 8/25.
- 570 CUBA Santa Clara QMHI R. Rebelde xint w/Reloj Nacional pgm. Same on 590 and 600 0918 9/3. (Kenneally)
- 575 ALGERIA Bechar at noise level w/occasional moaning 0015 8/27.
- 580 PUERTO RICO San Juan WKAQ good 0323 8/28. Totally dominant w/ID jingle "WKAQ R. Reloj", then SS talk 0117 8/29.
- 584 SPAIN Madrid barely making it by WEEI slop and TV QRM on 582; SS talk by man poor 0014 8/27. SS mx weak at 0324 8/28.
- 590 CUBA San Antonio de las Vegas QMW loud, o/WEEI; light opera and LA mx pgm 0116 8/29.
- 595 DOMINICA Roseau poor w/light Caribbean mx in QMW/WEEI slop 0110 8/29.
- 600 CUBA San German QMKV light opera //630, 640, fair w/HJ nulled 0407 8/30.
- 600 SURINAM Paramaribo noted w/Oriental sounding talk (possibly a religious pgm) o/Colombia/Cuba, 0109 8/29.
- 611 MOROCCO Sebaa-Aoun good w/fast AA male vocal w/violins 0323 8/18. Man in AA loud, jamming 610 0023 8/25.
- 620 NICARAGUA Managua YNM in clear w/man and woman in SS. Radiodifusora Nacional ID at 0835 9/3. QRM from a LA (YVNO I think). (Kenneally)
- 630 CUBA Santa Clara QMHQ xint, way better than //640; SS light opera 0406 8/30. (Connelly) Something must be wrong with 640; every night they are barely there, often killed by TGW-CH
- 640 CUBA Habana fair o/other LA's, opera //600 and 630 0406 8/30.
- 640 GUATEMALA Guatemala City TGW 0422 8/30 fair o/CMQ w/nationalist SS promos, ID's, and marimba mx //6180 SW. (Krueger) In like a local at s/off w/"Buenos noches, Guatemala!". Faint CMQ in background 0607 9/3. (Kenneally)
- 540 SURINAM Paramaribo RADHIKA w/exotic Mid-East style mx, then YL talk (Hindi?), just o/the pack-Cuadalupe/YVQO/CBN hiding in there (too early for Cuba) 0010 8/27.
- 640 VENEZUELA Puerto La Cruz YVQO good w/fast SS talk, Ondas Portenas ID 0000-0001 8/28.

650 CUBA CMKU R. Rebelde, Santiago de Cuba vy poor 1037 8/28. Just enough sneaking in u/WSM to establish a // to 640. (Hutton)
650 DOMINICAN REPUBLIC Santo Domingo HIAT rolling o/other LA's; exciting LA mx, then SS talk, ID as "Radio Universale, Santo Domingo" 0405 8/30.
650 HAWAII Honolulu KORL heard with good volume on 8/23 and 8/25. ID's quite often. (Wilkinson)
655 EL SALVADOR San Salvador YSS in good for my first split. R. Nacional ID 1032 8/31. (Kenneally)
660 CUBA Santa Clara CMHG in clear w/man in SS then R. Progreso ID 1030 8/31. (Kenneally)
660 NEW ZEALAND Wellington ZYC heard quite well from 1202 to 1204 on 8/23 and from 1155 to 1157 on 8/25. (Wilkinson)
660 VENEZUELA Coro YVNA to good peaks w/WNBC nulled; pompous horn fanfare, SS talk giving call letters, then Venezuelan NA was played 0356 8/30.
665 PORTUGAL Lisboa fair o/u QRN; romantic PP female vocal 0327 8/28.
670 CUBA San Pedro de Cacocum CMKP dominant w/R. Progreso ID, then jazz 0328 8/28.
675 COSTA RICA San Jose TICN R. Sonora 8/30 0712. Just R. Sonora repeated many times. No other ID. (Maguire) Fair w/romantic SS vocal, then reverberated "Sonora" ID; WRKO nulled 0353 8/30.
698 DOMINICAN REPUBLIC Valverde HICG noted w/SS rock 2343 8/26.
700 AUSTRALIA 2NR Grafton very good from 1154 to 1202 and from 1206 to 1209 8/23. Also good from 1148 to 1152 8/25. (Wilkinson)
700 COLOMBIA Cali HJGX: talk about Colombia by man and woman in SS o/other LA's 0417 8/30.
700 CUBA "La Fiesta Cubana" Radio QRR (say-mmy-ere-ere), don't find any Cuban with this call, but several ID's on tape. (Mag)
700 VENEZUELA Maracaibo YVMH R. Popular w/SS pops, frequent ID's. Faded in and out w/another SS underneath. (Deitz)
701 ANDORRA (tentative) mellow pop mx, II or SS sounding vocal, poor-fair 2347 8/26.
705 ST. VINCENT Kingstown fair w/woman in muffled EE, then soft instrumental mx 0106 8/29.
710 VENEZUELA Caracas YVYK o/u WOR w/R. Capital SID 0424 8/29.
719 PORTUGAL Norte fair o/WOR slop; PP talk by woman then include of cl piano mx 0326 8/18. Good w/man in PF 0003 8/25.
720 CUBA Colon QMGN atop mess; opera pgm //640 0419 8/30.
720 VENEZUELA Paríamar YVOE good w/R. Vision ID then fast LA mx hetted by Portugal 719 2350 8/26. Loud and dominant 0122 8/29.
725 COSTA RICA San Jose in fair o/QRN splatter w/R. Colombia ID 0501 9/4. (Kenneally) TLX 0430 9/1 w/noticias by SS OM. Good. Per friend, some ID's mention 50 kw now. (Krueger) Fair w/man in SS 0418 8/30. (Connelly) Strongest to date w/SS by two males, probably mx. (Deitz)
725 SURINAM Paramaribo loud (as usual) w/LA style calypso mx 0121 8/23. Good w/man in DD dialect 2352 8/26. Slamming in w/talk pgm in non-European language 0105 8/29.
730 TRINIDAD Port of Spain rising above a cacophonous mess w/AA style mx, then EE anct that it was "a program from the Islamic Cultural Institute of Trinidad and Tobago", then ID in accented EE 0102 8/29.
737 SPAIN Barcelona poor/fair w/soft mx 0120 8/23. Female operatic vocal at low audio level on big carrier 2354 8/26.
740 MONTSERRAT R. Antilles fair o/u WHEB slop; Caribbean festive mx/steel drums, then man in PF 0023-0027 8/29. Pgm similar to Junbo 545.
750 AUSTRALIA 4QS Toowoomba heard with man in EE giving ABC National News from 1209:30 to 1212:30 on 8/23. Faded but back again at 1214 //700. (Wilkinson)
750 JAPAN JO1B Sapporo took over the frequency at 1212:30 to 1214 on 8/23. Much stronger from 1205-1208 on 8/25. (Wilkinson)
750 VENEZUELA Caracas YVKS good w/SS anncr and US soul mx 0342 8/30.
755 PORTUGAL Lisboa vy good w/woman in PF, some WHEB disco slop 0006 8/25.
760 CUBA Habana CMCD u/WJR w/usual Reloj pgm 0328 8/18.
760 GUYANA Georgetown suspected here w/song loosely based on "Green-sleeves", then accented EE talk 2359 8/26.
765 SENEGAL Dkaar good w/jazz style native mx and vocal 2328 8/21. VV (vernacular) talk by man, mx fair in 2335 8/26.
770 COLOMBIA Bogota HJKH heard w/Tequendama mention in pack of LA's totally killing WABC 0126 8/29.
770 VENEZUELA Valencia YVKK in w/SS talk, ID mentioning Valencia, Venezuela; pretty well dusting off enfeebled WABC 0345 8/30.
775 COSTA RICA San Jose TIW poor to fair w/rock mx 0344 8/28.

780 BRITISH VIRGIN ISLANDS Roadtown, Tortola ZBVI blasting in w/disco rock, jive talk anncr mentioning the #1 spot for the entire eastern Caribbean, followed by bursts of Star Wars type raygun noises, then reggae mx 0015 8/29.
780 CUBA Camaguey QMJN good w/SS political talk atop weak LA mx stn 0346 8/30.
782 PORTUGAL Miramar fair w/disco rock w/female vocal, then man in PF 0048 8/23. Talk by man and then vocal by woman good despite QRN 2356 8/26.
800 NETHERLANDS ANTILLES PJB Bonaire good w/EE religious pgm 0011 8/29. In w/local type signal, EE talk at 0347 8/30.
805 UNID and very weak split 1007 8/28. Cesar Objio listened to this tape at the convention and couldn't get anything out of it, but I suspect it was Canal Tropical in Quito. (Hutton)
810 BAHAMAS Freeport ZNS3 1626 9/5 w/usual EE soul mx, male DJ, ads. Sked is local 6 AM to 6:30 PM w/own programming, other times relays ZNS1 Nassau. Still 1 kw and QSL reports should be sent to Mr. Samuel Hepburn in Nassau. Sam is a nice fellow-met him in 1973. (Krueger) Are they 24 hours?-CH
810 PUERTO RICO San Juan WKWM dominant w/2 KVM mwntions, nightclub ads, then SS vocal 0427 8/30.
818 MOROCCO Rabat loud w/AA moaning by man 0345 8/18. Good w/AA chanting o/low het-growl 0016 8/25.
825 PANAMA HOR56 R. Peninsula, Macaradas at just an amazing level 095501032 8/28. How amazing? Previously I had a couple of fair taped ID's but this reception netted a couple of thunderous ID's with the 390A in 4 kHz bandpass. The program consisted of only long wailing tamburitos, with an ID on the hour mentioning 830 kHz. (Hutton)
827 MOROCCO Oujda poor w/woman in AA //818, atop tone tester who occasionally let loose with incoherent code like sending; storm QRN a problem 0335 8/18. AA chanting potent o/fast SAH's/other audios 2358 8/26.
827 UNID meter pegging oc, SAH way under 0010 8/25.
830 VENEZUELA San Antonio de las Altos YVLT good w/"Summer Nights" from Grease, Sennacion ID 0428 8/30. (Connelly) 0905 8/28 s/on was at no less than local level. Commenced with the Venezuelan NA, then a bit of cl violin mx introduced a 5 minute s/on that seemed to name the entire staff. (Hutton)
845 ITALY Rome fair w/nx by man, WHDH nulled 0002 8/27.
860 DOMINICAN REPUBLIC Santo Domingo HILR good w/R. Clarin ID, SS talk by man 0429 8/30. (Connelly)
860 PANAMA HOL55 R. Reforma, Chitre fair-good 1041 8/28. Sunrise had taken out everything else in the Caribbean. (Hutton)
875 COSTA RICA TIGPH R. Monumental, Liberia fair 0401 9/6 with "Monumental" ID's. (Hutton)
882 CUBA Pinar del Rio QMAF is here, first noted 9/6 at 0443. Nuevo Mundo was left on 880 and they were really heard nicely. (Hutton)
885 MONTSERRAT Plymouth ZJB here w/rhythmic Caribbean mx, weak as usual 0033 8/29.
890 COLOMBIA Bogota HJCE in w/La Voz Bogota jingles and ID atop WLS 0416 8/29.
890 AUSTRALIA Adelaide SAN-man in EE talking about the government in Australia from 1224 to 1229 on 8/23. (Wilkinson)
890 SOUTH KOREA/JAPAN stations heard at same time from 1214 to 1220 on 8/25. Could not separate. Both at good volume. (Wilkinson)
890 COLOMBIA Bogota HJCE (sorry, belongs above-CH) w/SS vocals. Three note 15 at 0300 and La Voz de Bogota ID. Very strong until fade-out at 0307. No sign of WLS. (Deitz)
900 BARBADOS Bridgetown good w/EE discussion of European Economic Community, then R. Barbados ID by woman, followed by Muzak; signal mostly o/R. Mara YVMD which could be heard clearly behind 0022 8/30.
900 VENEZUELA Maracaibo YVMD dominant w/"R. Mara de Maracaibo" ID by woman, then mx 0341 8/29.
914 SURINAM Nieuw Nickerie RANI fair w/East Indian mx and talk 2338 8/28.
919 COLOMBIA Cartagena HJAE Emisoras Fuentes bombing WJAR out; boisterous "Emisoras Fuentes" ID 0415 8/29.
936 MOROCCO (tentative) carrier in splash 0352 8/28.
940 CUBA R. Reloj outlet here o/u CBM; usual non-stop SS nx and TC's 0345 8/29. WRTVH lists QMHF Cienfuegos as only 940 Cuban. I can not say for sure that this is the Reloj outlet-signal seems too good for listed 1 kw.
950 VENEZUELA Caracas YVKG loud w/R. Vision ID jingle, SS talk by man and woman, TC 8:40, 0040 8/29.

960 COLOMBIA Magangue HJHN loud w/R. Sutatenza ID, TC, adverts 0350 8/29.

980 COLOMBIA HJES R. El Sol, Cali fair-poor 0848 8/28 with a nice, slow ID by a woman after RCN promo. (Hutton)

990 VENEZUELA Barquisimeto YVIA very good w/R. Tricolor jingle, SS talk and more ID's 0403 8/29. (Connelly) Good with R. Tricolor SID o/a weak WNOX 0752 8/28. (Hutton)

1000 CUBA (not sure of city) Cuban march theme mx, SS talk u/WCFL 0355 8/28. (Connelly) This is an unlisted R. Guama outlet-CH

1000 CUBA unlisted R. Relej outlet heard poor-fair 0758 8/28 w/the Colombian. (Hutton)

1000 COLOMBIA Cartagena assumed here w/clear RCN ID atop other LA with lively mx 0407 8/29.

1010 COLOMBIA HJCC R. Mil Veinte, Bogota very good 0800 8/28 with a complete ID including calls. (Hutton)

1015 EL SALVADOR San Salvador YSC xint w/light LA mx and LOUD R. International ID 0131 9/4. (Deitz)

1016 WEST GERMANY Mainz-Wolfsheim suspected w/man and woman in CC sounding talk and bits of interspersed cl mx, good carrier but bad WINS slop 0103 8/23.

1034 PORTUGAL Porto Alto to fair peaks w/man in PP 0036 8/27.

1035 HAITI Cap Haitien 4VEC good w/organ mx, then EE talk mentioning Evangelical Voice of Haiti, then s/off 0030 8/28.

1060 VENEZUELA San Juan de los Morros YVLA poor in QRM w/man and woman in SS, Gaarico mention, then mx 0007 8/31.

1070 COLOMBIA HJCG R. Santa Fe, Bogota and HJAG Em. Atlantico, Barranquilla mixing with the remnants of a domestic 0459 9/11. One or the other was about 400 hertz off freq and wandering slightly-probably HJAG considering their past record. (Hutton)

1070 VENEZUELA Maracaibo YVLA good o/rumble w/strident R. Zulia ID 0450 8/29.

1075 COSTA RICA San Jose TIFC in good w/soft mx and Faro del Caribe ID. QRM in the form of WIBC splatter 0222 9/4. (Kenneally) Xint so far this season; they seem to have upped power to 10 kw or so. At 0332 9/6 a man gave a totally clear ID in EE as "from San Jose, Costa Rica, this is TIFC, the lighthouse of the Caribbean". This was followed by a half hour EE pgm of book reviews. (Hutton)

1085 HONDURAS Tegucigalpa ERQP 0405 8/31 w/EZL SS and EE vocals, "Aeropuerto" ID by SS CM. Excellent. (Krueger)

1091 COLOMBIA Monteria HJAW jamming BSAL; romantic LA mx up well at 0054 8/29. (Connelly)

1100 ANTIGUA St. John's ZDK fair w/reggae mx 0053 8/29.

1110 MEXICO Mexico DF XERED in fair o/u KFAB w/SS talk and X-3-RED ID 0601 9/3. (Kenneally)

1130 VENEZUELA Carupano YVQT Loud w/fast SS talk, Carupano mentions 0002 8/31.

1130 COLOMBIA HJAG Em. Rio-Mar, Barranquilla rose up out of a grumble of weak LA's with two ID's 0450 9/6. No sign of the usual a. Tonchala. (Hutton)

1115 MOROCCO (tentative) poor w/female vocal, possibly AA 0402 8/28.

1135 EL SALVADOR San Miguel YSCF 0515 8/30 w/EE and SS pops, SS male DJ with TC's. Excellent. (Krueger)

1165 ANTIGUA St. John's CRL fair-poor at s/off w/man in EE giving stn information then into mx (anthem?) before s/off 0200 9/3. (Kenneally)

1176 COSTA RICA Puerto Limon TIQ 0540 8/31, EE pgm w/male JJ (Walter Sidney) and pop mx from the 50's and 60's. Very good and //5954 SW. (Krueger)

1180 VENEZUELA Maturin YVOR atop w/man and woman in SS, talk mentioned socialism, ten R. Maturin ID at 2355 8/30.

1190 COLOMBIA Barranquilla HJCT briefly atop pack of LA's: Barranquilla mentions, then La Voz de la Costa ID 0447 8/29.

1200 COLOMBIA Riohacha HJZW booming in w/"Almirante" ID on car radio on Route 28/Bass River Bridge, South Yarmouth 2346 8/27. (Connelly) In good o/YVOZ w/many R. Almirante ID's 0057 9/4. (Kenneally)

1200 PANAMA Chitre, Ondas Tropicales fair o/u a handful of LA's 0300 8/14. First ever report of them on their assigned frequency, hi. (Hutton)

1206 HAITI Port-au-Prince 4YDS I guess. Man and woman in FF heard after Cayman s/off until R. Propres s/off 0409 9/4. (Kenneally) Assumed the one here w/primitive sounding mx 0042 8/25.

1214 GREAT BRITAIN BBC poor in QRM w/pop mx w/male vocal 0033 8/27.

1265 ST. KITS Basseterre very loud w/preaching in EE 0028 8/27. Local like w/EE preaching 0048 8/29.

1320 CUBA QMAL R. Relej, Pinar del Rio up on top of the freq 0614 8/28. This was the toughest of the Relej outlets-not heard up until

(1320, continued) the end of last season. QMAL was the last of the Relej's to be logged-got 'em all! (Hutton)

1370 COLOMBIA HJCC R. Mundial, Bogota poor 0355 9/1 with RCN promo and weak ID. I believe they are the stn slightly off freq, causing a fair het. (Hutton)

1403 GUINEA Conakry in w/bodacious signal; native mx pgm w/no ID's or announcements 0359-0402 8/29. Very strong w/African mx during AU cx 0046 8/29.

1430 CUBA unlisted R. Surcos outlet very good again 0329 9/2. Still no clue as to location or calls even though many of the Cubans now give this in their ID's. (Hutton)

1475 MALAYSIA Sabah with nice soft sounding popular mx and vocals with a female anncr from 1232 to 1239 on 8/23. Very loud at 1237. (Wilkinson)

1500 MEXICO XERH R. Seis & R. America, Mexico DF 8/28 at 0905. (Maguire)

1505 ANGUILLA The Valley, R. Anguilla 0000 9/1 w/EE male ID, soul type mx. Good for 500 watts (if it still is). (Krueger) Still 500 to the best of my knowledge-CH

1555 CAYMAN ISLANDS R. Cayman unexpectedly strong w/BBC pgm, ID, then mx 0258 9/3. (Kenneally)

1570 SOUTH KOREA Cheju HLDA with religious songs and woman anncr from 1240:30 to 1245 on 8/23. Not heard after 1200 on 8/25. (Wilkinson)

1578 PORTUGAL Canidelo (tentative, per direction finding on TRF) noted w/orchestral mx occasionally surfacing through heavy slop/pronounced het on CBJ 0035 8/25.

1578 CUBA the R. Cadena Agraronte outlet formerly on 1583 was down here most of the summer. Slipped my mind every time I typed a column. (Hutton)

1580 MEXICO Hermosillo XEDM in good w/LA mx and SID "La Grande de Sonora" 0447 9/3. (Kenneally)

1586 WEST GERMANY Langenberg good w/Mungo Jerry, then uptempo instrumental mx 0321 8/28.

That's a decent sized column. Looks like the season is off to a decent start. Connelly, WRTH lists a Radio Musical Nacional on 1000 but I've never heard the slightest trace of it. If it was still on the air I know it would be heard here, as a very weak R. Guama and R. Relej make it.

Allow me to congratulate the new reporters on the quality of their DX. The reports were of excellent quality.

Reporters....

- Mark Connelly - West Yarmouth, Mass. R390A, TRF, 2 37 m. phased wires
- Mike Deitz - Virginia Beach, Va. SPR4, DR33, DA5
- Chuck Hutton - Decatur, Ga. R390A, 1900' Beverage
- Richard Kenneally - Cincinnati, Ohio DX160, CB antenna
- Terry Krueger - Caselberry, Fla. QR666, 65' LW
- Norm Maguire - Albuquerque, N.M. SPR4, Sanserino loop
- Hank Wilkinson - Santa Rosa, Ca. Hq180, SP600, Sanserino loop

NOTES FROM THE SECRETARY

Since Chuck was kind enough to leave some room on his last page, I'll take this opportunity to add my personal thanks to the Atlanta bunch for the fine convention they hosted.

PACIFIC NORTHWEST BEVERAGE EXPEDITION POSTPONED Bill Hardy wrote to tell us the 2nd Annual Westport Beverage Expeditions, scheduled for October and November along the Washington coast have been indefinitely postponed. The beach cabin which was to be used has now been rented indefinitely. Should the cabin become again available, he'll advise of any new dates for the Beverage Party. Bill and Nancy are sorry they had to cancel and hope that no one who had to attend will be inconvenienced.

WIBG LIVES Dave Schmidt sent the following: "A short item of interest I thought you'd be interested in passing on. WIBG-1520 has been running 250 watts non-directional since August 15th due to a failure of a part in their antenna phasor. They have had some problems trying to locate a replacement part but have finally done so and expect to be back to normal shortly. Station Manager Ron Miller mentioned that he does have other reception reports on hand and hasn't had too much of a chance to answer since they recently changed calls and with the busy summer season, plus the past CE recently left for a job in Atlanta, so he has also taken on that job, also. Welcome to big city radio-hi!"



We won't tell you who Cameron Kesteven hit with that towel, but the photographer still has the welt! NRC proved again they are all wet with swim parties at all hours..from left host Karl Jeter, LPCer Wayne Murphy, and George, Cameron and Leonard Kesteven from Calgary. Below, Glenn Cooper, Ed Krejny and LPCer Pat Hartlage hear Alan Merriman tell of the TA that got away! More photos, Pg. 37.

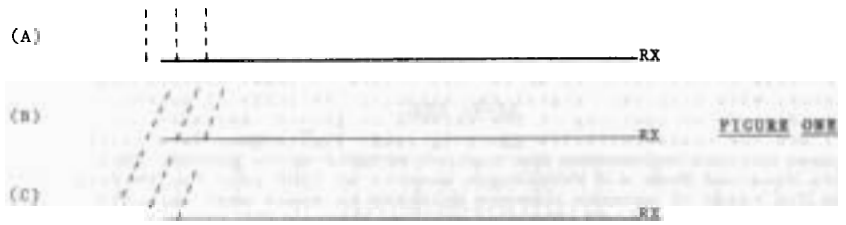


ANALYSIS OF THE BEVERAGE ANTENNA

CHUCK HUTTON

PART ONE-BASIC THEORY OF BEVERAGE ANTENNAS

The Beverage antenna is a "signal summing" antenna, meaning that a radio wave induces currents in all parts of the antenna as it passes down the wire, with the currents being added together and delivered to the receiver. The currents induced depend on the tilt angle of the wave—the degree to which a vertically polarized wavefront has developed a horizontal component. The tilt angle in turn depends on the arrival angle of the signal and on tilt produced by the finite conductivity and dielectric constant of the soil. The lossy nature of the soil (as determined by the 2 parameters above) causes losses in the wavefront which must be supplied by the wave, hence the altered polarization of the wave. Pictorially we have:



(A) is a vertically polarized wavefront with an arrival angle of zero degrees. On an ideal Beverage such a signal will induce no signal. Only a perfectly conducting ground will have a completely vertical wave as pictured. (B) is also a vertically polarized wave, but this time lossy ground is present. The wave "drags its feet" on the ground, and now there is a horizontal vector component present in the direction of the wave. (C) is a vertical wavefront with an arrival angle of ten degrees or so. It is seen that this situation produces an equivalent horizontal vector component to that produced in (B) by the ground wave travelling over lossy earth. Sometimes a combination of (B) and (C) is present, as in a low arrival angle DX signal. The small horizontal vector is the only portion of the energy in the wave which induces currents in the Beverage antenna.

Tilt angle (and therefore horizontal component) of the wavefront as in (B) can be expressed as:

$$X/Z = \frac{\frac{(f\mu p)^2}{3.24 \times 10^{24}}}{1 + 3.24 \times 10^{24}} \quad (1/\sqrt{K})$$

Where: X=horizontal component of signal
 Z=vertical component of signal
 f=frequency in cycles
 K=dielectric constant of soil
 p=specific resistivity of soil

This can be expressed equivalently as

$$E/E = \frac{r^2 k^2 p^2}{3.24 \times 10^{14} + r^2 k^2 p^2} \quad (1/\sqrt{R})$$

A plot of tilt angle versus frequency for "average" resistivity and dielectric constant earth is shown in figure 2. Figure 3 shows tilt angle at 1 MHz for soils of different resistivity and dielectric constant.

Some interesting conclusions can be drawn from these graphs: (1) it is evident that the Beverage antenna is a fairly inefficient extractor of electromagnetic energy. At MW frequencies one can expect to be using only 3-10% of the available electric field. (2) tilt angle increases greatly with frequency. At MW frequencies tilt is relatively high, as compared to values for LF where Beverage's work was done. (3) regardless of local soil characteristics sufficient energy will be extracted from the wavefront to make the Beverage very useful. There has been a lot of misinformation in DX circles on this subject. Beverage antennas can and have failed at LF but any Beverage antenna will work on MW frequencies where tilt angle is greater and also arrival angles are higher. Of course greater signal will be delivered by the Beverage over highly resistive ground; measurements indicate that about three times more signal will be obtained by an antenna over dry, sandy soil than one over wet, marshy ground. Last that should like an extremely significant increase, be reminded that such an increase amounts to only 1 dB-unit.

Electrical parameters of interest include velocity of the current induced on the antenna, attenuation, length, and wavelength. Velocity is an important factor because the velocity of the induced currents must be close to the velocity of the space wave or phase differences will occur, with resultant signal cancellation. Velocity of antenna currents depends on coupling of the antenna to ground (dependent on height) and the characteristics of the ground. Figure Four is a graph of antenna current velocities for various heights above ground. This data was obtained from a 1 wavelength antenna at 1500 kHz. For MW frequencies the ratio of antenna current velocity to space wave velocity will be between .80 and .95. This causes two things: (1) there is a length past which the antenna currents and the space wave are more than 90 degrees out of phase and loss of signal occurs. This length can be determined by:

$$L = \frac{\lambda}{4(100/C-1)}$$

Where λ = wavelength of the signal in meters
C = ratio of antenna current velocity to space wave velocity expressed in percent

As an example, consider a Beverage for reception at 200 meters (1500 kHz) with velocity ratios of .80, .85, .90, and .95. The resulting maximum feasible wavelengths are 200, 283, 450, and 952 meters. Obviously the higher velocity ratio will pay off if you are trying to build an extremely long Beverage. Looking at Figure Four, it can be seen that a higher Beverage antenna will have a sufficiently favorable velocity ratio to permit using very long antennas.

Antennas with lower than normal velocity ratios have definite interest. As the directive curve of the antenna depends mainly on the electrical length of the antenna and not the physical length, and the electrical length depends on the velocity ratio, it is possible to have the directivity of a two wavelength antenna with an antenna only one wavelength long if the velocity ratio is .5, the directivity of a three wavelength antenna if the velocity ratio is .33, etc., etc. Reduction of the velocity ratio to these very low levels must be done by artificial means- adding series inductance, shunt capacitance, or a combination of the two. An unwanted byproduct of introducing these phase delaying elements is the introduction of considerable attenuation.

Attenuation is the unavoidable result of close coupling to ground characteristic to Beverage antennas. An attenuation constant of .50 (50% loss per kilometer or 0 dB) is normal. High attenuation as the result of very low to the ground antennas or introduction of lossy

FIGURE TWO

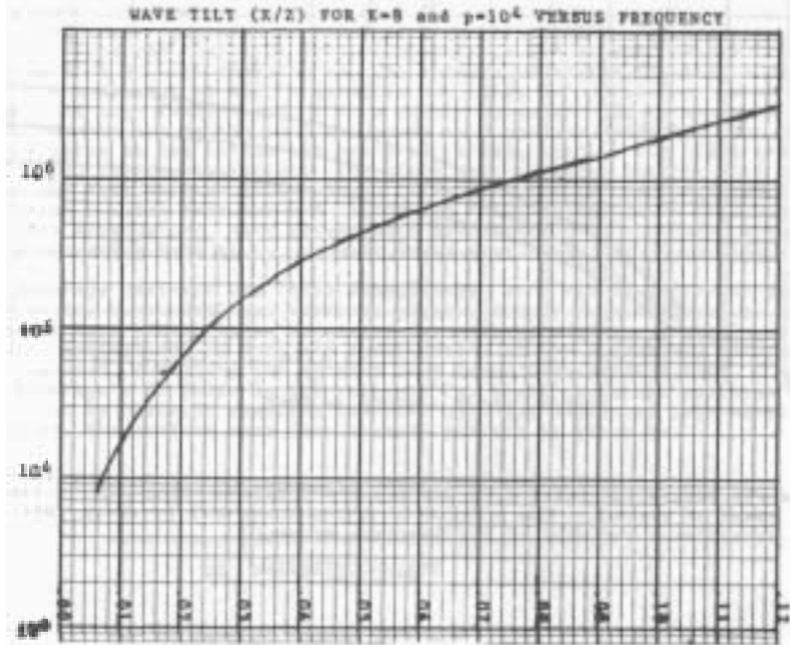
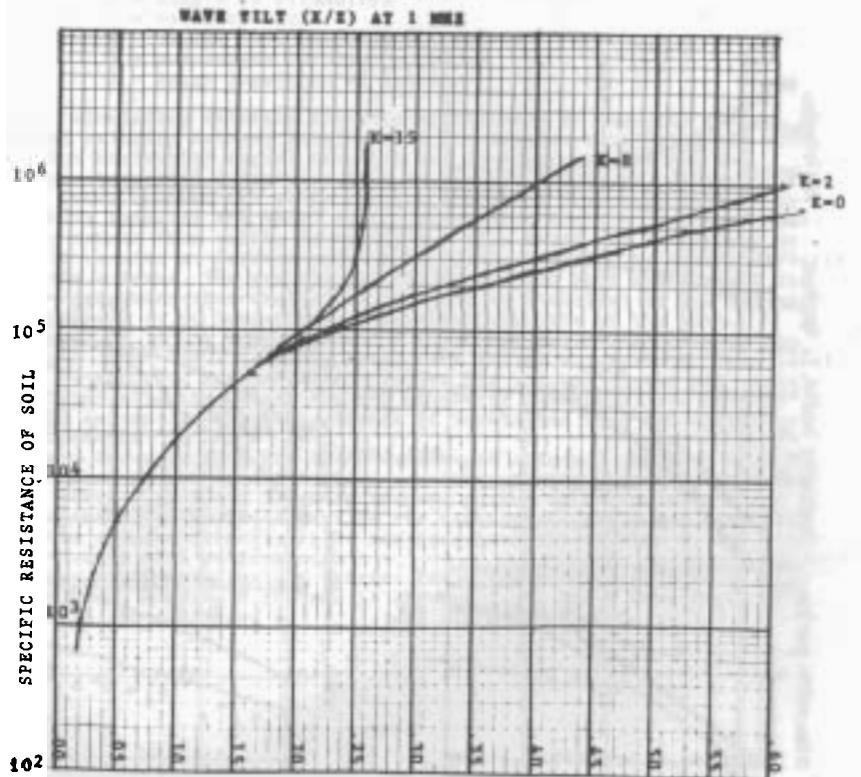
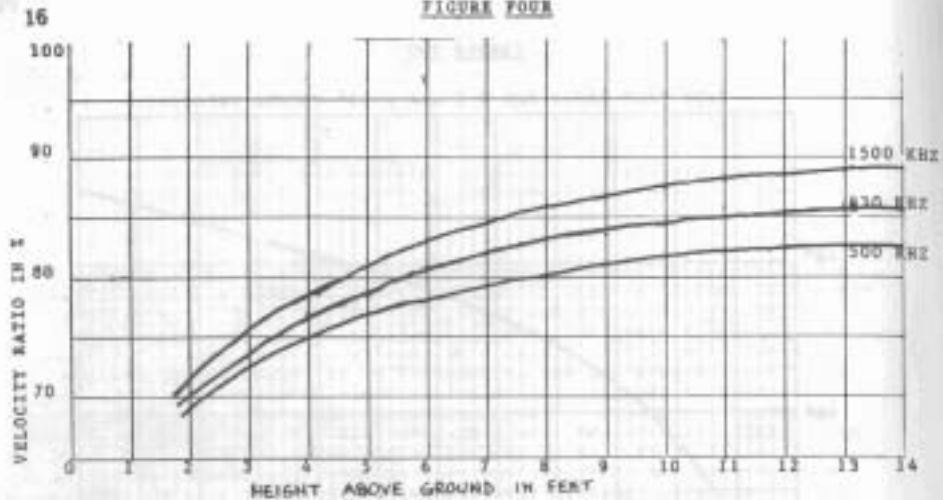


FIGURE THREE





elements smears the pattern of the antenna (fills in nulls) by "scrambling" the phase of currents. The effects of attenuation will be shown later with the directional patterns of the Beverage antenna.

is nulls) by "scrambling" will be shown later with

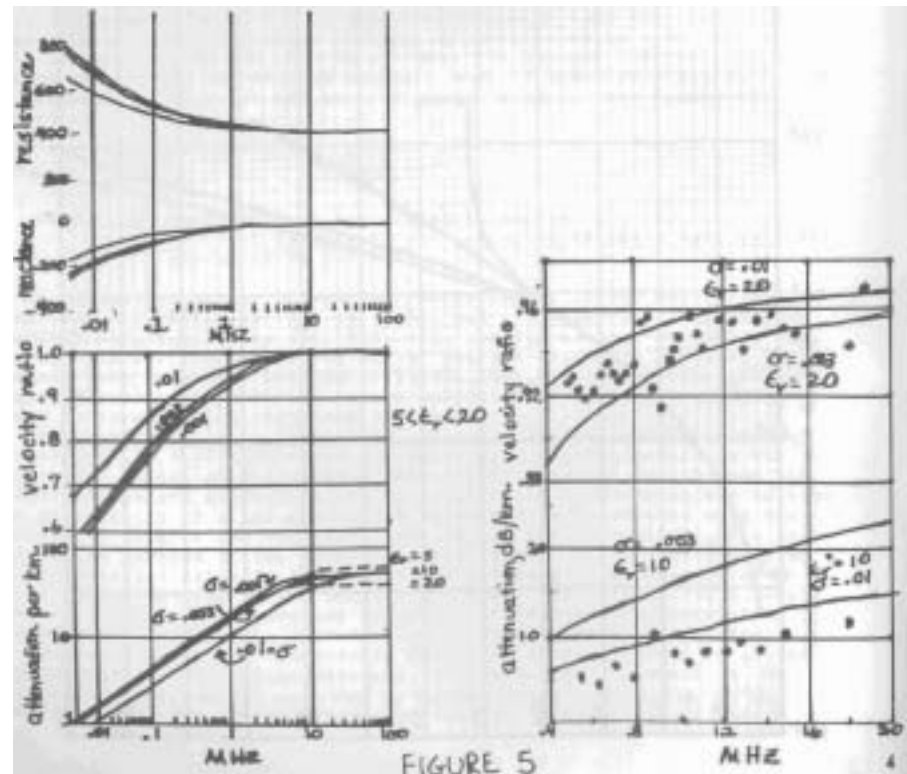


Figure 5 is a set of graphs from Knight. The following conclusions can be drawn: (1) attenuation is proportional to f^2 at low frequencies, tending to a limiting value dictated by the complex relative permittivity of the ground. The complex relative permittivity is approximated by the relative dielectric constant of ground at high frequencies. (2) velocity ratio deviates from the "ideal" 1 proportionately to $f^{-1/2}$ at low frequencies, tending to 1 at high frequencies. (3) antenna impedance contains a major reactive component at low frequencies but tends to the perfect earth impedance at high frequencies, i.e. a purely resistive figure as would result from the assumption that the earth is a perfect conductor. The dots in the curve at the bottom are measured values, whereas the lines are calculated values. Resistivity and dielectric constant for the soil underneath the test antenna fell between the values for the two measured lines. Agreement between measured and calculated velocity ratios is good but is poor for attenuation. Many researchers have noted that observed values for attenuation tend to be somewhat lower than theory would predict.

Beverage patterns are three dimensional, with vastly different patterns in the horizontal and vertical planes. Simple formulas derived by Beverage have proven to be accurate; for extreme accuracy exceedingly complex derivations of Norton's modification of the Sommerfeld integrals must be used, modelling the antenna as a lossy transmission line. I will use Beverage's formulas as the complete far field radiation patterns as described by Sorbello requires computer time and a printed page worth of formulas. The surface wave (horizontal) pattern is given by:

$$E_{\theta} \cos \theta = \frac{V I_0 (\epsilon - \epsilon_0)^2 - 2 \epsilon_0 \cos \frac{360L}{\lambda} (1 - n \cos \theta)}{2 \sqrt{\epsilon_0^2 + \epsilon_0^2 (1 - n \cos \theta)^2}}$$

Where:

E_{θ} = horizontal signal strength
 θ = azimuthal arrival angle in degrees
 α = attenuation constant (dB per kilometer)
 L = length in kilometers
 n = velocity ratio
 λ = signal wavelength in kilometers
 β = wavelength constant = $360/n\lambda$
 Z = surge impedance of antenna

For calculating relative directional patterns to show the effects of different velocity ratios, lengths, and attenuation constants, the constants for horizontal signal strength and impedance can be omitted.

If you have read references such as Fischer and Misk, differences will be noted between the above formula and their formulas. This is because their formulae are based on the assumption that the antenna is infinitely remote from earth, an assumption that turns out to produce unrealistic results as derived plots bear little relation to actual directivity of the antenna. The presence of the conducting half space under the antenna also means that the pattern can not be described by one formula as the pattern is no longer symmetric about the axis of the wire.

Figure Six is the polar directive curve for a Beverage antenna one wavelength long with a velocity ratio of 1 and no attenuation. This ideal antenna is the plot against which Figures Six through Eleven are normalized. It and all other plots (unless otherwise specified) are derived under the assumption that the antenna is terminated into its characteristic impedance.

Figure Seven is also for a one wavelength antenna, but with a velocity ratio of .9 and an attenuation constant of .50. The effects of the changed parameters are a slightly reduced pickup on the main lobe and a re-arrangement of the small ears on the backside of the curve. At this length the reduced velocity ratio and increased attenuation do not interfere seriously with performance.

Figure Eight contains the pattern for a two wavelength antenna with $n=.9$ and $\alpha=.5$. Figures 9,10, and 11 are for 3, 4, and 5 wavelength antennas with the same α and n .

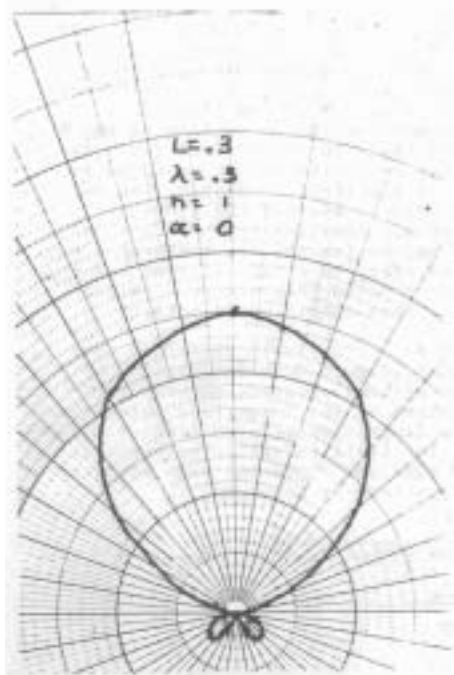


FIGURE 6

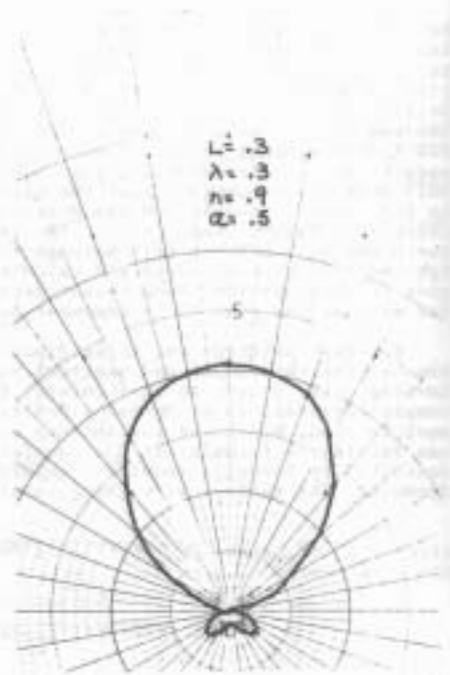


FIGURE 7

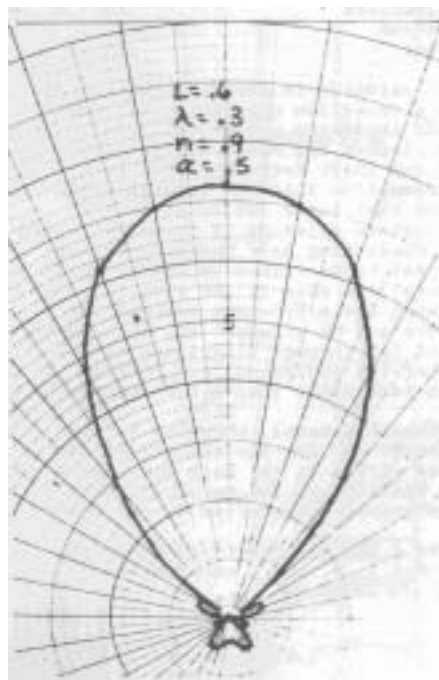


FIGURE 8

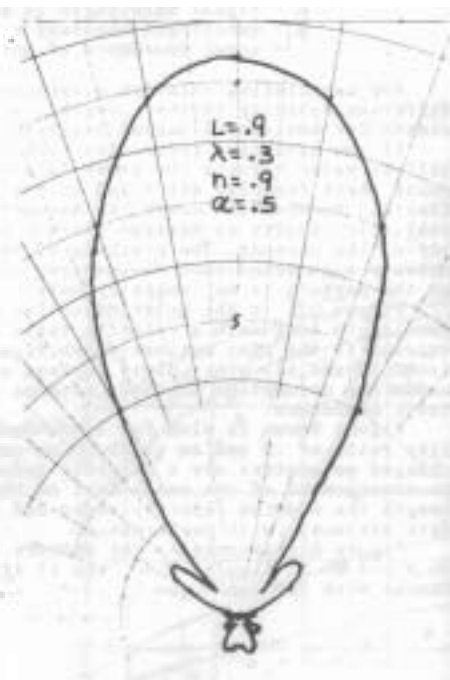


FIGURE 9

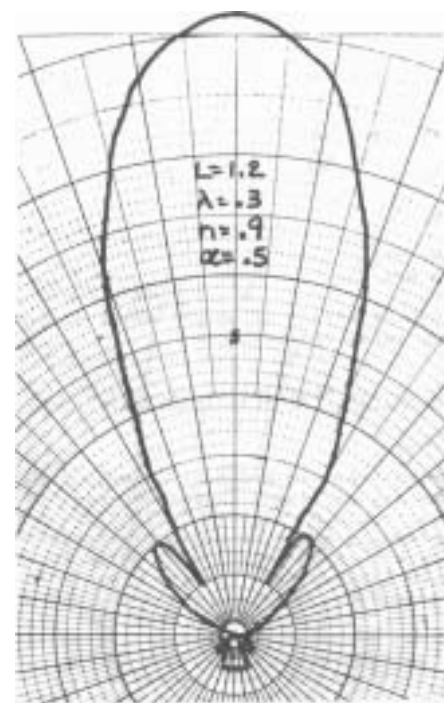


FIGURE 10

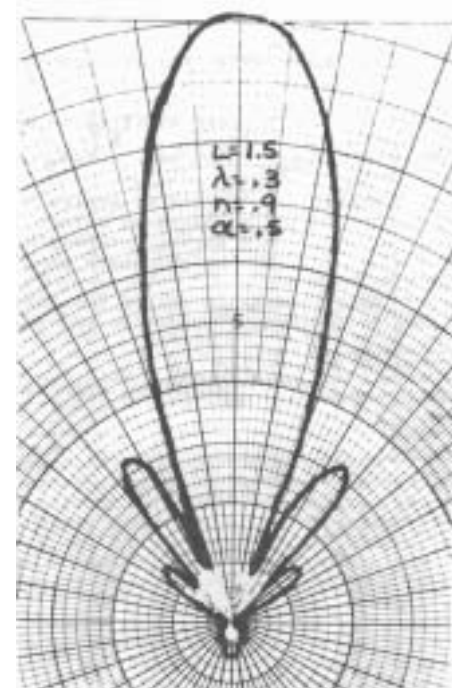
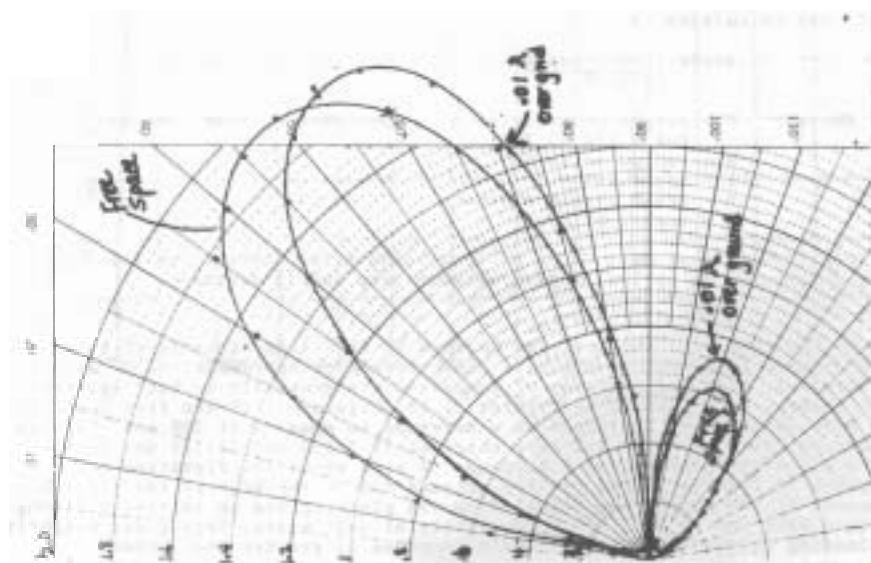


FIGURE 11



FIGURE

The space wave (vertical pattern) is given by:

$$\frac{\cot \theta}{L} \sin \left[\frac{2\pi L (1 - \cos \theta)}{\lambda} \right] \frac{2 \sin (2\pi H \sin \theta)}{\lambda}$$

Where: θ = vertical arrival angle
 L = length in meters
 λ = signal wavelength in meters
 H = height above ground in meters

This formula is suited for analyzing the effect of height above ground. For determining attenuation and velocity ratio effects, use:

$$\frac{\sin \theta [1 - e^{-\alpha L \cos 360(1/v - \cos \theta)} + j e^{-\alpha L \sin 360(1/v - \cos \theta)}]}{\alpha L \cos 360(1/v - \cos \theta)}$$

A few remarks about vertical directivity are in order. It can be seen that the angle of maximum response decreases as length increases, making the antenna more suitable for low arrival angle DX signals. Height above ground has little effect; a slight increase in angle of maximum response is seen. See figures 12 and 15-20. Using the -6 dB points as a guide to the useful pickup, we see that a one wave antenna will receive from 10-65 degrees, a two wavelength from 10-45 degrees, a three wave from 7-34 degrees, and a four wave from 6-28 degrees. This points out that the Beverage antenna is not an extremely great system for extremely low arrival angle long haul DX. Bear in mind that the above formula is for a space wave; at low angles (say below 5 degrees) the wave interacts with ground underneath it and develops a tilt as per the previously given formula for wave tilt. Therefore, zero angle response is never zero as the formula would indicate. I have found that the Beverage is an excellent medium range antenna-my southern Beverages receive well from the Caribbean and northern South America but poorly from Georgia and north Florida. For instance, I have heard at least a dozen south Florida graveyards and a handful of Cuban, Dominican Republic, and Columbian graveyards but only two Georgia graveyards. Deep South America has been almost totally absent-only E. Globo in Rio de Janeiro has been heard.

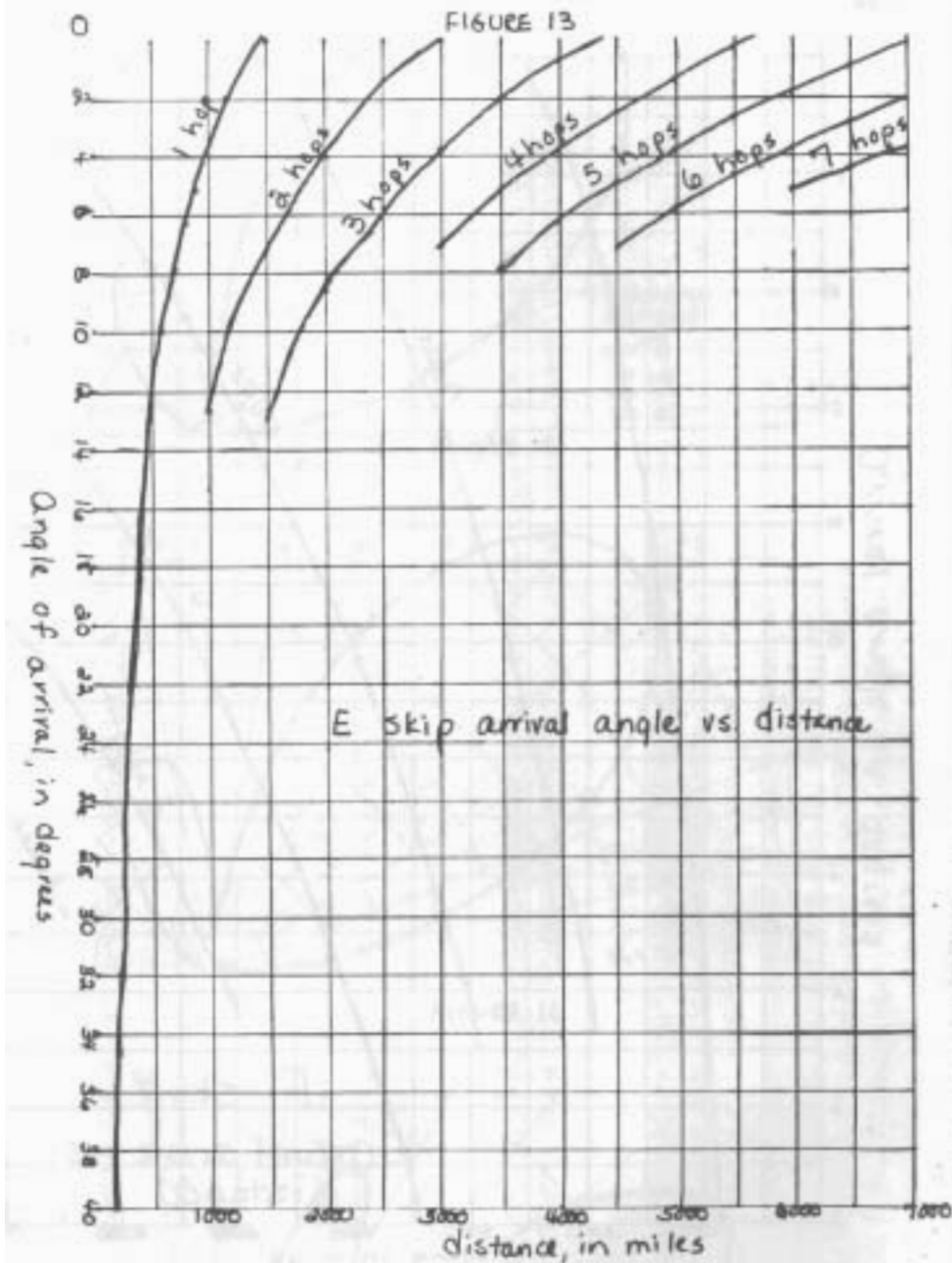
To give an idea of signal arrival angle versus great circle distance, Figure 13 (for E skip) and Figure 14 (for F skip) were prepared. Arrival angle was calculated by:

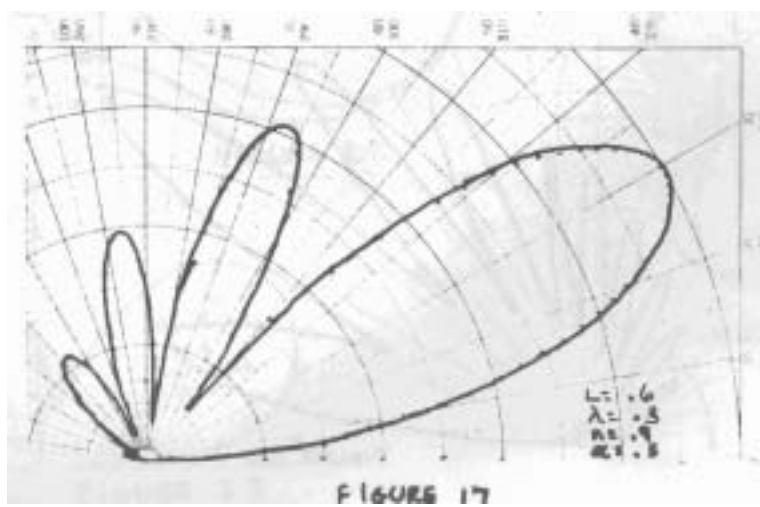
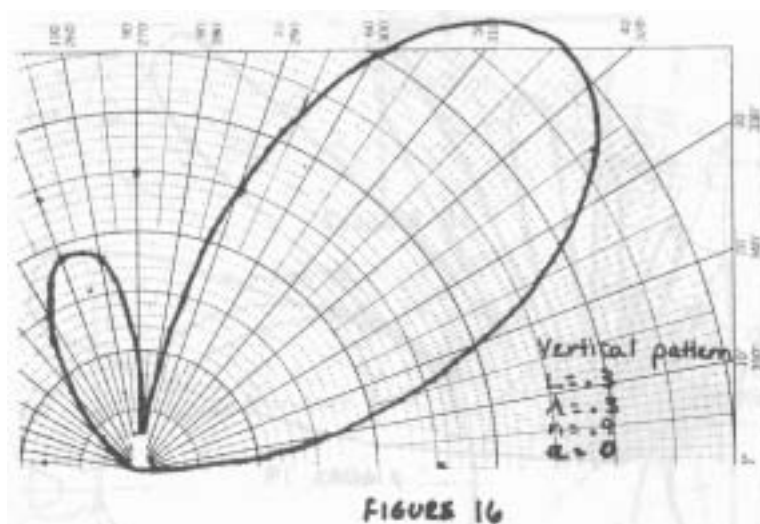
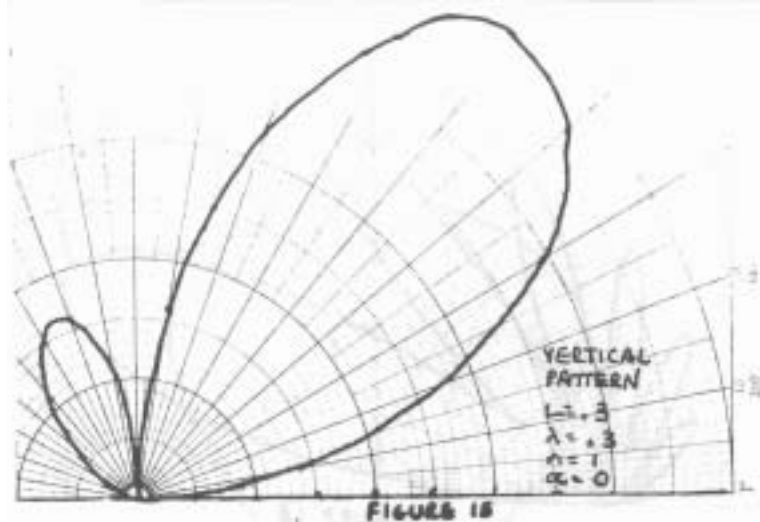
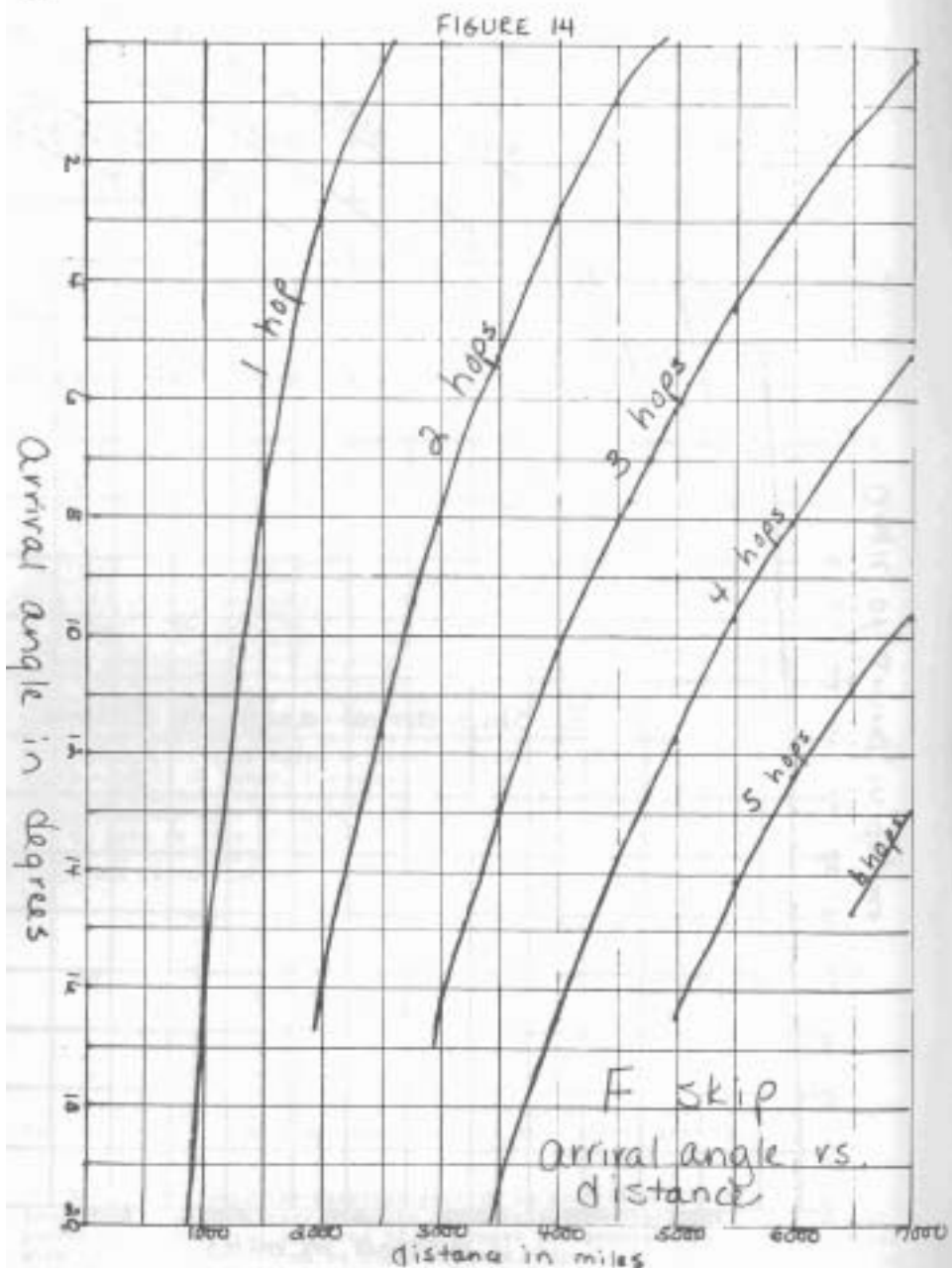
$$\arctan \left[\frac{H + R(1 - \cos X)}{R \sin X} \right] \cdot X$$

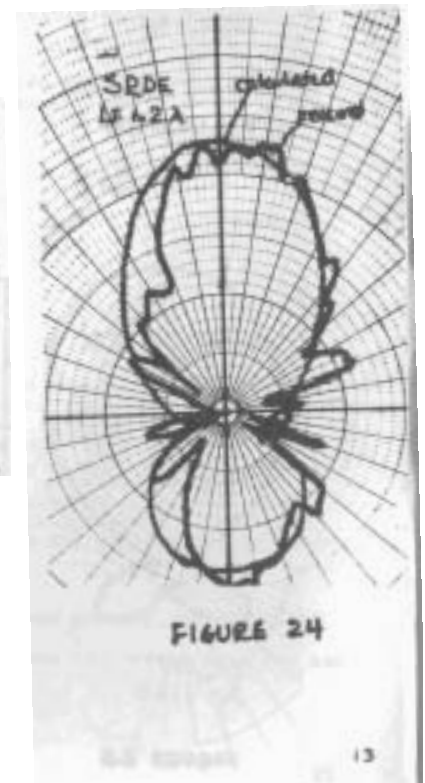
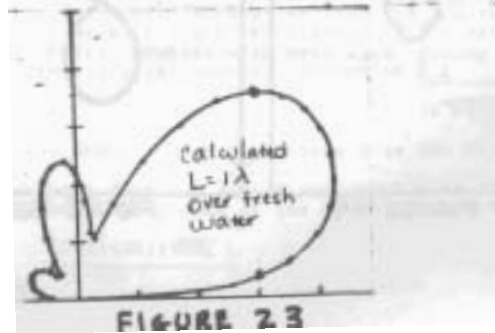
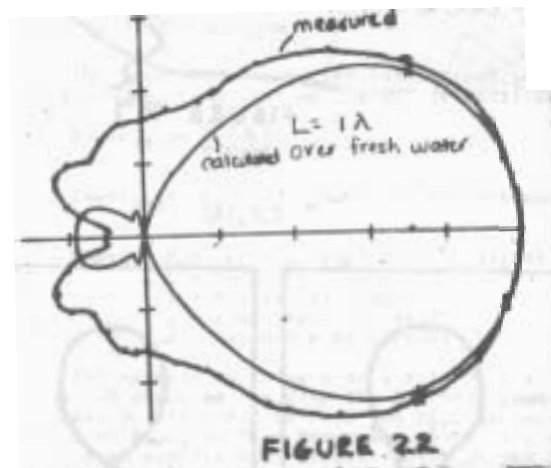
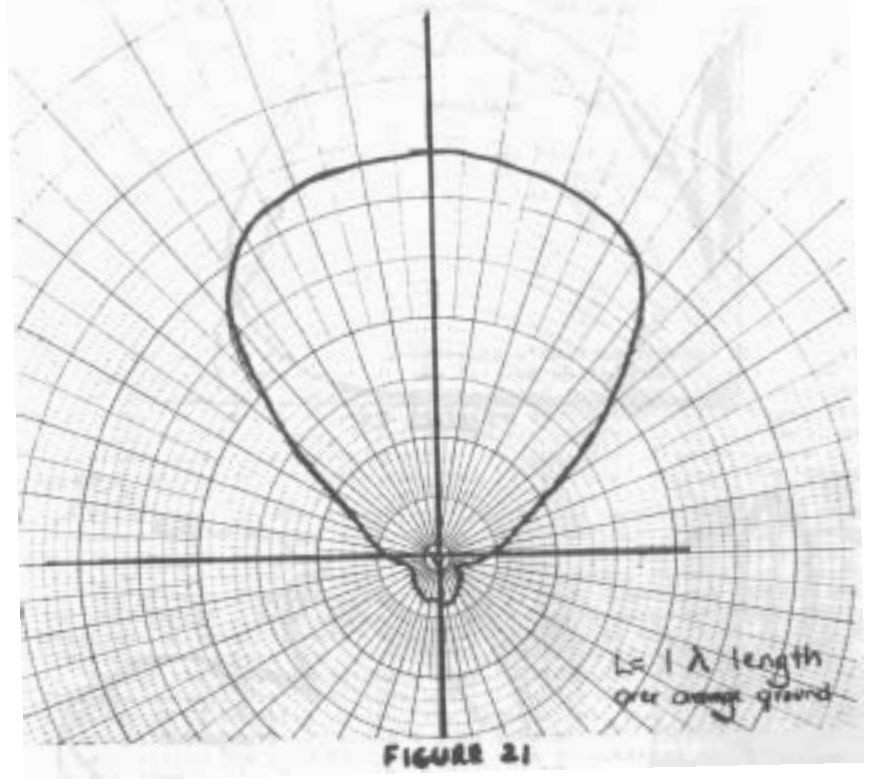
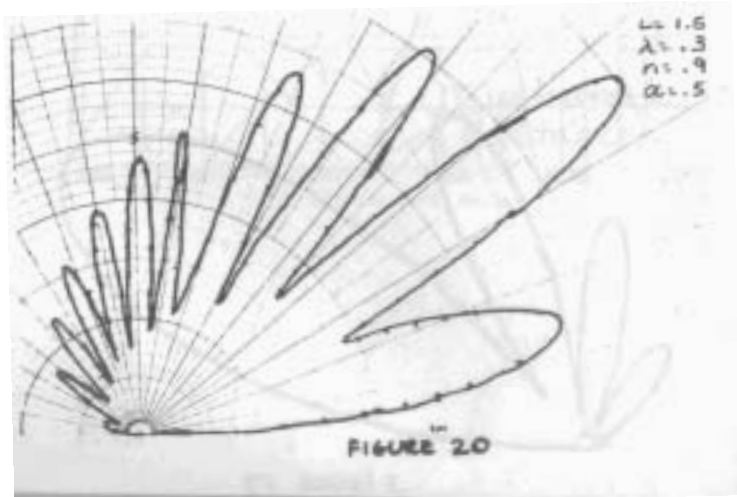
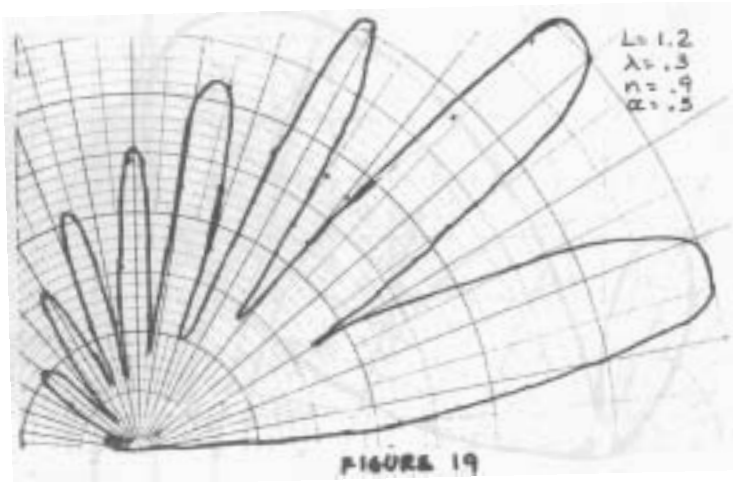
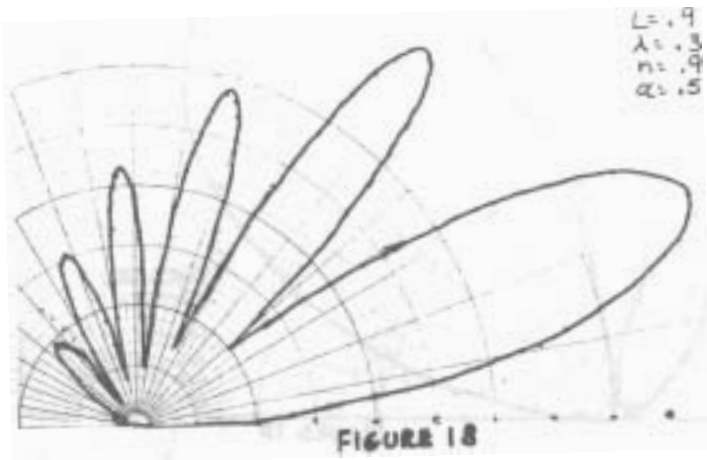
Where: H = height of reflection of ionospheric layer (assumed 186 for F and 65 for E)
 R = radius of earth
 X = $D/158.12K$
 D = great circle distance
 K = number of hops

Considering that most DX is at least 1000 miles distant, we are therefore interested in arrival angles between zero and 15 degrees.

So how well does the Beverage perform in real-life situations? As antenna people know, theory is quite often merely an approximation of actual performance. Measured patterns of Beverages are generally in fair agreement with theory, as evidenced by figures 21-28. Figures 21-23 are from Sorbello and were obtained by scaling down a Beverage to operate at 300 MHz. Figures 24-28 are from Schofield and were obtained at 3.860 and 13.225 MHz by flying a plane over and around a Beverage. A word about low elevation angle response in Figures 25 and 27: the antenna ran to the edge of the English Channel. At low angles the signal from the plane formed an extremely strong surface wave due to the high conductivity of salt water. This gives slightly misleading observations as low angle response is greater than normal.







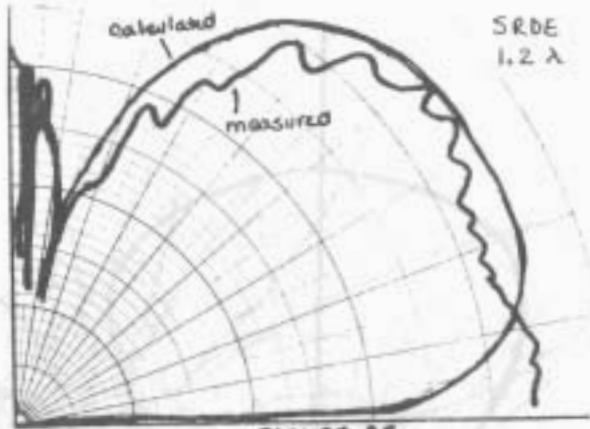


FIGURE 25

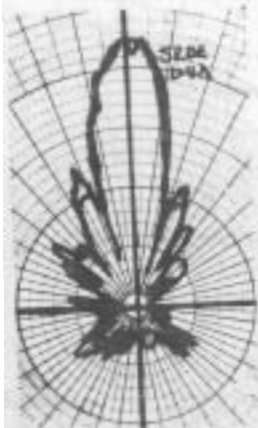


FIGURE 26

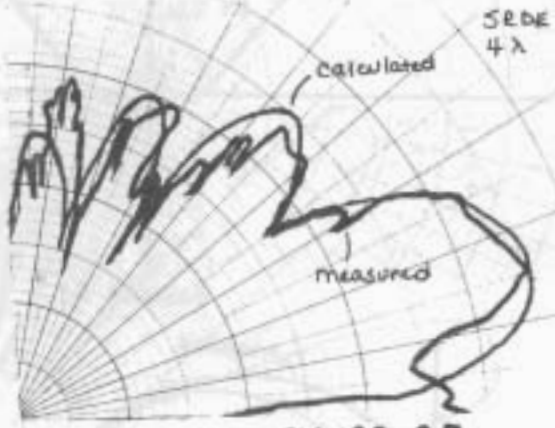


FIGURE 27

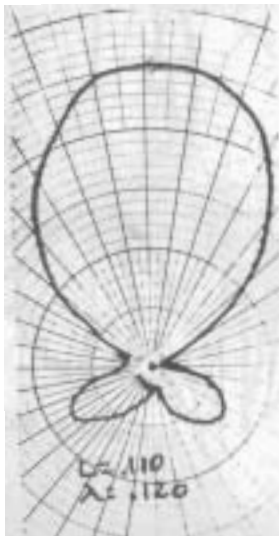


FIGURE 28



FIGURE 29

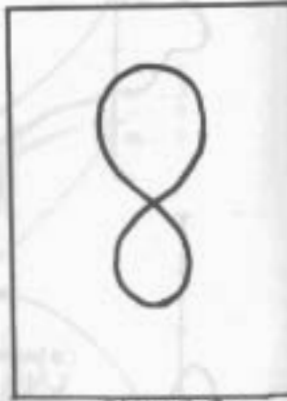


FIGURE 30

Impedance of the antenna can be estimated from the formula:

$$Z = 138 \log_{10} \frac{4H}{d}$$

Where Z is the impedance, H is height above ground, and d is wire diameter. Units for H and d are unimportant as long as they are the same for both. Wire gauge can be converted to inches by:

$$\frac{.46}{(AWG+3)} = \text{inches}$$

Should you want to terminate a Beverage with a resistance but are not able to use a potentiometer at the far end while a second person observes the receiver S-meter, the calculated impedance can be used with good results. Variation due to differing ground constants, height, and wire size is not extreme. Actually the resistance giving the least back end pickup is not the true impedance because: (1) surge impedance contains a small reactive component, and (2) a signal propagating from the rx end to the far end induces a large current travelling towards the far end and a small current travelling towards the receiver end. The true impedance of the antenna will allow all the current travelling to the far end to continue on into ground but of course the currents travelling to the rx will be heard. If there is a small mismatch between the resistor and the antenna a small portion of the current travelling towards the far end will be reflected back to the receiver with phase reversal. When it meets the current that was travelling towards the receiver, it will neutralize that current and provide lower back end reception.

All of the previous patterns have been derived under the assumption that the antenna was terminated into its surge impedance. Of course, the antenna can be operated without the termination, but will become essentially bidirectional. Figure 30 gives a good idea of what happens to the directional pattern. The lobe from the rear side is somewhat smaller because signals from the rear must travel down to the end of the antenna and then be reflected back, with the wire serving as a transmission line. Losses will be 25-30% minimum.

The Beverage is a rather inefficient antenna! Proof of this can be had by comparison with an "ideal" vertical antenna:

$$Power_{vert} = \frac{E_v^2 A^2}{1700g}$$

$$Power_{bev} = \frac{E_v^2 L^2}{480g \lambda K} \quad (\text{with } n=1 \text{ and attenuation} = 0)$$

- Where: E_v = vertical intensity of signal
- L = length
- λ = signal wavelength
- g = conductance of soil
- K = impedance of antenna

For example, setting g at 2×10^{-3} , L at 300 meters, λ at 300 meters, and K at 500 ohms, we can drop the E_v^2 term common to both equations. P_{vert} then becomes $90,000/12620$ or 7.13 and P_{bev} becomes $90,000/144,000$ or $.625$. So the ratio of P_{vert} to P_{bev} becomes 7.13 to $.625$ or 11.4 to 1 . This agrees very well with experimental results although the P_{bev} formula is an optimistic one due to the assumption that $n=1$ and there is no attenuation.

The much higher efficiency of the vertical antenna is related to a practical problem with Beverages- pickup from the downloads at the ends. Expressing the antenna current as $E_v L$ and the current on the vert-

ical downloads as $\frac{E_v h}{2K}$ (where h is the height above ground), the ratio of current from the directional pickup of the antenna to current from the non-directional pickup of the downloads becomes:

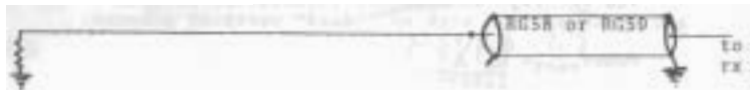
$$\frac{(E_v h)(2K)(480g)}{2K E_v L}$$

This simplifies to: $\frac{h\sqrt{60g\lambda}}{L}$. For a 300 meter antenna operated at one MHz, see Figure 31 for dB below the antenna current of the non-directional pickup of the downleads. Figure 29 illustrates this graphically; this pattern is for a one wavelength antenna at 200 meters with 3 meter downleads. Subtract 3 dB if you have 2 downleads.

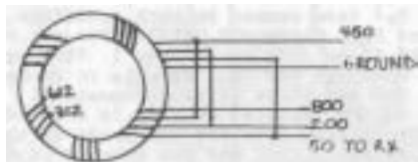
	2×10^{-3}	4×10^{-3}	8×10^{-3}	16×10^{-3}
H= 1	34	31	28	25
2	28	25	22	19
3	24	21	18	15
4	22	19	16	13
5	20	17	14	11
6	18	15	12	9
7	17	14	11	8
8	16	13	10	7
9	15	12	9	6
10	14	11	8	5

FIGURE 31

It obviously is beneficial to build long, low Beverages (high enough for safety of course) in order to have the best directional effects. Of course, special precautions can be taken to eliminate downlead pickup. For single wire Beverages, use the arrangement below.



As mentioned before, reflections occur at the end of the antenna if the signal sees something other than the surge impedance of the antenna. Hence the matched resistor at the far end. It is also preferable for the antenna to see its surge impedance at the rx end so that no desired current will reflect back instead of passing on to the receiver. An auto-transformer will solve this problem nicely; using a Q2 toroid core (permeability of 40) the following figure will produce a versatile impedance matcher.



As Beverage users know, the antenna will perform quite admirably without impedance matching at the rx end.

Good ground connections are required at both ends of the antenna, but fortunately one does not have to go to the lengths that are taken with vertical transmitting antennas. With extremely low resistance ground, one ground rod will suffice. With more "difficult" soil, a network should be used, such as a handful of ground rods in parallel or a radial system with wires pointing in any direction except back towards the antenna.

An interesting method of termination that avoids the difficulties of obtaining a good ground connection is:



The resistance used is the surge impedance of the antenna and the wire on the far side is made equal to a quarter of a wavelength. Signals travelling towards the far end of the antenna pass through the resistor, travel a quarter of a wavelength to the end of the wire, are reflected, and travel one quarter of a wavelength back to the resistor. At this point they have travelled one half wave since passing through the resistor and are therefore 180 degrees out of phase with currents exiting from the resistor. Phase cancellation then results. Contrary to what one might expect, this system has been shown to perform well over a 2:1 bandwidth and will give acceptable results at up to a 3:1 bandwidth.

Coupling between Beverage antennas or between Beverages and other antennas can occur. Ground any antenna not in use to prevent spurious pickup. Beverages in use can be crossed at angles of 60 degrees or more with spacing of only a few feet per FCC tests. These same tests showed coupling with antennas running in parallel directions if the spacing is less than 400 feet. However, John McIlvenna (personal communication) reported that tests run at Harvard indicate that there is very little coupling is present on antennas more than 5-10 feet apart. Experience and the opinions of other users lead me to believe that the correct answer is much less than the FCC results but much more than Harvard's results.

One of the most beneficial properties of the Beverage is its immunity to electrical noise. Part of this is due to its directivity and part due to the fact that the Beverage receives only horizontally polarized waves while most electrical noise is vertically polarized. The vertical polarization of noise is due to the fact that while both polarizations are produced by the noise source, the horizontally polarized noise is attenuated much more rapidly. (This is one reason why MW broadcasters use vertical transmitting antennas). For a dramatic description of noise reduction possible with a Beverage, see Boothe's QST article. Pay particular attention to the problems he had with noise radiation from his vertical that was picked up by his Beverages.

Now to a more practical evaluation of Beverages and their construction. Most people interested in putting up a Beverage are overly concerned with the straightness of the antenna, a constant height above ground, and the soil underneath the antenna. In my experience any wire strung up will produce good results. The difference in results between a sloppily constructed Beverage and a perfect Beverage will be only moderate. I have used many antennas that snaked in direction due to the availability of trees for support and they have given me excellent results.

I would recommend that anyone with a Beverage take precautions against lightning. The only thing effective against a direct hit on the antenna is to have it removed from the receiver. Lightning arrestors available commercially will not remove the danger in case of a direct hit. They are effective against the large static charges that accumulate on a Beverage when there is lightning in the vicinity-say within half a mile. These charges are large enough to destroy the front end of your receiver so it is worthwhile to install an arrestor. These static charges can also burn out the termination resistor; the FCC report mentioned in the references notes that the Grand Island station found their resistors burned out after every electrical storm.

Errata: Figure Four quite obviously includes velocity data for 833 and 500 kHz in addition to the 1500 kHz mentioned in the text. Comparison is now possible between the velocity ratio for the same antenna at different frequencies.

PART TWO-TWO WIRE PHASED ANTENNAS

A Beverage antenna can be expected to have a front to back ratio of 10-20 dB and sidelobe reduction of around 20 dB in practise. Some stations will be found to be totally eliminated, but stronger stations will power through anyhow. Phased Beverages allow the user to electronically move a null point to almost any direction and achieve a 30-40 dB reduction in signal strength. Nulling is a matter of combining 180 degree out of phase currents from the undesired direction. Figure 33 shows a basic form of the phased Beverage system. The two wires are at the same height above ground and of equal lengths.

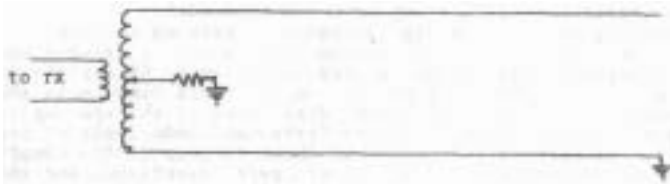


FIGURE 33

Signals travelling from right to left induce equal, in phase currents which arrive at the transformer in push-push, causing cancellation of currents in the transformer. The currents see the transformer as a short circuit and pass through the resistor to ground. The resistance is made equal to the surge impedance of the antenna so that currents from the right side will continue on to ground. For signals travelling from left to right, equal, in phase currents are induced in both wires which strike the ends of the wires. Currents on the open circuited wire are simply reflected back to the transformer; currents on the grounded wire are reflected back but with phase reversal. The currents then travel back to the transformer with the two wires acting as a balanced transmission line. When the currents arrive at the transformer in push-pull, producing an output in the receiver winding. Note the rather unexpected feature of being directional away from the direction the wire points in. With proper balance of the transformer, the pattern of this arrangement will be identical to that of a regular Beverage antenna.

So far we do not have a moveable null feature. What we wish to do is combine some of the rear end pickup from the pattern of the signal travelling from left to right with the 180 degree out of phase current from the front end pickup of the signal travelling from right to left. We can do this by reflecting back in proper phase and magnitude some of the current travelling from the center tap of the transformer to ground. This is accomplished by inserting a series tuned L-C network which will resonate at the frequencies of interest. At resonance, they introduce no phase shift, but if they are tuned slightly off of resonance they will introduce phase shifting up to limits of + 90 degrees. This limit on phase shifting explains why most phased Beverage systems such as this one only allow nulling from + 90 degrees off the rear end of the antenna. A combination of the reactance from the off resonance tuned circuit and a small mismatch of the resistor (best made variable in practise) will reflect current in the proper phase and magnitude to cancel out the unwanted back end pickup of the pattern of the current travelling left to right. Now we have a Beverage that can null off the rear end and reduce QRM even further than a one wire antenna. For MW use, L should be around 250 uH, C is a standard 365 pf variable capacitor, and R is a 1000 ohm pot.

The above system allows reception from one direction and nulling from the opposite direction. However, unidirectional patterns are both available at the receiver end; one is utilized and the other passed on to ground. The antenna can be made more versatile by using the following circuit. Transformer A should be a 4" coil with a primary of 60 turns #26 wire center tapped and a secondary of 45 turns #26 wire. Transformer B is a 4" coil with a primary of 36 turns #26 wire and a secondary of 45 turns #26 wire. Both should be wound with insulation between the two layers and then an astatic shield between the layers consisting of 7/8" of a turn of tinfoil taped in place and grounded.

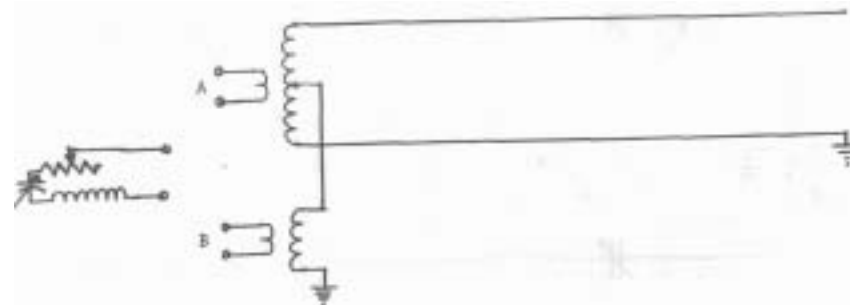


FIGURE 34

Analysis of the phase relationships between currents on the antenna shows that the patterns from the left and right are in phase at 1/2 wavelength, 180 degrees out of phase at one wave, in phase at 1 1/2 wavelength, etc. Currents from the left have an added phase due to returning to the receiver end in a transmission line mode; this amounts to 180 degrees at 1/2 wavelength, 0 degrees at one wavelength, 180 degrees at 1 1/2 wavelengths, etc. The net effect is that the patterns are 180 degrees out of phase. If the antenna has no attenuation, the 0-180 degree phase relationship is preserved and nulling can be accomplished by adjusting the amplitude of one pattern to exactly equal the amplitude of the unwanted signal on the other pattern. When there is attenuation present, the phase relationship is somewhat altered, hence the need for the phase adjuster (L-C network) to restore the 180 degree phase difference. In practise, the effect of attenuation is to make it impossible to obtain nulls in a few areas which ideally would be "nullable". The 180 degree phase difference mentioned actually applies only to current from directly off the rear end of the antenna; as the direction is moved towards the front of the antenna the phase difference becomes less and less and it is not possible to create a null. It will be found that most directions + 60 degrees will null well with the above setup.

Separation between the 2 wires of a phased Beverage is a matter of some disagreement. Most references suggest a spacing on the order of a couple feet. However, Bill Bailey has tried separations of 3, 30, 35, 60, 70, and 105 feet, with three feet failing to work well and 105 showing the best results. Boothe reports excellent success with only 18" spacing as recommended in the FCC report. Miskel used 1 foot spacing. Whatever distance is chosen, the effect on impedance in the transmission line mode should be considered, and transformers modified accordingly if the mismatch is extreme. Design data contained herein is suited for spacing in the 1-10 range and may work just as well with greater spacing. To estimate impedance in the transmission line mode, use this equation:

$$276 \log \left[\frac{2D}{d} \left[1 + \left(\frac{D}{3H} \right)^2 \right]^{-1/2} \right]$$

Where: D = spacing
d = diameter of wire
H = height above ground

The above systems suffer from the ability to null only off of the rear of the antenna. The system below was designed by Bill Bailey and will null over almost the entire angular range. Even with his setup, I find that there are certain difficult directions to null in where either partial or absent nulls are encountered. Component values are as before. The transformer Bill uses is a standard 4:1 balun.

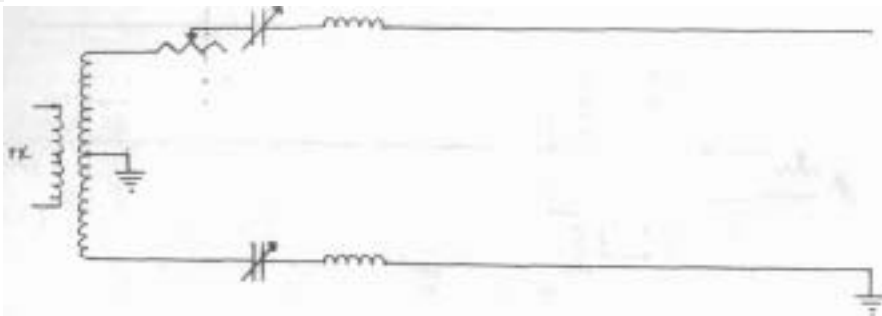


FIGURE 35

Pickup from the vertical downloads has been discussed earlier. There are two ways to reduce pickup from the downloads; (1) use of balanced feedlines and transformers between the antenna ends and the phasing network, and (2) balancing out the pickup from a particular direction with current from a separate vertical, with provisions to adjust the phase and amplitude of the vertical antenna. This is essentially what is done in cardioid arrays.

Method One is the preferred means. Mizek covers this thoroughly in his Beverage Antenna Handbook.

Arrays of Beverages can be used to advantage. Lateral arrays narrow the beamwidth of the major lobe, which is rather wide by directional antenna standards. In situations where a narrow main lobe is desired but a high attenuation and low velocity ratio preclude the use of a long Beverage, a lateral array of a few average length antennas will provide the desired beamwidth with much greater signal. Coaxial arrays have also been used to reduce back end pickup, avoiding the effects of great length on a single wire.

Much rather detailed information has been omitted as it is of little interest to the DX'er. Included: experimental determination of attenuation, impedance, and velocity ratio and complex calculations of theoretical values for the same parameters. I would be happy to supply this information to any interested persons.

~~When~~ using the phased system in Figure 34, the rx is connected to either A or B, with the phasing network being connected to the unused terminal. A receives from the left and B receives from the right.

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MUSINGS

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The opinions expressed in this column are those of the individual members, and do not necessarily reflect those of the editors, publishers or NRC.

CURT "GOES DOMESTIC" - LOGS RIMOUSKI-1000

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

I have been among the missing from these pages for too long. With the early demise of TA reception last season & a busy sked of much travelling & home maintenance, the listening dropped off radically. 4/27- 6:57pm yielded a beautiful clear #/off of WVSC-990. At 7pm, CKEW-1000 was blasting in. 4/30 was one of the extreme upset CX nights when many frequencies showed no signals at all. At 9:10pm WNDK-1260 was dominant with no sign of local WEZK. 5/1- WTMJ-620 was atop @ 2am. 5/29- CKTS-900 alone @ 8:08pm & Rimouski FF alone on 1000 @ 8:12pm. 8/13- I noted my first TA of this season w/Germany-1586 playing "Rm & Coca-Cola" @ 11:35pm. Other weak TA's noted on 1578, 1554, 1502, 1475, & 1403. 8/14- QIHI-1260 with #199 in Frederickton* finally logged @ 12:10am w/WEZE off, my first new station of 1978! (I don't count call changes). In addition to a busy job that has just resulted in a ten mile shift of business location, church activities and travel have made up for the lack of decent DX CX. I just got finished with a five day stint in a religious film produced by a mid-western public broadcasting group. And next month we're off to England for our first real vacation since our son's motorcycle accident five years ago. We've spent the last summer getting a special bath put in the house, getting a van with a lift that he will be able to drive as a quadriplegic, and painting the house in the spare time, hi! Maybe I'll find time for some DX in the Fall. I hope everyone had a good time at the ATLANTA Convention. 73. (They sure did, Curt! -NRC)

HEARS NEW WYIS-690 ON DAYTIME TESTS

DAVE SCHMIDT - 42 Chelwynne Road - Castle Delaware - New Castle, Delaware - 19720 8/18/78
A little DX to report. 7/18 brought the WMMW-1470-TEST 12:02-12:23am, very rough here. Same morn, the f/c from WBRQ-1310 popped up, 1:45-1:55am with Dixieland mx, rough, but two IDs were copied easily o/WCAM/WOH. 7/26- the new WYIS-690 noted on w/daytime HTs to set up their two-tower directional, 1:35pm & on. They're supposed to hit the air about August 20th. 7/31, tuning over the dial with the HT brought out WKRI-1450 w/an HT, 1:25-1:35am w/OC, then mx, IDed @ 1:30, well atop. A f/up went to WWER-1430. Veries total 958 with the following added: w/l- WKRI-1450, WTRN-1340 (Pa. #134, thanks Cary!), WBRQ-1310 (w/CH & sticker), WMMW-1470-TEST, & WYIS-690 (w/CH, Pa. #135). V/f- KPAR-1190-TEST, WNDK-1260 (one f/up w/SASE), WMMQ-1460. WFSR-1470 stamped their calls on a blown-up copy of my f/up, said my first report never showed up, signed by the PD. Local WMS-1380 was noted off during the day a few weeks back but by the time I arrived home, they had returned. Two other carriers were noted on the frequency, one WBNL, no doubt, but I would have liked to know who the other was. I'll be looking forward to this season, as I will be trying to get my 1,000th verie. I just hope my luck holds out with the replies, hi! January will mark 15 years I've been with the NRC, it's been very enjoyable to say the least (but somehow, it doesn't seem that long!). 73's till next time.

MORE STATION NEWS - NEW I.M. SWITCH BOSTON PLEASE COPIE!

FRIS KMP - 5 Greenwood Avenue - Bethel, Connecticut - 06801

WB1FZX

Greetings all. I hope everyone has recovered from the ATLANTA experience. WSAI in Cincinnati was switched from T-40 to contemporary country, effective 8/20. WAIT in Chicago has dropped its talk format and returned to RFL. WCBZ has mounted an ad campaign stressing they are the only ALL-NX station in the Big Apple. I guess they are taking the liberty, since WINS carries the Yankees. Another handy-dandy looker-upper is available to DXers. "Across the Dial" is a pocket-sized guide to U.S. & Canadian AM & FM stations, listing call letters, frequencies, & formats. It is available from Broadcasting Publications, Inc., 1735 DeSales St., NW, Washington, D.C., 20036, for \$2.25 a copy plus 75¢ postage. WQBL-710 has been granted a power increase to 10kw (Hacksburg, Va.), WHUL-1190 in Pine Castle, Fla. has been granted a power increase to 1kw. WCDS-1440, modern country station in Glasgow, Ky. is upping power from 1 to 5kw. American Top 40 will switch to a four hour format beginning the weekend of Oct. 7/8, thus allowing for longer cuts & more commercials. WNBC gets its third new WOFFING DJ when Scotty Brink arrives replacing Lee Masters. Brink has been in the #1 market before, under the name of J. J. Jordan on WOR-FM. I still believe that WNBC missed the boat by dropping Imus a year ago. WPCF Panama City, Fla. is changing its calls to WMMQ and will be known henceforth as 3WQ. So much for station news. I plan to take my General License by the end of August, meanwhile 15 meter CW takes up free time.

DAVED ABOUT HIS NEW 800' ANTENNA

JOHN ERNEA - Box 86 - Montville, New Jersey - 07045

8/28/78

The big news around here this time is my new antenna. It works FANTASTIC! Around the middle of August I thought about adding more wire onto my LW antenna of 150'. I bought about 650' of wire and connected it, making it now 800'. I am fortunate to have the room to build an antenna of this length. It runs above dry land, then swamp, then dry land. It ranges from 5' to 30' above ground & the wire is 22 gauge. I evaluated my new (con'd.)

Eronka, con'd.) antenna's performance and noticed significant signal strength gains on selected stations throughout the band. A nearby ERGcr, WIL BERNSTEIN, of whom I am most fortunate to know because of his technical background and pleasant personality among other things, suggested that I connect a loopstick & a 365 pf. variable capacitor in series between my antenna and RI so I could peak the desired signals. I noted his suggestion, but then read of BUSS EDWARDS' article on Antenna Trimmers from the Antenna Reference Manual. I decided to construct his tuner for LW in excess of 125'. I got the parts for it and was ready to build. When I got the parts home I was just tinkering with the loopstick and the variable capacitor. First, I experimented with the RL-160, but no great results were achieved. But, then came my discovery. You technically-minded ERGcrs out there might laugh because of my ignorance on what I found, but just remember there are quite a few members in this Club who don't know much about the technical side of DLing & we should not be looked down upon. Anyway, I connected my 800' LW to the variable capacitor & then connected the variable capacitor to the external loopstick I bought. After trial and error I came to the decision of running a wire off the loopstick and one off the metal shaft of the capacitor. I then mounted the whole mess on my portable radio (that heard KING, PALE MOUNT, ha ha) nearest to the interior loopstick. I noticed when I touched the bare ends of the wires off the loopstick and the capacitor that I had connected, there was a great signal gain. Again, WIL BERNSTEIN came to the rescue and said that maybe my body was acting as a ground, and suggested I connect it to a ground. So, I connected the wires to the center screw on one of my electrical outlets and the results were terrific, even better than when I touched the wires. One example of how good the antenna is: WJIL-590 Islip, N.Y. used to put a "1" in here on the "3" meter. Now it pins the meter, like WABC! It's simply unbelievable! No telling how good the system will be when I construct the antenna trimmer. The signals will probably overload the RI. Anyone out there who is interested in this, write me & I will elaborate. Maybe now I can start raising my totals faster.

LET'S WELCOME GERRY THOMAS TO THE N.E.C.1 WUZE OPTER, GERRY!

GERRY THOMAS - 2355 West Michigan Avenue - #460 - Pensacola, Florida - 32506 8/21/78
After only a couple of months' membership in NEC, I've already begun to appreciate the benefits of dual membership in the two major NW DLing clubs - some info that appears in DL NEWS just doesn't appear in DLG, and vice versa. Since this is my first Wuz (and therefore, a "bio-Wuz"), I should mention that I am also a member of the regional Dixie DL Club, as well as SPENEX. Within NW DLing, I guess I'd have to be considered a generalist, in that both domestic and foreign DL are pursued (with a TSM count of around 600 since my move to Pensacola about 12 months ago). Besides listening, I also enjoy tinkering around with the Realistic TRF (with my cohort, CHARLIE BARFIELD) and also use an FWD-7 that has been modified in a number of ways. Main antenna includes a 4' amplified box loop, a 145' inverted L, & an occasional 1500' quad-beverage. On the personal data side of the ledger, I'm 30 years old, married, and am a civilian experimental psychologist currently doing research for the Navy's Aerospace Medical Research Laboratories here in Pensacola. My first contact with DLing Fever came about 2 1/2 years ago while in graduate school at the U. of Florida in Gainesville. While trying to hear a previous class member's (U. of South Florida, Tampa) HEB game on the radio, I was astounded to discover that not only could I hear WFLA-970's broadcast of the game (at an unbelievable distance of 125 miles, hi), but I could also hear the opponent's broadcast of the game from their hometown station, 400 miles away! And as my wife says, "He hasn't been 'right' since." 7)'s, NEC.

LOOK SIXTEEN NEW ONES IN THE SUMMER

PALE MOUNT - 471 Bearon Avenue - Teaneck, New Jersey - 07666
Sixteen new AM & 19 new FM stations have been added this Summer despite a hectic 9-5 work week, since it's 9PM to 5PM. Then I get home and can't sleep, so I wake up in mid-afternoon. I won't mention the PMS here, hi, but the additional SW adds & notes: 7/28. GYR - 730 Out. good w/r/r o/CRAC 10:05pm on Route 46 near Little Falls. 7/31. CKCR-970 P.Q. L&C w/r/r in ER. FF, spoke in FF, WMDJ off, as was WIS3. WWSJ-630 a/e on 5 w/WHEN doing quite well underweek. I received a mysterious letter from EARL FORN saying "Watch for fantastic CI on all bands Aug. 1-3." All I could think of is that the wonder workers in Louisville had arranged for special CI to be in effect following their convention, hi hi. Well, I didn't note anything fantastic, but at least he got me DLing, hi. 8/1. WPOO-1550 Ais. with another RT @ 3:09am. On 1490, WELF-N.Y. heard saying "WELF Syracuse, it's 3:30; we're back on the air after a brief period of technical adjustments." They were stop for the next half hour, with WWSJ Atlantic City, also new, heard in fading, w/poor signal. local WI helped. Another station added by trying something I hadn't tried before, listening to 1490 before midnight w/local WJIT 1480 carefully muted. WAIL Hamilton, Pa. heard w/Phillies BB 8:25-9. NM 8/14, a big surprise, WJIT-1480 off for first time in a LONG time, but only WJIL (needed) heard. OC was on & off; man said "WJIL-WJIT in Ridgefield Park, N.J.-----", shows where he used to work (starting to say "WJIL".) Can I count this as new, since I previously logged WJIT New York. Please do not call and ask why. WFOR Me. among those needed on 1490, also WWSJ, Pa. While WJIT was on, I tuned up to 1500-1510, & heard "GUNS House a quatra-vingt Montreal" ID, who? (That's Sherbrooke-1510, Paul - ERG) There's an outside chance I'll be in ATLANTA; good chance for move to Ohio. 7). (Turned out AYE in both cases - ERG)

THINK TWICE ABOUT LEAVING YOUR DX EQUIPMENT UNATTENDED!

TOM FAUBERIE - 62 Sunrise Avenue - Orafton, Massachusetts - 01519
I'd like to advise all to heed JERRY STARR's equipment safety advice. In early July, the B+ filter choke in my main RI caught fire while my wife & I were in another part of the house. The fuses caused quite a panic. This time I was lucky, but I will NEVER AGAIN leave electronic equipment running unattended. DXers who use timers to record when away should think twice, especially. I fixed the RI A-OE through. Learning much in the process.



Speakers..Greeters and Musers...Aubrey Morris from WSB poses with convention host Karl Jeter, above, while Chuck Rader gives a greeting from the pool (he's all wet, but he expects me to say that by now, hi!) and 3 of the intrepid DXers try Musing for a change in front of a Downtown shop obviously named by Ernie Cooper! The 3 are John Clements, new Q&A editor, Rich Segalas, charge card collector, and NRCs Santo Domingo DXer Cesar Objio. Photos by Hartlage and Flywheel!



KCRA-1320 BECAME KGNR on 8/28 W/IL NEWS

GENE ALLEN - 134 Bret Harte Way - Vallejo, California - 94590 8/27/78
 KCRA-1320 just announced that starting tomorrow (8/28) they would become KGNR, the 'NR' standing for News Radio. Latest DX here is KERR-1070 heard 8:34-8:40am on 8/23, w/KHX leaped out on the SM-1. I don't know if KERR was 25 or 50kw. Also, SAN-890 heard same AM from 8 to 8:25. The only other DX was Sabah-1475 from 7:30-8am 8/14. Also, on 8/14 KYA-1260 was off, & CFRN was logged 7:45-8am. KVSP-1260 also heard to ID @ 7:53am. Does anyone have a veri from KHX-1580 for their TEST for the Club on April 24 last year? I want a report plus return postage and have sent f/up two months ago with return postage, & no reply, but costs are approaching \$1 on that veri. I can remember the good old days when that was needed was a 2¢ first class postage one way only. Rumor has it that HANK WILKINSON's wife Helen plays a far better game of Samba than he does. In fact, Hank is considering going to school to learn the game! 73.

EMILY HIS 1978-1979 SEASON BY LOGGING SEVERAL TP'S

HANK WILKINSON - 5028 Walden Lane - Santa Rosa, California - 95405 8/25/78
 I started the 1978-79 DX season on August 23rd. I will be DXing between 1130 and 1300 GMT for the next six weeks except for when I will start earlier. (That's 7:30-9am, ELT - ERC) Aussies on 700 & 750 & 890kHz; Zedder on 660; South Korean on 1570, Sabah on 1475, & several Hawaiians have been heard at tremendous volume. In checking last season's DX notes I find that Aussies were exceptionally good on Sept. 27, 28, & 29th. For those DXers who may be having difficulty in receiving veries from KPLS-1150, KSRO-1350 & KVRB-1460, all located in Santa Rosa - please watch for Ernie's "Verie Signers" as I have just supplied him with the latest data from these stations. Does anyone know if the WRN is going to publish an early supplement to reflect all those MW changes of frequencies taking place on November 23rd?

DX IS GOOD IN CALIFORNIA IN AUGUST, APPARENTLY

JAMES R. CROTONET - 1935 Walden Street - Red Bluff, California - 95060 8/26/78
 During the month of August some of these items may be of interest to other DXers. Thu. Aug. 10 @ 6:03 I heard on 1490, Walla Walla, Wash. was mentioned; I missed the call letters; is KYE AM? KLOG, Kelso, IDed at 6:07 on 1490. MM Aug. 14 @ 7:53 on 1470, KNEC, Abilene, Tex. IDed, no KNDE. At 7:59, KMLA, Centralia, s/on, 1470 also. Number 50, unheard at any previous time, anywhere, was KEVA-1240, Evanston, Wyo., w/s/on @ 7:57; call letters were mentioned several times. MM 8/21 @ 5:58 on 1240, KING, San Bernardino, IDed, for new call. A 3x5 card is made for each call heard. NI was given @ 6:01, along with "Medicana" ID announced @ 6:02, who is this, IBCG, Nogales? (a border station). Wed. Aug. 23 @ 7:51 on 1240 I heard an Idaho Farm program, nearest station would be KFII, Mountain Home, not IDed, so not counted. The 600th station heard in Red Bluff since 11/21/76 was KVSP-1260, "The Voice of Santa Fe" @ 7:48. KIA was off, thankfully; CFRN heard @ 7:54. Fri. 8/25 @ 8:01 on 860 there was an FF loud, but unID, maybe CFNS. IEMO on @ 8:02. No French this AM, 8/26 @ 8. The second station, with KSFO, @ 8:13, was KMOM, praising Montana. I started DXing at 8 this past week; a whole new world, with MDT s/ons. Sorry I can't go to ATLANTA; Frances was operated on for tumors in a new location. The doctor told her it was a terminal illness. She is still in the hospital, with intravenous feeding, but seems better each day; may be good for several months yet, we keep hoping. (We hope it's a lot longer and better than that, Jim! -ERC) Good DXing.

DX IS GOOD IN CALIFORNIA - OFFER COVERAGE MAP COPIES

ROBERT WISE - 943 Desert Hills Drive - San Jose, California - 95117
 In a hearing of two months ago, BILL HARANG commented on the fact that the Santa Clara Valley is a poor location for the reception of Hawaiians & TP's. I also agree totally, from experience. My only true Hawaiian reception was of KOKL on 3/23/78 @ 2:28am PST (verified). KPOI-1040 is tentative. The reason is that the Santa Cruz Mountains to the W effectively block out any Pacific reception, skipping over us. I hope to remedy this situation when I buy an SM-2, which will hopefully bring in some elusive HI's. I have about 120 assorted Cks available to anyone for 10¢ per copy (no 5¢ copy places around here!) Anybody who'd like a list of the ones I have, feel free to write me. Also, I have just recently typed up a 406-question trivia quiz special, available for 50¢ (copying charges). It's too much hassle to type out, although I do type out my station lists for anybody if they send me theirs. Many new stations heard in the past month, including KPOW-1260, KVSP-1260, QHAF-880 (tentative), KING-1010 ET (also w/KHCS in a month ago, so two new stations!), KXP-1420, KENN-1390, & a host of others. Veries in the past month or two: KMJJ-1140 Las Vegas, ET, KLUC-1400 Redding, Cal., ET, KUOL-1290 Shloam Springs, Ark. TEST, KEST-1450 San Francisco, KWHN-1320 Fort Smith, Ark., ET, KEND-1590 Lubbock, Tex. (w/local NPer KLV off for longest SP I can remember, total luck), KLAJ-1600 Lakesood, Col., XEPRS-1090 Rosarito, Mexico, v/q, Cal. DXers drool for a veri from this one, after four tries), KAIR-140 Tucson, Ariz., KCTI-980 Salinas, Cal. (interesting C.), KPWW-1260 Powell, Wyo., KING-1420 Coos Bay Ore. ET, KRE-1400 Berkeley, Cal., & a large v/q today from KPAC-1330 Los Angeles, also veries from KNSM-1230 Coos Bay, KHGS-1010 Phoenix, Ariz. ET (I will now send a f/up to KXEB), KING-1090 Seattle (w/XPRS off), & KCKI-1390 Turlock, Cal. KXEB sounds like a perfect DX TEST possibility, so in my report, I requested a TEST. No luck so far with seven other letters out for DX TEST requests.

LET ALL PROCLAIM THE GOOD NEWS - IT'S ST. LOUIS IN 1979! IT'LL MARK THE TENTH ANNIVERSARY OF OUR FIRST CONVENTION IN THE GATEWAY TO THE WEST CITY ON THE MISSISSIPPI RIVER! BE THERE!

KLUC-1140 IS NOW KMJJ, NORTH LAS VEGAS, 10,000/2,500 U-2

MORTON D. MEEHAN - 7682 North Star Avenue - Twenty-nine Palms, California - 92277 8/17/78
 Reading my report of 7/19 on 8/15 in the 8/14 issue of DX NEWS is about the fastest turn-around time I've seen in bulletins. Congratulations to ERC and the hard-working Louisville group. KMJJ-1010 Palm Springs is announcing they have studios in the Gene Autry Hotel, 4200 East Palm Canyon Drive. Their little studio in a house under the XR was a crowded mess when I visited there. KMJJ-1140 was heard on 8/11 with programs independent of KLUC-FM and now announce as North Las Vegas. They have moved IR & studios out of Las Vegas to North Las Vegas, leaving KLUC-FM in Las Vegas. They have moved their 10kw IR and added a 2500w IR for new nighttime operation. This may be the last FCC grant of 2500 watts. KRAM-1340 has dropped ABC and added UPT NX. KMJJ has picked up ABC. The correct spelling of Twenty-nine Palms is two words, not three. PAUL MOUNT, WINS got its call before you were born when Hearst Newspapers owned it and the International News Service. In the 30's it was probably the most "news" station in the country. Ford Frick, later a baseball commissioner, was a sports reporter for the station in the 30's. I suggest TONY LAGATTUTA contact the Longwave Club of America, Box 33188, Granada Hills, Cal., 91344 for the information he wants. Radio Shack's 1979 catalog shows the new DX-300 at \$379 and it reads like a copy of the FRG. 73s.

HAS A NEW, MODIFIED PRO-7 BY GRANT MANNING

DAVE BENNETT - 3145 176 Street - Surrey, British Columbia - V3S 4N8 (604) 437-0143 or 576-1673 VE7AZG
 I came, I listened, I Mused, if I may paraphrase
 that famed world traveller, J. Caesar. Actually, what happened was I went - to Portland and for a brace of radio-type conventions: a ham-DXer one the weekend of Aug. 5-6 and then the IRCA-type one the following weekend. I think that will have to do me this year as I can't get enough time off for the NRC do, but I will be thinking of you all. I met and fell in love with a GRANT MANNING modified PRO-7 in Portland and by the time you read this it will be gracing my Burnaby apartment. In the meantime, I have done a little DXing from Surrey with the R-390A and one of Grant's little amplified loopstick antennas, to wit: Aug. 14. KGYN-1210 Guyman, Okla. popped up through the noise & CKDA splatter to give me an ID at 11pm EST, then into a religious program. Then, strange as it seems, I got an ID on KFMH-760, San Diego, @ 11:49, after a Toyota commercial. Probably everybody on the WC has them, but for some reason they have eluded my log to date. On Aug. 19, KNPT-1310, Newport, Ore. crept out from under CHQM's splash @ 11:43pm with the "American Top 40" show, ID @ 12:08am; then KRDR-1230, Gresham, Ore. @ 12:15-12:51 when I finally got enough signal through the pack to ID them. As you can see, it's not been a particularly successful Summer for DX, but I think things are going to get better. How come ANDY RUGG didn't give me a call when he was out here? Even on two metres? Somebody at the IRCA gathering suggested there be another ham net on 75 metres for the WC types this winter - anyone else interested? It can be pretty hard to hear the existing one - or be heard by it! I guess that's it for now. I hope ERC hasn't worn out his "necktie T-Shirt" yet. See you all on the WC next year! (I hope.) 73.

COULDN'T MAKE IT TO ATLANTA

WAYNE HEINEN - The Pike's Peak DXer - 427 East Caramillo - Colorado Springs, Colorado - 80907
 Just a note to say 'Sorry, I won't make ATLANTA; an ill-fated trip back home (stuck in Buffalo with no car) used up all of our ready cash. Nice to see JACK HATHAWAY of Illinois & his wife on a recent trip of their through Colorado Springs. Thanks to AL MERRIMAN for his fine (hic) hospitality while visiting my in-laws in D.C. I saw Al's Radio West Loop & was impressed I ordered one. Recent veries include: v/PP/c- KPGE-1340, KFXD-580, KRKO-1380, KYAC-1250, KPDM-1340. v/l- KITS-1400 & KFKA-1310. Veries now stand at 697 overall. I heard that ST. LOUIS might bid for '79 - I sure hope so! (Thou hast said it, Wayne! -ERC) Once again any and all passers-by give us a shout, Coors in the Fridge. 73's and have fun in ATLANTA - and MUSE!

IS AVERAGING 66% ON VERIE RETURNS

JOHN W. HOOGHERHEDDE - 105 Bayside Lane - Brandenburg, Kentucky - 40108
 Poor DX CX continue with lightning in the air constantly. When audible through the crackle, the dial seems full of Tennessee stations. 8/28 I had s/off of WENE-1240 playing hymn (tune of God Save the Queen) @ 2:03 s/off. WKDA Nashville & WLSV Louisville were in behind. QSLs are drifting in very slowly but I am still running a 66% return rate. I'm up to 594 heard and 341 verified since CCB interests have been revived. Tops in loggings (but poorest in QSLs) are Kentucky 70-36 and Tennessee 53-17. Seems like no one in Tennessee answers. Other states like Ohio, Wisconsin & Illinois, Missouri, & Indiana have excellent return ratio on reports. I have recently revised my DX report-verie request form in hopes it will bring better results. Latest QSLs are WQAU-1340 Athens, Ga., WYOD & WYOD, the former my best graveyarder since the log was restarted. I should arrive in ATLANTA by 10pm Friday - I'll be looking forward to seeing everyone again. What happened to DON DAVIS' QSL Bureau? I know I can build Kentucky up that way.

LAST YEAR ALONG ABOUT THIS TIME, WE SUFFERED THROUGH A DEARTH OF MUSINGS IN DX NEWS. PLEASE LET US NOT HAVE THIS HAPPEN THIS YEAR, GANG! NOTE THESE MUSINGS DEADLINES FOR THE NEXT SEVERAL ISSUES, THEN: MONDAY, OCTOBER 9 IS A POSTAL HOLIDAY SO THE DEADLINE HAS TO BE MOVED BACK TO SATURDAY, OCTOBER 7. THEN, THE NEXT DEADLINE IS MONDAY, OCTOBER 23, AND THEN - IT'S ONTO OUR WINTER WEEKLY SKED ONCE MORE. BUT REMEMBER, WE NEED YOUR MUSINGS FOR THESE UP-COMING COPIES OF YOUR FAVORITE DX PUBLICATION! PLEASE DOUBLE SPACE! 30 LINES IS LIMIT.

GAINS AT LEAST ONE NEW LOGGING PER MONTH THIS SUMMER

JOSEPH W. BRAUNER - R. D. 1 - Box 153 - Punxsutawney, Pennsylvania - 15767 8/28/78
 Just a shorty to say the DX drive is still alive here. I've been only "spot" tuning during the rapidly closing off season but thanks to DX NEWS, especially "AM Switch" (worth the price of NRC membership by itself), I've been able to keep the log 'alive' by at least one logging each month so far. WITS-1510, @ 11:35pm on 5/6, WWWG-1460 @ 4:30am on 6/28 (as expected, using the "3 WG" ID). WYFA-1580 in strong w/ET/mx @ 2:30am on 7/11, WANN-1070 @ 12:40am on 7/24 on TEST thanks to member JOHN KROMKA and WFUN-970 at midday 8/15. DX NEWS had arrived a few hours earlier listing WRBD as wanting WFUN; a quick check found it already in use. Like ERG, I goofed on a needed TEST, WINF, coupla demerits! It made me mad enough to remember WANN. Those Test Tones were noted as soon as CHOK left the air at 12:07am but no clear VID's until the 12:40-12:50 period when two were readable through QRM & QEN. Very nice v/l & souvenir received 'planters'. The v/s used to work out this way at WGED Dabois and WRRN Warren. WANN was the 5,557th entry in my heard MW log. Since WWSW can be pulled any time, WFUN was just a matter of tuning. The new WBBG-1260 should also be easy. I have been checking 690 for WUIS to keep my Pa. needs down to one (Lancaster-1490) but no luck yet. I've been considering the FRG-7 but until we learn more about it we'll stay with my Allied Radio A-2515 & Hallicrafters SX-99 combo. I hope all are enjoying a nice Summer. I wish CX permitted a trip to ATLANTA. Have fun! 73.

TAKES OVER AT WAPR-1390 - PROMISES DX TEST

STEVE KENNEDY - Box 1433 - Avon Park, Florida - 33825
 Howdy to all from Avon Park's only SW & MW DXer. As I mentioned in my last Musing, I would be moving here from Immokalee. By the time this appears in DX NEWS, I will be up to my ears in engineering chores at WAPR-1390. The old Gates BC-1J has been re-tubed & modulation is a lot better. I am already planning a CPC TEST for WAPR for this winter so keep tuned to DX NEWS. I have to determine when 1390 is clear before I run the TEST. Down here in Florida our worst pest on 1390 is WROA in Gulfport, Miss. DX-wise everything is a big fat zero for me as I have yet to erect a decent antenna. My apartment is located in a quiet location next to a lake, but there are several pepper trees which makes it difficult to erect a decent antenna. I have considered erecting an inverted 'Y' antenna for SW, & getting an SM-2 later for MW. I used to have an SM-1 about four years ago, and it did a good job. I don't have the room in my shack for an NRC AA Loop nor a Sanserino Loop. Big news for those looking for a new RX is the new Radio Shack DX-300. This set will tune from 10kHz to 30MHz, has digital frequency readout, and seems to be a nice set - all for \$380.00. I haven't yet had the chance to see one, but my initial impressions are that it looks like a better RX than the FRG-7000 which sells for almost \$600.00. One thing, though, the FRG-7 is still the best of the three mentioned because it is the easiest to modify, and is more utile. I have finally decided to get an FRG-7 when the \$\$\$ permit. 'Bout time! I have been trying to determine what I was going to get now for almost 1 1/2 years. I enjoy listening to AM DX so much that I keep an old Heath RL-1 Mohawk RX tuned to 7295k in the 40 meter ham band to listen to the M hams. There aren't many any more; but AM is still a mode used in ham radio; especially by old-timers. Those who have dropped me a line about the possibility of a DX Newsletter for Central Florida DXers, I am in the process of finding a printer - more next month. Until then, 73's.

GIVES HIS IMPRESSIONS OF THE CONVENTION

GERRY THOMAS - 2355 West Michigan Avenue - #460 - Pensacola, Florida - 32506 9/5/78
 I just returned from the NRC Convention in ATLANTA & I muse say I was very impressed. Right at the top I'd like to congratulate & thank all of the ATLANTA area folks who had a hand in the Convention's preparation. Although it was the first radio club convention I'd attended (& therefore, have nothing to use as a comparison), it is difficult for me to imagine it being any better. In fact, in terms of preparation and organization, it exceeded many of the professional society conventions I've attended (in terms of sheer fun, it out-distanced all of the professional conventions I've been to, hi) Probably the most enjoyable aspect of attending a convention for the first time is having the opportunity to associate well-known names with faces & personalities. Because it would be a bit laborious to list all of the DXers I met, I'll simply paraphrase that old Rogerian bromide and say, "I didn't meet a DXer I didn't like", (even though some, I'm sure, would rank quite high on a weirdness scale, hi). A few personal highlights that immediately come to mind include: watching the auctioneering "skills" of TED FLEISCHAKER and WAYNE MURPHY; seeing DON ERICKSON bidding on items he couldn't even see; obviously viewing ELLIOT STRAUS' verie collection; checking out ROLLAND LINDELADE'S GE TRF; examining VERN SHERER'S cherry, one-owner, 1956 Chevy wagon; viewing GLENN HAUSER'S and NEIL ZANK'S slides of radio stations (it was comforting to discover I'm not the only one afflicted with this idiosyncrasy - i.e., photographing radio stations); visiting CHUCK HUTTON'S DX shack, & on & on. In addition, quite a bit of useful info & insights were gained from the seminars of RONALD SCHATZ & CHUCK. Extremely impressive was the preparation (complete with contingency plans & back-up equipment) & execution of the "Secret DX Safari" which, in my mind, could best be described as a cross between an Easter Egg hunt & the Boston Marathon, hi. Even my wife had a good time at the Convention & suggested (without prodding) that we should try to make it to ST. LOUIS next year! Yes, there were many pleasant experiences at the Convention but perhaps the most enlightening one concerns ERNIE COOPER. His lengthy tenure as Musings Editor is given added significance when one realizes Ernie has a physical handicap - from what I could see at the Convention, it appeared he has gone through life with a beer can permanently appended to the palm of his right hand. How is he able to type? 73's from Pensacola, & thanks again, Karl, Don, Vern, Chuck, Greg, Roy, Paul, et al. (I plead NOT GUILTY - I ALWAYS use my LEFT hand, so there! -hi -ERG)

OFFERS TAPES OF HUTTON'S & SCHATZ'S CONVENTION SEMINARS

ELLIOT R. STRAUS - 27 Devon Drive - West Orange, New Jersey - 07052 201-736-1681
 Well, it's a week before Convention so I think I'll start this Muse now & send it to Ernie after ATLANTA. With some new additions this Summer the old shack is getting quite full. The only thing I lack now is a Rustrak Strip Chart recorder, for which I am hunting. Present equipment includes the R-390A, HP 524B electronic counter, BC-221M frequency meter, Dumont scope, NRC Loop and an old Heathkit Q-Multiplier I picked up for ten bucks that is dynamite. The best news though is that I will be home daily at sunset for the first time in seven years. I got a change of hours from 2-11pm to 6:30am-2:30pm. I am so tired of DXing midnight to Jamit will be great, sunset will be a whole other world of DX to attack. Only thing to report lately is verie #578 from WISE-1560. Heard totals are 1347. I am still waiting for a verie from KNIX-TEST in April - c'mon Cliff, I need Arizona! ATLANTA'S now history & I had a really great time. Hey Ted, I still haven't figured out what to do with my double null detecting framistan but it works very well as a door stop, ya can't beat a good door stop for a buck and a half. It was really nice to meet everyone in ATLANTA. It's nice to be able to put a face to a name. I hope to make the Convention a yearly must. I have tapes of both RON SCHATZ'S propagation discussion and CHUCK HUTTON'S beverage seminar so if anyone wants a copy of either or both just send me a blank cassette. Help needed: I need a 2 kc. mechanical filter for my R-390A - it is signal corps stock #321 892-22, 32, filter, bandpass 455 kc. 1-13/32" lg xl" wd x 2-3/4" h, Collins part #522 9160 002. If anyone can help me obtain one or turn me on to where I could get it I would be eternally grateful. My thanks to the GAADS for an excellent job of hosting. An original copy of this Muse is available, how about it Don? You could add it to your junk collection. 3's gang, remember WSB, 50,000 watts.

ACQUIRES "NEW-OLD" RADIO CIRCA 1921

MIKE TUGGLE - 909 Moores Mill Road - Bel Air, Maryland - 21014 8/29/78
 Well folks, in an attempt to get back on "RS", here's another Muse. Although CX are poor, the past couple of days, they do seem to be picking up. Recent new receptions, all at local SSS, include: 8/18- WMMC-1370 Pa. s/off w/SSB. 8/20- WYIT-1570 Va. in for a brief ID, and 8/24- WTCR-1420 Ky. w/an ID before dropping out. And 8/25, WFL-1070 Tenn. came blasting in like a local 50kw, 10:20-11:05pm+, equal to WBAL. I veried them last Fall on an early AM test, but I never expected to hear them again, particularly on RS. Somebody musta forgot to throw the 50kw daytime power switch. On the antique radio collecting front, I hit it big this past weekend at an auction where I picked up an Adams-Morgan Paragon RA-10 regenerative receiver. This particular model, at the hands of its designer "Paragon Paul" Godley, in Androssan, Scotland, received the first trans-Atlantic SW signals from an amateur station in Connecticut in late 1921, 20 years to the day after Marconi sent his TA signal. Travel Out West is scheduled for the next couple of weeks. I will try to report in from out there. Your by-lines are the greatest, Ernie! 73's all. (Thanks, Mike! -ERG)

TRAVELS WEST & HEARS THE EAST COAST OUT THERE

BILL TOWNSHEND - 4500 Connecticut Avenue N.W. #901 - Washington, D.C. - 20008
 While going over my loggings between 1947 & 1962 with the help of an old typed-up November 1949 DX log (I discarded the OY stations since I wasn't sure of them) and memory for later catches (I record only stations I'm sure of). I've discovered that my total number logged here in D.C. is 641. I was Out West for a little over two weeks last month, including a weekend at the IRCA Convention in Portland, Ore. (next year I plan to be at both the IRCA & NRC Conventions). Using the TRF set, some interesting catches are: WLV-700 heard in Portland, Ore., WCB5-880 heard in Reno, Nev., 2,500 miles away, WCAU-1210 from Las Vegas, & KTNQ-1020 from Denver. While in Virginia Beach, Va. last weekend, I heard WYFA-1580 (1,000 watts) o/WPGC-1580 & WBZ-1030, 500 miles, away from Tidewater, Va. (The opening kickoff of the Patriots-Redskins game, won by Washington 16-14, was heard on WBZ). 73's.

ENJOYED THE CONVENTION AND SEEKS OLD BROADCASTING YEARBOOKS

JACK PARKS - 909 Jefferson Street - Hamlet, North Carolina - 28345 9/7/78
 The recent NRC Convention in ATLANTA was the first one for me but I enjoyed it so much that I plan to attend as many as possible in the future. Thanks to all who planned for our pleasure and to those who attended. It was good to meet so many of you and great to be able to converse with people who have interests similar to mine. I believe I made many friends and hope that I made no enemies. My only regrets are that many of you were unable to attend & that I arrived late and had to leave early. As one who began listening about 1941 and received many stations clearly at night I am in favor (1) of expansion of the broadcast band and (2), as long as foreign stations utilize higher power than 50kw, higher power authorization for domestic stations, in the same order, hopefully. I would still like to have the 1967 and 30's, 40's & 50's Broadcasting Yearbooks to add to my collection if anyone has any of these and would be willing to part with them for a reasonable price. I have previously advertised for same in DXchange.

HE'S STILL IN THERE TRYING!

ERIC FADER - 23-35 Ball Boulevard - Bayside, New York - 11360 9/4/78
 Hi group. Only DX lone lately here was MM 8/21, when it was too noisy. UNID TT-1590, 1:24am. CKLM-1570 was off. Local WJIT-1480 had OC, 1:25. UNID-1490 w/"Dr. Demento", carries it 12-2am per now far into the program they were. That's all for now - a re-intro next time. 73's.

ALWAYS REMEMBER TO SUPPORT THE SPECIAL DX TESTS WHICH WILL BE COMING ALONG, BY SENDING THEM EITHER A RECEPTION REPORT, OR A THANK-YOU CARD IF YOU ARE UNSUCCESSFUL IN HEARING THEM, OR CANNOT TRY FOR THEM. LET THE FOLKS AT THE STATIONS KNOW WE APPRECIATE THEIR EFFORTS!

HIS FATHER WILL SOON BE AN N.R.C. MEMBER ALSO!

MARK STRICKERT - 5715 North Kenmore - #302 - Chicago, Illinois - 60660

I'm just back from ATLANTA, all wide-eyed and bushy-tailed ready for work - yawn. The Convention was the best I've ever attended, which isn't saying much as it was my first. However, from what response I heard most NRCers thought it was one of the best. Thanks to the GAAs for a good show, and especially to CHUCK HUTTON who helped the bumbling Lakefront Logger get home. One idea I got from the Wsbee Tour - why not have a special committee to look into taking "pests" off the air during TESTS, using any means - wire cutters, plastic explosives, etc. Sort of a "Courtesy De-Programming Committee." eh? I didn't really mind the spurs WSB was causing. (For those unfortunates who didn't attend, their IR was only 2-3 blocks from the hotel), because they managed to cover the other locals! The next one should be more convenient for me, as I'm but a day's drive N of ST. LOUIS, St. Charles, St. Ralph, or wherever it ends up. At this time I'm setting my sights on a week in the San Francisco Bay area the first week of October. While there I might drop in on a few BARFs - oops! I gotta stop having chili for breakfast, hi! I expect my dad to join NRC during the next couple of months. If he hasn't joined by the time my renewal comes up, I figure on sending him in with mine - should be a nice birthday present for him, don't you think? Lastly, a couple of Chi-Town radio notes. WAIT-820 has returned to BFL ax after a pitiful attempt at a talk format. WCFL now has Larry King, midnight to 6 A.M. (I remember King from my Coral Gables days. He was on WIOD from 7 to midnight. He was MUCH better then, but is still O.K. as AM talk show hosts go.) As KEN ONYSCHUK mentioned, WIND goes all-NX & talk later this month. Otherwise, not much more to say for now, as my DXing will be limited until I have time to perform minor surgery on the TRF to repair a minor problem (the sound goes out a lot). Besides, I think I'm over 30 lines so I'll say 73 (no, not quite that many lines yet!) Until next month.

WE WELCOME ANOTHER NEW MUSER - CHECK IN HERE OFTEN, DAVE!

DAVE YOCIS - 85 Vesper Street - Fairfield, Connecticut - 06430

Greetings. This is my first Muse. I'm 16, a High School Senior, & an NRC member of about two months. I got started in October 1976 on the family bedroom Zenith 79657R and picked up a DL-160 when the Zenith conked out last December. Not much DX lately. 8/23- WSEB-1350 atop channel @ 2:33am w/ID. 9/3- WCAO-600 u/mysteriously weakened WCC, only about eight miles away! While working this Summer in Sherman, about 35 miles N of here, I picked up a BBC IS around 640 on a small transistor portable without any outside antenna. Is there an LA station around there that would broadcast BBC NX around 0130 GMT 8/13? (9:30 pm 8/12, ET -NRC) Or could BBC-647 be a possibility? My totals now stand at 286 heard, mostly because the DL-160 can't tune for splits (no TA's last season) and there isn't enough room for a decent longwire. I'd like to build a good loop or steal the loop from the Zenith before the season starts. WOMN-1220 ("Woman Radio"), ex-WCDQ, is on with new calls. That's all for now. 73's.

MOTBALL MEMORIES

CHAPTER LXXVII - AN ATLANTA DXER REMINISCES (Part One)

- VERNON SHEARER

The year was 1921. At age nine I was busy with my fifth grade homework

one evening when my dad put down the newspaper he was reading and said excitedly, "Atlanta is going to have a radio broadcasting station!" Pushing my homework aside I looked up and asked, "What is a broadcasting station?" "It's a wireless sending station; it's like a telephone without wires", he explained. At my tender age the whole idea sounded a little fantastic, but the thought of sending voices and even music through the air really piqued my curiosity. In the months that followed there was more and more in the newspapers about this newest wonder called "radio". Articles that included diagrams detailed just how one could build his own radio receiver. This new medium was like a shot in the arm to the economy. Almost overnight "radio departments" appeared in five and dime stores, electric shops, and department stores. For sale were vacuum tubes, batteries, head phones, cardboard cylinders, square brass rods with spring contact sliders, switch points and switch levers, crystal detectors, binding posts, antenna wire and insulators, bakelite panels, bus bar, soldering irons, and much more. By the time WSB went on the air in March of 1922 there were several thousand Atlantans who were ready to tune in on The Atlanta Journal's "Voice of the South" which according to the early announcers "covered Dixie like the dew." A few weeks after WSB made its debut, a competitive newspaper The Atlanta Constitution aired its new station with call letters WGM. The two newspaper buildings were on either side of the railroad gulch in downtown Atlanta and were separated in distance by little more than a hundred yards. Wooden poles on the roof of each building supported the four parallel wires that served as the transmitting antennas. WGM was decommissioned sometime before its second birthday, and the license was picked up by Georgia Tech who soon thereafter started broadcasting from the college campus using the call letters WGST (Georgia School of Technology). An Atlanta electrical parts company came on the air with WDBE, and the Atlanta and West Point Railway opened WDAJ in nearby College Park, Georgia. The railway had hoped to provide radio entertainment in its lounge car between Atlanta and points South. Disappointingly they discovered that reception was unreliable a mere 20 miles down the track. Those early days were a DXer's paradise, and almost every listener was a DXer from the outset. In school, at work, and at social gatherings the main topic of conversation was radio, and listeners would boast a little about which out-of-town stations they had been able to pick up. More sophisticated receivers became available, many enclosed in fine handmade cabinetry. The popular Victrola record player was joined by RCA's line of Radiola receivers. And Zenith in their advertising cited the DX capabilities of their receivers which at the time were the choice of an Arctic expedition.

WE WILL CONTINUE VERNON'S STORY IN THE NEXT ISSUE OF "DX NEWS".

AM or FM, Billy rhymes them!

HILL WURTZEL - 32 West 31 Street - New York, New York - 10001 212-594-4892 8/31/78

Sorry to have missed this year's Convention, but I promise to show up at the next one and do some entertaining. I hope to play the guitar by then and will do a song I wrote, and recite some limericks about DXers and radio. There is never anything mentioned about the FM band in DX NEWS, so I wrote this poem, a sequel to the AM band poem called "Dialing New York's FM Band."

1
I always twirl my tuning knob from WKTU
Across the FM rock dial to WNEW
Between each of those rock stations
I tune by carefully inapticipation.

2
At 95.5 FM is W P L J
Which plays many hit songs every day.
Then there is NBC's 97 - W Y N I
Which I listen to when I get high.

3
A bit further up is 99-X W X L O
Which plays rock mixed with Disco.
Next is CBS-FM-101 playing the oldies
Today's big hits and back to the oldies.

4
Next door is FM-102 W P I X
Which I enjoy with a few beers by Beck's.
When I want jazz I tune in WRVR
I also listen to them in my car.

5
For classical music it's W N C N
Which plays the classics and Beethoven.
WQXR, the Times station, gives me news
Classical music, or their newspaper I can choose.

6
Public affairs programs are heard on WNYC
Which keeps my mind alive mentally.
WFAT is New Jersey's good music station
93's the dial setting, with no duplication.

7
Newark's station WFME brings me religion
Which is listened to by my pet pigeon
Free speech listener-supported W B A I
Struggles to survive but they always get by.

8
W T F M, W R F M, and Newark's W V N J
Bring us nice music to soothe our pains away.
W E V D has ethnic programs and Danny Stiles
Which makes me happy and full of smiles!

ONE OF THE OPINIONS FROM ONE OF THE MINIONS

TOM FARMERIE - 62 Sunrise Avenue - Grafton, Massachusetts - 01519
Outside there is thunder and lightning; the QRN level is fright'ning.
Auroral displays have gone on for days,
While LA's sign off early nightly.
I'm afraid if conditions get worse we'll
All write bad poems like Wurtzel!

MUCH ADD ABOUT NOTHING - i.e., NO NEW CATCHES

ERMIE COOPER - 5 Anthony Street - Provincetown, Massachusetts - 02657 212-487-9337 9/11/78
On HILL WURTZEL's specialty I hate to make assault, but verses have ground here to a screeching halt! The ATLANTA Convention was absolutely fantabulous, and ha ha to all of you who missed it! What a great bunch of guys we have in the NRC! Long may it (we) wave! My thanks in particular to KARL JETER who picked me up at the airport Thursday night, and to CHUCK HUTTON who delivered me back there on Monday afternoon. Now - only 49 weeks to make plans for the next big one - in ST. LOUIS! It'll seem odd to type the 1978 Convention city in small letters again, hi. Recent DX: MM 8/14- WNBC-660 & WTC-1080 were off today; TT-1600 @ 2:26-2:29, unID. Unn YNAV-860 in troubled Managua, heard @ 1:52 w/Glarin off. Unn CHW atop 1250 @ 2:20 w/pop mx. More TT on 1600 @ 3:23, then OC. Looks like WBEZ-620 is AN HMs, as they had "20-20 NX" @ 3:40. 8/16- Late Red Sox BB noted on 1230, 1280, & 1450, the latter IDed as WTSN, unn. CKLM-1570 off again w/CFOR there. TT looping SW/NE on 1280 @ 2:05. I noted a "2-W-E" ID in the 1490 pile @ 2:09, new calls for old WVEC (WVDE) but not enough for a report. 8/18- Late Red Sox games noted on WTSN-1270, WDMA-1370, WGAN-560, WTAG-580, WNNH-930, WJAR-920, all unn, circa 1 a.m. UnID TT-1590 1:36-1:41+. More TT w/WFOP & CIOO on 1410 @ 1:29, and a low hum-like tone on 1480 around 2:03. WKEI-590 & WHEI-1330 were not on; 590 yielded only CKEY & CHW, unn. Paul Harvey said today he's signed with ABC for the next seven years, so he's not switching to Mutual. 8/19- Unn WNU5-1490 s/off 1:26 w/no SSB after Red Sox WC BB. 8/20- SM - Unn CKJD-1110 noted on night pattern for the very first time, S-7, is the pattern acting up, RON SIBBITT! This @ 1:45 w/WBT off. Unn WNOX-990 noted atop WZZD @ 1:49. The 1206a Haitian seems AN SMs, still on @ 2:40. MM 8/21- WTC-1080 off again this week. Unn WIBX caught s/off @ 1:26. TT on 1430 2:02-2:09, who? Unn CFNW-790 in well @ 1:31; they use the CBS NX IS up there in Newfoundland also! And CKJD-1110 giving WBT a battle @ 2:49. 8/23- Larry King mentioned KPOL-1540 will join his network 8/29. 8/23 - TT-810 @ 1:29-1:37, then OC w/WBY. TTs also on 1550 and 1570 circa 2. SM 8/27- Unn WCHS-990 off today; unn WBSA-910 heard s/off w/America the Beautiful @ 3am, leaving WLAS/WRNL. MM 8/28- AU. SS-1530 1:38-2:13 s/off, unID, any ideas, people? Old (friend?) R. Piloto-1370 giving WFEA fits today. Unn WAMS-1380's r/c-TT heard @ 2:33. Unn WRC-980 atop @ 2:45. 990 featured only R. Tricolor AN. A Barranquilla outlet was noted on 1220 @ 3:15 as it grew more "Aurora-er" by the minute. That day, Paul Harvey mentioned the sensational Northern Lights displays of the last few nights! 8/29- Unn WFTR-1450 noted r/c-TT which means theirs is the LAST Tuesday, 1-1:15. 8/31- Dominican Republic NA noted on 950 @ 1:36am; Cesar says this is R. Popular, now on 950, ex-920. Unn WROD-1340 on AU AM in with Larry King. C U N 14!

WITH THIS ISSUE OF DX NEWS, WE CONCLUDE VOLUME 45. AND, YOUR OLD EDITOR THIS NOW LAUNCHES INTO HIS "Volume 37" OF DOING THE MUSINGS SECTION. WE WOULD LIKE TO URGE YOU GOOD FOLK NOT TO ALLOW THIS SECTION TO FAULTER AT THIS TIME OF YEAR WHICH SEEMS TO BE AN ANNUAL LET-DOWN PERIOD. SO, WHILE YOU HAVE IT IN MIND, WHY NOT DASH OFF A MUSINGS LETTER, DOUBLE-SPACED, OF COURSE, RIGHT THIS VERY MINUTE? THEN, YOU'LL KNOW YOU ARE DOING YOUR PART, IN CARRYING SOME OF THE WEIGHT OF TURNING OUT GREAT ISSUES OF YOUR FAVORITE DX PUBLICATION, "DX NEWS"! -ERC

CONTESTS

JOHN KROMKA
P.O. BOX 86
MONTVILLE, N.J. 07045

WELCOME! to another era of Contests for the medium-wave band. You probably notice that I am the new editor and I hope that this season's contests will stir up enough interest as Bob Walker's had and hope I can do a good a job as he had done with the column. With this issue I hope to illustrate, to the best of my ability, the Contest program for the coming 1978-1979 season. I hope that all of you will participate in it and enjoy taking part in the various Contests all throughout the coming months. They should all prove quite interesting as I have tried to involve Contests this year with various different applications in our hobby.

With the beginning of Contests this time we will not charge any entry fee for the first Contest, as to let as many wet their appetite. After the first Contest the entry fee will be 30¢, or two 15¢ stamps. Stamps would be preferred as they would go towards a certificate of appreciation which everyone will receive at the conclusion of the Contests season. More on this later-----

The prizes for each Contest will be relatively the same as last year except for a new prize included this season. For two of the Contests, if you are the winner, you will have your choice of any \$3.00 worth of reprints. The other Contests will have the prizes of antenna reference manual, receiver reference manual, the NEW NRC Domestic Log, and the NRC Pattern Book. The Grand Prize for this year will be a FREE SUBSCRIPTION for DX News for one year!

If you win one of the eight individual Contests, it is only fair that you will be ineligible for any other prize if you happen to win again, other than the Grand Prize, of course.

Deadline to send me your entries for each Contest will be FIVE DAYS after the conclusion of each Contest, so don't delay sending them in. Get your entry to me as soon as possible or I will not be able to accept them.

It may seem to some of the membership that one of more of the Contests this time around may favor certain geographical areas of the U.S. and other areas. I have done my best to make it as fair as possible for all.

So that you may have a sneak preview into this year's Contest program here is a list of all the upcoming Contests for this season including all the details you will need to know about each of them:

CONTEST # 1

Most stations that you can log on any two combined frequencies of your choice.

LENGTH: Oct. 10-Oct. 17 DEADLINE FOR ENTRIES: Oct. 22
PRIZE: \$3.00 worth of any reprints the winner chooses
POINT SYSTEM: 1 point: for every 50,000 watt station
2 points: " " 25,000 watt station
3 points: " " 10,000 watt station
4 points: " " 5,000 watt station
5 points: " " 2,500 watt station
6 points: " " 1,000 watt station
7 points: " " 500 watt station
8 points: " " 250 watt station

BONUS: 25 points for each PSA heard under 250 watts

DOUBLE BONUS: 50 points for each station heard while testing -----

CONTEST # 2

Stations only with FM affiliates with identical call sign.

LENGTH: Nov. 8-Nov. 14 DEADLINE FOR ENTRIES: Nov. 19
PRIZE: Receiver reference manual
POINT SYSTEM: 1 point: clear channel station
2 points: regional channel station
5 points: local channel station(graveyarder)

BONUS: 10 points for each frequency that you can log five or more stations

DOUBLE BONUS: 50 points for each frequency that you can log 10 or more stations

CONTEST # 3

Stations only 1000 watts of power at time of reception

LENGTH: Dec. 6-Dec. 18 DEADLINE FOR ENTRIES: Dec. 23

PRIZE: Antenna reference manual

POINT SYSTEM: 1 point: fulltimer

3 points: daytimer

10 points: station testing with power of 1000 watts(can be day or night power)

BONUS: 25 points for each frequency that you can log eight 1000watt stations on
LIMITATION: Excludes local frequencies ----- at least -----

CONTEST # 4

Stations in your home state or states bordering your home state

LENGTH: Jan. 9 DEADLINE FOR ENTRIES: Jan. 14

PRIZE: NRC Domestic Log

POINT SYSTEM: 1 point: stations in home state

5 points: stations in states bordering home state

BONUS: None -----

CONTEST # 5

Stations in any other time zone than your own(includes Canadian time zones, excludes any other foreign time zone)

LENGTH: Jan. 31- Feb. 6 DEADLINE FOR ENTRIES: Feb. 11

PRIZE: NRC Antenna Pattern Book

POINT SYSTEM: one time zone away stations: 50,000 watts: 10 points

25,000 watts: 20 " "

10,000 watts: 40 " "

5,000 watts: 60 " "

2,500 watts: 80 " "

1,000 watts: 100 " "

500 watts: 150 " "

250 watts: 300 " "

two time zone away stations: 50,000 watts: 500 points

25,000 watts: 1,000 " "

10,000 watts: 5,000 " "

5,000 watts

and less : 10,000 " "

three or more time zones away: 50,000 watts: 20,000 points

25,000 watts: 40,000 " "

10,000 watts: 75,000 " "

5,000 watts

and less : 100,000 " "

BONUS: None -----

CONTEST # 6

Fulltime station signoffs

LENGTH: Feb. 27-Mar. 6 DEADLINE FOR ENTRIES: Mar. 11

PRIZE: Receiver reference manual

POINT SYSTEM: 1 point: clear channel station

2 points: regional channel station

4 points: local channel station(graveyarder)

BONUS: 50 points for each frequency with two or more signoffs heard

DOUBLE BONUS: 200 points for each frequency with 5 or more signoffs heard

CONTEST # 7

Only stations with a "U2" antenna pattern according to NRC Domestic Log

LENGTH: Mar. 27-Apr. 3 DEADLINE FOR ENTRIES: Apr. 8

PRIZE: Antenna reference manual

POINT SYSTEM: 1 point: regional channel station

5 points: clear channel station

NOTE: Graveyard frequencies do not count because there are no "U2" stations on these channels.

BONUS: 20 points for each clear frequency with 2 or more "U2" stations heard

DOUBLE BONUS: 40 points for each regional frequency with 4 or more "U2" stations heard -----

CONTEST # 8

Only stations that have in their format "T40" (top forty) as per NRC Domestic Log

LENGTH: Apr. 24-May 1 DEADLINE FOR ENTRIES: May 6

PRIZE: \$3.00 worth of any reprints the winner chooses

NOTE: Be it clarified that a station will count in this Contest if Top 40 is any part of a station's format. It does not have to be their only format.

POINT SYSTEM: 1 point: daytimer on clear channel frequency

5 points: daytimer on regional channel frequency

6 points: fulltimer on regional channel frequency

oops! 3 points: fulltimer on clear channel frequency

10 points: graveyard

BONUS: 100 points for each tester heard with T40 format

Well, that's it! I hope that they spark your interest and cause you to participate. I would like a better turnout this season for participation in the Contests. Only 30 members took part in last season's Contests and that's not a great number considering the size of the current membership. I hope we get more members to participate this year. It's really a good idea to participate because the Contests are really FUN and you will enjoy them greatly, I guarantee you, hi!

Members of NRC Staff or anyone associated with the Louisville Publishing Committee is ineligible for participation in any Contest. The Contest Director reserves the right to null and void any entry.

Remember the first Contest is from 0000 LT, Oct. 10 until 2359 LT, Oct. 17, 1978. Prize for this contest will be the winner's choice of any \$3.00 worth of reprints he or she wishes. Contest will be most stations that you can log on any two combined frequencies of your choice. Deadline for entries is Oct. 22. Remember NO entry fee is required for this first Contest. Deadline for entry fee for remaining Contests of 30¢ will be Nov. 7.

Here's hoping all will have an enjoyable season participating in Contests.

Just one note of caution: WATCH OUT FOR MIKE HEPPE, hi! 73's and CUN3 wks.

John

St. Louis In 1979!!

Due to overwhelming public demand at the recent NRC convention held in Atlanta it was decided to hold the 1979 convention in St. Louis. Since 1979 will be the 10th. anniversary of the 1969 bash hosted by St. Louis it seemed indeed appropriate.

Tentative plans are to have the actual site located in Historic St. Charles, but since St. Louis is a suburb of St. Charles no problems are foreseen on this account. Transportation to the area presents no problems as I70, I64, I44 and I55 all converge here. St. Louis International Airport is located 8 miles East of St. Charles, Greyhound and Trailways bus lines also have a terminal here.

There are many attractions in the area such as the fantastic Gateway Arch on the St. Louis Mississippi riverfront, Missouri's First State Capital building located in the St. Charles Historic District on the banks of the Missouri River, the Budweiser Brewery, not to mention KMOX-1120 with it's 50 thousand Red Hot Watts, hi.

St. Charles has all the amenities such as McDonalds, Burger King, White Castle, Taco Bell, as well as several nice restaurants that serve real food. Northwest Plaza shopping center with about 150 different stores is located only a 15 min. drive away (take note Ted)

Some of the activities under consideration are a Cardinal BB game if they are in town at the time, an excursion on the Steamer Admiral or a trip to Six Flags Over Mid-America for those getting in on Thursday or Friday. As an added attraction Ted has agreed to act as auctioneer at the annual crazyness that transpires after the banquet (that alone is worth the trip, hi).

As you can see there is a lot to do and see in this area so plan now to attend and bring the family along. As plans are finalized you will be updated so stay tuned.

		V E R I E		S I G N E R S			
540	WLIX 1r	Marilyn Schon, Trfc	E	1280	WELM 1	Theodore Kalin, CE	E
	WGTO 1	Paul E. Telchenal Jr., CE	E		WGSO 1	Frank Maynard, CE	C
550	WKRC f	W. Talley, ESu	B	1290	KOIL uq	Jerry Weist, CE	C
	WMLM 1	Anthony F. Hogg	E	1300	WYNG 1	Warren Henderson, CE	B
560	WFIL q	Ray McCloy, CE	D	1310	WSEL lu	Joseph Terrieu, CE	E
610	WSLC 1m	Herman Reavis, Exec VP	B		WJLK c	Al Bonner, CE	E
620	WHEN 1	Jeffrey Baker, CE	E		KFSB p	John C. David, GM	C
630	KMAC ul	Shirley Browning	E		WSLW 1	Douglas Lawrence, Cont'y	B
	WMAL q	u/u, CE	D	1320	WHHO fu	Ralph L. Van Der Linden	E
660	SLucia lu	Jacques Comptan, M	B		WKQT q	B. Taylor, CE	F
680	WCAW 1m	Michael J. Grady, DoE	B	1330	WASA 1m	J. Allan Lerner, CE	B
710	KIRO q	David L. Hubert, CE	A	1350	WNLK 1	Clif Mills, CO	E
	WREG 1	Jeff B. Wilson, O	B	1360	WDRG q	Wayne Mulligan, CE	E
730	WPIK f	Robert Taliaferro, CE	E		WMBZ 1	Francis C. Fekel, CE	E
740	WPAQ 1	Mrs. Lucy E. Bowman	E	1370	WELV ru	Al Brene (?)	E
	WMBQ 1	George V. Ramsey, CE	E		WFEA fu	Paul R. Barrette, CE	E
750	WBYD 1	Scott Brenner, CE	B		WKIK 1	Ted R. Tate, PD	D
790	CHIC 1	M. D. Hargrave-Pawson, CE	E	1380	WAMS xl	Bruce Schiller, CE	A
800	CJAD c	Ernest Mott, CE	E		KDXE ur	u/u	C
810	CJVAuam	Francois A. Jacob	F		WBNX 1u	Al Jayne, CE	E
820	WBAP q	u/u	E		WDOW 1	Robert Sagendorf, SxD, MxD	E
830	HIJB qn	u/u	B	1390	WROA ul	Jack Cox, CE	C
850	KOA q	u/u	E	1400	KVOU ul	Nona Whitley, M	C
	WKIX q	Terry L. Tucker, CE	D		KTFS ul	David Hall, PD	C
	WYDE m	u/u, CE	D	1410	WHLN 1m	James T. Morgan, P	E
860	WLEG 1	William Hogan	F	1430	WHEL 1m	Christopher J. Hall, CE	E
	WYJZ ul	James Eric, Genl Sales M	F	1460	WAXC fu	R. Bruce Peters, CE	E
	HILR q	u/u	B	1470	WMBD fu	Neil Burk, CE	D
	WOAY up	Don Moye, CE	B		CHOW 1	Larry Holleran, E	E
895	4VRNM nl	Edner-Jude Jean-Louis, PD	C	1480	WHBC q	John Schen, CE	E
910	KRIO ul	Madonna Johnson	C	1500	KSTP c	George G. Merrill, CE	E
	WJGW 1	Ed Bryant, CE	D	1510	WPUT 1	R. Novik, GM	E
	WBRJ c	T. Hamilton, CE	D	1520	WKSW f	Peter Burk, CE	E
920	WPTX 1	Carl L. Joyce, Adv. M	D		WTGR 1m	William Files, CE	E
940	WLDG	Louis M. Ozark, CE	A		WSLT 1	Ronald M. Miller, SM	D
960	CHNS q	Judy Cairuthers	E		WVDB f	R. Nicholson, CE	D
970	KSYL ulm	David W. Meland, PD	C	1530	WNTR 1	Robert Nafzinger, CE	D
980	KCAB ur	Judy Patter	C		KNEB ulm	Richard E. Knox, M	C
	CKQM lum	Geoffrey Smith	E		WRBX pu	Randy Merritt, PD	E
	CHEX q	Judy Carswell	E	1540	KRXV ul	Evelyn Dobbs, Bkpr	C
	KININ ulm	Eddie Bell, CE	C		WPTR q	u/u, CE	D
1000	WSPF 1m(1)	William Setzer, Op M	B	1550	WXVA 1	Tammy Rutherford, DXDep't	DE
	WSUM 1	David S. Johnson, TD	E		WMLB 1m	Thomas Saylor	F
	WKYB c	D. H. Hastings, CE	E	1560	WRSJ 1nu	Jose A. Cruz, PD	B
	WKBP 1	Austin Rigsbee, SM	E		KWOC uq	M. McKee	C
	WSPF 1(2)	William Switzer, Op M	E	1570	WTDW 1	Susan L. Fishel, CorpComM D	D
	WRNJ 1	Lawrence J. Tighe Jr., P,GM E	E	1580	WPGC fh	(Joseph Nunemaker, WABZ, CE D	D
1010	CFRB c	D. Lumley, for: C. Eastwood, VPoE	E		WYFA 1m	Perly Silver, P, GM	F
	1020	KDKA q	u/u	E	KLOU c	Daniel Chimenco	E
	1035	4VEC q	Mrs. Edna Beachy, Q/L Secy D	E	WPUV 1q	John A. Columbus, P, CE	E
	1080	WYIC q	Harold A. Dorschug, CE	E	WKIG 1	Dan F. Cobb	E
		KRLD q	Rick Neace, CE	E	WBBA fm	Russell Knepler, PubAffrs	E
		WDRR 1	R. Frank Timberlake, VP,GM B	E	WVKD pu	Bert Charles, P, GM	B
1090	WILD 1	Robert Motiz, CE	E	1590	WGOE q	James Grainger, CE	B
1100	WLB 1um	Miss Myrie Denney, OM	B		WEST 1	John Bridgeman, CE	F
	WHLI q	Richard G. Silvera, CE	D		WDRH ru	u/u, VP, GM	D
1110	CKJD 1hm	Ronald J. Sibbitt, CE(NRC)	E	1600	WNST 1m	Gaines R. Johnson, CE	F
1120	WUST f	Gary Hess, TD	E		KCRG	Carl Mann, PD (NRC)	A
1140	CJTR qn	Denis Jourdault, DT	B		WNUE pu	Gene Johnson, P, GM	B
1150	CJRC q	Andre Bonneau	A		C R E D I T S		
1170	WCLN p	Larry B. Carr, GM	F		A - Ray Arruda	D - John Rouse	
1190	CHTN f	John R. Bentley, CE	E		B - Kelly Andrews	E - Mel Bernstein	
1230	KEEE ul	Kirk Williams, PD	C		C - Steve Ponder	F - Ernie Cooper	
1240	KOCA 1	Richard Martin, GM	C		Symbols used: e - English (when native language of station isn't)		
	KEAN ul	J. T. Wheeler, PD(nowXXL)	C		u - Verie as a result of a follow-up.		
	WSKI q	Gerard L. Marcato, CE	E		h - V/s is a ham. l - Verie is a letter.		
1250	WDVA 1	Allian P. Campbell, CE	E		m - Included coverage map. n - In native language of station (when not English)		
	WREN ufl	Lee Yazell, CE	A		p - Prepared card (by the DXer) q - Verie card, printed.		
1260	WNGC q	u/u	C		r - Verie on DXer's report.		
	WPHB 1h	C. Dean Sharpless, CE	E		f - Verie is a form letter or carbon/photo copy		
	WBNR f	Jay Nussbaum, CE	E		x - Verie is unsatisfactory or vague.		

We have quite a few more verie signers on hand - keep them coming, but please ferret out those which have appeared recently. List type of verie, as