



# DX NEWS

*the magazine of the  
National Radio Club*

— SINCE 1933 —

VOLUME 51 ISSUE 26 May 7, 1984

**CPC TEST** See CPC Section for details, should have been part of the NRC Hot Tip postcard system, headed by Ken Chatterton. Wanna join?, send a couple of stamped postcards w/ your name & address on them, and Ken does the rest.

**AM Stereo for Autos** Sherwood CRD-158 model. It has digital readout, 10 stn preset, separate base & treble controls, also FM Stereo & cassette player. To find the nearest dealer call 800-841-1412 during west coast business hours, or try 800-633-2252 ext 865. This all according to Walt Breville, he saw the ad in the May '84 issue of Stereo Review. Anyone out there have one yet? If so, test it and let us know!

Here's some good news about a stn, WJSD-1590, is a 'friendly stn' toward DXers. This according to Dave Schmidt, says the stn is asking for accurate reports of its signal, give it a try. Verie signer is J. Paxton Durham, CE & C.W. Williams, Assistant Eng. (Address is as is in the Log book).

**BCB/SW MEETING** to be held in Colorado. May 22, June 17, both at 1700 to 2130 UTC. For info write to Rob Harrington, Box 3434, Littleton, CO 80161

From ANARC, \*ANARC 1984 CONVENTION. This coming July, hundreds of hobbyists will be gathering in Toronto, Ontario, Canada to talk about radio. The hobby is called DXing - and it means picking up rare and distant stations from around the country to around the world. The Association of North American Radio Clubs sponsors its annual convention each summer for DXers who listen to every possible radio broadcast - including LW, AM, SW, FM, TV, and Utilities. It's an exciting weekend for anyone interested in the world of radio. This year's convention will be sponsored by the Ontario DX Association and the activities will be held from July 20 to July 22 at the Ramada Renaissance Hotel in Toronto. Included in the weekend's activities are seminars on all kinds of radio listening, displays from manufacturers of hobby equipment, forums with broadcasters from around the world, along with an emphasis on seeing the sites of beautiful Toronto. For registration information and a schedule of activities, write to ANARCON 84, P.O.Box 232 - Station Z, Toronto, Ontario, Canada, M5N 2Z4. When you write, send a self-addressed envelope and a 1st class stamp (do not attach stamp to envelope). For those outside North America, please include 3 IRCs. See you in Toronto!

## CPC TEST (ALL TIMES ARE E.L.T.)

May 7 WBUC-1460 0000-0100. Big Band music. Do not call stn as test will be Mon conducted at location where no phone is available. WRITE to: Jay Neuman Owner, Drawer C, Buckhannon, WV 26201 Arranged by Brian Pitman.

## LOOK INSIDE:

- |                               |                                       |
|-------------------------------|---------------------------------------|
| 2.....AM SWITCH               | 30.....Some Antenna Experiments       |
| 4.....DDXD                    | 32.....A4R GRAPH                      |
| 8.....IDXD                    | 33.....60YRS of Adventist             |
| 11.....FORMATS                | Short-Term Stations                   |
| 13.....DXCHANGE               | 34.....KARL JETERS Replies            |
| 14.....STN PROFILE-KXEW       | To WTAK                               |
| 15.....STN PROFILE-WGMA       | 35.....FINLAND RECEPTION REPORT       |
| 16.....S. FLORIDA NEWSLETTER  | 36.....BANDSCAN                       |
| 17.....FCC NEWS RELEASES      | 37.....CONTESTS                       |
| 18.....QSL'ing The Locals     | 38.....MUSINGS                        |
| 19.....PUZZLE                 | 43.....HAP PAGE                       |
| 20.....*Knock Your Socks Off* | 44.....UNIV. SW RADIO DXers Directory |
| Regen. Amplifier Circuit      | 45.....AGENDA FOR ANARCON '84         |
| 21.....ICOM R-71A REVIEW      | 46.....ANARCON '84 REGISTRATION FORM  |
| 24.....1400 KHZ STN LOC MAP   | 47.....NRC CONVENTION FORM            |
| 28.....SPORTS NETWORKS        | 48.....NRC FACTS & YOUR NAME!         |

**THE WORLD'S OLDEST AND LARGEST ALL MEDIUM-WAVE DX CLUB**



## AM SWITCH

JERRY STARR  
C/O WHOT RADIO  
401 N. BLAINE AVENUE  
YOUNGSTOWN, OHIO 44505

## CALL LETTER CHANGES

Old call:	New call:	Old call:	New call:
760 *New FL Palm City	WJEA	1340 WSEB FL Sebring	WITS
990 WSDM MI Clare	WABX	1400 KONG CA Visalia	KNDE
1030 *New CA San Luis Obispo	KXZI	1420 KRIS WA Renton **	KSCR
1140 KSKS TX Conroe	KXLC	1440 KGLD MN Golden Valley	KQRS
1200 *New KY Radcliff	WYCP	*New TX Helotes	KXAM
1230 WTCB AL Tuscaloosa	WIGL	1450 WXOL IL Cicero	WVON
1260 WGWR NC Asheville	WKXR	KITX MT Whitefish **	KSLR
1280 KBDF OR Eugene	KYKN	1470 KSEM WA Moses Lake	KBSN
1310 WOLF FL Deland	WYND	1600 KCRI AR West Helena	KVHA

\*\*KRIS was granted but never used, station remains KSCR. KTXK call change to KSLR correcting previously reported KSKR which appears to be incorrect.

## APPLICATIONS FOR NEW STATIONS

610	CO	Minturn: 5000 D1
680	KY	Shepherdsville: 500 D1
820	CO	Winfield: 1000 D1
830	WY	Evansville: 10000 D1
840	KS	Lyons: 2500 D1 **
	LA	Ball: 1000 D1
	NM	Bernalillo: 5000/1000 U1 **
	TX	Reese Village: 10000/1000 U1 **
1010	CA	Rancho Mirage: 500 D1
	CA	Thousand Palms: 5000 D1
1030	CA	North Palm Springs: 5000/1000 U1
1240	AL	Gadsden: 1000/250 U1
1460	OR	Stayton: 1000 D1

\*\*The Bernalillo (suburban Albuquerque) and Reese Village applications are both by the same group, although under different corporate names. These are "mutually exclusive" meaning that only one of these two will be granted. Note that the Lyons, KS application is a different community from the larger Lyon, KS (for those of you who like to locate these on you map)

## GRANTS FOR NEW STATIONS

830	CA	Orange: 2500/1000 U2
1030	CA	San Luis Obispo: 50000/1000 U1
1200	CA	Pismo Beach: 5000/1000 U1
1440	TX	Helotes: 500 D3

## APPLICATIONS FROM EXISTING FACILITIES

850	WIVS	IL	Crystal Lake: power to 5000
870	KPRM	MN	Park Rapids: day power to 25000
920	KQEU	WA	Olympia: to 5000/5000 U4
1000	KXRB	SD	Sioux Falls: to Harrisburg, SD with 10000/2500 U4
1050	KORE	OR	Springfield-Eugene: power to 5000
1270	WVCA	IN	Gary: night power to 2500
1400	WVGB	TN	Waynesboro: change from unlimited (KURE) to specified hours (SH1)
1450	KTCI	TX	Gonzales: day power to 1000
1460	WJKX	MS	Moss Point: power to 1000
1500	KDFN	MO	Doniphan: to 2500/1000 U4

## GRANTS TO EXISTING FACILITIES

990	WVSC	PA	Somerset: power to 10000
1200	KFNW	ND	Fargo: remove limiting resistor in non-DA antenna
1230	KNUZ	TX	Houston: taller tower (already has the tallest tower of any IV)
1470	KVLH	OK	Pauls Valley: changes in antenna system
1480	KAAR	WA	Vancouver: taller towers
1500	WIXR	SC	Mount Pleasant: power to 5000
1560	WQXM	GA	Gordon: relocate XR
	WPAD	KY	Paducah: night power to 5000

## One hot promotional

AMES, Iowa (UPI) — A promotional broad-

cast from a hot tub at a downtown intersection proved to be hotter than planned when a microphone fell in the tub and gave two radio personalities an elec-

trical shock. Police said KASI radio news director Rich Fellingham and morning announcer Dr. Johnny Gray had just begun a morning

broadcast shortly before 8 a.m. Monday when a microphone fell in the tub and short circuited. Both men were treated at a nearby hospital and

released. A KASI spokesman, who called the incident a "break accident," said the radio station had conducted a similar promotional broadcast.

## OTHERNESS

1240 KBYM MT Billings: Remember last October when the owners of this station proudly announced how they would use the facility for such things as reading services for the blind, community access and education? Well put those high ideals on hold. The college has just sold the gift station to a group of commercial investors for \$420,000 CASH! Unknown is the fate of the recently requested call change to KUUS. 1560 WA Sumner: Last issue we raised the question if the fulltime CP that was granted to KFWY would be carried over to the applicant for this frequency since the FCC had cancelled the KFWY license. The answer is NO. This frequency was VACATED by the cancellation of KFWY and the new parties are applying for a totally new station on a now-empty frequency. Their application was for the daytime facilities similar to KFWY. If they were purchasing the station the CP would be transferred to them. Since the frequency was vacated the fulltime CP, along with the KFWY license is cancelled, it no longer exists. The new owners (if granted) can, of course, apply for the fulltime CP but will have to start back at square one and go through the entire procedure.

And finally, some question has been cast on last issue's listing of the application of WCAS-740 to move to 1090 kHz since WILD is already operating on this frequency. It turns out that WILD's application for 720 kHz is mutually exclusive with WCAS's request. WCAS is proposing to move to 1090 kHz if and when WILD moves to 720 kHz.

73 and Good DX,

*Jerry & BKF*

Jerry Starr & Buffalo K. Foonman

**W P T W**

AM - FM

WPTW RADIO INC. - PIQUA, OHIO

## KDEN, KWOD TAGGED

## Radio Stations Dealt Heavy Fines, Short-Term Renewal

Failure to comply with FCC rules has resulted in stiff fines for several stations, and a rare one-year short-term renewal for KDEN/Denver. Stations are normally renewed for seven years. The all-News station will also have to make EEO progress reports to the Commission every six months, and was admonished for errors in its EEO reports.

"They're at the edge here," warned Commissioner Mimi Dawson. Poor minority hiring performance resulted in attachment of EEO reporting conditions to KDEN's license in 1977. EEO Branch Chief Glen Wolfe told the Commission. The station rallied to do an "adequate job" in the 1977-1980 license term, but slipped again from 1980-1983, when minorities were hired only "sporadically" and KDEN made "little effort to communicate the station's employment needs to sources of qualified minority applicants."

A petition to deny KDEN's license had been filed by the Urban League of Metropolitan Denver and the National Black Media Coalition (NBMC). The coalition also objected to the renewal application of WYDE/Birmingham. The Commission decided to renew WYDE for the full seven years, but to require periodic EEO reports. Even though the license term in question occurred before Alande, Inc. bought WYDE in 1981, the FCC said the new owner isn't making enough effort to seek out minority applicants.

## KWOD/Sacramento Fined \$10,000

In recent actions by the Mass Media Bureau's Enforcement Division, KWOD/Sacramento was socked with the biggest fine -

\$10,000. The station was accused of exceeding 100% modulation, creating spurious signal emissions, and making an unauthorized move of its auxiliary station.

WNAB/Bridgeport ran afoul of the Commission's complex political broadcasting rules, earning a \$5000 penalty. The FCC said the station not only failed to charge political candidates the lowest unit rate, but also discriminated by improperly charging candidates different rates for the same classes of airtime.

## EEO Fines Lifted

Three stations have been relieved of \$1000 fines previously issued for failing to file annual EEO reports. KSVN/Ogden was found to be exempt from reporting because it has fewer than five fulltime employees. WCPG/Houston, MS was found to be in technical compliance with the rule, and KLLR/Walker, MN was let off the hook because of new ownership since the station's failure to file 1981 and 1982 EEO reports.

## A silent station may return to air

Associated Press

LATROBE, Pa. — A former Westmoreland County radio station shut down in August because of financial problems may be broadcasting under new ownership within 60 days. The Federal Communications Commission last week approved the purchase of the license of WQTW-AM of Latrobe by Stan Wall. He also owns WLSW-AM in Scottsdale, Westmoreland County.

Wall bought the station in federal bankruptcy court in November for \$60,000, said Chris Molton, general manager of WLSW. WLSW is conducting surveys to determine an appropriate format to use for WQTW, but no decision has been made, Molton said.

## Daytimers Get More Relief, But ABES Threatens Lawsuit

Responding to daytimer complaints that they were granted ridiculously low post-sunset power, the FCC voted last week to change the way it determines those power levels. But the Association for Broadcast Engineering Standards (ABES) immediately said it may take the issue to court, charging it would cause "severe and widespread interference to the existing local groundwave service of fulltime regional stations."

Daytimers on regional channels (Class 3B) will no longer have to abide by "worst case" interference calculations. They'll get a minimum of 100 watts, and many will get up to 500 watts.

Daytimers on clear channels won't get across-the-board relief, although new power-setting methods will help many stations.

"Daytimers need help," FCC Chairman Mark Fowler commented. But he added the warning, "We have gone as far as we reasonably can. I would frankly be unhappy to see them press for more and more and more."



Mark Fowler



# DOMESTIC DX DIGEST

DAVE SCHMIDT  
42 CHELWYNNE RD.  
CASTLE HILLS  
NEW CASTLE, DE 19720

Here is the NRC column which is almost as exciting as Oxford, Pennsylvania on a Saturday night! When sending your items in, please type or neatly write, skip a line or two between items, BLT (EDT after 4/28 please), and all the usual stuff. And off we go:

## SPECIAL:

- 1170 WRIT CT VERNON - Add to NRC log, operates with critical hours power of 500 watts, per verie. (KG-PA)
- 1240 WYGL PA SELINGROVE - 3/26 was first day of new call usage as well as new management, ex-WQBQ. (KG-PA)
- 1260 WZBO NC EDENTON - 3/29 0600-0641 usually on top w/no data s/on for AM and FM, RKO Satellite News, weather, pop music and ads, ID's as Z 102, ex-WCDJ. (KG-PA)
- 1460 KKHT CO COLORADO SPRINGS - 3/29 noted w/new calls, oldies format, sked still NSP, ex-KYSN. (WH-CO)
- 1600 WKJS TN HARRIMAN - 3/26 1836-1845 o/all in WRRL's null w/religious songs, ad and no data s/off by female anc'r, ex-WHBT/WJZA/WDBH/WHBT. (KG-PA)
- WANR WV WHEELING - 3/24 1338 loud w/ID w/EZL music, drops rock. (JS-OH) Rocks usually hurt when your drop them, especially on your hands! (DS)

## CKVL

## FREQ. CHECKS:

- 2nd Tues - WSNJ-1240 w/TT only, no ID's, per list. (DS-DE)  
WRAR-1000 w/TT 0022-0024. (DS-DE)  
KFLA-1310 per list. (WH-CO)
- 3rd Mon - WYFC-1530 only TT noted. (WH-CO)  
KOTO-1050 not heard. (WH-CO)  
KVSH-940 only TT noted. (WH-CO)  
tune in til 0119 w/TT and ID. (KDF-IL)

## ADDRESSES:

- 760 KSJL TX SAN ANTONIO - 217 Alamo Plaza, Suite 200, 78205, phone 512-271-0972, claim will be on air by mid April. (JS-OH)
- 1070 WIBC IN INDIANAPOLIS - 9292 N Meridian, 46260 per verie. (BH-NJ)
- 1270 WORL FL ORLANDO - 2001 North Mercy Dr., 32808 per verie. (BH-NJ)
- 1380 WVIN NY BATH - E. Washington St. Ext., RD 1, Box 394, 14810. (KG)
- 1450 WPKX PA S. WILLIAMSPORT - Per visit, PO Box 5057 or E. Central Ave., S. Williamsport, 17701. (KG-PA)

## MIDDAY - MIDNITE:

- 630 WEJL PA SCRANTON - 3/23 1803 good w/end of local news, ID, PSA and music. (BP-ON)
- 690 WAPB FL JACKSONVILLE - 4/2 1855 w/religious music, ID. (BS-NJ)
- 730 WPAL SC CHARLESTON - 3/30 1831 good ending soul music, s/off. (HJH-PA)
- 740 WMNA VA GRENA - 3/30 1830 fair w/WPAL behind w/s/off. (HJH-PA)
- 740 WMBG VA WILLIAMSBURG - 3/25 1805-1815 over all w/MYL, no data s/off from "the new sound of 740, WMBG". (KG-PA)
- WRNR WV MARTINSBURG - 3/26 1803-1807 on top w/news and Tri State weather update, pop music, lost to WMBG. (KG-PA)
- 790 WTSK AL TUSCALOOSA - 3/3 1859 noted w/gospel music and s/off. (KDF-IL)
- 850 KFUO MO CLAYTON - 4/1 1956-1958 long extensive s/off noted mixing w/several others, heard while looking for WWJC, seems religious, hated putting the date on this reception report! (HJH-PA) No foolin'? What would you have done if today was your birthday? (DS)
- 860 WAEC GA ATLANTA - 4/1 1915 noted w/s/off by female anc'r, said Atlanta real sexy, seems religious. (HJH-PA)
- WDMG GA DOUGLAS - 3/25 1858 fair w/abrupt change from twangy rock music to an evening worship service, very loud, still going past 1900. (HJH-PA) ....0 Mighty Dollar... (DS) 4/2 1935 w/rock music, no sign of CJBC. (BS-NJ)
- 870 WGTL NC KANNAPOLIS - 4/2 1852 w/religion. (BS-NJ)
- 910 KLCN AR BLYTHEVILLE - 3/31 1859 noted u/CKLY/WGBI w/s/off. (JK-MD)
- CKLY ON LINDSAY - 3/17 2154-2211 good w/CW Countdown, local news, ID and editorial comment. (BH-NJ)
- 950 UNID ID 1325 1818-1824 CW music w/ID by female anc'r, sounded like WPET. (TF-CT) Could be might! (DS)
- WXGI VA RICHMOND - 3/25 1750-1815 w/CW music, ID as "Home Grown 950", no s/off message. (TF-CT)



## KARV

- 960 WQGR TN LAFOLLETTE - 3/24 1845 way o/all w/full data s/off by a female anc'r, ID'ing as Warm, Wonderful Gospel Radio. (KG-PA)
- 980 WPHG VA BRISTOL - 4/2 1847 w/pop music, ID. (BS-NJ)
- WKLM NC LELAND - 4/2 1845 promo for American Country Countdown, mention of Wilmington. (BS-NJ)
- 1010 CFB ON TORONTO - 3/21 2048-2201 badly fading in WINS null w/MOR music, news and classical music. (BH-NJ)
- 1060 WRCW OH CANTON - 3/25 1758 in briefly o/KYW w/ID. (JK-MD)
- 1080 WKBY VA CHATHAM - 3/25 1827-1830 o/all w/full data s/off followed by closing instr. theme music. (KG-PA) (BS-NJ)
- 1150 WGOX NC LENOIR - 4/2 1900 s/off w/mention of Furniture City B'cstg. (BS-NJ)
- KOKY AZ COOLIDGE - 3/27 2127-2137 more or less atop freq. w/CW music til 2129 then ID nicely atop into Suns basketball. (DKK-CA)
- WORK TN MORRISTOWN - 4/2 1850 w/pop music, ID, mentioning of broadcasting from Radio Center. (BS-NJ)
- 1250 WSMP WI MILWAUKEE - 3/22 1825-1840 o/WTAE at this unusual time w/Oldies Olympics, program of Solid Gold rock music w/listeners voting for their favorites. (KG-PA) Better than a rock fight....with real rocks! (DS)
- 1330 WEAW IL EVANSTON - 4/1 1910 w/modern religious music, ID. (JK-MD)
- 1340 UNID IL 1745 1740 small craft warnings, then EZL music, calls sounded like WPB. (BP-ON) WMID maybe? (DS)
- 1360 CJVL PQ STE MARIE DE BRAUCON - 3/29 1851 noted w/ad and jingle/ID in French, English disco record. (BH-NJ)
- 1370 WTTS IN BLOOMINGTON - 4/2 1917 strong til 1930 while on day pattern. (JK-MD) Then what?
- WGOH KY GRAYSON - 4/2 1917 noted w/late s/off. (JK-MD)
- WGNW WI SUSSEX - 3/6 1900 fair w/s/off, mention of all news format, was my closest unheard. (KDF-IL) Mine, too! (DS) (JK-MD)
- 1400 CKCB ON COLLINGWOOD - 3/27 2015 noted in noise w/dual CKCB/CKBB ID.
- 1410 KBCC MO CUBA - 3/8 1914 fair w/s/off, poor. (Forth-KDF-IL) Yes, we do know who you are, how can it be fair & poor at the same time? You hangin' out with RK again?
- 1450 CHUC ON PORT HOPE - 3/25 2000 ID noted then into news. (HJH-PA)
- 1480 WCFR VT SPRINGFIELD - 3/31 1738 ads, rock music, lost to WSAR. (TF-CT)
- CHRD PQ DRUMMONDVILLE - 3/23 2155-2203 tentative w/english rock music and male DJ in French in WJIT null. (BH-NJ)
- 1490 WUSS NJ ATLANTIC CITY - 3/25 1943 on top w/Latin music program. (HJH)
- 1530 WBCW PA JEANETTE - 3/29 1822 in loud w/several others w/ID by female anc'r. (HJH-PA) Mighta been someone w/a problem! (DS)
- 1540 WPGR PA PHILADELPHIA - 4/1 1835-1845 oldies, ID's as "Philadelphia Gold Radio", way o/WPTR. (TF-CT)
- 1550 WYNX GA SMYRNA - 3/29 1841 very loud and alone w/ID and anct. that they were going to reduce power and become inaudible (and by darn it, they did!). (HJH-PA) A DA that really works!
- 1570 KMAY CA RIVERSIDE - 3/27 2100 s/off atop KCVR after being in din for previous 15 minutes, ID'ed as "Inspirational Radio" (DKK-CA) Yes, I would even rise up if I heard them! (DS)
- 1580 WBBA IL PITTSFIELD - 4/2 1925 in briefly w/MYL type music, no sign of CBJ/WSRP. (JK-MD)
- WVCO OH COLUMBUS - 3/29 1845 briefly atop w/s/off, w/mention of FM on 94.7. (BH-NJ)
- 1590 WVNA AL TUSCUMBIA - 3/23 2100 w/ID then into CNN News, promo as "the News Station", all o/usual WAKR. (JS-OH)
- 1600 WUNR MA BROOKLINE - 3/29 1830 w/"New Englands Ethnic Giant" ID, did notice some strange music from them. (JK-MD) Anything from that area doesn't surprise me! (DS)
- WEUP AL HUNTSVILLE - 4/2 1915 w/black gospel music, ID. (BS-NJ)
- WHVL NC HENDERSONVILLE - 3/29 1818 atop w/Top 40 music, ID. (HJH-PA)

## MIDNITE - MIDDAY:

- 550 WHLM PA BLOOMSBURG - 3/25 0620 rock music, sports, way atop. (TF-CT)
- 580 WHP PA HARRISBURG - 3/25 0632 contest, music, u/ever present WTAG. (TF-CT) WTAG doesn't exist....here-hi! (DS)
- 610 \*WGSN AL BIRMINGHAM - 3/12 0249-0320 ET w/TT and ID, WIP also noted w/TT at this time. (BP-ON)
- 630 WMAL DC WASHINGTON - 3/24 0640 MOR music, ads, no sign of WPRO, 1st time heard here. (TF-CT) It won't be the last! (DS)
- 700 KGRV OR WINSTON - 3/26 0951 finally noted alone and with a strong signal, religious music then PSA, usually u/KFAM. (DKK-CA)
- 710 \*WOR NY NEW YORK - 4/2 0005 noted w/full s/off w/SSB, leaving strong CJRN/WLW splash. (DS-DE)
- 790 WSIG VA MT JACKSON - 3/24 0649-0709 CW music, AP news and sports, never heard here before. (TF-CT)
- 910 WKCN SC N CHARLESTON - 2/29 0600 good w/s/on into CNN news. (BP-ON)

**WWSA**  
1290 AM



1010 KCHJ CA DELANO - 3/26 0800 w/s/on u/CBR, news til 0805 then into Spanish program, was looking for KCMF. (DKK-CA)

1020 \*KTNQ CA LOS ANGELES - 3/25 0350-0500+ noted off this AM, KYXE fair/good thru TVI from next room. (DKK-CA) That's why they invited master power switches for each room! Works great!(DS)

1060 WTPP MA NATICK - 3/31 0600-0607 strong in KYW's null w/ai news, promo's into "Public Issues" program til fading. (KG-PA) 3/13 0645 ads, ID, talk show, mixing w/CJRP. (BP-ON)

1090 \*WBAL MD BALTIMORE - 4/2 0015 noted off this AM leaving KAAV/CKKW and UNID Spanish. (DS-DE)

1100 \*WWE OH CLEVELAND - 4/2 0035 noted off completely, WBT splashed ruined channel. (JS-OH)

1130 WPUB SC CAMDEN - 3/30 0638 s/on in WNEW's null w/full data, singing ID and "Be Still And Know." (KG-PA)

WCBX NC EDEN - 3/31 0600-0605 strong in WNEW's null w/Satellite News Network news, "CBX" ID's, into "Mark w/Music" program.(KG)

1170 WCLN NC CLINTON - 3/24 0629-0650 mostly atop in WWVA's null w/full data s/on (slogan: The Place To Be), ABC news, sports and pop music, again 3/25 0708 w/s/on. (KG-PA)

WXAX SC LEXINGTON - 3/25 0630-0708 alone in WWVA's null w/SSB, full data s/on (anc'd power as 5000 watts), followed by Sunday AM gospel song program and local ads, taken out by late s/on of WCLN at 0708. (KG-PA)

WJCC MA NORFOLK - 3/21 0700-0711 New England Radio Net. news, sports, weather, ads, read public school menus. (BP-ON)

1180 \*UNID 3/18 0710+ someone here testing w/WHAM anc'd "frequency response test" then proceeded to run thru a series of tones, anc'ing the hertz of each one, help? (BP-ON) Sounds like the old faithful NAB test records! (DS)

1240 WCNC NC ELIZABETH CITY - 4/10 0006 noted w/s/off before start of WSNJ f/c w/Jumble. (DS-DE)

1250 WREN KS TOPEKA - 3/27 0330+ battling KTMS, ID then MoR/EZL type music, KXFX in background. (DKK-CA)

1260 WJOT NC LAKE CITY - 3/30 0620-0630 o/all w/CW music, weather and ads, followed by news. (KG-PA)

\*KOIT CA SAN FRANCISCO - 3/27 0300-0359 noted completely off, back w/OC 0400 wiping hour any ID's then TT/OC til 0500 when I zonked out. (DKK-CA)

KVSP NM SANTA FE - 3/27 0300-0400 in/out w/XEMW and UNID MoR/EZL type, good til 0346 then back to rock music. (DKK-CA)

1280 WABK ME GARDNER - 3/25 0605-0620 CW music, way o/WADO. (TF-CT)

1330 KMBI WA SPOKANE - 3/23 0900 s/on w/clear call ID then split second pause of about 3 or 4 s/on's + KPAC & KUPL, freq. sounded like a full blown tornado there after. (DKK-CA)

WHOT OH CAMPBELL - 3/18 0458 briefly atop WTRX/WFBC w/local news, WPOW was off. (BH-NJ) JS got a balloon stuck on the tower!

1340 WKSN NY JAMESTOWN - 3/25 0441 briefly atop w/ID. (BH-NJ)

WHAR WV CLARKSBURG - 3/25 0456-0526 good w/Top 40 music, request line, local news, "13 RK" and "1340 WHAR" ID's, "Clarkeburgs best rock" slogan. (BH-NJ) Usually atop here AM's now. (DS)

WSTV OH STEUBENVILLE - 3/25 0459 ID noted during Larry King show.(BH)

1360 WSAI OH CINCINNATI - 3/18 0534 fair w/CW music, ID. (BH-NJ)

KZIQ CA RIDGECREST - 3/26 0901 s/on w/instr. SSB, full data, atop KPIV et al, local KEEN-1370 in news so no splash. (DKK-CA)

1380 KOTE CA LANCASTER - 3/26 0900-0905 way atop KTOM w/NBC news, 10 minutes on events of day in history, KEEN-1370 splash fierce but finally caught ads and ID 0918-0921. (DKK-CA) 820!

1400 WABY NY ALBANY - 3/17 0622 briefly atop w/AM 1400 ID into MYL type music. (BH-NJ)

1410 WDOV DE DOVER - 3/21 0616 fair in WOTT null w/ad. ID. (BP-ON)

WXQT MI GRAND RAPIDS - 3/23 0628 popped up with ID and temp. (BP-ON)

1440 WBGA GA BRUNSWICK - 4/3 0543-0600 o/all w/local and national weather, MoR music, church item, taken out by WKLV's 0600 s/on.(KG-PA)

1470 WTKO NY ITHACA - 3/31 0641-0653 oldies, sports, contest, way o/WSAN, not heard here before. (TF-CT)

1480 WADR NY REMSON - 3/31 0624 way atop freq. w/CW music, Mutual news.(TF)

WCNS PA LATROBE - 3/31 0604-0608 end of news, ads, sports, weather, never heard here before. (TF-CT)

WSAY VA SALEM - 3/31 0605 s/on, ID's as "The Station of the Stars", big band music. (TF-CT)

1510 KZZI UT WEST JORDAN - 3/26 0845 s/on u/KGA, easily readable in English then Spanish into Spanish program, was looking for KDUQ.(DKK)

WLAC TN NASHVILLE - 3/31 0545 w/gospel music, CBS news, taken out by WFIF-1500 s/on at 0602. (TF-CT)

1520 WGMA NC SPINDALE - 4/5 0611-0614 o/all w/local ads, ID, sports.(KG-PA)

1550 KUAT AZ TUCSON - 3/16 0840-0845 atop w/news, KXHI off til 0900.(DKK)

**WVLE**  
AM 1040

1560 WMIC MI SANDUSKY - 2/23 0645 w/ID w/WTGV, ads. (BP-ON)

1570 CHLO ON ST THOMAS - 4/9 0010 strong w/MYL promo, ID into Big Band selection, not often heard here (usually CFOR/CKLM).(DS-DE) 4/4 0517 "O Canada", partial s/on (omitted address) into standard MYL type music (odd s/on time). (KG-PA)

1580 \*WSRP FL PT LAUDERDALE - 4/2 0057 ET w/old rock music, several long OC periods in middle of tunes and after ID, seemed to be back in RS by 0106 w/several ads and more music, o/u "The Tone on 1580" program. (JS-OH) #1 with the loons! (DS)

1590 WPTH VA RICHMOND - 4/4 0537 full data s/on into prayer and gospel singing, strong, o/all. (KG-PA) 4/1 0540-0600 gospel music, ID as "Faith Radio", anc'r made comment that he was called at 0300 to s/on at 0530 instead of 0600! (TF-CT)

**OFF THE AIR:** (Better off than out of, in most cases....)

600 WFST ME CARIBOU  
650 WNRC CT ENFIELD  
1230 KPRD CA BARSTOW  
KHDN MT HARDIN (Since 1/83, as well as their FM!)

1440 KPRO CA RIVERSIDE  
1560 KFWY WA SUMNER (FCC has cancelled license!)

\*\*Info from Jerry Starr.

**COLUMN MADE POSSIBLE DEPT.:**

JK-MD/Joe Kureth, Uniontown, MD/SX43, LW  
BP-ON/Brian Pitman, Kingston, ON/RP1403  
WH-OO/Wayne Heinen, Aurora, CO  
KDF-IL/Karl Fort, Chicago, IL/HQ160, Spiral Loop  
BS-NJ/Bob Smolarek, Whitehouse Station, NJ/Superadio  
BH-NJ/Bob Harrison, Union, NJ/Superadio, WSKQ spurs and splatter!  
KG-PA/Kermit Geary, Walnutport, PA/HQ180, R389, LW, SM2  
JS-OH/Jerry Starr, Hubbard, OH/2 HQ180's, LW, MRC Loop "Irving".  
DKK-CA/Don Kaskey, San Francisco, CA/HQ140X, SM2  
HJH-PA/Harry Hayes, Wilkes Barre, PA/Superadio, SM2  
TF-CT/Tony Fitzherbert, Fairfield, CT/ICP55W  
DS-DE/Can't say it, Knitter will chop it anyway!/HQ180A, Superadio, SM2.

And away we go, off to the haunts of NC for a full week this time, HQ180 in tow! This should be an interesting trip, so lots from there next time. We are sending out the column a few days EARLY to make sure it gets there on time, for once-hi! But then again I could always use the excuse that it was lost in the mail but CH burnt that one out early-hi! 73's - Good!

**Stay tuned: 'I love you'**

TULSA, Okla. (UPI) — After several on-air conversations, Ellis said, the couple made late night call-in program called Bed Check were all witnesses to the engagement of a Tulsa area couple, the station's news director said.

Announcer Jan Dean allows listeners to talk to each other anonymously over the air, KAYI news director Jim Ellis said Wednesday when he called in to publicly accept his proposal.

A few months ago, Ellis said, a male listener calling himself the Keyboard Man called in to make contact with a female listener who identified herself as Cupid's Arrow.

Handwritten signature: JDE

NUMBER 1 in Los Angeles

**KFWB**

COLOR channel 98

**Ex-Radio Station To Open In Area**

By The Tribune-Review  
A former Latrobe radio station which was shut down last August because of financial problems is expected to be broadcasting under new ownership within 60 days.

The Federal Communications Commission last week approved the purchase of the license of WQTW-AM of Latrobe by Stan Wall, owner of WLSW-AM in Scottsdale.

Wall had purchased the station last November for \$66,000 in federal bankruptcy court, according to Chris Molton, general manager of WLSW.

A court-appointed trustee for Regency

Broadcasting Corp. closed the station last August when it had financial difficulties. The owners of Regency Broadcasting, Nick and Ann Corvello, filed for bankruptcy in February 1983.

The station was hit by a fire on Jan. 1, 1983, which caused \$160,000 in damage. The fire destroyed most of the radio station's equipment, Molton said.

WLSW is conducting surveys to determine the format to use for WQTW, but no decision has been made, Molton said. He doubted a country music format would be selected because two other radio stations in Westmoreland County use similar formats.

The station is expected to employ about six persons, Molton said.

No site has been selected for the new offices. FCC rules restrict the station to relocating within Latrobe, Molton said.

Wa. J. K. Shields

**KG 14**  
The Album Station

4-11-84



- 531 ALGERIA Ain Beida 0357 3/11 AA talk, mx and vocals poor-fair. (Hakiel)
- 550 VENEZUELA YUKE Caracas R. Mundial with baladas y pop vocals, TC's, few ads, mostly fast LA vocals 0308 3/31 good. (Frodge)
- 580 PUERTO RICO WKAQ San Juan R. Reloj with man and news 0330 then ID as "La Gran Noticias de la Hora", several promos, news continues at 0332, fair 3/31. (Frodge)
- 590 CUBA CMCA La Julia 0333 331 good with man w/EE and SS pop vocals, R. Rebelde ID's/TC's, man and woman announcers o/WKZO. (Frodge)
- 600 CUBA on 400-620-670 and 690 (but not 640) Rebelde has absorbed Liberacion according to Hauser's World of Radio, and this was noticed for the first time 0650-0700 3/27. (Renfrew)
- 660 VENEZUELA unid with NA u/WNEC at 0400 4/6; probably Ondas de los Medanos, the only Venezuelan listed. (Powerful logic there Mr. Renfrew-CH) I'm not sure if they signed off the air or not. (Renfrew)
- 684t CUBA? R. Rebelde MOR EE pop mx // 590 and 690 (they've also popped up on 634 a couple of times) (noted again 0256 on 4/11) 0344 3/31 fair. (Frodge)
- 684 UNID 3/17 0623 very strong signal-music followed by man in unid lang (not SS) at 0629. Top late for Yugoslavia? (Stutterheim) In all likelihood yes....How about the exotic and exciting Cuban? CH
- 690 CUBA CMEC Santa Clara 0258 3/29 fair and now on Rebelde net, fair 0258 3/29. (Frodge)
- 711 LIBYA Jefren etc. 3/5 0241 male announcer then people chanting briefly, more male talk, good // 1251. (Vernon)
- 720 USSR Yuzhno-Sakhalinsk 2/5 1711 male and female RR announcers, probably Program Two, does carry Program Two as listed in WRTH=83 but omitted in WRTH=84, 3/25 0959 FS IS noted. (Vernon)
- 750 GREENLAND Umanak 3/5 0200 female w/Danish talk, poor signal, topping KFOD, // 850 good. (Vernon)
- 750 NICARAGUA HTA750 R. Sandino man with Nicaraguan sports u/WSB-frequently blasting a xylophone-like sound at 0312, gone at 0314 4/11, poor. (Frodge)
- 760 CUBA R. Reloj u/WJR 0430 4/2. (Renfrew)
- 765 SENEGAL 2249 3/7 Dakar good w/AA and vernacular talk. (Connelly)
- 774 SPAIN 2251 3/7 SS talk at low modulation level. (Connelly)
- 774 SPAIN RNE Caceres etc. 3/5 0240 female with talk then SS rr mx. (Vernon)
- 774 UNID the makings of a great ID until splashed by WABC (the best laid plans of mice and men...CH): "transmite Radio (crash!)" 0505 3/15. Probably Spain. (Renfrew) (Another day shall come-CH)
- 792t AUSTRALIA 40G Brisbane 3/17 1036 female opera type singing. (Vernon)
- 820 ALASKA KCBF Fairbanks 3/5 0442 spot for reception reports from outside Fairbanks area, reads name of reporter over the air!! (Vernon) New trend established. Now spreading to all of western world with the remainder to follow soon surely...CH
- 825 PANAMA HORS6 R. Peninsula Macaracas, man with ID, instrumental mx, lasted three minutes and gone 0502 3/31 with St. Kitts off. (Frodge)
- 840 COLOMBIA HJBI Santa Marta 0436 4/12 poor with clear ID "O.D.C." and tropical mx u/WHAS. (Frodge)
- 846 ITALY Rome 0150 3/21 11 vocals, 11 talk, fair. (Hakiel)
- 854 PERU Lima 0430 3/2 old pop tune "If I Loved You" and Radio Nacional ID, good. (Hakiel)
- 864 FRANCE Paris 0528 3/23 man and woman in AA talk // 1206 poor-fair. (Hakiel)
- 880 GUATEMALA TGJ R. Nuevo Mundo, man with speech to 0200, ID, promos then WCBS took over at 0202, believe start of news-hear whistle sound used 4/3 fair. (Frodge)
- 882 ENGLAND BBC Washford 3/5 0201 BBC nx // 909 both fair. (Vernon)
- 882 UNID listed as tentative in issue #17 as Saudi Arabia, played the tapes to an Indian friend (from India-hi) and mx was Hindi not AA, maybe Ceylon??!! (Vernon) Ho hum.....CH
- 891 ALGERIA 2257 3/7 Algiers loud w/male AA chant. (Connelly)
- 891 FIJI Lautoka 2/26 0935 Hindi type singing, good signal. (Vernon)
- 891 USSR Ukrainian SSR Uzhgorod 3/5 0429 Mayak IS 0430 female announcer, never noted before. (Vernon)
- 895 COLOMBIA 3/5 0259 R. Galeon in with solid signal, Much more variable than other Colombians. (Stutterheim)
- 900 ITALY Milano 3/5 0201 male w/11 nx, good signal. (Vernon)
- 900t SAUDI ARABIA Al Quarayyat 3/5 0311 male AA type wailing, CJU1-HKY ORN. (Vernon)
- 905 UNID and 905.2 0253 two hets. (Stutterheim)
- 909 CHINA (in issue #6) per verie in CC is Urumqi, (verie is from Urumqi) and pgm was Mongolian not RR (have made this mistake a number of times now). FS IS noted here, but is only for Mongolians living around the Urumqi area in China. Verie was translated by our machinist at work. (Vernon)

- 936 USSR Ukrainian SSR Lvov 3/5 0355 male and female announcers then piano mx, noted also 0421 w/female announcer then instrumental of "Yesterday" tune. (Vernon)
- 940 MEXICO XEO Mexico DF man with pelota-Leones versus Capitolinos 0224 3/15 good. (Frodge)
- 954 UNID 3/5 0250 female w/AA singing, Turkey listed as s/on at 0300, at 0300 pips, male with talk, maybe just relays TPT1 Sundays w/0200 s/on? (Vernon)
- 967 CUBA solo classical mx, "...Radio y TV..." ID at 0459, short anthem and s/off before 0500, not // P. Rebelde 4/12, good (Frodge)
- 972 USSR Ukrainian SSR Nikolayev 35 0327 band mx, 0329 Mayak IS, 0330 female announcer, good signal. (Vernon)
- 999 USSR Moldavian SSR Kishinev 3/5 0301 USSR anthem, 0304 male then news sounder // 936 Program One. (Vernon)
- 1008 JAPAN JONR Osaka 2/5 1703 male announcer then JJ singing, good signal. (Vernon)
- 1011 COLOMBIA Monteria HJZD 0235 3/5 LA mx, Radio Panzenu ID, has moved from 1020, xInt. (Hakiel) 0140 3/15 pretty good signal for 15 km, ID in clear at 0200. Repeated references to Cuba, was confused for a while.
- 1012 COLOMBIA HJZD Monteria R. Panzenu with lite SS vocals, many ID's with some preceded by piano notes, het with CFRB 0232 3/31 fair. (Frodge)
- 1017 TONGA A32 Nuku'alofa 2/29 0659 military type band mx, 0700 6 pips, female with "time is 8 o'clock", news sounder then male w/Radio Australia news, poor signal. (Vernon)
- 1020 VENEZUELA La Asuncion R. Mundial, YURS with ID promos, LA mx, "Radio y TV ..." promo and "Margarita presente", no sign of KDKA 0231 4/7 fair-poor. (Frodge)
- 1035 IRAQ Babylon 3/5 0229 male w/AA wailing, no background mx, and long silences between wails // 1197 both poor. (Vernon)
- 1035 PORTUGAL Lisbon 3/5 RR mx "Say It Isn't So" then 0346 male w/PP talk. (Vernon)
- 1044 MOROCCO Sebba Ayoun 0114 3/20 AA talk, fair. (Hakiel)
- 1050 MEXICO XEG Monterrey with "la Ranchera Monterrey", man with ranchera mx, many ID's, SID 0305 4/10 good. (Frodge)
- 1070 COLOMBIA HJCG Bogota 3/17 0610 on top of channel with usual LA mx and constant voice-over ID's with echo. (Stutterheim)
- 1080 ALASKA KTNX Anchorage 2/19 0741 female w/10-80 Ten-X Country ID so is now c&w again. (Vernon)
- 1098 CZECHOSLOVAKIA Bratislava 3/5 0414 female singer 0415 6 pips, male briefly, probably TC, mx continued. (Vernon)
- 1100 CUBA ? R. Rebelde with beisbol // 690-new stn-net change or relay-then ID w/ weak WME 0214 4/7 poor. (Frodge)
- 1110 VENEZUELA R. Carupano with news and door chimes 0535-0550 4/6 when WBT faded back in. (Renfrew)
- 1170t COLOMBIA HJNM LV de la Heroica with "Radio Mil un Setenta"-OM w/SA news and net ID's 0400 "La Caracol Noticias" o/u WJVA 0315 4/7 poor. (Frodge)
- 1175.3 COLOMBIA Neiva HJKK 0534 3/5 SS vocal by man, guitar mx, fair. (Hakiel)
- 1197 IRAQ Al-Hammadaniyah 3/5 0230 male AA wailing // 1035, no ORN at this time!! (Vernon)
- 1197 WEST GERMANY UOA Munich 3/5 0212 female w/RR talk. (Vernon)
- 1206 FRANCE Bordeaux 0522 3/16 AA pgm w/AA mx and talk, good. (Hakiel)
- 1233 CZECHOSLOVAKIA Praha 3/5 0211 piano and orchestral mx, xInt sig, // 1521 fair. (Vernon)
- 1251 LIBYA Tripoli 3/5 0241 people w/brief chant between talk by male // 711. (Vernon)
- 1278 FRANCE Strasbourg France Culture net 3/5 0501 female, AA type mx briefly then male w/believe an AA pgm. (Vernon)
- 1314 NORWAY 2WL Wollongong 3/17 1033 program about Elton John in Australia, poor signal. (Vernon)
- 1323 EAST GERMANY R. Moscow Leipzig 3/5 0210 male w/EE talk, poor signal. (Vernon)
- 1332 JAPAN JOSF Nagoya 2/5 1725 JJ rr mx, fair signal. (Vernon)
- 1337 HONDURAS 0249 4/12 R. El Mundo, San Pedro Sula man with excited talk, no mx heard, several R. Mundo ID's sith sound effects, other promo with Juventud. (Frodge)
- 1413 OMAN Masirah Island BBC 0135-0205 long talk by man in lang, probably Farsi, 4 pips--- -- at 0145 and 6 pips at 0200 followed by Radio Oman ID and BBC Far East news in EE fair-good. (Hakiel)
- 1413 YUGOSLAVIA 0510 2/23 Pristina w/big carrier, bits of slavic talk in bad slop. (Connelly) 0400 3/10 loud gong at 0400 then 5 minutes of Slavic talk-probably news-followed by near eastern mx, fair. (Hakiel) tentative-0354 3/10 middle Eastern chanting then sitar mx then some flute mx, time check was loud bong (a la JA) Rank (??ch) followed by man in lang. Oman doesn't seem a possibility because of time, and GH says Yugo plays international format. (Stutterheim)



- 1422 JAPAN JORF Yokohama 3/5 1724 two males w/JJ talk, fair signal. (Vernon)
- 1422 WEST GERMANY SR Heusweiler 3/5 0213 instrumental mx // 1017 ARD pgm. (Vernon)
- 1458 ENGLAND 0533 2/23 London (?) poor to fair w/EE talk, rock mx including "Let's Dance" by David Bowie. (Connelly)
- 1466 MONACO Monte Carlo 0531 3/10 man and woman in FF talk-1466 is daytime frequency for this stn, fair. (Hakiel) Would sometime like to tell me why????????? CH
- 1467 MONACO Monte Carlo 3/5 0505 male w/GG talk, good. (Vernon) 0532 2/23 to good peaks w/religious music, man and woman in GG. (Connelly)
- 1467 FIJI Rakiraki 3/14 1016 male with Hindi type mx. (Vernon)
- 1476 AUSTRIA 0534 2/23 Wien xint/like a local w/classical piano mx. (Connelly) 3/5 instrumental mx 0204 w/pgm title I guess then rr mx. (Vernon)
- 1485 NORWAY Svalbard NRK Longyearbyen 3/5 0501 female w/talk, //1314 probably news. (Vernon)
- 1494 USSR Leningrad 3/5 0323 male w/EE service, fair signal. (Vernon)
- 1521 SAUDI ARABIA Duba 0342 3/10 AA chants-better than 1520, xint. (Hakiel)
- 1539 WEST GERMANY DLF Mainflingen 3/5 0203 male w/GG talk, xint. (Vernon)
- 1555 CAYMAN ISLANDS R. Cayman with rock and roll 0230 3/21. (Renfrew)
- 1557t FRANCE 0505 2/23 AA talk and mx, loud. (Connelly)
- 1575 ITALY 0500 2/23 Genoa to good peaks; 5 pips, pause, 6th pip then mx in II by man and woman. (Connelly)
- 1575 SPAIN 0544 2/23 2 men in SS atop other stations. (Connelly)
- 1580 ANTIGUA VOA with DC s/on at 2350 u/CBJ. Also noted // 5995 with news at 0310 4/6. (Renfrew) Jazz pgm GMT TC, woman with news 0258 3/31, poor. (Frodge)
- 1580 MEXICO La Grande de Sonora heard through noise with ID 0640 4/3. (Renfrew)
- 1593 WEST GERMANY 0455 2/23 Langenberg loud with GG male vocal. (Connelly)
- 1610 ANGUILLA Caribbean Beacon heard with EE preacher 0215 3/21. (Renfrew)

That's all for this time.....if you are still DX'ing during the warm weather, don't forget to drop me a note.

SMILEY ABOUT NO HEADER CHUCK - HQ (LOVE)

Mark Connelly-Billerica, MA R390A, 2 30 m. phased wires & amp  
 Harold Frodge-Midland, MI DX302, 185' LW, tuned loop  
 George Hakiel-W. Islip, NY R7A, R71A, 400' mini-rhombic, Kowalski loop  
 Jim Renfrew-Rochester, NY HQ150, SM1  
 Matt Stutterheim-Montauk, NY anything and everything  
 Brian Vernon-Elsa, Yukon Terr. anything and everything



WALLY WAWRO, WHO SENT THE ARTICLE, HAS A FEW QUESTIONS THAT WE COULDN'T ANSWER HERE AT HQ.

1. HOW DO YOU LOG IT?
2. WILL THERE BE A CONSTRUCTION ARTICLE ON A SUPER-DUPER ANTENNA TO RECEIVE IT? (WE DUNNO, ASK MARK CONNELLY, OR DALLAS LANKFORD)
3. AND, OF COURSE, DO THEY VERIFY?

WELL, GANG, LET'S SEE YOUR ANSWERS IN YOUR NEXT MUSING.

### ENTREPRENEUR OF THE WEEK

Listen to Jim Stanton and you know he's a broadcasting man. Stanton left radio last year when the station he managed, KEJZ, went Spanish-language — he no habla español. But in a way, Stanton is still in the business. His new company, Adcaster, is the Texas and Oklahoma distributor for low-power, "talking" Home For Sale signs.

The device, called the AMCAST 24-Hour Salesman, transmits a signal prospective home buyers can pick up via a designated AM frequency on their car radio. The message, recorded on an endless heavy-duty cassette, can be used to describe features of the house. Except for computers and the MLS, Stanton believes real estate hasn't changed much in the last 30 years. "This is a new marketing tool for the industry," he says.

Realtors and builders aren't the only takers. Stanton sold one unit to his banker, who uses it to broadcast community news to waiting drive-through depositors. Adcaster will provide sample scripts and even a professional announcer to record the three-minute message. But most Realtors want to do it themselves. "They all think they're Ron Chapman," Stanton says. "But that gives it the personal touch." The device, complete with sign and cassette, sells for \$495.

# FORMATS

OF THE MONTH CLUB

TONY FITZHERBERT  
 356 JACKMAN AVENUE  
 FAIRFIELD, CT 06430

Here is the column which is as exciting as the life of a brain surgeon for gerbils, an octopus on a bicycle, or CWM on WBBM. Thanks go to Rod O'Connor for a Metro Anchorage report, and also for the clipping several issues ago outlining the formats of the eastern Maine stations. Also, thanks go to several others who have sent in format changes. Here, a trip down to Washington via the Main Street of the East Coast with the family results in some more radio format information. Listening to the radio is certainly the most exciting pastime in which one can engage on I-95!! Watch for a new format on 1050 in Washington, 980 in the Nation's Capital, and on WEAM across the muddy Potomac, as all have been sold. So we can credit your contributions, PLEASE put your name on any clippings that you send to Headquarters, or to me. Here we go up and down I-95, with a side trip to Anchorage.....

- 550 KENI AK Anchorage - Adult hot hits, CHR (RO).  
 560 KVOK AK Kodiak - Ad. Com. days, BBD, MYL evenings, Classical Sunday nights, A(1) News on the hour (RO). Oldies.
- 570 WPIL PA Philadelphia - Classical, simulcasts w/ WQMS - PM, Mutual News.  
 580 WIP PA Harrisburg - Oldies, rock, CBS News and Features.  
 590 KHAR AK Anchorage - Automated EZL, 24 hours (RO).  
 600 KOGO CA San Diego - Now all news (PN).  
 WCAO MD Baltimore - CWM (TF).  
 KRKE NM Albuquerque - Mixed CHR and Oldies(PN).  
 610 WIP PA Philadelphia - Ad. Com, Talk.  
 630 WMAL DC Washington - Pop, News, Sports, A(1) News, and a very popular jazz show.
- 650 KYAK AK Anchorage - CWM, with personalities, syndicated (RO) CWM magazine programs on weekends, 24 hrs.  
 670 KWNK CA Simi Valley - New station, w/ CWM (PRM).  
 680 WCBM MD Baltimore - "Newstalk 680", w/ news and teletalk. (TF).  
 690 KTCR MN Minneapolis - Dropped CWM for Jazz(PRM).  
 WYIS PA Phoenixville - Gospel, Religion.  
 700 KBYR AK Anchorage - Satellite "Star Station", CBS News, AM and PM News Blocks, lots of local and national sports (RO).  
 WPKX VA Arlington - CWM, AP News.  
 740 WVCH PA Chester - Rel., Gospel.  
 750 WBMD MD Baltimore - Religion, Inspiration (TF).  
 780 WABS VA Arlington - Religion, Inspiration, Gospel Music.  
 800 WTMR NJ Camden - Religion, Gospel.  
 810 WYRE MD Annapolis - Ad. Com., CHR (TF).  
 830 KABN AK Long Island - Variety, Folk, Jazz, Classical, Reggae, lots of musical features and talk, station is Big Lake - staffed by volunteers, hours are 0500 - 2400 (RO).  
 860 KVVA AZ Phoenix - Now Mexican, "Radio Viva" (PN).  
 WEGR MD Baltimore - "Baltimore Gospel Radio", Religion, Gospel Music (TF).
- 900 WTEL PA Philadelphia - Religion, Ethnic, Spanish Programming.  
 WLMD MD Laurel - Soft Rock, Ad. Com, UPI News.  
 910 WPLN PA Philadelphia - Classical, simulcast w/PM.  
 940 WSPA PA York - Ad. Com.(TF).  
 WVLV PA Lebanon - News, Information, Nostalgia, lots of Sinatra(TF). Dropped Rel. some time ago. Religion.
- 950 WCTN MD Potomac -  
 KRIS MN St. Louis Park - Dropped CWM for "950 Hot Hits" (PRM).  
 WPEN PA Philadelphia - Old, Nostalgia, BBD, w/personalities.  
 WOXI VA Richmond - CWM, "Home grown Country"(TF).  
 960 Kool Az Phoenix - Is Kool, NOT KARZ (PN).  
 970 KYTE OR Portland - BBD, MYL(PN).  
 980 WWRC DC Washington - News, Talk, NBC, Talknet (TF).  
 1010 WYST MD Baltimore - Oldies "Greatest hits of all time".(TF).  
 1050 WQAY MD Silver Spring - EZL(TF).  
 1080 KTNX AK Anchorage - CWM, 24 hours (RO)  
 1100 WOPA PA Bethlehem - CHR "The Star Station"(TF).  
 1110 WYNN NH Salem - Was MYL, now CHR "All Hit Radio"(PRM).  
 WNAR PA Norristown - "Entertainment Radio", BBD, Nostalgia, Oldies, EZL (TF).
- 1120 WUST DC Washington - Gospel Music, Rel, Black Programming.  
 1150 WJOK MD Gaithersburg - Still all comedy(TF).



1220	WPAZ	VA	Fairfax	- Religion, Gospel.
1230	WBME	ME	Belfast	- Not all-news from CNN, but CNN programming is supplemented by Ad. Com. and MOR (RO).
	WITH	MD	Baltimore	- Automated MYL(TF).
	WCOL	OH	Columbus	- AD. Com., Oldies, was Nostalsia (HR).
	WKBO	PA	Harrisburg	- "AM 1230, the best show in town", CHR, NBC, Talk in the evening(TF).
1240	KSML	AZ	Globe	- Ex KGJM, CWM (PN). (TF).
1250	WNOV	PA	York	- CWM, A(1) News, "AM 1250 Stereo, York Country."
1260	WWDC	DC	Washington	- Automated BBD, live only from 0600-1000, Sinatra show on Sunday PM (TF).
	WBUD	NJ	Trenton	- Old, "Sounds of Your Life", NBC.
1280	WABK	ME	Gardner	- CWM (TF).
1310	WSSJ	NJ	Camden	- CHR, Black, Urban Contemporary(TF).
	WEEL	VA	Fairfax	- All News, AP, UPI, ABC fillers.
1320	KEZL	CA	Oceanside	- BBD(PN).
1330	KULP	OR	Portland	- CWM(PN).
1340	WYCB	DC	Washington	- Rel., Gospel, Black programming, talk, Fire and Brimstone preaching (TF).
	WHAT	PA	Philadelphia	- Black talk and music.
1360	WEBB	MD	Baltimore	- Black, Urban Contemporary(TF).
1370	WPAZ	VA	Pottstown	- Ad. Com., lots of local info.(TF).
1390	WEAM	VA	Falls Church	- Still BBD, Nostalsia(TF).
1400	WWIN	MD	Baltimore	- Automated Black Programming, Urban Contemporary(TF).
1410	WLSH	PA	Lansford	- Variety, UPI News "Great Radio"(TF).
1420	KSCR	WA	Renton	- With call change to KRIS will drop CHR for Urban Contemporary.(PN).
1440	KOPA	AZ	Scottsdale	- Ex Kxam, now simulcasts with 100.7 FM (PN).
1450	WOL	DC	Washington	- Black music, talk, AP and Sheridan News.
	WPAM	PA	Pottsville	- "Hit Radio WPAM", CHR (TF).
1460	WPRW	VA	Manassas	- Ad Com., AP News.
1480	WDAS	PA	Philadelphia	- Urban Contemporary, Black.
	WSAY	VA	Salem	- BBD "Station of the Stars"(TF).
1490	WGCH	CT	Greenwich	- Now EZL, Mutual Net, Wall Street Journal Bus. Reports, heavy local news (TF).
	WJIC	NJ	Salem	- CWM "The Just Country Station".(TF).
	WAHT	PA	Annville	- "Lebanon Valley 15", mixed Ad. Com., and Old Rock, AP News (TF).
1530	WPWC	VA	Triangle	- CWM, according to the Washington Post.
1540	WMDO	MD	Wheaton	- Spanish
	WMYF	NH	Exeter	- Dropped MYL for Ad. Com. (PRM).
	WPOR	PA	Philadelphia	- Oldies "Philadelphia Gold Radio".
1560	WXTR	MD	LaPia	- Oldies, simulcasts with WXTR-FM.
1580	WPGC	MD	Morningside	- CHR, simulcasts with WPGC-FM.
1590	WJRO	MD	Glen Burnie	- EZL(TF).
	WPTH	VA	Richmond	- "Faith Radio", Gospel music, religion(TF).
1600	WINX	MD	Rockville	- Ad.Com., Oldies, some CWM, dropped "Station of the Stars", Mutual News(PRM).
	WHOL	PA	Allentown	- Still Religion, Inspiration, Gospel(TF).

And, according to Paul Mount, WERA-1590 has not erected the 4th tower required for nighttime operation, so is still a daytimer. And WXMC is still silent as of 4-20-84, when I drove by the XR, on I-80. Our column has been brought to you by the Washington Post, Anchorage News, and, more importantly, by the following members: PRM - Paul R. Mount, HR - Harley Ryan, PN - Pete Nolan, RO - Roel O'Connor, and TF - the typist. Do mail in your format changes, as we hope to have a column in each issue this summer. Remember...if KDKA goes Urban Contemporary, over 700 interested people are waiting to hear about it. All for now.....

733-72

Data Transfer via Modem can be done at HQ. Procedure is as follows: Call first, voice, make arrangements with HQ personnel. You will be instructed what to do and so forth after voice communications is established. And Please don't wait till the last minute to transfer your article, story, or column, UNLESS you've already done it once with us. We haven't had any problems yet with anyones machine but there's always a first. Equipment online: Hayes Modem, 110 or 300 baud available, etc. You may call when phone rates are favorable for YOU.

# DXCHANGE

Russ EDMUNDS  
753 VALLEY ROAD  
BLUE BELL, PA 19422

As noted in an earlier issue, this column will appear every other month during the summer months. I'll leave space for Mike to fill in the appropriate issues and deadlines, as I haven't a bulletin schedule handy. This column is predominantly receivers, so here goes...

## FOR SALE - RECEIVERS

ALLIED SX-190: good ex. SWEC only. \$135 plus UPS. (M.J. Stutterheim, 510 Main St., Roosevelt Island, NY 10044; (212)-838-5182 (answering machine).)

DRAKE SW-4a: good ex, SWEC only. \$125 + UPS. (Stutterheim)

DYMEK DR-33C: Digital 50 kHz. - 30 mhz. with extra Collins mechanical filters, rack mount and cabinet. \$800 + shipping. (Stutterheim)

YAESU FRG-7: damaged by fire, but repaired by Mfr., and fitted with new cabinet. Works great as a back-up rx. "DX" position of filter doesn't work despite \$105 repair bill. \$100 + UPS. (Stutterheim)

COLLINS 51J4 with 3 and 6 kc. filters (mech.); in original cabinet. 1 kHz. filter missing. \$300 + shipping. (Stutterheim)

DRAKE SFR-4, w/ 20 xtals; tunes all SWEC bands. ECB and ham bands. Very good ex. \$275. (Bruce Winkelman, 3014 W. 68th Pl., Tulsa, OK 74132; (918)-446-6094, evs.)

HAMMARLUND HQ-140X; scratches on top of cabinet, works OK, w/ manual, Q-Multiplier jack added. Make reasonable offer. (George Sherman, Box 2284, Minneapolis, MN 55402)

HAMMARLUND HQ-180C; fully reconditioned, looks ok, works great. Make reasonable offer (Sherman)

PANASONIC RF-2600 portable, MW, FM, (w/ECA mod.) SW 3.9-28 mhz. Digital readout all bands, exc. ex. Make reasonable offer. (Sherman)

PIONEER TX-1000 FM-stereo and MW tuner. Was \$299 in 1972. Has headphone jack w/ level control (no amp needed for phones), works good-best if loop is used. Make reasonable offer. (Sherman)

## FOR SALE - ACCESSORIES

HEATHKIT GD-125 Q Multiplier. Assembled and working, w/ manual. Could be used with HQ-140X above. Make reasonable offer. (Sherman)

RAMSEY ELECTRONICS CT-50 Frequency Counter. Has built-in adaptor to permit operation from 1 mhz. standard. \$50, I ship. (Charles A. Taylor, Box 812, FPO Seattle, WA 98722).

That's it for this time around! Stay tuned for details as to the next one!

Here are some more items for sale:

HQ-188AX, looks great, works fair. \$150, split shipping.

Kantronics Field Day 2 Code/RTTY/ASCII Reader. Mint, \$200 UPS included.

Bearcat 28/28 Programmable Scanner. Mint, \$200 UPS included.

ICOM GC-4 World Clock. Mint, \$50. UPS included.

(All 4 items from Jerry Strauman)

## WANTED:

Pre 1964 White's Radio Log, Radio-TV Experimenter magazines, or Broadcasting Yearbook. (Peter Hunn, Box 92, Port Henry, NY 12974)

ICF-6580W or other similar quality portable. Trade for above sale items? No offer refused. (Jerry Strauman, 519 38th Street NW, Cedar Rapids, IA 52402, 319-362-7124 after 0800 UTC).

Schedule for next DXCHANGE Column which will appear in the July 16th issue:

Have your cards, letters, etc to Russ by JUNE 25th

AND REMEMBER--Anything received here at HQ will be forwarded to Russ or held until the July 16th issue. Thanks for your cooperation - HQ.



# STATION PROFILE

TONY FITZHERBERT  
356 JACKMAN AVENUE  
FAIRFIELD, CT 06430



KXEW-1600 "Radiofiesta"

An ethnically formatted radio station which is the only source of programs broadcast in the native, or primary language of the 30% of the population within its service area. The only station in a city of over 350,000 which broadcasts in Spanish to a market of over 110,000 Hispanic residents, in an area rich in Mexican lore. While Houston claims seven AM and FM stations serving its hispanic community, Miami is served by three full time AM Hispanic stations, and even Southern New Jersey has four AM stations broadcasting blocks of Spanish programming, the only Spanish radio station in Tucson is the small, but very professional KXEW "Radiofiesta", 1600 on the dial. KXEW's primary market is women, ages 25-54. The 24 hour (no silent period) station ranks fifth in its market, and market research reveals the lowest rate of turnover among its listeners, of any of the 17 AM and FM stations in Tucson. Another factor in KXEW's success is that, in 1983, an estimated 23% of all of the residents in Pima County are of Hispanic heritage. Additionally, the KXEW market has exploded by over 123% between 1970 and 1980, and this growth does not reflect an underground segment of KXEW's audience, people who have illegally crossed the US-Mexican border.

With an air date of May 10, 1963, as a 1000 watt daytime station, KXEW has broadcast, over the last 20 years to both Mexican and Black audiences. The present owners, Frank Lazarus and Jerrold Lyanst, who bought the present Cactus Broadcasting Company in November, 1981, and General Manager Pat Barraza has, since then, developed a very upbeat format of Ranchero and Mariachi music, featuring international Spanish artists, originating from Puerto Rico to Spain, from Argentina to Mexico. This music is equivalent to Adult Contemporary music on an English station, and differs from the exclusiveness found in Cuban or Puerto Rican formatted stations. The format runs 24 hours daily, as the owners realize that consistency leads to the success of any radio station.

While KXEW is a uniquely successful radio station, the accepted true measure of success within the industry - the Arbitrons - fail to document the true level of listenership to this station. Typically, the male head of a Hispanic household does not look at the mail, or merely casts it aside - and will not be bothered with keeping the Arbitron diary. Another norm unique to KXEW's audience has evolved from the acceptability of speaking other than English in the U.S. Fifteen years ago, to speak Spanish in an elementary school was a detriment - today this ability is an asset. Other generalizations unique to KXEW's listeners include the tendency to not keep up with the Jones', making available more disposable income within the family unit. Reflecting family values, Hispanic consumers tend to be product-loyal, buying name brands, especially those used by one's parents. However, the typical Hispanic will buy a car with all possible accessories. The average income for a Hispanic family in Tucson is around \$13,500, contrasted with \$17,000 for all area families. However, 54% of the area Hispanic families earn \$15,500. Add to these market statistics the spending power of illegal aliens who, while maintaining a low profile, must eat, and purchase essentials. Thus the Mexican population is an important, and lucrative market for an advertiser.

The call KXEW has not intended meaning...the station ID'd as "Radiofiesta". Four years ago, it became a full time station with a night directional pattern. The primary lobe extends south, toward Mexico, and the daytime pattern radiates up to 50 miles from the transmitter. The offices, studios, and transmitter are located in a small white brick building at 889 El Puente Lane, a short, narrow road in an industrial area just off I-18, in South Tucson. The station is licensed to South Tucson, which, as an aside, is a mile square municipality, separately governed, from the larger Tucson. As the later grew, it completely engulfed South Tucson, which is populated by about 6500 people, primarily of Hispanic background, with its own school system, and other municipal services.

Next to the studio and office building are two guyed, unlit towers, and the base for the original day tower.

Supplementing the happy music are three daily 15 minute newscasts, featuring events of interest to Pima County's Hispanic community - at 8AM, noon, and 5PM. At present, KXEW is not affiliated with a network, but plans to carry UPI Spanish news broadcasts in the future.

KXEW's staff includes 18 full and part time personnel, including a four person sales department, an engineers, three secretaries, and ten personnel in the news and programming group.

As the only Mexican station in Tucson, with a dramatically mushrooming market, KXEW is assured a rosy future. To create a more professional

environment, the station building is being refurbished, and new equipment is being purchased. A new transmitter will replace the original installation. With these improvements, KXEW's facilities will be second to none in Tucson.

The editor would like to thank Patricio Barraza, KXEW General Manager, who readily and enthusiastically shared information about his station, and market. Pat started with KXEW three years ago, as a sales representative, and progressed to Sales Manager, and then to General Manager.

## The WGMA Story

By Guest Editor John Malicky

In the early months of 1979, two old friends met in a local restaurant. They had not seen each other in 25 years, and they spent several hours chatting about their childhood days growing up in Spindale, N.C. Wayne Harden Shared with Bill "Moon" Martin a long time dream of his...of having a radio station in Spindale. Martin was not impressed with the idea, since he had returned to Rutherford County for rest and relaxation. He wished Wayne well in his projected venture, and they parted. Hardin later stated that "Moon doesn't know it yet, but he's the guy who is going to head up this operation". Several months, and meetings later, the two formed the "Moonglow Broadcasting Company, Inc."

Eighteen months were required to find a suitable location for the transmitter and tower. The site was a tract of land on the Route 74 Bypass, near the Western Steer Steak House. The Evans Building was purchased on West Main Street in Spindale for offices and studios. The corporation then invited Mrs. Frances Anderson of Lauderdale, FL., to become a partner in the new venture. Application for the station was filed with the FCC on December 24, 1981.

An immediate protest was filed against the application, from a radio station in Spartanburg, SC, alleging that the transmitter site was one mile too close to Spartanburg. The FCC notified Moonglow that they had ten days to answer the protest...and the response was the purchase of a new location, at the intersection of Ross and Ledbetter Roads in Spindale. An amendment to the original application was filed, and, in spite of protest from Spartanburg, the license was granted, on July 10, 1982.

Meanwhile, the Evans Building was renovated, over a three month's period for broadcast purposes. During this time, new equipment was purchased, and a staff was hired. The call sign WGMA was selected, and approved by the FCC.

A test was run at 2:00 AM on October 11, 1982, and the first sounds burst forth on 1520 in Spindale, as Mearle Womach sang "I'll Rise Again". "Moon" Martin stated, as tears streamed from his eyes "That's the most beautiful song I've ever heard". This test was heard as far away as New Castle, DE.

The station began officially, by signing on the air at 7:30 AM that very morning. It was the only full time gospel station in Western North Carolina.

Five other radio stations followed WGMA's format within a period of twelve months. Wayne Hardin's dream had thus become a reality with far reaching consequences.

Vital statistics...WGMA is a non-directional 500 Watt station. The Evans Building is located at 301 West Main Street. While the station is a favorite in its primary area, its signal has been heard as far away as Pittsburgh, PA, and Fairfield, CT, and has been verified for both locations.

WGMA has become a highly respected radio station. The staff is dedicated and professional in every way, and the station's influence and ministry has become a unique form of its own, through the combined efforts of "Moon" Martin, Wayne Hardin, and Frances Anderson. All three are quick to agree that "without God's help, WGMA would be nothing but a dream".

\*\*\*\*\*

REMINDER: For those of you that write overseas, we remind you that all the clubs within ANARC, of which we are part, have agreed to protest to those countries that continue to practice intentional jamming of international shortwave broadcasts. We ask that you either not report to station in those countries anymore, or if you do, please send along with your correspondence a protest to their continued practice of intentional jamming.



\*\*\*\*\*

So much has occurred on the South Florida AM radio scene in recent weeks that it seems fitting to present it in the form of a NEWSLETTER:

On 23 March, Cuba's Radio Liberacion ceased to exist, merging into Radio Rebelde. This move frees a lot of high-powered transmitters for use in retaliation against Radio Marti, now due to come on the air this fall. CMAC-740 and CHAB-BBO have been off the air for a while, along with CMKC-730. CMEA-570 now with Radio Reloj. Reports of scattered activity on 1040 and 1160 from FCC.

FCC Field Operations recently commenced monitoring program of Cuban signals, with daily bearing/field measurements from Fort Lauderdale and Miami along with field trips to the Keys as far as Dry Tortugas. Local AM stations are cooperating by dropping off the air for brief periods. FCC will attempt to come up with a Cuban station list with these data, which ignore station ID's. An outside contractor (You'll never guess who) MAY take over the job - if the price is right.

Local stations with Special Temporary Authorizations (STA's) may now have their expenses compensated by the USIA up to \$250,000 each. Trouble is - the compensation fund (\$5,000,000) has not been appropriated, nor is it likely to be unless the Cuban interference gets a lot worse than it is now.

AM stations in the face of Cuban interference may be seen as risky investments: WPLP-570, WSUN-620, and WNWS-790 all sold recently.

WIRK-1290 in West Palm Beach now WPCK and country. WAVS-1190 in Fort Lauderdale, off the air for a long time, will return very soon on 1170 kHz.

Finally, on 10 April, WCMG-1220 moved to 1210 kHz with a "Miami Springs/Miami" ID. On 13 April PM, heard on both 1210 AND 1220! RFS called Steve Kennedy to witness the weird phenomenon. WCMG weak or off for a couple of days thereafter, then back to normal.

WINZ-940 wants to go 50 kW ND days, but can't as long as it must protect the FCC Monitoring Station in Fort Lauderdale. The Monitoring Station itself would like to relocate out of this congested area, preferably to Vero Beach, but Washington is slow to react. Solution: Push a law through Congress forcing the move and providing funds for same. Fort Lauderdale is one of 14 monitoring stations located strategically throughout the U.S. and Puerto Rico as follows:

MONITORING STATION	LATITUDE	LONGITUDE
Anchorage, AK	61 n 10'	150 w 00'
Douglas, AZ	31 n 30'	109 w 39'
Livermore, CA	37 n 43.5'	121 w 45'
For Lauderdale, FL	26 n 06'	80 w 17'
Powder Springs, GA	33 n 52'	84 w 43.5'
Waipahu, HI	21 n 23'	158 w 00'
Belfast, ME	44 n 27'	69 w 05'
Laurel, MD	39 n 10'	76 w 49'
Allegan, MI	42 n 36'	85 w 57'
Grand Island, NE	40 n 55'	98 w 26'
Canandaigua, NY	42 n 55'	77 w 16'
Sabana Seca, PR	18 n 27'	66 w 14'
Kingsville, TX	27 n 26.5'	97 w 53'
Ferndale, WA	48 n 57'	122 w 33'

FCC Monitoring Stations must be protected against blanketing radiation as per Section 0.121 of FCC Rules and Regulations.

- 30 -

RENEWAL RENEWAL RENEWAL RENEWAL RENEWAL RENEWAL RENEWAL  
Is it that time of the year again for you? Trying to weight which magazines to stay with? Uncertain which one gives you more dollar for dollar? If your reading this then your decision should already have been made! Only DX NEWS offers you the famous CUBAN LIST, only DX NEWS offers you CPC TEST INFORMATION, only DX NEWS keeps you up to the minute with call letter changes with AM SWITCH. Do we need to go on? Of course not, your mind is made up. Your going with DX NEWS !!!!!!!

NEW FCC RULES  
FOR

NIGHTTIME POWERS FOR GRAVEYARD STATIONS

FCC RULE 73.3571

Most graveyard stations will soon receive letters from the FCC permitting them to increase their nighttime power from 250 Watts to 1000 Watts. There are a few stations, however, that are currently licensed to operate with less than 1000 Watts daytime or that use a directional array daytime. These stations will be required to apply for higher power at night rather than being granted it without any further action:

1230 KIFW Sitka	AK	1230 KGHS International Falls	MN
1230 KTNC Falls City	NE	1230 KELY Ely	NV
1230 WECK Cheektowaga	NY	1230 WEEX Easton	PA
1230 WKCE Harriman	TN	1240 KJOP Lemoore	CA
1240 KPPC Pasadena	CA	1240 KLOA Ridgecrest	CA
1240 KCRT Trinidad	CO	1240 WINK Fort Myers	FL
1240 KMCL McCall	ID	1240 WSDR Sterling	IL
1240 WWC Wilkesboro	NC	1240 KDLR Devils Lake	ND
1240 WGBB Freeport	NY	1240 WJTN Jamestown	NY
1340 WLEN Bad Axe	MI	1340 WLVC Fort Kent	ME
1340 WEXL Royal Oak	MI	1340 WCSR Hillsdale	MI
1340 WKSJ Jamestown	NY	1340 KHUB Fremont	NE
1340 KFBR Nogales	AZ	1340 WLVL Lockport	NY
1340 WQUB Athens	OH	1340 KTOB Sand Springs	OK
1340 KWNR Enterprise	OR	1340 WSAJ Grove City	PA
1340 WQYL Oil City	PA	1340 WSTA Charlotte Amalie	VI
1340 KYCN Wheatland	WY	1400 KCOG Centerville	IA
1400 WCYN Cynthiaiana	KY	1400 KCHS Truth/Consequences	NM
1400 WQNY Dansville	NY	1450 KLAM Cordova	AK
1450 WDLK Dadeville	AL	1450 KJMB Blythe	CA
1450 KQBO Yuba City	CA	1450 WKET Kewanee	IL
1450 WTHU Thurmont	MD	1450 WKIP Poughkeepsie	NY
1450 KCTI Gonzales	TX	1450 KQNP Port Angeles	WA
1490 KIIO Manitou Springs	CO	1490 WQFB Quitman	GA
1490 KBAB Indianola	IA	1490 WACM W. Springfield	MA
1490 WBTA Batavia	NY	1490 WOLF Syracuse	NY
1490 KOKC Guthrie	OK	1490 WSDC Hartsville	SC
1490 KQJO Laramie	WY		

So the message is, don't expect any of the above stations to come up with higher nighttime power for awhile.

+++ Specifications on Articles +++

Those of you that wish to 'finalize' your articles, you can do so by following some simple rules. Use a new or like new ribbon; use a pica size type; leave 1" on top & bottom of each page; number each page on the back; there are no side margins except the paper itself; try to send us the original or a very good black and clean copy, same goes with drawings; use white 20 pound paper, not onion skin (unless your overseas then alot of these rules are void); try to format your article around a 8 1/2 x 14" page, if possible. If you can follow these rules fine, otherwise just send in what you have and we will fix it up here. Thanks-HD.

\*\*\* RETURN ADDRESS LABEL \*\*\*

When writing to stns, you have been asked to send an SASE or a Stamp or Both! and still end up with marginal results. We have tested and have gotten a 80% return by using a stamp and a self-adhesive label with our return address on them. How can you get better results? Why not purchase 100 labels for a mere \$1.75, price includes shipping! What do they look like, just look on the back of this DXN, same size only difference is that the due dates will be replaced with your country (USA, CANADA, ENGLAND) below the last line. Order from: NRC PUBLICATION CENTER, P.O.Box 164, Mannsville, NY 13661.



# QSLing The Locals OR How I spent my Summer Vacation

by SKIP AREY

Whatsamatter Bunkey? Ya say the static crashes of summer are starting to wipe out your DX? Ya say that the late spring noise of night is giving you a headache even when you listen to strong locals? Ya say the summer doldrums have hit you and you need a new thrill? Well take heart dear friend and lend a few minutes of time to the topic of DXing locals.

I was once one of those folks who near paid much attention to my local outlets except as to how they blocked out hearing something rare with their splatter or worse yet their frequency allocation. (I want to clear the record right now and tell everyone that I never ever tried to hacksaw WCAU's antenna system) Then one day it happened. WIBG 998 rather abruptly changed its call to WZZD as well as its format and ownership. A station I grew up listening to is not in my collection.

Since the summer months have this nasty tendency to eliminate long distance listening, it might be a good time to put the locals in your QSL book. What? You say your local won't verify near-range reports? Well get creative lads and lassies! Do something to attract attention to your report, yourself and your hobby. When I lived just south of Millville NJ I found that every time I drove along Route 55 past WREY 1440's towers I would get this high pitched whine on my car's radio. So my report to them included this effect and the exact distances at which it occurred and a good approximation of its band width. This information was given not in the form of a complaint but simply as a report of the effect and a query as to its cause in relation to my interest in the radio hobby. It brought back a verification and a letter from the station engineer explaining the effect. When I lived in Sommers Point I asked the Chief Engineer of one of the local outlets what he would value in a report from a near-by BCB DXer. His suggestion was that next time the local listener was traveling out of the normal coverage area, the listener might provide the station with a report that included the distance at which the station became unintelligible either through fade, interference with another stations coverage area, or other related reason.

I sent a report, notably dated April 1, 1988 to none other than WCAU 1218 explaining to the station staff how clear their signal was on my wife's GE Toaster Oven. With this report I included a legitimate report of an evening's listening from Washington, D.C.. WCAU QSL'ed both reports in the spirit with which they were sent. In the Short Wave Hobby I did the same thing to UGA and WWV and received similar results, but that is another story for another magazine.

The point of all this is that we have all heard time and again that stations have no obligation to honor or answer our reports and local stations present the added disadvantage of lacking the "curiosity factor" of long distance reception. So the obvious thing to do is to put on your thinking cap and come up with alternate curiosity factors. You will be presently surprised at the results.

Something many members have had good luck with, including this intrepid author, is personal visits. This tactic, however, must include the caution that while we are in this for fun and games, the radio station staff are working and quite probably might not have either the inclination or the time to put up with our visits. Pursue such efforts cautiously and above all courteously. Be sensitive to the situation and know when to leave. You might get snubbed, do not get upset, the staff is only paid to entertain you at the far end of your radio speaker not at their doorstep. On the other hand you might end up splitting a six pack over a dead spectrum analyzer but that is most definitely another story.

\*\*\*\*\*

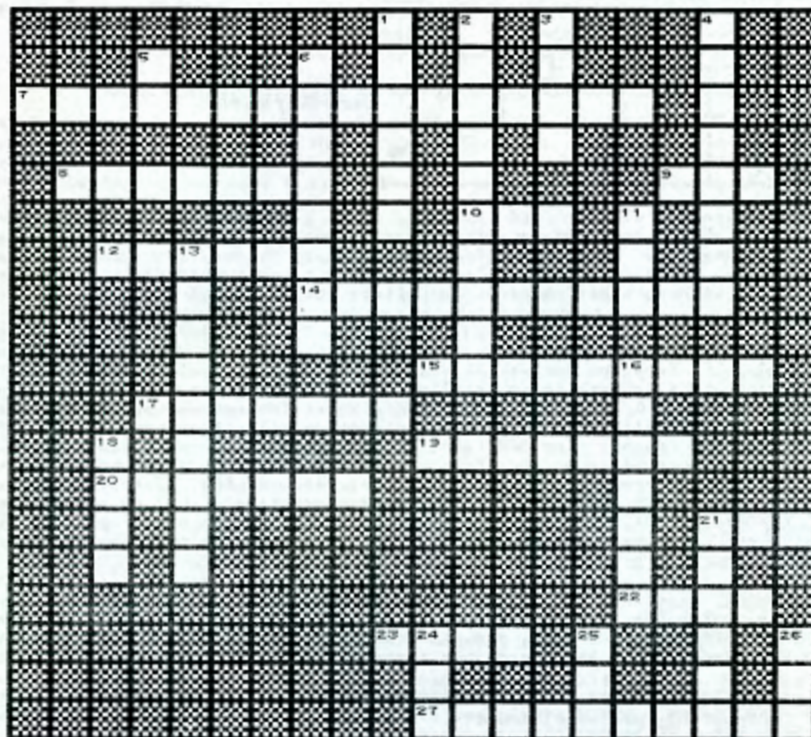
## HAS RENEWAL TIME ARRIVED FOR YOU?

### DON'T KNOW WHAT CLUB MAGAZINES TO STAY WITH?

#### ASK YOURSELF THIS:

- WHAT MAGAZINE BRINGS TO YOU THE CUBAN LIST, by Ron Schatz?
- WHAT MAGAZINE BRINGS TO YOU CPC STATION TESTS?
- WHAT MAGAZINE BRINGS TO YOU CONSTRUCTION PROJECTS by Mark Connelly, Dallas Lankford, and others?
- WHAT MAGAZINE BRINGS TO YOU EACH ISSUE UP-TO-DATE AM STATION CHANGES PRESENTED IN AM SWITCH by Jerry Starr?

THERE IS ONLY ONE.....THE NATIONAL RADIO CLUB'S 'DX NEWS' - 36 TIMES A YEAR!



#### ACROSS CLUES

7. A PHENOMENON WHICH PRODUCES DAYS OF UNEXPECTEDLY WEEK SIGNALS DURING MID WINTER MONTHS.
8. SIGNALS REFLECTED FROM LAYERS OF THE IONOSPHERE.
9. PROOF OF PERFORMANCE.
10. CANADA'S LICENSING BUREAU.
12. EXTREME ABSORPTION TO MEDIUM WAVE SIGNALS, RELATED TO MAGNETIC STORMS, NORTHERN LIGHTS.
14. PERTAINING TO THE EARTH'S MAGNETIC FIELD.
15. AUDIO TONE PRODUCED BY TWO STATIONS CLOSE IN FREQUENCY.
17. A TRANSMITTER'S "FOOTPRINT"
19. A PIRATE STATION, SLANG.
20. THE AREA OF STRONG GROUNDWAVE RECEPTION FOR A RADIO STATION.
21. SILENT HETERODYNE PRODUCED BY STATIONS SO CLOSE IN FREQUENCY THAT THE BEAT NOTE IS NOT NOTED.
22. THE DIRECTION OF MINIMAL SIGNAL PICK-UP.
23. LOW POWER RELAY TRANSMITTER
27. AZIMUTHAL, WITH AN EXTRA U. STAY AWAKE.

#### DOWN CLUES

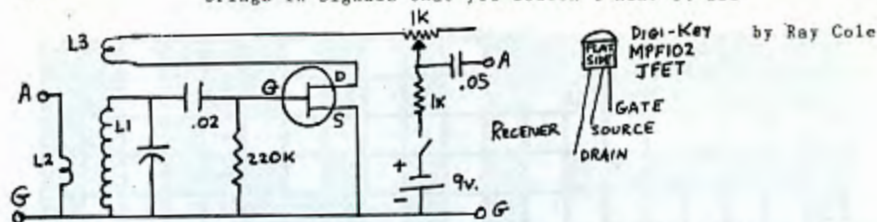
1. MAIN REFLECTION LAYER, RESPONSIBLE FOR NIGHTTIME RECEPTION OF AM RADIO SIGNALS.
2. MW SIGNAL COMPONENT WHICH TRAVELS ALONG THE SURFACE OF THE EARTH.
3. DIRECTION FINDING ANTENNA
4. A MULTIPLE OF A GIVEN FREQUENCY
5. KILOWATT
6. A LONG LOW SINGLE WIRE WITH SPECIAL GROUND CONNECTIONS USED FOR MW AND LW RECEPTION
11. FIELD EFFECT TRANSISTOR
13. THE TRANSMISSION OF ELECTRO-MAGNETIC WAVES
16. REGION OF IONOSPHERE WHERE DAY-TIME MW SIGNALS ARE ABSORBED.
18. SLANG TERM FOR A SPURIOUS SIGNAL
21. A CRASHING SOUND PRODUCED BY A STATION OPERATING ON A CLOSE FREQUENCY.
24. PRE-SUNRISE AUTHORIZATION
25. EUROPEAN BROADCASTING UNION
26. VERIFICATION OF RECEPTION CARD

## NRC STAMP SERVICE

BRIAN PITMAN - 835 Milford Drive, Apt #102 - Kingston, ON CANADA K7P1A7

(Canadian & American Stamps only) If you want stamps for either country, let me know the quantity. Please include the proper amount of funds to cover the purchase of those stamps and also include return postage funds. As a big help to both of us, make your check or money order out in funds appropriate to the amount of stamps ordered. (Ex.: U.S. person orders \$10 in Canadian Stamps, go to your bank & have the money order made out for \$10 in Canadian Funds) This all to avoid exchange rate problems. U.S. 1st Class 1 ounce = 28 cents (American); Canadian 1st Class 1 ounce = 37 cents (Canadian).





Simple, cheap, reliable and stable, this preamp will at least double your receiver's "dig them up out of the mud" power by amplifying the signal between your antenna and receiver. Its noise level is very low and so is its power consumption. Modification of the coil L1 to suit will cover the lower short wave bands with no other changes, but slight changes to L2 and L3 improve it.

The original coil is wound on an old BCB ferrite core, 3/8" dia. by 4 3/4", wound with paper to a 7/16" dia. #28 wire was used, but a cloose substitute may be used. L3 is wound over a 1/2" dia. form that will slip easily over L1, and left with long enough leads to slide from L3's position to the very end of the ferrite core. L1 should be wound starting at the extreme end of the ferrite. Be sure to wind all coils in the same direction. For long wave, 180 to 500 Kc., L1 needs 250 turns; for BCB (AM), 90 turns; for short wave the coil will vary quite a bit depending on your tuning capacitor's size - start at 40 and trim it later to the coverage you want. For long wave and BCB, L2 is 9 turns, L3 is 7 turns. For short wave use 5 and 4 turns respectively. L2 is close wound over the center of L1. L3 is slipped over the far end from where the winding of L1 began, and the end of L3 nearest to L1 must be connected to the Drain of the MPP102. You will probably use L3 at the far end of the ferrite.

The tuning capacitor for long wave is the combined sections of an old BCB variable. For BCB, use only the large section. For short wave, with a low cost general coverage receiver, use the large section; but for better radios with less coverage on each band, use only the small section.

The 220K resistor may be 150K to 1000K (1 Meg.), but power drops off sharply at 150K and below, and slowly above 1000K. The 1K regeneration control can be up to 5K, but a 1K is smoother in operation. The oscillation joint is near the no resistance end, so it should be wired so that resistance decreases with clockwise rotation.

**CAUTIONS** - An MPF-102 and an MPP102 (no dash) are entirely different animals. This circuit uses only an MPP102. Also, different manufacturers of MPP102's sometimes use different pin connections. Be sure to use the correct ones for the MPP102 that you use. If unknown, an ohmmeter will read about 2200 from Gate to Source, but only about 180 from Source to Drain. Digi-Key Corp., Box 677, Thief River Falls, MN 56701, will sell quantities of 10 or more for less than 60 cents each (the more, the cheaper) and accepts VISA or MASTER CHARGE orders at 800-346-5144. The MPP102 is a high frequency amplifier and mixer that makes a great all purpose experimenters FET.

The preamp tunes fally sharply and must be tuned to track right along with your receiver - otherwise it will overload your receiver with stong signals from whatever frequency it is tuned to. The preamp's dial can be calibrated to track with your receiver. With the preamp's regeneration you will literally find signals where you had nothing but a blank before, and they will seem like strong signals that your receiver shouldn't have missed.

When you build this preamp and you've used it awhile, let others know (and myself) how it worked for you thru the MUSINGS section of DX NEWS.

KXPR (88.5)	KOMT (94.3)	KOYL (101.7)
KVPR (88.5)	WETO (94.3)	KYLO (105.5)
KVPR (88.5)	KZUP (92.5)	KYLO (105.5)
KUOP (91.7)	KZUP (92.5)	KYLO (105.5)
KAER (92.5)	KEBR (100.5)	KWOD (106.5)
KPOF (93.5)	KXQA (107.9)	
AM Stations		
KFSA (780)	KZMZ (1380)	KQDA (1470)
KAM (950)	KQMR (1320)	KFRK (1530)
KPFP (1110)	KQAS (1380)	KCYR (1570)
KQAR (1170)		

from early LowPower  
Circuit Digest #8

ANSWERS: RADIO TERMS

Q	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

## ICOM IC-R71A GENERAL COVERAGE COMMUNICATIONS RECEIVER

## USER REVIEW AND COMMENTARY BY THE DX AUSTRALIA TECHNICAL TEAM

With the timely arrival of the ICOM IC-R71A, ICOM Inc., have scored a coup which will likely assure their continued world dominance of the top end of the general coverage receiver market for many years to come. The R71A offers so much better performance & extra features over its lower priced competitors that most prospective purchasers would be able to justify the additional expenditure on a value for money basis. Similarly, there is so little difference in the performance compared to all other receivers up to \$3000, that even the well-heeled DXer would balk at the higher prices. The purist may argue the apparently discontinued Drake R7A remains unmatched in dynamic range & point to its superb passband tuning, but the realist will buy an R71A (are the similar type numbers purely coincidental?), & use the \$1000+ saved on reception report postage or an exotic DXpedition.

The ICOM company's products display a rare combination of technical excellence, cost-effective design & ingenious marketing strategy. We DXers were sitting back with our shiny R70s (estimated 50% market penetration over \$300), waiting for an outboard multi-channel memory unit to be released & wondering what to do about those annoying R70 quirks, such as 1MHz band segments without rollover & fixed bandwidths. Meanwhile ICOM had rightly decided that a general overhaul was necessary. Leaning heavily on proven circuitry from its "competition grade" transceivers (eg the IC-751 & 740), the developed a wider dynamic range front end, replaced the microprocessor controller with a greater capacity unit & enhanced its software with 32 channel memory & scanning functions, all integrated into the same size package as the R70 by subtle rearrangement & rationalization of least wanted features. Then there is an unparalleled range of optional extras which permits owners to personalize their sets according to wants & needs. The result is so impressive that it is likely that amongst the flood of buyers will be many R70 owners, rightly deciding to trade up to an R71A. The reputation of the R70 is such that the market rate for a 2nd hand unit is only about \$100 less than new price (if you can find one), so the changeover would be relatively painless. In all probability your wife stopped speaking to you when you bought the R70, so what have you got to lose?!

**Overview:** The IC-R71A is a quadruple conversion superhet with a 1st IF of 78.4515 MHz. The Australian version (perhaps this is where the "A" comes from) covers nominally 2-30MHz, but all circuitry is in place or .1-30MHz & your ICOM dealer will convert upon request by reprogramming a RAM chip. Frequency & mode readout is by means of a custom fluorescent display with 100Hz freq readout. Tuning is by means of a microprocessor based dual loop 10Hz step PLL synthesiser. Frequency may be controlled either by the optically encoded main tuning dial with dual UFO's, keypad digital entry or 32 channel memory (frequency & mode are stored). Features include a fully adjustable noise blanker, switchable AGC time constants, switchable wideband preamp, squelch, readout dimmer, variable rate tuning, notch filter & "ICOM" passband tuning. Optional accessories are FM mode board, high selectivity SSB PBT filter, high stability crystal frequency reference, speech synthesis frequency readout, infrared remote control & computer interface. What more could you ask for? In terms of external appearance, major changes are the shift of the internal speaker to the top of the receiver & utilizing the remaining space at the extreme right of the front panel for a 4x4 keypad frequency entry system. The rather useless monitor level control & RIT control of the R70 become noise blanker level & memory channel selectors respectively.

**Physical Packaging:** The unit comes in a sturdy cardboard package complete with handle & is worth retaining by the DXer on the move. 3 coolite frames minimize risk of damage. Size is 111mm(H) x 260mm(W) x 274mm(D). Total weight is 7.5kg. A tilting bail is provided which still lacks the necessary rigidity & rubber padding. A pull-out carry handle on one side of the set itself & 4 large rubber feet on the other are ideal for receiver carriage over short distances. The display panel is both easily read & comprehensive. A large accurate S meter is labelled both in S units & the R code & is a useful guide to tuning. The jungle of keys, switches & knobs is a little daunting at first, but displacement is logical, separation is barely sufficient & functions are quickly learned. Only major criticism is the rather central location of the main tuning knob, which should preferably be at the extreme right of the front panel for right-handed operators. One small feature which rates highly with the reviewers is the sturdy mains power socket at the rear & its removable power lead. There is nothing worse than lugging a receiver around with a trailing power cord & this feature should be mandatory on all sets. Supplied accessories include 4 spare fuses, 3 x 3.5 mm plugs & an RCA plug. A nice thought is the inclusion of several metres of insulated wire connected to a banana plug which fits into the receiver's SO239 antenna socket. The newcomer to the hobby (yes, some do begin with a \$1000 rx) can get started straight



away. A serious omission is a publicity brochure for DX Australia, but we're working on that, hi! The supplied instruction manual thoroughly describes the control functions & general operation. It is largely devoid of the "quaint" English which so often emanates from Japanese manufacturers. Locations of key components are illustrated. Full instructions are given for option installation. Two large block diagrams are an invaluable reference, though the flow from right to left is disconcerting. An enormous schematic diagram will satisfy the engineers, but unfortunately the excellent detailed PCB component & track layouts of the R78 have been dropped.

**Technical Specifications:** The following information is based upon manufacturer's supplied figures or inferred from earlier R78 specs. In a few cases it has been possible to check figures with elementary equipment, but a detailed laboratory test report is hoped to be available soon. Noise floor in SSB with 2.3 KHz BW is -134dBmW with preamp on and -130dBm without. Sensitivity in SSB 2.3 KHz is less than .15uV for 10dB S+N/N (.1-1.6 MHz, less than 1uV). AM mode sensitivity is less than .5uV for 10dB S+N/N (.1-1.6 MHz, less than 3uV) -BW 2.8 KHz. Several switchable bandwidths give a good range of selectivity. The wide AM filter is 6 KHz at -6dB & 15KHz at -50 dB. The need to specify the 50 dB down point on this filter infers poor ultimate rejection & this is plainly apparent in actual listening. BW for AM normal & SSB wide is quoted as 2.8 KHz but the review unit appeared to have a BW of 3.3 KHz in SSB. The normal SSB filter is 2.3 KHz at -6dB & 4.2KHz at -60 dB which is excellent. The optional narrow filter for AM/SSB/CW is 500Hz at -6dB & 1.5KHz at -60 dB. Stability is less than 200 Hz after switch on 1 minute to 60 minutes & less than 30 Hz after 1 hour. This is excellent & more than adequate for all but the most demanding applications. The quoted dynamic range is 105dB without preamp & would be about 100 dB with preamp. If achieved this would match the famed Drake R7A, but considering the circuitry, this would need to be carefully verified. Regardless of the numbers, ability to withstand overload, cross-modulation & intermodulation is superb. Spurious responses (birdies) are quoted as being more than 60dB down & nothing of significance was noted on SW other than very low level readout hash. Even this could probably be cured by using a few feet of coax cable at the antenna input. Gone are the days of image response. Warning, if you are not technically oriented, skip the next 3 sections & you will have missed nothing.

**Front End:** A detailed description of the front end circuitry is as follows. In accordance with accepted practice, signals from the 50 ohm antenna input first go thru a 2 section 30 MHz low pass filter to avoid spurious responses from intermodulation between the local oscillator (70.5515 - 100.4515 MHz) & ultra strong VHF broadcast stations (Band II TV & FM). One of 10 sub-octave 4 section elliptical bandpass filters or a 500 KHz low pass filter is then selected depending on the tuned frequency, by means of uP control & PIN diodes at input & output. According to the setting of the PRE/ATT switch, the signal then passes on unaltered, attenuated by 20dB or amplified by 10dB. This permits user optimization of noise figure & dynamic range. The preamp is a pair of low noise wide dynamic range junction FETs (2SK125, 2dB NF, +38dB output intercept) in a broadband grounded gate push-pull configuration. The preamp performance is excellent, but no longer state of the art. Quiet locations would benefit from even lower noise figure & the option of greater gain. The Motorola line of ultra linear UHF CATV bipolar transistors with ion implanted arsenic emitters in common base noiseless feedback configurations offer superior performance. A pair of MRF571s (device NF .5dB/ 3rd order o/p intercept +45 dBm @ 50 ma) followed by a pair of MRF586s (2dB NF, +60 dBm intercept @ 98 ma) would be ideal.

The key element of the front end & hence the entire receiver is, of course, the first mixer. In this regard the R71A is a significant advance over the already good R70. The R70 first mixer employed a DM412EL IC bipolar DBM with a third order input intercept of about +12 dBm. The R71A moves on to a balanced pair of active 2SK125s with local oscillator power applied to the gates. The claimed 105 dB dynamic range for the R71A (cf 95dB for the R70) would indicate an input intercept of about +27 dBmW. Hams must tolerate their colleagues down the street sharing a band & running (hopefully) legal limit, & DXers continue to chase uV signals in the MW band between 50 kW locals. In these circumstances, the question is not what mixer performance is necessary, but what can be achieved. A quad of 2SK125s in passive mode may not be state of the art, but would give another 10 dB dynamic range. If increased requirement for local oscillator drive & hence shielding is too expensive, then the unit should be modularized & a superior unit offered as an option. The mixer is followed by a 2 pole monolithic crystal filter at 70 MHz with a BW of about 15 KHz. Significant gains in performance could be had here with narrower BW but the wider bandwidth requirements for the optional FM IF & demodulator preclude this. In conclusion, please note that this is amongst the best front ends you'll get in a receiver under A\$5000 & temper the criticisms accordingly.

**IF Strip:** Following the 70 MHz filter is the 1st IF amplifier (3SK74 & the 2nd mixer (another double balanced mixer) with LO injection at 61.44 MHz & output at 9.8115 MHz. This output is sampled by the noise blanker circuit which

operates a diode bridge series switch in accordance with operator determined parameters. After a further dosage of amplification comes the main selectivity determining elements - the 2nd IF filters. These are crystal filters of 6 KHz, 2.3 KHz, & 500 Hz. The 3rd mixer (3SK74) is driven by the PBT UX0 at 9.4665 KHz nominal & outputs at 455 KHz. Inferior quality ceramic filters follow this mixer (an optional crystal filter is available for 2.3 only). Depending on the actual setting of the PBT UX0, the IF passband may be reduced at either the high or low side by interleaving the responses of the 2nd & 3rd filters. The 4th mixer is driven by the same UX0 & therefore restores the IF to 9.8115 MHz. A half lattice crystal notch filter at this frequency completes the RF circuitry of note.

**Logic/PLL Circuitry:** The logic unit consists of a proprietary 8 bit microprocessor for treating data such as up/down frequency control, dial lock, tuning rate select, band switch control, code convertor, memory storage, & scanning control. This is a subject all of its own & a minefield for the authors - 'nuff said. The PLL unit consists of 2 PLLs for the synthesis of the first LO signal & a crystal oscillator frequency reference/2nd LO. The xtal oscillator runs at 30.72 MHz. Portion of the output drives a frequency doubler which is the 61.44 MHz 2nd LO. Portion of the 30.72 MHz signal is divided to generate 10 KHz & 5 KHz references for the main PLL loop & sub-loop respectively. The sub loop runs at 115 - 119.99 MHz with 5 KHz steps. This signal is divided by 500 to get 230 - 239.99 KHz with 10 Hz steps & then is mixed with the 30.72 MHz reference to give 30.950 - 30.9599 MHz. This is used as the LO for the phase detector of the main loop. The main loop generates output (which is the 1st LO) continuously from 70.55 - 100.45 MHz in 10 Hz steps, but one of 4 separate VCOs covering different frequency ranges is selected to optimize LO carrier to noise ratio.

**Operating Controls:** The front panels boasts no less than 48 keys, switches & knobs - surely a record for an under-\$1000 receiver. 2 jacks at the front & 8 at the back complete the complement. A brief description of each will give an idea of the overall operation of the set. The noise blanker has no less than 3 controls - on/off, level & width. It is effective against pulse type noise including ignition noise & OTH radar. AGC time constant switch offers off/fast/slow (decay) attack time is fast. With AGC switched off & RF gain adjusted, optimum performance is achieved when Murphy's Law results in a good DX opening concurrent with quasi-local thunderstorm activity. 5 pushbuttons control mode - one each for AM, CW, LSB, USB, RTTY. Optional FM is obtained by pressing the "Function" key then AM. Thankfully the R78's automatic selection of USB above 10 MHz & LSB below has been dropped. Unfortunately the quirk of a 3 KHz freq change in swapping between USB & LSB remains to plague DXers & is the single most annoying feature of the set. If this aspect were corrected the "ICM" PBT would be far more effective. The PRE/ATT switch provides a choice of 20dB attenuation, straight thru or 10 dB amplification. The preamp as supplied does not function below 1.6 MHz, but presumably the inhibit line can be cut to correct this. The R70 amp once modified in this way was effective down to 300 KHz.

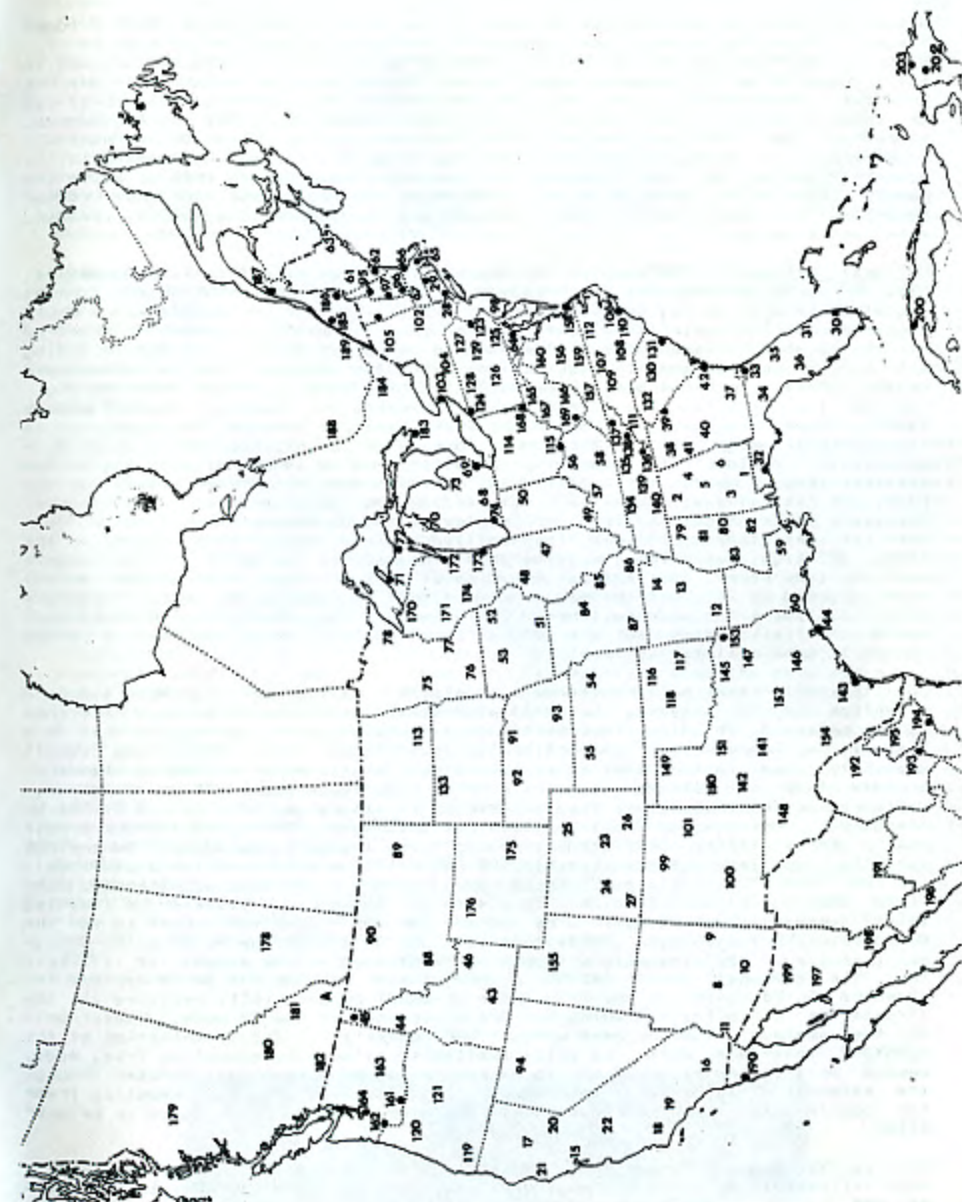
Two pushbuttons give 3 positions of selectivity tailored for each mode. Pressing either the narrow or wide buttons alone gives the appropriate BW in each mode. If both are in or both out then "normal" BW is selected. A 3 position switch would have been better. Individual controls are provided for AF & RF gain, squelch level & tone. A dimmer switch reduces the frequency readout display intensity for night-time listening. A switch is provided to enable the optional infrared remote control. The tuning rate switch varies the frequency step increment in the synthesiser. With button out the frequency changes in 10 Hz steps (2 KHz per rotation) unless the knob is being rotated rapidly, in which case the step increases to 50 Hz (up to 10 KHz per rotation is achieved). If the TS button is pressed steps are 1 KHz (200 KHz per rotation). The R70 quirk whereby the tenths of KHz was not cleared has been corrected. The variable rate tuning is a flop as it is too difficult to gauge the rotation speed at which the 10Hz/50Hz transition occurs. On the other hand the 100 Hz fixed step rate of the R70 will be sorely missed as this was probably the most used when tuning BC signals in AM. The fundamental problem with photoencoders, however, has still not been addressed. The ideal combination would be 10 Hz steps & 20 KHz per rotation, i.e. an order of magnitude increase in the number of steps per rotation. Perhaps a quantum leap in technology is required to achieve this, but until it is achieved, the vast majority of users will feel uncomfortable with photoencoder dials. An interesting enhancement over the R70 is the band button which converts the main tuning dial into a band switch (1 MHz steps, 7 MHz per turn). While better than the R70s up/down 1 MHz buttons (non-repeating), the Kenwood R2000 system beats both "hand down" with dedicated buttons but a repeat feature which activates after 1 second & increments every 1/5 second thereafter. A dial lock switch electronically freezes the tuned frequency to prevent accidental mistuning.

A notch filter may be adjusted in frequency & switched in & out to eliminate an unwanted carrier in the sideband. Frequency control is excellent & notch depth



1. WTCC	ANDALUSIA	71. WCCY	HOUGHTON	141. KRUN	BALLINGER
2. WNSL	DECATUR	72. WQXO	MUNISING	142. KBYG	BIG SPRING
3. WKAL	DEMOPOLIS	73. WSAM	SAGINAW	143. KUNO	CORPUS CHRISTI
4. WFPA	FORT PAYNE	74. WSJM	ST. JOSEPH	144. KILE	GALVESTON
5. WJLD	HOMEMOOD	75. KEYL	LONG PRAIRIE	145. KCVL	GREENVILLE
6. WJHO	OPELIKA	76. KMHL	MARSHALL	146. KFNX	HUNTSVILLE
7. KVLD	VALDEZ AK	77. KLBB	ST. PAUL	147. KEBE	JACKSONVILLE
8. KSUN	PHOENIX	78. WHLB	VIRGINIA	148. KIUN	PECOS
9. KRZV	SPRINGERVILLE	79. WBIP	BOONEVILLE	149. KEYE	PERRYTON
10. KTUC	TUCSON	80. WMBC	COLUMBUS	150. KVOP	PLAINVIEW
11. KVOY	YUMA	81. WYKC	GRENADE	151. KWAT	STAMFORD
12. KELD	EL DORADO	82. WFOR	HATTIESBURG	152. KTEM	TEMPLE
13. KCLA	PINE BLUFF	83. WJQS	JACKSON	153. KTFS	TEXARKANA
14. KMYN	WYNNE	84. KFRU	COLUMBIA	154. KVOU	UVALDE
15. KRE	BEREKELY	85. KJCF	FESTUS	155. KFTN	PROVO
16. KRCQ	INDIO	86. KSIM	SIKESTON	156. WKAV	CHARLOTTESVILLE
17. KQMS	REDDING	87. KITS	SPRINGFIELD	157. WHHV	HILLSVILLE
18. KUNA	SAN LUIS OBISPO	88. KDRG	DEER LODGE	158. WPCF	PORTSMOUTH
19. KFAP	SANTA PAULA	89. KXGN	GLENDAVE	159. WHLF	SOUTH BOSTON
20. KTRT	TRUCKEE	90. KARR	GREAT FALLS	160. WINC	WINCHESTER
21. KUKI	UKIAH	91. KBRB	AINSWORTH	161. KLCK	GOLDENDALE
22. KONG	VISALIA	92. KCOW	ALLIANCE	162. KEDO	LONGVIEW
23. KRLN	CANON CITY	93. KLIN	LINCOLN	163. KRSC	OTHELLO
24. KDTA	DELTA	94. KWNA	WINNEMUCCA	164. KPMA	TACOMA
25. KFTM	FORT MORGAN	95. WBRL	BERLIN	165. WPQZ	CLARKSBURG
26. KBZZ	LA JUNTA	96. WTSL	HANOVER	166. WRON	RONCEVERTE
27. KFAC	PAGOSA SPRINGS	97. WLTN	LITTLETON	167. WVRC	SPENCER
28. WSTC	STAMFORD	98. WOND	PLEASANTVILLE	168. KWVK	WHEELING
29. WILI	WILLIMANTIC	99. KTRC	SANTA FE	169. WBTH	WILLIAMSON
30. WFTL	FORT LAUDERDALE	100. KCBS	TRUTH OR CONSEQUENCES	170. MATW	ASHLAND
31. WIRA	FORT PIERCE	101. KTNM	TUCUMCARI	171. MJJK	EAU CLAIRE
32. WNUE	FORT WALTON BEACH	102. WABY	ALBANY	172. WDUZ	GREEN BAY
33. WZAZ	JACKSONVILLE	103. WYSL	BUFFALO	173. WRJN	RACINE
34. WPRY	PERRY	104. WDNV	DANSVILLE	174. WRDB	REEDSBURG
35. WWJZ	SANFORD	105. WSLB	OGDENSBURG	175. KATI	CASPER
36. WPAS	ZEPHYRHILLS	106. WBTB	BEAUFORT	176. KODI	COBY
37. WULF	ALMA	107. WKEM	GREENSBORO	*177. WIDA	CAROLINA PR
38. WUNF	ALPHARETTA	108. WSMR	RAEFORD	178. CHOA	STETTLE
39. WSGC	ELBERTON	109. WSTC	STATESVILLE	179. CFLD	BURNS LAKE
40. WNEK	MACON	110. WISE	WALLACE	180. CHNL-1	CLEARWATER
41. WCOH	NEWMAN	111. WHCC	WAYNESVILLE	181. CKGR	GOLDEN
42. WSGA	SAVANNAH	112. WSMY	WELDON	182. CINL	PRINCETON
43. KART	JEROME	113. KODJ	JAMESTOWN	A. C.	SPARWOOD
44. KRFL	MOSCOW	114. WMAN	MANSFIELD	183. CKCB	COLLINGWOOD
45. KIGO	ST. ANTHONY	115. WPAY	PORTSMOUTH	184. CKOB	RENFREW
46. KSTP	SANDPOINT	116. KWON	BARTLESVILLE	B. CBG	GANDER
47. WDWS	CHAMPAIGN	117. KTMC	MC ALESTER	185. CKRV	DRUMMONDVILLE
48. WGIL	GALESBURG	118. KNOR	NORMAN	186. CKFL	LAC MEGANTIC
49. WROZ	EVANSVILLE	119. KIVR	CAVE RIVER	187. CJFF	RIVIERE DU LOUP
50. WBAT	MARION	120. KNND	COTTAGE GROVE	188. CKRN	ROUYN
51. KCOG	CENTERVILLE	121. KJDY	JOHN DAY	189. CIKJ	ST. JOVITE
52. KADR	ELKADER	122. KBCH	LINCOLN CITY	190. KEPP	ENSENADA
53. KVPD	FORT DODGE	123. WEST	EASTON	191. KEGD	PARRAL
54. KVOE	EMPORIA	124. WJET	ERIE	192. KEARO	NEUVA ROSITA
55. KAYS	HAYS	125. WHGB	HARRISBURG	193. KEDE	SALTILLO
56. WCYN	CYNTHIANA	126. WAMQ	LORETTO	194. XELE	LINARES
57. WIEL	ELIZABETHTOWN	127. WKBI	ST. MARY'S	195. XESH	SABINAS HIDALGO
58. WFTC	LONDON	128. WICK	SCRANTON	196. XEEK	CULIACAN
59. WFPR	HAMMOND	129. WRAK	WILLIAMSPORT	197. KEFB	HERMOSILLO
60. KAOK	LAKE CHARLES	130. WCOB	COLUMBIA	198. XENAS	NAVOJOA
61. WRDO	AUGUSTA	131. WGTN	GEORGETOWN	199. XEAB	SANTA ANA
62. WIDE	BIDDEFORD	132. WKDY	SPARTANBURG	200. CMGX	MATANZAS
63. WNCB	NACHIAS	133. KBJN	LEMMON	*201. CMHV	GUAIMARO CUBA
64. WWIN	BALTIMORE	134. WJ2M	CLARKSVILLE	202. HIAL	LA VEGA
65. WALE	FALL RIVER	135. WHUB	COKKEVILLE	203. HIBN	PUERTO PLATA
66. WLLH	LAWRENCE-LOWELL	136. WLSB	COPPERHILL		
67. WHMP	NORTHAMPTON	137. WKPT	KINGSFORT		
68. WKNR	BATTLE CREEK	138. WCAP	MARYVILLE		
69. WOBH	DETROIT	139. WHAL	SHELBYVILLE		
70. WLJN	ELMWOOD TOWNSHIP	140. WNBC	WAYNESBORO		

\* = NOT PLOTTED



BY: BILL HALE



satisfactory (variable depending upon location in the passband). Unfortunately the notch is not operative in the AM mode. Apparently the problem with the R70 where the notch would not cover one sideband in AM, has been "corrected" by disconnecting it in the AM mode altogether! The use of a 9 MHz crystal notch does not permit more than 3 KHz running range, compared to the 18 KHz required for AM. A better solution for ICOM would have been to use an LC hybrid at 455 KHz.

Scanning functions are impressive, with 2 scan rates, specifiable upper & lower limits. Scanning ceases when squelch is activated or the tuning dial moves. Scanning may be confined to channels stored in memory & further constrained to only those with a selected mode. As well as 32 memories several buttons are provided to facilitate interaction between them & the dual VFOs. All freqs can be entered either through the main tuning dial, memories or the digital keypad. There is room for improvement with the scan rates which do not meet all requirements & keypad entry of this would be desirable. An anomaly in the scanning system is that frequencies increment down rather than up as do the memory channels - a major flaw. Sockets on the front panel are provided for earphones & record jack. Rear sockets are for panoramic adaptors, speaker, mute, ant & earth.

**Optional Extras:** ICOM provide an unparalleled array of optional enhancements. Thus a purchaser receives an already excellent base receiver which may then be upgraded according to specific needs. It seems that any module which would significantly increase the base receiver price or which would not be required by the majority of users has been separated out as an option. In the following all prices quoted are in Australian dollars & represent ICOM's recommended retail price. All options can be installed by anyone competent in soldering. Top of the list is the IC-EX310 speech synthesiser frequency readout module (\$68). When the speech button on the front panel is pressed, the frequency is "announced", e.g. for 14.2315 MHz "one four point two three one five megahertz". Volume is internally adjustable & a jumper selects one of two speech rates. While this unit has not been specifically developed for the R71A, it is believed to be the first readily available for a semi-professional receiver. Our sight-impaired colleagues & the DX community as a whole owe a debt of gratitude for this long-awaited device. Thanks ICOM! While in the arena of high technology, mention should be made of the RC-11 infrared remote control (no price available at the time of this writing). The device has not been sighted as yet, but the manual infers that it remotes the keypad frequency entry system & the mode switches. It includes a separate control & additional board or installation in the R71A. This unit will bring new meaning to the phrase "armchair listening level".

For the DXer seeking the ultimate in stable exalted carrier single sideband reception of AM signals, the CR-64 high stability crystal frequency reference is recommended (\$114). It consists of a replacement high stability xtal in a temperature compensating proportionally controlled oven. Resulting overall stability spec is +/- 50 Hz after switch on 1 min to 60 mins (200 Hz standard) & less than +/- 10 Hz after 1 hour at room temperature (30 Hz standard). Variation with temperature is +/- 100 Hz in the range -10 C to +60 C (500 Hz standard). Various optional filters are available. The FL44A 455 KHz 8 pole xtal lattice filter (\$99.50) has proven to be a superb replacement in the R70 for the supplied inferior ceramic SSB PBT filter & will function equally well in the R71A. With it the PBT loses its fuzziness & performs as intended. The FL-32 500 Hz filter (\$56.50) is a must for the serious listener in locating split frequency operations. The FL-63 250 Hz filter (50 cents) is for the dedicated CW enthusiast. Note that only one of either the FL-32 or FL-63 can be installed. By the way, although not mentioned in the manual, it is likely that the somewhat better FL-33 6 KHz filter for the R70 could replace the standard FL-70 used in the R71A. The IC-EX257 FM unit (\$51) replaces all the IF/detector circuitry following the 3rd mixer when in the FM mode. Useful only in the amateur 10 metre band without UHF converters. The installation of the IC-EX389 interface unit (no price available) allows the operating freq, mode, memory write, memory read etc to be controlled by a personal computer through the external CT-10 optional interface unit. Also available is a mounting frame for mobile use. As you can see, the base unit can be optioned up by over \$1800.

**R70 vs R71A Summary Comparison:** Roses to ICOM for the following enhancements. More illustrative frequency/mode display. When changing to 1KHz steps, tenths of KHz readout now zeros. Bandwidth is now user selectable & in particular, narrow AM BW available. Greater dynamic range & hence less overload problems. Better LF performance due to additional front end low pass filter. Tuning is now continuous & doesn't cycle within 1 MHz segments. Speech synthesis, remote control, etc., options. 32 channel memory & scanning functions. Tuning Knob doubles as band switch. Keypad frequency entry.

Brickbats for the following. Notch filter inoperative in the AM mode. Inferior 6 KHz filter. Narrow CW filter not provided as standard. 100 Hz tuning increments not available.

**Suggestions for the R72:** Optional high dynamic range 1st mixer with 3rd order input intercept exceeding +40 dBmV. Option of up to 20 dB gain preamp with noise figure overall below 1 dB. Notch filter capable of operating usefully in all modes. Fully variable scan rate & scan step increments with values entered by keypad. Rotary BW selection switch with 5 positions. Optional superior 3 KHz, 4 KHz, & 6 KHz BW filters. Passband tuning identical in principle to that of the Drake R7A or at least no frequency hopping in changing modes. Dual time clock with separate display - 12 hour local time & 24 hour UTC. 5 memory banks each of 20 channels.

**The Bottom Line:** ICOM's recommended retail price for the base unit is A\$850. Note that by importing a 2-30 MHz receiver, a lower rate of duty applies (20% vs 32 1/2%), even the conversion for MW is a piece of cake. ICOM's wide network of authorized distributors won't trim very much off that price. It is possible to pick up the receiver for \$799 from one outlet (not an authorized distributor), but the apparent saving can be rather transient if the set goes bung. ICOM's warranty is both accessible & iron-clad. Keith Haslam of Eastern Communications Center (168 Elgar Road, Box Hill, Phone 03/2893107) has looked after DXAers on several occasions & if you're within cooee of Melbourne we suggest you direct your business that way.

**Conclusion:** This receiver is considered to represent best value for money in the range \$500-\$3000. Technical performance is superb, flexible tuning arrangements are a money & optional extras permit development of a cost-effective personalized receiver. The IC-R71A is a fitting successor to the respected IC-R70 & will assure ICOM's dominance of the top end of the semi-professional communications market. Many thanks to Kiyoski Fukushima & Duncan Baxter of ICOM Aust for the unconditional loan of an R71A for review purposes.

**IC-R71A Afterthoughts:** There are a couple of things which have not been brought out in the review so far which do warrant attention. We'll present them here, in no particular order. The keypad entry system unfortunately lacks a decimal point key & presumably the uP software does not support it. Therefore rather clumsy digit sequences are required when entering frequencies. The tenths of KHz must always be entered, though this would rarely, if ever be required in practice. Also, when entering frequencies below 1 MHz, the zero MHz must be entered first. The mental gymnastics required significantly reduces user enjoyment of an otherwise superb system. It is also a pity that hundredths of KHz are not displayed on the frequency readout, although the data would be readily available from the PLL synthesiser. Yes, of course the information would have to be taken "with a grain of salt" as the absolute frequency stability of the receiver is much less than the required +/- 5 Hz say, although the hi-stab freq ref approaches this. Nevertheless, the vast majority of broadcast stations operate within a few Hz of integral multiples of 5/9 KHz & when using ECSS reception of AM signals 10 Hz or better tuning accuracy is needed. Even an inaccurate 10 Hz readout would be an excellent relative guide. Ideally a front panel switch would give the option of suppressing the 7th digit. Another available option for the R71A permits portable 12 VDC operation. This consists of just a DC socket mounted on the back panel & wired into the existing voltage regulator circuitry, together with an appropriate plug & lead. It is hard to understand why this is not standard, considering the few dollars involved. Several members have reported R70s going defunct due to static charges on the antenna line. The R70 is far more susceptible to this problem than other rx's, despite the presence of a 10K static drain resistor across the antenna terminals. Both the preamp FETs & the 3rd LO (PBT VXO) have fallen prey. In the R71A, an intriguing device labelled "DS1" in series with the antenna input would appear to be a gas discharge capsule & this will hopefully correct the problem.





Barry S. Finkel  
10314 S. Oakley Ave  
Chicago, IL 60643

**Milwaukee Brewers (baseball) 1/18/84**

550 WSAU-WI	1090 WISS-WI	1270 WJRC-WI	1400 WRDB-WI	1550 WHR-WI
570 WMAH-WI	1230 WKRB-HI	1310 WIBA-WI	1430 WBEV-WI	1570 WMR-WI
580 WKTY-WI	WHBY-WI	1320 WFHR-WI	WRDN-WI	1570 WFBZ-WI
590 WJMS-HI	1240 WJPD-HI	1330 WHBL-WI	1440 WNFL-WI	1580 WTTN-WI
620 WTHJ-WI	WQMT-WI	1340 WLDY-WI	1450 KFIZ-WI	1590 WTOQ-WI
680 WDBC-MI	WQBT-WI	1380 WBEL-IL	WDLB-WI	
980 WNB1-WI	WJMC-WI	1400 WATW-WI	WRCO-WI	(+26 FM)
980 WPRE-WI	1260 WUIS-WI	WJJK-WI	1490 WIGM-WI	

**Chicago Cubs (baseball) 1984**

720 WGN-IL	1150 KCKY-AZ	1370 KLBA-IA	1460 WKAM-IN	1590 KWBG-IA
800 KXTC-IA	1170 KSTT-IA	1380 KCIH-IA	1510 WINU-IL	WPOD-IN
850 KLEU-IA	WLBH-IL	1390 KLNT-IA	1540 WBNL-IN	1600 WCWC-WI
900 WNNO-WI	1250 K1ZZ-IL	1400 KADR-IA	1560 WSQR-IL	
910 WAKO-IL	1300 WFRX-IL	WBAT-IN	WRIN-IN	(+10 FM)
980 WPRE-WI	1330 WRAM-HI	1440 WRBA-IL	1570 WIFF-IN	
1020 WCIL-IL	1340 WTMN-MI	WPGW-IN	1580 WCCR-IL	
1110 WFBM-IN	1350 WIOU-IN	1460 WRTL-IL	WAMJ-IN	

**Baltimore Orioles (baseball) 1984** Jon Miller, Tom Marr

610 WIOD-FL	1010 WCST-WV	1280 WHVR-PA	1410 WDDV-DE	1490 MARK-MD
WAYS-NC	1070 WINA-VA	1300 WFBR-MD	1420 WDDY-VA	WLPA-PA
WVA1-VA	1230 WXCX-VA	1330 WASA-MD	1430 WNAV-VA	1500 WTOP-DC
900 WJML-DE	WFWA-VA	1340 WJNA-VA	1450 WILM-DE	1520 WEXM-VA
920 WPTX-MD	1240 WCEM-HD	WEPH-WV	WTBO-MD	1590 WETT-MD
930 WFMD-MD	WSSV-VA	1350 WOYK-PA	WTHU-MD	WCBG-PA
960 WSBY-MD	WKDY-WV	1350 WNIS-VA	WIMZ-VA	
970 WANV-VA	1270 WLBR-PA	1400 WHGB-PA	1470 WTRR-MD	(+12 FM)

**Kansas City Royals (baseball) 2/27/84 (subject to change)**

580 WIBW-KA	1230 KTNC-NE	1340 KTOW-OK	1410 KCLO-KA	1490 KDMO-MO
680 KFQE-MO	1240 KTUL-KA	1350 KRNT-IA	KOQO-NE	KDRO-MO
690 KGGF-KA	KAKZ-KA	1360 KSCJ-IA	1420 KULY-KA	1510 KANS-KA
810 KCMO-MO	KNEH-MO	KOYY-KA	KZMO-MO	KOSC-MO
880 KRVN-NE	KFOR-NE	1370 KGNB-KA	KBTN-MO	1540 KLKC-KA
960 KMA-IA	1270 KSCB-KA	KIKS-KA	1440 KCHE-IA	1570 KLEX-MO
1060 KLMO-CO	1280 KSOK-KA	1390 KNCK-KA	1450 KWBW-KA	1580 KNIN-MO
1080 KJEL-ND	KDKD-MO	KJAN-SD	WBSH-MO	1590 KVGB-KA
1100 KREK-CO	1300 KMHO-MO	1400 KBZZ-CO	KOKO-MO	1600 KLAK-CO
1130 KYOD-MO	1310 KGHT-NE	KCOG-IA	KLXN-NM	KFRS-NE
1150 KSAL-KA	1330 KTOD-AR	1460 KKDY-KA		
1190 KVSU-KA	1340 KSEK-KA	KAYS-KA	1470 KARE-KA	(+42 FM)
1220 KOFO-KA	KGFW-NE	KTMC-OK	1490 KKAN-KA	

**Minnesota Twins (baseball) 4/2/84**

570 WMAX-SD	1230 KGHS-MN	1340 KDLM-MN	1450 KGCA-ND	(+3 FM)
610 KDAL-MN	1240 KDLR-ND	1380 KLIZ-MN	1480 KAUS-MN	
830 WCCO-MN	1260 KROX-MN	1400 KEYL-MN	KEHG-MN	
910 KVAA-SD	1270 KPRM-MN	WHLB-MN	KGCK-MT	
1060 KFIL-MN	1300 KGLO-IA	1450 KBUN-MN	1490 KXRA-MN	
1070 KILR-IA	1310 KNDX-ND	WELY-MN	1580 KDOM-MN	

**Toronto Blue Jays (baseball)**

560	710 CHYR-ON	950 CKBB-ON	1310 CKOJ-ON	1430 CJCL-ON
600 CFCH-ON	730 CHIR-ON	1090 CKKW-ON	1340 CKNR-ON	1450 CHUC-ON
630 CJET-ON	730 CJNR-ON	1230 CKMP-ON	1350 CHRO-ON	1570 CFOR-ON
680 KCEB-ON	900 CHHL-ON	CJTT-ON	1400 CKOB-ON	
710 CJRN-ON	930 CKNS-ON	1240 CJCS-ON	CKCB-ON	(+3 FM)

**Cleveland Indians (baseball) 3/28/84**

900 WFRD-OH	990 WTIG-OH	1400 WVRG-WV	1490 WMOA-OH	1540 WBTC-OH
950 WLIT-OH	1110 WAME-OH	1410 WSCW-WV	WHRN-OH	1570 WBUZ-NY
960 WSTW-OH	1240 WBBW-OH	1450 WEYZ-WV	1520 WBNO-OH	1590 WAKR-OH
970 WFUN-OH	1400 WMAN-OH	WLEC-OH	1540 WBCC-OH	(+12 FM)

**Pittsburgh Pirates (baseball)**

590 WMB5-PA	1230 WTIV-PA	1310 Wbfd-PA	1400 WKBI-PA	1490 WESB-PA
920 WMMH-WV	1260 WLKK-PA	1340 WSTV-OH	WAMQ-PA	WOFN-FL
940 WGRP-PA	1270 WILE-OH	WTRN-PA	1420 WCEP-PA	WJNL-PA
990 WSCV-PA	WCBG-ND	WCVI-PA	1440 WAJR-WV	1580 WANB-PA
1020 KDKA-PA	1280 WKST-PA	1390 WRSC-PA	1450 WFRA-PA	
1150 WHUN-PA	1290 WOMP-OH	WKLP-WV	1470 WNGZ-PA	(+16 FM)

**San Francisco Giants (baseball) 1984**

680 KNBR-CA	990 KINH-MA	1250 KNCO-CA	1300 KYNO-CA	1460 KDON-CA
790 KEKA-CA	1230 KDAK-CA	1270 KCOK-CA	1390 KCEY-CA	1560 KIQS-CA

**Philadelphia Phillies (baseball) April 1984**

590 WARM-PA	1150 WDEL-DE	1270 WRAK-PA	1360 WPPA-PA	1490 WAZL-PA
610 WIOD-FL	1210 WCAU-PA	1290 WQIN-PA	1400 WEST-PA	WBCB-PA
790 WAEB-PA	1230 WKBO-PA	1320 WGET-PA	1420 WOCJ-NJ	WMRF-PA
850 WEEU-PA	WBPZ-PA	1340 WTAN-FL	1450 WIIN-NJ	1600 WKEN-DE
1070 WKOK-PA	1270 WLBR-PA	1350 WHMH-NJ	1490 WLPA-PA	(+3 FM)

**Los Angeles Dodgers (baseball) 1984** Vin Scully, Jerry Doggett, Ross Porter  
790 KABC-CA (I have no network list.)

- <sup>a</sup>This station is on both the Brewers' and Cubs' lists.
  - <sup>b</sup>NOTE: Because of differences in individual station formats, such as broadcast hours and other factors, stations on the network will carry a varied schedule of games. Other stations will be added.
  - <sup>c</sup>Many stations will not carry all 162 Royals' games.
  - <sup>d</sup>The Twins' list has Sidney/Williston ND. This station is in MT, near the ND border.
  - <sup>e</sup>Dan Jakubowski got this list over the phone.
  - <sup>f</sup>CHYR broadcasts on 710 KHz days, and CHIR broadcasts on 730 KHz nights.
  - <sup>g</sup>KABC sent me 11 copies of the Dodgers' schedule, but no network list.
- Thanks to Dan Jakubowski and Russ Edmonds for information contained in this column.

## Daytimer Relief Debated Before Goldwater Subcommittee

Daytime-only broadcasters made a strong new pitch for extended hours to the Senate Communications Subcommittee this week. But they found powerful opposition arrayed against them, including clear channel broadcasters, the Association for Broadcast Engineering Standards (ABES), and, on many points, FCC Mass Media Bureau Chief Jim McKinney.

The debate took place in Washington Tuesday (4-3) at a hearing on the "Equity to Daytime Radio Broadcasters Act" (S. 886), introduced by Sen. Larry Pressler (R-SD). The bill would guarantee daytimers two hours of airtime both pre-sunrise and post-sunset, as long as no objectionable interference was created to another AM's groundwave signal. That would effectively end skywave protection during those four hours. Pressler will conduct a field hearing on the bill in Sioux Falls, SD on April 14.

Opponents were caught off guard last June when S. 886 passed the Senate Commerce Committee with little notice, but they are clearly geared up to fight this latest daytimer effort. Even though the bill has cleared the committee process, a hearing was needed "to take another look at this issue" in light of last fall's FCC daytimer relief, subcommittee Chairman Barry Goldwater (R-AZ) said Tuesday.

**CB's More Powerful Than Daytimers**  
The FCC's grant of extended hour power levels as low as 1.4 watts was attacked by Jim Wychor, President of KWQA/Worthington, MN and of the Daytime Broadcasters Association (DBA). "In many cases, these commercial stations are expected by the FCC to provide a local service with less power than a CB radio," he testified. "The FCC did attempt to alleviate the daytime broadcaster's plight, but in fact, in most cases, simply laced the straitjacket tighter."

McKinney said at its April 11 meeting the Commission will reconsider the daytimer action. He hinted it will "significantly increase the permissible power levels." But he warned that S. 886 goes too far because it would end skywave protection for clear channel stations two hours pre-sunrise and post-sunset.

### McKinney Backs Skywave Protection

"We must be careful... We are rapidly approaching the point where gains for some can be achieved only at the expense of others," McKinney told the panel. Pointing out that over half of the U.S. land area depends on skywave signals at night, he added, "It appears strongly desirable that some protection be provided to skywave, as well as to groundwave service."

Even though his group includes AMs of all types, ABES Executive Director Wally Johnson came out against S. 886, saying, "The relative need of the public for skywave reception services clearly outweighs the limited need for extended hours operations by daytime-only stations."

Also voicing that view was KSL/Salt Lake City VP/GM Thomas Glade, President of Clear Channel Broadcasting Service (CCBS). Class I-A clear channel skywaves serve 26 million Americans "who live in and travel through a vast radio desert," he testified. "Intolerable interference would result from daytimers broadcasting at greater power for longer periods of time than authorized by the FCC."

The solution for daytimers is FM, Glade asserted. "Of the approximately 2300 daytime stations, over 1000 have co-owned FM stations and many others have unused FM assignments available to them."  
KPRE/Paris, TX President/GM Gene Sadduth asked that daytimers not be forced to divert their AMs if they win FM licenses in the same community. He told of getting an FM channel assigned to Paris, only to face four competing applicants from as far away as Florida and California. If they "were sincerely interested in our specific market, why did they not risk the time, effort and expense involved in the petitioning process?" he asked.



## Washington Q&A



The operator of a Class 4 AM station wonders when he can begin broadcasting with the 1.4 watt power level recently approved by the FCC. Nobody knows the answer to that just now, but the best guess is some time between Labor Day and the end of the year.

The change to a new AM band now being negotiated with Mexico, similar to one already concluded with Canada. Once the Mexico deal is signed, the FCC will coordinate a date with both countries for Class 4s to boost nighttime power.

Just this week the FCC began sending "show cause" orders for the change to all Class 4s that the week before. The FCC began sending "show cause" orders for the change to all Class 4s that the week before. The FCC began sending "show cause" orders for the change to all Class 4s that the week before.

Directional Class 4s, or those with daytime power other than 1 kw, must apply for the new power to speed the process. However, the FCC will treat these requests as minor change applications.



SOME ANTENNA EXPERIMENTS -- Part 1

If you think the title above sounds as if I'm settling down to a long siege of work, you are correct. Let me explain. Several months ago I had a peculiar idea; what would happen if I took a Longwave loop that contained a lot of wire and used it as a wound-up longwire? For lack of a better name I am referring to the antenna that has resulted as a "helical longwire". If anyone has a better name let's hear it. I'm not that proud of the nomenclature.

DXers have used metal "Slinky" toys (stretched and supported) as antennas with good results. It has been proved that longwire antennas do not have to be strung in a straight line; they may be bent to fit in a given space. My own 120' inverted L antenna is bent in a broad hairpin shape in the attic; it works fine. The important factor seems to be getting as much wire as possible up in the air and not worrying too much about the exact shape as long as it does not double back on itself sharply. What got me going were all of the letters from folks who live in apartments, condos, or restricted housing and who are not allowed to erect an "unsightly" outdoor antenna. Some of them install a short preamplified whip such as the McKay Dymek DA100, the Radio West KKS, or one of Ralph Burhans' designs and get away with it, possibly by installing them out of sight or in an attic. Running a clip lead to a rain gutter, downspout, window frame, or other metallic part of their home may take advantage of the fact that any large metallic object can become a useful antenna if it is not grounded. A little experimenting with coupling/tuning devices may produce useful signals. Many of us started by using our bed springs or a window screen.

Some years back I heard a few DXers at a SCADS meeting discussing the use of vertical antennas that consisted of wire wound on a long weatherproofed 2 by 4. They seemed to use about 100 to 200 feet of wire, and they reported good results in the ECB and the Shortwave. Such an antenna should be useful in a horizontal position also.

Of the folks using these experimental antennas (and that certainly includes my odd-shaped inverted L) some are using preamplifiers to raise signal levels and some are not. Some use antenna tuners and/or preselectors and some don't. The important points causing such decisions often are the characteristics of the receivers in use. Do the receivers have good sensitivity; do they have bad front-end overload characteristics; and do they need all the help they can get?

The first step after getting the idea of the "helical longwire" was to hit the books and see who had already tried it. I don't claim to be original, but I couldn't find any reference to such an antenna. Only one thing left -- try it!

On hand in the Mc Shack is a tunable loop (Figure 4 page 8 September '83 LOWDOWN) that is 40" by 40", has 22 turns of wire in the tuned loop, contains 293 feet of #26 solid copper wire, and is tuned with a two section variable capacitor of 365 + 140 pf. It covers a frequency range of 150 to 600 KHz and has been extended below 150 KHz by using clip-on fixed padding capacitors in parallel across the variable tuning capacitor. If frequencies above 600 KHz were needed then a switch was made to some other antenna. I don't use tapped windings on loop antennas. A single link turn over the center of the loop winding feeds a length of RG58 coax cable which goes to the receiver.

To try this Longwave loop as a helical longwire I removed the link turn and the tuning capacitor, and used only the loop winding. One end of the loop winding was left floating -- not connected to anything. The other end of the loop was connected via the center conductor of the coax cable to the receiver.

The results with this simple setup were disappointing. The signal strengths were about 20 to 40 db less than those delivered by my DA100 and my inverted L antennas in the Longwave and the ECB. The use of a preamplifier was not tried because the signal-to-noise ratios were bad. Instead I added various antenna tuners and preselectors between the antenna and the receiver. Mixed results were obtained. Things got complicated fast. The antenna tuners on hand are a Grove TUN2, a Grove TUN3, a McKay Dymek DP40, and a homemade pi-section tuner that uses the plug-in coils from a grid dip meter to cover the range from 10 KHz to well over 50 MHz. To summarize quickly my results were as follows:

1. The Grove TUN2 was far more successful than the Grove TUN3. The more versatile and flexible TUN2 allowed me to select antenna tuning and matching combinations that were not available on the TUN3. [Unfortunately, the Grove TUN2 is no longer manufactured and sold by Grove.] Signal strengths and signal-to-noise ratios were delivered to the receiver by the Grove TUN2 which were about the same as those obtained with the DA100 and the 120' inverted L in the frequency range from 10 KHz to 20 MHz. That's right -- all the way from the low end of the Longwave up through the Shortwave to about 20 MHz. Above 20 MHz trouble was encountered with the TUN2 which I have not solved yet.

2. The McKay Dymek DP40 did not produce useful signals or signal-to-noise ratios on my receiver in the Longwave, but worked well in the ECB and Shortwave ranges all the way up to 30 MHz.

3. The best results were obtained using the homemade pi-section antenna tuner which produced very good signal strengths and signal-to-noise ratios all the way from 10 KHz through 30 MHz. In fact on many stations tuned the helical longwire and the pi-section tuner produced better results than either the DA100 or the 120' inverted L.

Obviously these are preliminary results and much more work remains to be done. The length of wire in the helical longwire is probably important. 293' of wire produced good results when properly tuned. One of my next projects will be to wind a new loop that contains 500' or more of wire to verify my current best predictions. Then I plan to try a long skinny winding of about 300 to 500 feet of wire on a 2 by 4 or a cardboard tube. That may wind up installed in the attic. Maybe the 293' loop would work better up in the attic. For the time being I will keep the loop in the shack so I can check directional effects.

No antenna tuners or preselectors were used on the DA100 or the 120' inverted L antennas so far in this experimentation. These two antennas have been my "reference antennas" for about ten years.

The receiver used was a Drake DSR2 Laboratory Receiver. It has a 1000 ohm input impedance for the range of 10 to 500 KHz and a 50 ohm input impedance for 0.5 to 30 MHz. This receiver has a large, well-damped, signal strength meter calibrated from 0 to 100 db signal levels. Checking with a calibrated signal generator has showed that this signal strength meter is accurate to ±1 db. Anyone interested in experimental antenna work may have problems if their receiver has a small, bouncing, S-meter calibrated in S-Units. Various manufacturers set each S-Unit as equal to anything from 3 db to 6 db. There is a good fix for this which can turn almost any reasonable all-wave receiver into a better laboratory instrument. That is to install a high impedance VTVM or FET meter on the receiver's AGC (AVC) line as an S-meter. This will result in a definite improvement for several reasons. First, the high impedance meter probably has switchable decibel scales which can furnish very fine readings. Second, the VTVM or FET meter probably will have a larger, more stable meter movement. Third, the high impedance meter will be in parallel with the receiver's own internal S-meter and can serve to calibrate it better for future use. I have been known to use a Heathkit VTVM permanently wired into a receiver as an S-meter for careful experimental work. Adding the high impedance meter to the AGC line should not interfere with the receiver's alignment if the leads used are short. Keep the AGC line lead and the ground lead well separated to prevent capacitive loading of the AGC line.

One important thing noticed along the way was that while the 293' loop of wire when used as a tuned Longwave loop was quite directional and produced good nulls, the helical longwire idea destroyed most of the directional properties and only very small nulls were obtained.

This whole project is not a copyrighted personal trip. Everyone is invited to join in. In fact, to put it bluntly, I would welcome some help. You never know where your next good idea is going to originate. I used #26 solid copper wire merely because I lucked into a quantity of it a few years back. Larger gauge wire, particularly larger gauge Litz wire, might produce even better results. It is suggested that wire as small as #30 is usable, if that is what you have available. The math found in various books has led me to think that the more wire the better. I doubt that a little ECB loop would contain enough wire to work very well as a helical longwire. Anyone want to prove me wrong?

This whole project started as an attempt to design/develop a low cost indoor antenna that would be useful over a large frequency range (10 KHz to 30 MHz). So far the necessity for a good versatile antenna tuner has increased the cost and complexity considerably. However, the design so far is useful over the required large frequency range and can be operated indoors. There is still a lot of work to be done. It seems that only the surface has been scratched. In particular I would like to hear from anyone who does experimental work of their own, or can find anything in the literature about such an antenna design. I would like to get Xerox copies of any such literature. Keeping the Window antenna and other off-center fed antennas in mind it might be worth while connecting the feed point for the antenna somewhere besides at one end. It also seems obvious that such an antenna could be used as an auxiliary loading coil for another antenna which could be attached at the free end of the wire coil.

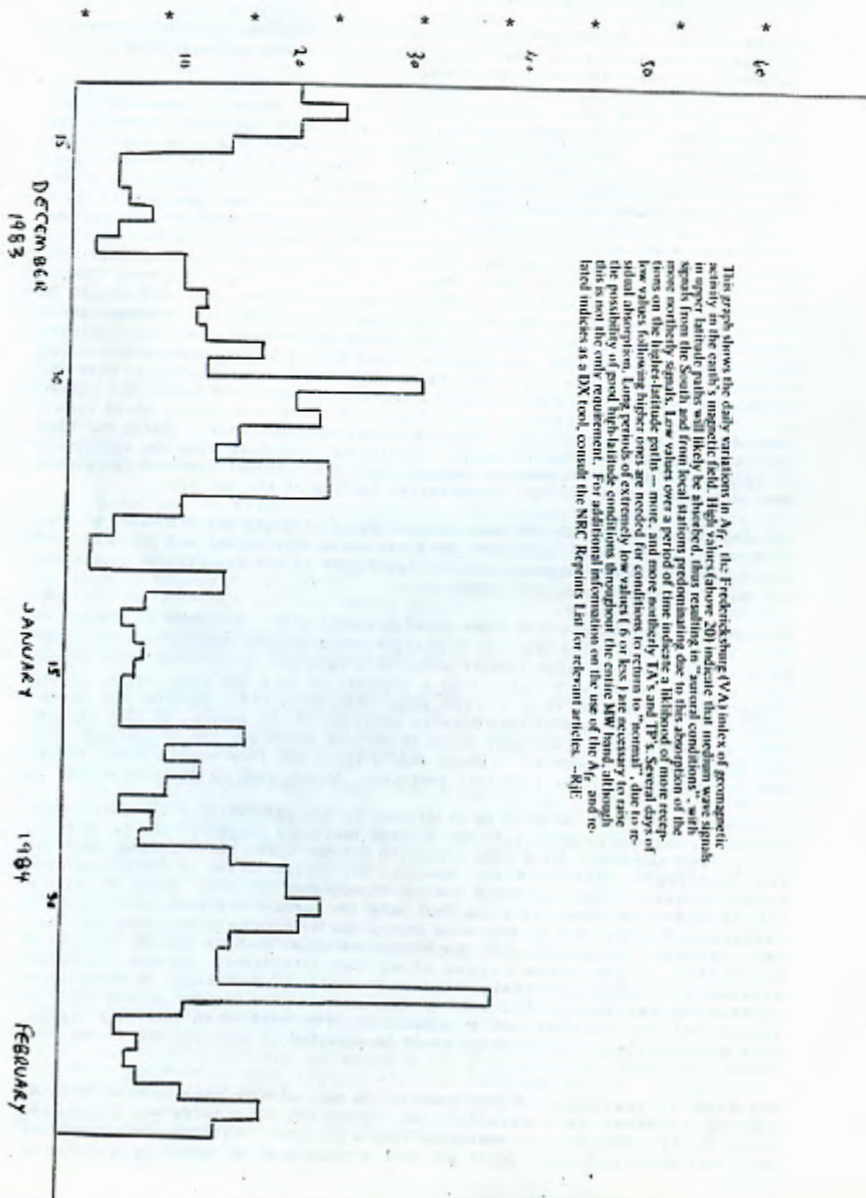
One word of caution -- if your receiver is in a plastic case instead of being totally shielded by a metallic case, be careful about using any antenna too close to the receiver. RF radiation from a receiver oscillator or synthesizer can cause noise problems. Don't get your antenna near an operating computer or



hand calculator. Either of these can be worse than an old black and white TV set or as bad as a cheap light dimmer. This microcomputer word processor which I am using gave me quite a bit of trouble on radio and TV reception until I moved the computer to the far end of the house and positioned it to use the large mass of metal around the disc drive as a shield between the rest of the computer and the RF receiving equipment.

One preliminary observation which I cannot explain is that the 293' coil of wire seemed to work very well as an antenna even without any antenna tuner when it was used in the higher frequency bands of the Shortwave. Have I missed something somewhere? Signal levels and signal-to-noise ratios were as good as those with the DA100 and/or the 120' inverted L.

It is planned to continue with these experiments as time allows. I would value hearing from anyone who tries some of these ideas or anything else that may occur to them. I'm certain that there are many possibilities which have not occurred to me.



by Adrian M. Peterson  
Director AWR-Asia

During the past 60 years, the Seventh-day Adventist Church has operated a total of 6 short term radio stations. These have operated in the MW band from three different locations in two widely separated countries.

The first of these stations was WCBA, in Allentown, Pennsylvania, USA. This station was a commercial facility owned and operated by Mr. C. W. (appropriately?) Heinbach. The studios and transmitter were located in Heinbach's home. Station WCBA, 15 watts on 1180 KHz, identified on air as the "Queen City Radio Station". During the summer of 1924 (mid-year in the northern hemisphere, the small transmitter and associated facilities were moved onto the Seventh-day Adventist Campground at Allentown, Pennsylvania, and for two weeks, the station broadcast the proceedings and meetings of the annual convocation.

The next short term usage took place more than half a century later, and this time at a large international convention in Dallas, Texas. Because of the international character of the 1980 convention, which was attended by 40,000 delegates from most countries all around the world, simultaneous translation facilities were needed. Four small 5 watt MW transmitters were installed, and various channels were tried. The final selection was 535, 620, 680, and 735 KHz. The antenna system was slung around the circular wall of the large building. Plastic headphone radios were available, and listeners could tune into the desired channel, for a simultaneous translation in French, German, Spanish, or Portuguese. These 4 MW transmitters were in use, without call sign, for a period of 10 days in April 1980. QSLs were issued for reception reports.

It is anticipated that a similar system of simultaneous translation will be available at the church's next international convention, at New Orleans, Louisiana, in 1985.

The most recent short term radio station operated by the Seventh-day Adventist church was for the 1984 annual campmeeting in Auckland, New Zealand. This station, LXH, was licensed to Interworld Plastics (NZ) Ltd., at Papakura for the purpose of providing an information and entertainment service to church members attending the convention. It was on the air daily, 6:30am - 10pm, from January 13 - 22, 1984.

The studio was located in a hut on the campground, and the studio was in a caravan loaned for the occasion. Station LXH radiated on 603 KHz from a 70 foot antenna, under the on-air slogan, "Radio Advent".

Three transmitters were used by the temporary station LXH. The station was licensed for 200 watts, but the main transmitter radiated only 120 watts. Because the main unit became faulty, the secondary transmitter of 25 watts was in use for considerable periods of time, and occasionally a small 2 1/2 watt unit was also in use.

Only one reception report for programs from Radio Advent LXH was received and this was acknowledged by letter.

The Seventh-day Adventist Church in New Zealand is planning to secure additional short term licenses for similar conventions throughout the two main islands.

Call	Location	State/Country	kHz	Watts	Period
WCBA	Allentown	Pennsylvania	1180	15	Mid 1924
	Dallas	Texas	535	5	April 1980
	Dallas	Texas	620	5	April 1980
	Dallas	Texas	680	5	April 1980
	Dallas	Texas	735	5	April 1980
WCBA	Allentown	Pennsylvania	1180	15	Mid 1924
	Dallas	Texas	535	5	April 1980
	Dallas	Texas	620	5	April 1980
	Dallas	Texas	680	5	April 1980
	Dallas	Texas	735	5	April 1980
LXH	Auckland	New Zealand	603	120	Jan. 1984

1984 HAP AUCTION needs many more products to auction off at the 1984 ANARC Convention in Toronto. If you have pennants, stickers, decals, pens, pins, mugs, etc by all means donate them to HAP at 47 Prospect Place, Bristol, CT 06010.



# Radio station fights Uncle Sam on early sign-off

## Alabama's WTAK must give up nights to radio up North

By Charles Seabrook  
Staff Writer

If a federal bureaucrat were listening to WTAK at 5:15 a.m., what he would hear would be enough to fry his eggs — before they're cracked.

The silver-toned-voice of WTAK announcer Mike Sweeney bids northeast Alabama a sincere good morning and gives Uncle Sam's Federal Communications Commission the ol' what-for. The reason? WTAK can't broadcast all night.

"We're forced to vacate our frequency during the hours of darkness because of the provisions of the Communications Act of 1934, a law much older than the olives we play. A law much older than most of us, matter of fact," intones Sweeney.

"We're forced to leave the air at night so that powerful stations up North can beam news and information to what they consider an ignorant, ill-informed Southland."

If that's not enough to curdle the cream in the bureaucrat's coffee, there's more.

By now, strains of "Dixie" have crept into the background, being suddenly replaced by the count-down of a space shuttle launch, a reference to the Marshall Space Flight Center on the outskirts of Huntsville.

"Despite our contributions to the space program and our high-tech economy," beams the voice of Sweeney, "the 'Continental Congress' doesn't realize that we in the South would rather do it (provide news and information) ourselves."

It's all part of an effort, said WTAK manager David Driscoll, to protest the FCC's requirements that the 10,000-watt Huntsville station — and some 2,300 others like it across the nation — vacate the airways between sunset and sunrise in favor of powerful Northern stations.

The WTAK protest has to do with FCC regulations promulgated several decades ago, which sanctioned several 50,000-watt, "clear channel" stations, whose broadcasts can be heard in nearly every region of the nation.

The rules meant that at night, any local stations that disturbed the more powerful stations' signals had to go off the air.

"After sunset, atmospheric conditions are such that radio signals drift, and can distort other radio signals," Driscoll explained.

Local stations that do not interfere with the broadcasts of the clear channels usually are allowed to remain on the air around the clock.

But WTAK is on the same frequency as the clear-channel WCFL in Chicago. "Since we interfere with their signal after sunset, we have to go off the air," said Driscoll. "But, heck, nobody in Huntsville can pick up WCFL anyway."

However, FCC official Henry Strube in Washington said that while he sympathizes with Driscoll, "these stations knew what the conditions were when they applied for a license. The clear channel stations provide a valuable service to rural areas of this country, which otherwise might not have radio reception. The regulations protect the clear channel signals."

But Driscoll, on the other hand, said the FCC regulations are too rigid. "The FCC is killing the daytime stations," he said. "They have made it extremely difficult for us to compete with the local 24-hour-a-day stations."

Around Christmas time, for instance, when sunset in Alabama is at 4:30 p.m. Central Standard Time, WTAK must cease broadcasting. "That's the biggest selling time of the year, when retailers are clamoring for advertising time. Going off the air at 4:30 means that we lose a bulk of our listeners — those who are driving home from work."

A daytime station also does not have the prestige of a full-time station, said Driscoll. "That image is all important in this business," he said. "You lose listeners if you don't have it."

Since the hours of sunrise and sunset change constantly, WTAK also has to change its sign on and sign off times accordingly. The station, said Driscoll, wanted a way to emphasize to its listeners that having to leave the air at different times in the afternoon was not the station's idea, but something forced on them by the bureaucrats in Washington.

"We're required by the FCC only to give our call letters, our location and frequency when we sign on and sign off," said Driscoll.

But the FCC, he said, didn't say anything about waging on-the-air war at what the station management considers highly antiquated regulations.

"So, we got one of our announcers, Mike Sweeney, who is a genius at production, to come up with a new sign on and sign off, which would let our listeners know that we really didn't want to leave the air," said Driscoll.

The result is two of the station's greatest hits. "We're getting requests for tapes of our sign on and sign off from all over the country," Driscoll said.

In the "sign off" at 7:15 p.m. sunset time in April in Huntsville, Sweeney says: "And now, in compliance with regulations from those wonderful people who gave us prohibition, the Susan B. Anthony dollar, the Bay of Pigs and an additional five-cent gasoline tax, WTAK is forced to discontinue broadcasting until dawn tomorrow."

Superimposed on Sweeney's rich, deep, mellow radio voice is something akin to Gomer Pyle's "goll-holl-lee." That, said Driscoll, tongue-in-cheek, represents those ignorant, uninformed Southerners that the powerful Northern stations are trying to inform.

Clear channel stations, by virtue of their larger audience, can sell more advertising and swing more weight in the broadcast world, said Driscoll. "They don't want to give up what they have," he said.

His station, he added, could request the FCC to assign it another frequency, one that would not be in the way of a clear channel station. "But the cost of doing that is nearly prohibitive," he said.

The station also could take the case to court, but, according to Driscoll, several other stations already have gone that route without success.

The FCC, however, has relented somewhat. It gave permission to WTAK and several other daytime stations across the nation last fall to stay on the air a few additional minutes, with reduced power, after sunset.

Jonathan David of the FCC said that even with just a few watts of power, a radio station can do a good job of serving a station's community, although not outlying areas.

But all WTAK was granted, said Driscoll, was 15 minutes extra with power reduced to anywhere between 77 and 139 watts. "Compared to the 10,000 watts we

have daily, that was nothing. Heck, I could get on the station's roof with a loudspeaker, and my voice would carry farther than that amount of power.

"So, we chose not to accept it. It just wasn't worth it."

The Atlanta Journal and Constitution

SUNDAY, APRIL 1, 1984

REPLY: ↘

## WTAK radio needs change of frequency

STONE MOUNTAIN — Southerners have been done a disservice by David Driscoll, manager of Huntsville, Ala.'s WTAK radio, as reported by Charles Seabrook in (the April 1) Journal-Constitution.

His implication that his station is forced off the air at night by government regulations so that powerful Northern stations can educate an "ignorant, ill-informed South" is ludicrous and self-serving.

How does Mr. Driscoll account for Atlanta's own WSB? Or Nashville's WSM? Or New Orleans' WWL? Or Louisville's WHAS? Or Richmond's WRVA? Or Port Worth's WBAP? All of these are Southern clear-channel stations that share the same status as the object of his wrath, WCFL in Chicago, and all of them require that Northern stations sign off their frequencies at night.

Allowing the 2,300 daytime stations to go full time would not necessarily result in improved service for communities, or better ratings for those stations. One thing that would result is increased interference in many areas and the further degradation of an embattled medium — AM radio.

One solution for Mr. Driscoll and WTAK is to relocate to a more favorable frequency. However, for the majority of struggling AM stations, the answer may be in upgrading and improving their programming so that people will want to listen.

KARL JETER

WJCD Inc.

P. O. Box 405

SEYMOUR, INDIANA 47274

WWVA 50,000 Watt Radio  
WHEELING BROADCASTING COMPANY  
Capital Music Hall • Wheeling, WV 26003 • 304-232-1170

February 26, 1984

National Radio Club  
P.O. Box 24  
Cambridge, Wisconsin 53521

Dear Folks at NR:

Just before I took my new job at WWVA last month, the station received an interesting reception report from Finland. I am enclosing copies of it in case you would like to reproduce it in NR News.

I find interesting Tuomo Waara's attempts to figure out some of the program details with his limited knowledge of English. For example, "winter storm watch" comes out "wander storm-watcher", "Greenbrier Valley" comes out "green Bob Brayer Walley" and "Ohio Valley Country" comes out "Ohio Family Country."

I am told the announcer who was on the air the morning this report came in called Tuomo Waara on the air, but I was not around to hear it.

I hope you find it as interesting as we did.

Yours truly,  
Jim Wallace  
6247 Sand Hill Road  
Bellville, Ohio 43006

A Subsidiary of Price Broadcasting Company

# Waky 790

WAKY 790 Radio  
558 River City Mall  
Louisville, KY 40202

# kmgk.kia

215 KEO WAY, DES MOINES, IOWA 50309



## RECEPTION REPORT

to WWVA - RADIO

Dear Sirs,

I had the pleasure of listening to your station.

Date and time: 10th January 1984, 6.32 - 6.42 UTC

Frequency: 1170 kHz in modulation

Receiver: Trio 90-5906 communications receiver.

Antenna: 500 watt coprocessor (longwire-antenna) direction 315°

Reception quality: Good signal strength, all notes and all propagation disturbances, overall signal good

Source of interference: No interference.

Programme details: 6.32 UTC: ... of Mallan special weather statements from the national weather-service in Charleston, West Virginia, weather-forecast (waggs) to listeners ... green Bob BRAYER Walley ... It would be come next to riding rain and snow, ... (and more weather statements) U.S. Ohio, Pittsburgh, Columbus, Washington DC, Harrisburgh, ... 6.37 UTC: SPOT: Carry Classic Larkin Company for room ... Waltons ... 6.37 UTC: SPOT: King of the Hoochiebush ... SPOT: Cigar Tobacco, Richard Elmdorf ... SPOT: Black Stonewell Seven Systems ...

6.38 UTC: To NWVA weather-chart so forecast (M. VAR to ... "this morning while away to Tallahassee"

6.39 UTC: JINGLE: W-WVA, OHIO FAMILY COUNTRY ... and popular music ...

6.42 UTC: Announce, and country music ...

Comments on your programme: Ooh, what fine style WVA has, fine country music and very nice SPOTS, its many-sided WVA-programmes! Thanks!

With best wishes,

Tuomo Waara  
Mr. Tuomo Waara  
SF-95770 Lankajärvi

NOW HERE'S SOMETHING INTERESTING!!

Here is a letter from Jim Wallace and a reception report & letter from a Mr. Tuomo Waara of Finland.

I thought you'd like to see what & how a reception report looks like to a U.S. Stn from someone overseas. Keep in mind that the same happens to us when we write to those stns overseas.

HW

Lankajärvi, north Finland  
10th January 1984

DEAR WWVA-RADIO:

My sincere thanks for your fine WWVA-programmes, which have given me very much pleasure.

I am 34 year old DX-listener here in north-Finland, call by name Lajland too. Excuse me my friends in WWVA, when I can little english language.

It was the biggest surprise in my life today, when I heard your WWVA-RADIO in my receiver, and reception was very good. I have three receivers; old US military receiver type R 1155B, Selena 212B portable receiver and Trio 90-5906 communications receiver. I have three "Long-wire antennas, direct to north-west.

WWVA-Radio has very "brisk"- style, very beautiful and fine music and nice spots. That is to say, WWVA has many-sided programmes. I like very much WWVA-Music! It this report in correct, (sorry my clerical errors) I should be very glad if you would verify it. I should like very much to have a verification card and pennant to keep in memory of your nice WWVA-RADIO.

Thank you and all the best in year 1984.

I keep listening - WWVA!

Best wishes

Tuomo Waara

FINLAND



## BANDSCAN

Welcome to the column which is just as exciting as having Chuck nutton listening to Boy George and Culture Club! (who's the Karma Chameleon?) Our first scan is a daytime scan from WILLIAM K. BUEBUE, taken in Niagara Falls, Ca, using a JVC PC-AllC and the internal antenna.

550 WGR-NY	910 CKLY-CN	1130 WCAI-MI	1340 WLVL-NY	1530 WCKY-CN
570 CHYM-CN	920 CKNA-CN	1140 WQJW-NY	1350 CKAR-CN	1540 CHLR-CN
590 CKRY-CN	930 WBBN-NY	1150 CKOC-CN	1360 WKNS-NY	1550 CBB-CN
610 CKTB-CN	950 CKBB-CN	1180 WHAK-NY	1370 WATK-NY	1560 WJAN-NY
620 WHEM-NY	960 CFTJ-CN	1190 CJMH-CN	1380 CKFC-CN	1570 WJUZ-NY
630 CFCC-CN	970 WBBR-NY	1220 CHSC-CN	1390 CHUC-CN	1580 CFCN-CN
680 CFTX-CN	980 CFPL-CN	1230 WELK-NY	1400 WYSL-NY	1580 CBJ-P4
710 CJRN-CN		1240 WJTN-NY	1410 WDOE-NY	1590 WJBT-NY
740 CBL-CN	990 WNYR-NY	1250 CHWC-CN	1430 CJGL-CN	1600 CHNR-CN
760 WJR-MI	1010 CFRB-CN	1260 WLKK-PA	1440 WJUL-NY	
790 CKMW-CN	1050 CHUM-CN	1270 WHLD-NY	1450 CHUC-CN	(NOTE: * ex-WJUL)
800 CKLW-CN	1070 CHOK-CN	1280 CHAM-CN	1470 CHOC-CN	{ * ex-CJJD
810 WGY-NY	1080 WUFC-NY	1290 CJBK-CN	1480 CKAR-CN	{ * ex-WJAN}
850 WJW-OH	1090 CKKW-CN	1300 WKAL-NY	1490 WBTX-NY	
860 CJBC-CN	1100 WWSB-CN	1310 WAAE-PA	1500 WDBS-MI	
870 WDCU-NY	1110 CKJD-CN	1320 CFCW-CN	1510 CKOT-CN	
900 CHML-CN	*1120 WNY5-NY	1330 WRLE-PA	1520 WKDW-NY	

Next scan: same person, same old place, same rx (nighttime)

540 CBEF-CN	820 WOSU-OH	1110 KFAB-NE	1350 CKAR-CN	1600 WHRL-NY
550 WGR-NY	830 WCCO-MN	1120 KAOX-MO	1360 WSAI-OH	1610 beacon
560 CFOS-CN	WNYC-NY	1130 WNEW-NY	1370 WATK-NY	(listed as "CBS-RNY")
570 CHYM-CN	840 WHAS-KY	1140 WVAW-VA	1380 CKFC-CN	(NOTE: * ex-CKIS)
WMA-NY	850 WJAC-PA	1150 CKOC-CN	1390 WFLD-NY	
580 WCHS-WV	WJW-OH	1160 WJJD-IL	CHOC-CN	
590 CKEY-CN	860 CJBC-CN	1170 WVAW-NY	1400 WYSL-NY	
WARM-PA	870 WML-LA	1180 WRAM-NY	1410 WDOE-NY	
600 WCAO-MD	880 WCBS-TV	1190 WQOW-IN	CKSL-CN	
610 CKTB-CN	890 WLS-IL	1200 WQAI-TX	CKP I-CN	
620 WTMJ-WI	900 CHML-CN	1210 WCAU-PA	CJGL-CN	
630 WMAL-DC	910 CKLY-CN	1220 CHSC-CN	WIRB-TV	
CFCC-CN	920 CKX-CN	1230 WELK-NY	WJAN-NY	
640 CMBB-CU	CKCY-CN	1240 WJTN-NY	1440 WJUZ-NY	
650 WSH-TV	930 WBBN-NY	1250 CHWC-CN	1450 CHEF-P4	
660 WNBC-NY	940 CBW-P4	1260 WLKK-PA	CHUC-CN	
670 WMAQ-IL	950 WJW-MI	1270 WHDR-NY	1460 WJUL-NY	
CKBC-CU	CKBB-CN	1280 WYSL-NY	1470 CHOC-CN	
680 CFTX-CN	960 CFTJ-CN	1290 WXYZ-MI	1480 WNBC-CN	
WPTF-NC	CKWS-CN	1300 CFFT-P4	1490 WBTX-NY	
690 CBF-P4	970 WBBR-NY	1310 WJAN-NY	1500 WTOP-DC	
700 WLW-OH	980 WWRG-DC	1320 WJAS-PA	1510 WLAO-TV	
710 CJRN-CN	CFPL-CN	1330 WJBC-PA	1520 WKBS-NY	
720 WGN-IL	CHEX-CN	1340 WYSL-NY	1530 WCKY-OH	
730 CKAC-P4	990 WNYR-NY	1350 WSLR-OH	1540 KXEL-IA	
XEX-MX	CBW-MB	WNEP-NY	WPTX-NY	
740 CBL-CN	1000 WCFB-IL	WFBG-PA	1550 CBB-CN	
750 WSB-GA	1010 CFRB-CN	1300 WKRL-NY	1560 WJAN-NY	
760 WJR-MI	1020 KDKA-PA	WREB-OH	1570 CFCN-CN	
CMBD-CU	1030 WBZ-MA	WFBM-MD	1580 CHUC-CN	
770 WABC-NY	1040 WHO-IA	1310 CKOY-CN	1590 WJAN-NY	
780 WBBM-IL	1050 CHUM-CN	WNYC-MI	1600 CHNR-CN	
790 CKMW-CN	1060 KYW-PA	1320 WJAS-PA		
800 CKLW-CN	1070 CHOK-CN	CFPM-CN		
CJBQ-CN	1080 WTIC-CT	1330 WRLE-PA		
PJB-N.A.	1090 WBAL-MD	WNYM-NY		
810 WGY-NY	1100 WWSB-CN	1340 WLVL-NY		
820 WBAP-TX	1110 WBT-NC	1350 WSLR-OH		

## NRC NIGHT PATTERN BOOK UPDATER

34 Maps. Each contain new station not shown on the current maps, can be inserted as a change page or you can redraw them onto your original book pages. Maps are same scale as set presently used. Patterns are drawn sharp and are as accurate as can be found anywhere!! Order from the NRC PUBLICATION CENTER whose address can be found on the back page of this magazine. US\$3.58 includes shipping!!! And please allow four to six weeks for delivery.

ERIC BUENEMAN  
836 LAMPLIGHT LANE  
HAZELWOOD, MO 63042  
(314)-895-1436  
(1700 to 2400 ELT)

NEXT SCAN: WENDELL FORD, Westville, IN (C.A.C. w/FM Stereo dual tape player/ recorder) (day)

540 WYLC-WI	920 WBAW-IN	1160 WJJD-IL	1340 WJOL-IL	1590 WCHA-IL
550 KUSA-MO	930 WBCA-MI	1190 WQWC-IN	WTRC-IN	1600 WCGO-IL
560 WIND-IL	940 WBSY-MI	1220 WAAA-IL	1350 WICU-IN	
580 WILL-IL	950 WJFC-IL	1230 WJOB-IL	1370 WLTN-IN	
590 WKZC-MI	960 WBSI-IN	WAL-IL	1390 WOCI-IL	
600 WMT-IA	970 WBA-WI	1240 WGRA-IL	1400 WJBR-AI	
610 WTVN-OH	980 WITY-IL	WSSC-IL	1420 WDMO-IN	
620 WTMJ-WI	WOAM-IL	1250 WIZL-IL	1440 WJON-MI	
670 WMAQ-IL	1000 WCFB-IL	WEPF-WI	1450 WOSV-IL	
700 WLW-OH	1020 WTRC-IN	1260 WNDL-IL	WAOI-IL	
720 WGN-IL	1050 WTCR-IN	WJW-MI	1460 WAAK-IL	
760 WJR-MI	WLIF-WI	1270 WJCA-IN	1470 WHPF-IL	
780 WBBM-IL	1060 WHPB-MI	1280 WMRO-IL	1480 WBSW-IN	
800 CKLW-CN	1070 WIBC-IN	1290 WJIL-IL	1500 WJAX-IL	
820 WAIT-IL	1080 WWSI-IN	1300 WTAJ-IL	1520 WKVI-IN	
850 WTVS-IL	1110 WMBI-IL	1310 WOLF-IN	1540 WGLI-IN	
860 WGOV-IN	1120 KMOA-MO	WIDA-WI	1560 WAIN-IN	
870 WKAR-MI	1130 WISN-WI	1320 WKAR-IL	1570 WBSL-IL	
890 WLS-IL	1140 WVEL-IL	1330 WBAW-IL	1580 WAMJ-IN	



Next Scan: PETER WEEKS, Fredericton, NB (Grundig Satellit, 3' loop) (day)

550 CFNB-NB	690 CBF-P4	910 WABI-NE	1190 CnTA-P4I	1350 WKLU-NB
570 CJEM-NB	710 WAGW-NE	920 CFCU-NB	1220 CKCW-NB	1360 CKBC-NB
590 CJCW-NB	730 CKAC-P4	930 CFBC-NB	1230 WJY-NE	1370 WBAW-NE
600 WFSB-NE	740 CBAW-NB	950 WKZA-NE	1260 CHHI-NB	1380 CnLR-NB
*620 WCON-NE	790 CFAK-NB	970 CBL-NB	1280 CKOV-P4	1390 WJY-NE
630 CFCY-FEI	800 CHRO-P4	1000 CKSW-NB	1300 CBAF-NB	1420 CnDY-NB
660 WNSC-NY	810 CJAV-NB	1070 CHA-NB	1330 CBAF-NB	
680 WRKC-MA	860 CBH-NB	1110 CBD-NB	1340 CULS-NB	(NOTE: * ex-WJUL)
CKDR-NB	900 CKDR-NB	1150 CHSJ-NB	WNOU-NB	

That'll do it for this month.



4800 E. Raymond Street  
Indianapolis, Indiana 46203



The University of Iowa  
Broadcasting Service  
WSUI/KSUI-FM  
Iowa City, Iowa 52242



P. O. Box 489  
White Bluff, Tenn. 37187

Best of DX and 75's,

Eric Bueneman  
Eric bueneman-KDX@STL/WLS-5K0

## CONTESTS

ROBERT KRAMER  
6416 N. RICHMOND  
CHICAGO, IL 60645

CONTEST STANDINGS  
as of 4/22/84

	A	B	C	D	E	F	G	H	I
George Sherman, MN	431	49	44	0	0	0	8	5	--
Jim Renfrew, NY	332	44	24	0	0	0	7	3	11
Nolan Stephany, MN	330	41	0	0	0	0	9	6	04
Paul Stephany, CT	307	39	0	0	0	0	9	4	03
Bill Hardy, WA	258	31	0	0	0	0	6	7	07
Nancy Hardy, WA	233	31	0	0	0	0	5	7	07
Amia Littelk, ON	170	37	0	0	0	0	4	3	03
Karl Forth, IL	139	39	0	0	0	0	4	0	--
Bruce Conti, RI	61	38	0	0	0	0	2	0	03
Mike Hogan, IL	46	21	0	0	0	0	1	0	--
Me	596	53	46	44	0	0	5	6	--

Noncontestant

Remember, the contest ends on May 31 at 2359 EDT. All entries must be received by me on or before June 16, 1984 to be included in your final point totals. The way this contest is shaping up, it could be a dog fight at the end.









not up here, featured the watery auroral-type distortion on the northern stations so I figured the next night everything but the south would be dead. Not the case this time: the Canadians were quite weakened and the south enhanced but not an all-out auroral assault as I had hoped for. The state of my DX record-keeping is in a chronic state of incompleteness. I have not finished my by-frequency lists as I had hoped to do at this time and my tape cataloging is getting out of hand. I have several cassette tapes completed that I have not made an itemized list for. I have also been questioning the value of my QSL collecting in the past few weeks, specifically if I should discontinue the practice and just DX as I used to. I haven't come to a decision. As it is, I just sent reports out to WDAJ and WYDE last week. I've been thinking about this because of all the "no replies" and the number of reports that the P. O. couldn't deliver. I don't see any commercial FM at this point and I'm just as serious about that hobby; also cutting out QSLing will eliminate a lot of paper work and frustration. Oh, well, I guess the future will tell what I'll do. Enough rambling.

#### RADIO ROUND-UP

WREB WYMP - Bethel, CT 06901 (pm 4-7; rec'd 4-10)

Greetings all ... Jack (KMOX) Carney's son, John, is following in his father's footsteps. John is a DJ for KSLV-AM in Monte Vista, Colorado ... Former WBZ radio personality David Pinnegar has returned to the media scene, this time on WNEV-TV ... In metro Atlanta, WVEP will hit the air with a news-talk format and an ABC affiliation in mid-April ... Michele Isla wasn't too happy with her night-time shift at NIP so she departed the station ... WKBS's resident psychologist Nicole Underg has her on-air time reduced to just Sunday nights. Her two-hour weekday shift has been replaced by music with Dave Nash hosting ... Mike Elliott has left WTMJ-Milwaukee for a return to the play-by-play action with the Houston Astros on KRBR ... Brian Mantyh, formerly associated with WIBA in Madison, WI, moves to WTMJ ... WPVL-AM has changed its call letters to WQLS ... ATW has agreed to underwrite (you can't say sponsor on public broadcasting stations) a weekly series entitled "ATW Presents Carnegie Hall Tonight." This series will be aired on over 175 radio stations, both NPR and commercial outlets ... Carl DeBuzze is back on the air at WRZ in Boston ... WCAU has finally gotten rid of the Larry King Show problem, with WIP picking up the syndicated show ... Art Athens has left WABC as news director to return to WDCB News Radio 98 ... KCMO has brought back Paul Pippert to do the Part Reports ... KUNW-AM will be leaving its studios in Lenexa to move into Kansas City. The city has issued industrial revenue bonds and the station will have a new studio, four acres, and a 178-ft. tower. The move is expected this summer ... WFRB-AM in Middletown has switched to a country music format ... Jack Buck, in my opinion one of the best radio sports announcers (I agree -pls), has been awarded the Honor Medal for distinguished service to journalism presented by the University of Missouri ... On a related subject, the P. C. C. has given its approval for television stations to broadcast their audio in stereo FM ... Detroit's WJR is moving from its current Fisher Building site, where it has been for the last 56 years, to studios just outside of town, in Troy (Wiltshire Plaza) ... So much for now. (It's interesting that KCMO, which was KUDL when I was a newsmen there ten years ago, is finally getting it together, literally, and moving into KC. The transmitter, FM studio, and AM studio were crammed into a tiny building in the middle of a soybean field in northeast Lenexa, just off I-35; the legal ID announced Fairway as the city of license because the nighttime pattern covered that tiny suburb; the FM transmitter and business offices were located ten miles north in Merriam; and as I mentioned in an earlier Muse, the sales force scurried all over Wyandotte, Johnson, and Jackson counties in two states in an attempt to bring in some revenue so that the station could remain on the air. If the 178-foot tower implies an ND pattern, they may be the subject of protest from KKS-1370 Iowa for interference as they were in the late '60's. -pls)

BOB WIELCAREK - 3131 S. New York - Milwaukee, WI (pm 4-3; rec'd in Riverside 4-7; rec'd in San Valley 4-10) Greetings fellow DX'ers. It's been a while since I've contributed anything to these pages, so I thought I'd do a season-ending wrapup. I had two listening highlights this season; the first was hearing WIN-1450, my first NJ; this was followed by KCLD-1220 MO, station #1,000. (?? KCLD is 1410 KS, Bob. But congrats on hitting that milestone -pls) Another happening of note was my purchase of an ICOM IC-R70. I hate to admit it, but I really haven't given it much of a workout on MW; I've spent most of my time on (dare I say it) shortwave. I expect to get back on the BCB with renewed enthusiasm this fall. Hopefully, by that time I'll have a Kowalski loop. (Hint, hint.) I was also able to find a good home for my HC-120A. I guess the biggest news around here is the ANARC '85 Convention. Mike Knitter, Paul Kowalski, and I had our bid accepted, and we will be co-hosting this gala weekend. (And one gal a weekend should be enough for anybody. (Speak for yourself, hi -pls) We've managed to line up excellent facilities and are now working on the little things, like a program. I hope you'll all try to include this in your plans for next summer. Al for now, good DX to all.

DAVID GLEASON - 10324 W. Flagler St. - Miami, FL 33172 (pm 4-10; rec'd 4-13)

Hi! As of 4-10, WCMQ is no longer on 1220 here in Miami; actually, it is no longer in Miami, either. After considerable testing from 4-6 on, between

midnight and 4 am, the station is now licensed to Miami Springs and on 1210 with an all-night format in Spanish. As the field strength readings are done on the new day-time signal, power will increase to 25 kw DA-D. Once this is done, the new night signal, power will be tuned and the station should soon (30 days) be on the air 24 hours a day. In other words, another AM-7 station. I am accepting thanks for WLS new conception of the dial at 1411 Coral Way, Miami, FL 33135. You can also send your recitation reports there, as I am the PD of "Radioletras-2000" and will be helping our CE summer reports. The day and night patterns have roughly southeast, so WCMQ may be a difficult catch. Other than this activity, which is a part-time job, I'm too busy with my syndication company to do any serious DX'ing, although it has been interesting to spend a substantial portion of my time visiting clients of the company in Chile, Peru, Paraguay, Ecuador, Colombia, Venezuela, Panama, Dominican Republic, and several places in Central America. The new 100 kw of La Voz de Centroamerica in San Pedro, Honduras, is about the only interesting thing seen (450 kHz). Our client in Lima, Radio Omega, is now on the air with 10 kw on 660, 24 h. Because of this, RRG-670 has moved to 680. On my next trip to Colombia to visit Caracol, I will try to get an updated NJ listing with network affiliation. Best 73.

LESTER PLAMING - Mount Fortune - East End - Anguilla BVI (pm 4-9; rec'd 4-10)

Hello fellow NRC'ers. This being my first muse, allow me to introduce myself. My name is Lester Plaming, 18 years of age, and I am an announcer at the Caribbean Beacon Radio. I have been an NRC'er since December last year, but as mentioned before, this is my first Muse (blush). Because I haven't the money to purchase a receiver, I am not an active DX'er. I have a portable radio with which I do some SWL. Seeing that I do not have the money to purchase a receiver I want to do, at this very moment, enlist the aid of every single NRC'er reading this. Please send me your financial contributions of ANY amount to aid me in the purchase of a Yaesu PRG-7700 receiver from the Electronic Equipment Bank in Virginia. Thank you all very much in advance. But please remember that if I cannot get any help from you, I will have to give up my interest in the hobby and drop out of the club, which of course I don't want to do. That's all for now and I am looking forward to hearing from all of you real soon. 73's from Anguilla. (Lester, welcome to the club ... But I think you have started off on the wrong foot by begging for money. You don't need an PRG-7700 to do serious BCB DX'ing, believe me. I would suggest saving your money against the purchase of a good portable rx. My suggestions for used ones: a GE Superadio or Sony ICP \$5W, under \$50 each (each also has FM); a Radio Shack TRF (12-655 at around \$30; 17-656 under \$30); a Sony ICP-5000W for under \$100 or a new ICP-6500W for about the same price (EBB carries the 6500) if you want shortwave, too; or perhaps a Sharp FV-610 B (with digital LCD readout and a clock plus LW) for under \$140; Radio Shack carries them. Perhaps other DX'ers would like to nominate their favorite inexpensive rx's in future Muses. My offer: I will sell you, and you only, a Radio Shack TRF (12-656), AM only, as new, at my cost, including shipping, at \$18 US. Other DX'ers are free to mail Lester whatever they wish -pls)

GENE MARTIN - 3303 East Evans Ave. - Denver, CO 80210 (pm 4-18; rec'd 4-20)

Big John and Sparky, mentioned in the Steve Francis Muse of the April 16 issue, reminded me of driving across Missouri or maybe Kansas on a Saturday morning in 1944 with my six-year-old daughter and four-year-old son listening to that kiddies' program. We lived in Cincinnati then where I worked in the WLW news department 1944-1950, but on this occasion I was taking the childrer with me on a vacation trip out to Kansas and Texas. Big John was John Arthur and I became acquainted with him in 1945 when he was a tall, lanky announcer at WSAI, at that time a sister station of WLW. John had talked to me on many occasions about his plans and hopes for Big John and Sparky. As he launched that program on ABC, I believe, soon after WSAI had split off to become a separate station as required by the FCC. Cressley owned both stations, WLW and WSAI, and they had a combined payroll of 600 in 1944. In the months just before the separation, each station set up separate staffs where you either worked for WLW or WSAI. I never worked on WSAI and John Arthur never worked on WLW, but the two stations' employees were all mixed together in the same 5-story building and studios at 140 West Ninth in Cincinnati. Before 1945 was over, all WSAI people had moved into separate quarters. We commonly referred to the two stations before the separation as "3y" for WSAI and "EW" for WLW. Whenever a new announcer came to work at WLW, the first lesson he had was to learn how to pronounce the letter W. The correct pronunciation is "double-you" and there is a tendency to pronounce it just "dub-a-yu". In Cincinnati, they were sticklers about that "double-you", and I imagine they still are. (At WLW, I don't believe they much care how W is pronounced.) (But they are careful about "New Orleans," hi -pls) Now that I have wandered away from my original topic and got located in New Orleans, I wonder how many have noted the frequent reference to King Edward cigars on WFL. This often is merely a reference, maybe a time signal, rather than a full-blown commercial. I would guess that mention of King Edward cigars is perhaps the oldest commercial on any U. S. station, for I know I first noticed it in 1940, quite a few years ago. It attracted my attention because cigars were and are rarely advertised on radio. One more thing: As late as 1964, I remember hearing a live orchestra being aired from a ballroom of the Roosevelt hotel on WFL. Perhaps WFL was the last station in this country to offer that kind of programming before records came in and swept live music off the air.



WAYNE HEINEN - 1642-C.S. Idells Cir. - Aurora, CO 80017 (pm 4-14; rec'd 4-18)  
 Once again, the spring assessment season is here and for 4 hours per week is cutting spring DX to a minimum. As September draws near I am finishing out the plans for the Kickoff for the 51st NRC PCB season. I promise to be enjoyable to all who attend. More on the agenda and special features will be seen in these pages. Anyone with special circumstances and/or in need of other details for a complete Colorado vacation feel free to drop a line. To DX one decent catch: CIGL-1430 with WYL back on 3-12 at 3:03 on PSD. This led to milestonic wpc #1000. After 19 years of PCB DX from 2 locations. May 12 I renew to begin my 10th year with the NRC at age 31. Seems like only yesterday ... 73, all.

ROBERT RUSH - 50 Regent Road - Southampton, MA 01073 (pm 4-14; rec'd 4-18)  
 Spring has come to Western Massachusetts with lots of rain and cool temperatures. If DX loggings were as heavy as the precipitation, I would have dozens of new stations to report! One could say drought conditions have set in on the medium wave band. While waiting out the drought, I've been busy at college and associated extracurricular activities. Hopefully, my respite for DX'ing will result in new loggings in the coming months. Neil Kassaros and others have been doing fine chasing international DX. Guys, the next time you have an opening, please send a few stations to Southampton, MA! The IOWA 870 and AN-1 antenna would love to receive a station from Cyprus or Togo! Until next time, I wish everyone good DX and verifications. 73's.

PAUL SWEARTZEN - 7310 Esner Avenue - Sun Valley, CA 91352 (919) 765-7651  
 It was kinda fun, I guess, to type this out in the old, time-honored method. I find that I am more used to the old manual keyboard than the IBM keyboard (either the computer board or the typewriter). However, the Commodore 64 keyboard (which I will be using in the near future) seems to be well-leid out for word processing. Yep, Wayne, I will be joining you somewhere in Colorado for the 51st Big Blowout; I wouldn't miss it for the world. I'll be combining a vacation visit with relatives with the convention trip; I've actually worked long enough at Wards for them to award me with a two-week vacation this year. 73.

**W THE HIGHLAND BROADCASTING CO.**

DRAWER A  
 HILLSBORO, OHIO 45123

February 1, 1984

Mr. Edward M. Eisenbrauer  
 1130 Colonial Drive  
 Mechenesny Park, IL 61111

Dear Ed:

Thank you for your January 18th letter regarding your reception of Radio Station WLS.

Our station is 9000 watts, directional, with a day and night pattern. We have only been full time since October of 1982, and are at 980. We are located in Manitowac, with our city of license as Two Rivers, Wisconsin.

We are pleased that you were able to receive our signal and do appreciate your letter.

Again, thank you for writing - and for listening.

Sincerely,  
 Ed  
 Ed Eisenbrauer  
 Chief Engineer

**WLS**  
 MUSICIACRODIS

**Logos**

BROADCAST GROUP LTD.  
 P.O. BOX 20700  
 OKLAHOMA CITY, OK 73156  
 (405) 478-2100

**KBYE-890**

**KECK radio**

February 1, 1984

Mr. Edward M. Eisenbrauer  
 1130 Colonial Drive  
 Mechenesny Park, IL 61111

Dear Ed:

Thank you for your January 18th letter regarding your reception of Radio Station WLS.

Our station is 9000 watts, directional, with a day and night pattern. We have only been full time since October of 1982, and are at 980. We are located in Manitowac, with our city of license as Two Rivers, Wisconsin.

We are pleased that you were able to receive our signal and do appreciate your letter.

Again, thank you for writing - and for listening.

Sincerely,  
 Ed  
 Ed Eisenbrauer  
 Chief Engineer

*Handwritten notes:*  
 - ZERO SOMEWHERE  
 - TALK THESE GUYS  
 - DOWN Vex!!!  
 - Here's Proof!  
 - Thanks Ed  
 - HA  
 - bumper sticker!!!

**We W/CUB**



Your bids go to the Address at the right and NOT TO NRC HQ. Orders for direct sale items and for All bids should be sent to: SAM BARTO 47 PROSPECT PLACE BRISTOL, CT 06010

MAKE YOUR CHECKS & MONEY ORDERS OUT TO "HAP"

This page brought to you as a Public Service of the NRC

**HAP DIRECT SALE ITEMS:** The following stickers/decals are available for \$2.25 each or any 5 for \$1.00: RFI (red) (blue) (cir.), KMJK, CKRD (large) (small), MAZU, K9BX, CPUN, KWK, CPRA, CKUA, CFRN, CKGY, Radio 210, Disco-99, Amateur Radio, WJNC, RCI, Radio Vatican (small) (semi-cir) (square), ANARC, CFTI, RNE, WDR (ORF), (small), Radio 270, 55-Country, Radio Derby, Rete Quattro, Polskie Radio, Radio, Radio Budapest, Metro Radio, RBO, KPNN, KDXD, WCPL and WINS.

**HAP BID ITEMS:** ITEM #508: Radio Canada: QSL card (4x7") m/c. #509: Radio Tees (UK) "Tickles Me" sticker (2.5x11") m/c. #510: CEREDX (Spain) sticker (2.5x4.5") B&W. #511: RCI QSL card "WARC-79" (4x6") m/c. #512: RCI QSL card "XXI-Olympiad" (4x6") m/c. #513: Manx Radio (Isle of Man) QSL card (4x7") B&W. #514: Cleveland Area Cable TV cloth arm patch (3" cir) blue, white. #515: RCI QSL card "WDXHAP" (4x6") m/c. #516: CIRK "Rock" sticker (4.5" cir) m/c. #517: Cable West TV (Canada) sticker (3" cir) m/c. #518: Radio Sweden "Keep in Touch" sticker (over 2" long) yellow, blue. #519: RCI QSL card "1974 Cycling" (4x6") m/c. #520: RCI QSL card "IYDP" (4x6") m/c. #521: RCI QSL card "Satellite" (4x6") m/c. #522: RCI QSL card "WDXFY-1973" (5x7") m/c. #523: RCI QSL card "Globe/Microphone" (4x6") m/c. #524: Radio 210 (UK) photo card (4x6") B&W. #525: KGBX m/c pig photo (3x5") very nice! #526: WFLA "Tampa Bay Bandits" sticker (3x7") red, B&W. #527: BBC Radio One (UK) sticker (2.5x3") red, white, blue. #528: Devon County Radio (UK) decal (3x4.5") red, white, blue. #529: Radio Scotland paper banner (2x13") blue, white. #530: Radio Hallam (UK) decal (2.5x13") m/c - sharp looking! #531: BBC Radio One (UK) 3 different staff photos (8.5x11") B&W. #532: Radio Veritas (Philippines) paper pennant (3x5") red, black, blue. #533: BBC Radio One decal "Happy Motoring" (2x12") m/c - nice! #534: WDAE "Tampa Bay Bucs" sticker (3x9") red, white, orange. #535: BBC Radio Nottingham (UK) 1984 gold and white diary - very nice item! #536: WHMB-TV large paper holder (8.5x11") m/c. #537: BBC QSL card "Old Building Style" (4x6") B&W. #538: RCI QSL card "Antenna-1971" (4x7") m/c. #539: Voice of Turkey cloth pennant (7.5x12") m/c - nice! #540: CFFGO sticker (2.5x7") blue, white. #541: RBI (DDR) "DX Club" cloth pennant (6x9.5") m/c. #542: BBC Radio Stoke (UK) 25 page magazine (8x11") m/c - very interesting! #543: BBC Radio Stoke decal (4x8") m/c. #544: The Black Pirate (Holland) sticker (2x3.5") black, gold. #545: BBC Radio Orkney (Orkney Islands) sticker (3.5" cir) red, white. #546: BBC Radio Newcastle (UK) sticker (3x6") blue, white, green. #547: Gamma Radio Milano (Italy) sticker (3x5.5") m/c - nice! #548: Radio Macarena (Colombia) reflective sticker (3" cir) m/c - beautiful! #549: Radio Macarena reflective decal (2x5") m/c - very nice! #550: RNE (Spain) "La Radio" sticker (3.5x4.5") B&W. #551: Radio Fase (Italy) reflective sticker (2x8") red, gold. #552: BBC Radio Nottingham (UK) decal (3.5x7.5") m/c. #553: BBC Radio Clwyd (Wales) decal (5.5" cir) m/c - sharp! #554: Radio RSA (South Africa) sticker (3.5x5.5") new style, black, yellow. #555: Radio Ulan Bator (Mongolia) paper pennant (4x6") blue, red, gold. #556: City-TV Koblenz (FRG) sticker (3x5") m/c - nice! #557: Voice of Turkey cloth pennant (4.5x7.5") m/c. #558: Radio West (Ireland) decal (3.5x5") red, white, blue. #559: Radio More Music (Italy) sticker (1x6") m/c. #560: Radio Nederland sticker 2 different (3x4.5") m/c. #561: ORP (Austria) sticker in Spanish (4.5x5.5") red, B&W - nice! #562: Hereward Radio (UK) plastic badge (2x3") orange, white, brown - very nice! #563: RBI (DDR) plastic badge (2x2") m/c w/orange. #564: RBI plastic badge (2x2") m/c w/red. #565: Radio Milano International (Italy) reflective sticker (3.5x8") silver, red. #566: MSM metal badge (1.5" cir) red, white, blue. #567: VOA 6 Presidential ruler, red, white & blue. #568: RRI stick pin, silver, green. #569: ORP mini-metal pin, silver, red. #570: RCI maple leaf pin, red, white. #571: Radio Peking metal pin, dark blue, silver. #572: Radio Peking metal pin, silver, white, light blue. #573: Radio Peking "Great Wall" pin, silver, white, blue. #574: Radio Peking metal pin, red, blue, silver. #575: Radio Bucharest (Romania) pin, m/c - nice! #576: Radio Nederland cloth pennant (4x6") red, white, blue. #577: Voice of Asia (Taiwan) pin, m/c - very nice! #578: RAE (Argentina) paper pennant (4x8") blue, white, orange. #579: HRVC cloth pennant (6x10") blue, B&W. #580: RRE (Spain) cloth pennant (4.5x8") m/c. #581: RBI cloth pennant (5x8") red, white, blue. #582: Radio Veritas (Philippines) 1984 calendar, m/c. #583: Radio Korea paper pennant (4x8") m/c. #584: Radio Nederland address book, red, gold. #585: 42A Radio Southland (New Zealand) sticker (5.5x6") w/Kiwi Bird, m/c - very nice! #586: Radio Vatican 1984 calendar in EG (4.5x8.5") m/c. #587: KAIM (Hawaii) sticker (4x7.5") blue, white. #588: 4XD (New Zealand) sticker (1.5x7.5") blue, white. #589: KNUI (Hawaii) sticker (4x7.5") red, white. #590: HJCB-FM sticker (3.5x8") B&W. #591: Radio Veritas sticker (3x10") yellow, B&W. #592: IBC (Italy) sticker (3x5") purple, white. #593: Radio Luna (Italy) sticker (3x4.5") blue, B&W. #594: Radio Nacional do Brasil sticker (3.5" cir) m/c. #595: RBI cloth pennant (6x9") m/c - sharp! #596: Radio Veritas cloth pennant (4x8") blue, white, yellow. #597: Radio Polonia stick pin, red, white, silver. #598: 6WP (Australia) cloth arm patch (2x3") blue, white, orange. #599: Radio West station pen, m/c. #600: Netherlands World Broadcasting 100 page plus book on the history of radio in Holland

ADDRESS: Send bids and orders to Sam Barto, 47 Prospect Pl., Bristol, CT. 06010





### UNIVERSAL SHORTWAVE RADIO

1280 Aida Drive  
Reynoldsburg, Ohio 43068  
Phone: 614-866-4267

#### DXER's DIRECTORY

Unfortunately most radio listeners are undertaking their hobby in a vacuum; out of contact with other listeners in their locale. Few would argue that the DXing hobby is more enjoyable and productive when you know other listeners in your area with whom you can talk about mutual interests. The hobby takes on a new dimension when you can share DX information and techniques with other local listeners. Whether communicating over the phone or just getting together once a month; the hobby is more fun when it can be shared. The problem has always been; How do you find other listeners with similar interests in your area?

Universal is pleased to present a solution! We are presently compiling a directory of listeners. This computer-based list will offer accurate and current information on active listeners. Important information on all registered listeners will be displayed. We will include name, address, phone number, type of listening, and club affiliations. This book will be an invaluable guide in familiarizing you with other listeners in your area.

We need your help to make it happen! WE WANT TO INCLUDE YOU in the next edition. Please fill out the form below and return immediately. Your listing will be without charge. You will be notified when the directory is available, but you are under NO OBLIGATION to buy one. It costs nothing to be listed. We would like your information whether you wish to buy the directory or not. So help us bring DXers together! Tear-off the form below and return it to Universal today. Thank you!



### UNIVERSAL SHORTWAVE RADIO

1280 Aida Drive  
Reynoldsburg, Ohio 43068  
Phone 614-866-4267

Full Name \_\_\_\_\_  
Street Address \_\_\_\_\_  
\_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Zip Code \_\_\_\_\_ Telephone# (\_\_\_\_) \_\_\_\_\_  
Monitor/Ham Call? \_\_\_\_\_

Type of Listening: (check all that apply)  
( ) Long Wave ( ) Medium Wave  
( ) Shortwave Broadcast ( ) Shortwave Utility  
( ) FM/TV DX ( ) VHF/UHF Scanner  
( ) Amateur Radio ( ) Facsimile (FAX)  
( ) Radioteletype (RTTY) ( ) \_\_\_\_\_

YES, please include the above information in the DXER's DIRECTORY! I understand that I am under no obligation of any kind.

Signature: .....

#### DXER's DIRECTORY

Universal is pleased to offer the first directory of radio listeners. Please complete this form and return it today so you can be included in the next DXER's DIRECTORY. You will be notified when it is available, but you are under no obligation. (\*optional)

#### Club Affiliations:

( ) NASWA ( ) SPEEDX  
( ) ASWLC ( ) ADXR  
( ) CIBX ( ) ACE  
( ) LWCA ( ) NVDXC  
( ) NRC ( ) IRCA  
( ) RCMA ( ) WTPDA  
( ) \_\_\_\_\_ ( ) \_\_\_\_\_

Return to:  
Universal Shortwave Radio  
1280 Aida Drive  
Reynoldsburg, OH 43068 USA

#### Friday, July 20

- all day - registration
- morning - exhibit set-up
- 1-5 pm - Exhibits
  - Eaton Centre trip for family members
- 3 pm - ANARC General Meeting. All convention attendees are welcome to attend.
- 5-7 pm - dinner on your own
- 7 pm - Wine and Cheese Reception. Well-known attendees will be introduced.
- 9 pm - "Planning a DXpedition", an informative and humorous look at what goes into a DXpedition, presented by Cedric Marshall, Ron Hopkins, Harold Sellers and Don Monan

#### Saturday, July 21

- 8-10 am - Registration
- 10am-5pm- Exhibits
- 9am-12pm- family outing to a local attraction, Cullen's Country Barn
- 9-10:30 - Concurrent seminars: (1) several brief presentations by experienced mediumwave and shortwave DXers (2) Bob Grove of Monitoring Times presents "Monitoring the Spectrum: The Tools and Techniques"
- 10:30-12- International Broadcasters' Forum, with representatives from several international broadcast stations answering your questions
- 12-1 pm - lunch break
- 1-5 pm - choice of (1) bus trip to CFRB/CFRX transmitter site and CN Tower, or (2) remain at hotel for group discussions and films
- 5-7 pm - free time
- 7 pm - cash bar opens
- 7:30 pm - Banquet. Guest speaker will be Mr. Tony Ward. Mr. Ward has been a mediumwave and shortwave DXer for 32 years, with experience in New Zealand and Ontario. He is a recognized authority on propagation, antennas, and DX techniques. Mr. Ward's presentation will be preceded by the annual ANARC Awards and the banquet will conclude with the ANARC Raffle.

#### Sunday, July 22

- 10am-12noon - Concurrent sessions for longwave, mediumwave, utility, TV-FM and Public Service Band hobbyists. Session chairmen to be announced. Format may be seminar and discussion or open forum.
- 10 am - World Radio TV Handbook quiz by Andy Sennitt, Assistant Editor
- 11 am - Tom Williamson, Tropical Bands Editor of the Ontario DX Association, presenting a Central American travelogue for mediumwave and shortwave DXers
- 12-1 pm - lunch break
- 1-3 pm - HAP Auction conducted by Sam Barto
- 3 pm - closing ceremonies
- evening - cruise of Toronto Harbour & Islands



# 46 ANARCON '84

## REGISTRATION FORM

for the 1984 ANNUAL CONVENTION of the Association of North American Radio Clubs, to be held July 20-22 at the Ramada Renaissance Hotel in Toronto, Ontario.

Please PRINT clearly the following information:

Name \_\_\_\_\_ Age Group:  Under 20  20-34  35-49  50-65  Over 65

Address \_\_\_\_\_

Telephone \_\_\_\_\_ Interests:  SWBC  MWBC  Unites  FM/TV  Ham  PSB

Club Affiliations (if any) \_\_\_\_\_

Date & Approximate Time of Arrival (if known) \_\_\_\_\_ AM \_\_\_\_\_ PM Mode of Travel:  Car  Plane  Train  Bus  
(Instructions for reaching the hotel will be mailed as part of your confirmation package)

**HOTEL ACCOMMODATION** A special rate of \$65.00 (Canadian) per room per night (Single or Double occupancy) has been guaranteed for the nights of July 19-22 inclusive. For subsequent nights a reduced rate of \$70.00 (Canadian) per night will apply. A limited number of cots are available if three people wish to share a room; the extra charge is \$12.00 per night.

I require accommodation for the nights of: July  19  20  21  22 \_\_\_\_\_

Additional nights required \_\_\_\_\_ Do you plan to share a room?  Yes  No

If so, please state the name(s) of the person(s) with whom you plan to share \_\_\_\_\_

Check here if you are willing to share a room and you would like us to match you with someone in a similar position. (Please send a deposit at the single person rate; a credit will be made if we match you with someone. We will do our best, but cannot promise that a match will be made.)

**BANQUET** Will you or any family members attend the Saturday evening banquet?  Yes  No

Names of those attending (including yourself) \_\_\_\_\_

(Formal attire: Jacket and tie please)

**ACTIVITIES** Would you or any family members like to take part in the Friday afternoon shopping/lightseeing trip?  Yes  No No. of people attending \_\_\_\_\_

Would you or any family members like to take part in the Saturday evening shopping/lightseeing trip?  Yes  No No. of people attending \_\_\_\_\_

Do you or any family members plan to take part in the Saturday afternoon tour of the CN Tower and CNR/CFRB transmitter site?  Yes  No No. of people attending \_\_\_\_\_

Do you or any family members plan to take part in the Sunday evening boat tour (weather permitting) of Toronto Harbour?  Yes  No No. of people attending \_\_\_\_\_

**HANDICAPPED ATTENDEES** Will you require assistance or special facilities?  Yes  No

If so, please specify \_\_\_\_\_

**DEPOSIT** (All amounts are Canadian Funds)

CONVENTION REGISTRATION FEE: \$ 20.00 (PER PERSON)

Please include whichever of the following apply to you:

BANQUET FEE (\$25.00 per person) \$ \_\_\_\_\_

HOTEL ACCOMMODATION (\$65 per night) \$ \_\_\_\_\_

(first night only, balance payable at checkout)

TOTAL DEPOSIT \$ \_\_\_\_\_

Note: Charges for the four field trips will be payable at the convention. Approximate prices per person are as follows:

Friday Afternoon (Shopping/Sightseeing): \$2.50  
Saturday Morning (Shopping/Sightseeing): \$2.50  
Saturday Afternoon (CN Tower/CFRB site): \$8.00 Bus \$5.00 Tower, (Weather permitting)  
Sunday Evening (Toronto Harbour boat ride): \$6.00

ANY QUESTIONS MAY BE ADDRESSED AS FOLLOWS:

ANARC CONVENTION COMMITTEE  
BOX 232, POSTAL STATION "2"  
TORONTO, ONTARIO  
CANADA M5N 2Z4

Please allow 2-3 weeks for your confirmation to reach you.

Deadline for registration:

**MAY 31, 1984**

(Registrations must be RECEIVED by this date)

THANK YOU FOR YOUR INTEREST - SEE YOU IN JULY!

PLEASE FILL OUT THE FOLLOWING FOR USE BY THE HOTEL:

NAME: \_\_\_\_\_ Date of Arrival: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ Date of Departure: \_\_\_\_\_

# 1984 NATIONAL RADIO CLUB CONVENTION 47

LABOR DAY WEEKEND --- AUGUST 31 TO SEPTEMBER 2, 1984

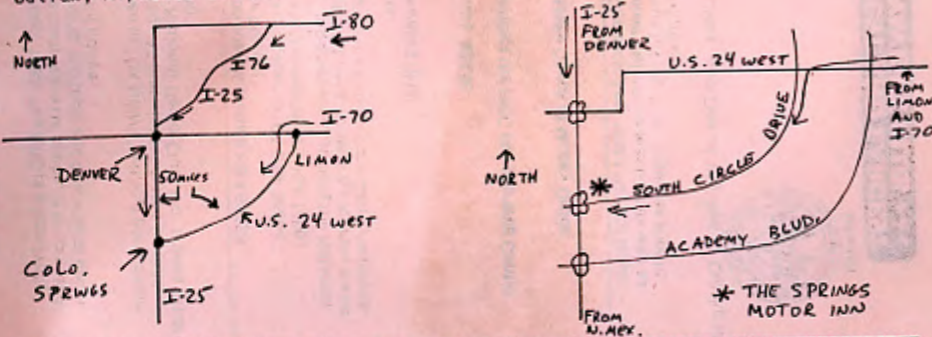
Welcome to the beautiful Pikes Peak Region. Hundreds of attractions and fantastic scenery will greet the lucky members who decide this is the year to start the NRC's second half century. The Springs Motor Inn is centrally located on the south edge of Colorado Springs just east of the Circle Drive exit. See the handy map below.

Registration Fee \$32.00 (US)

This INCLUDES the Buffet Banquet on Saturday Night AND a sight seeing tour by van to the Summit of PIKES PEAK. Room rates are listed below in the handy registration slip. The NRC SWAT TEAM is presently forming up our ranks and busily preparing a host of activities and what nots to keep everyone at a high level of enjoyment. Participate and ENJOY NRC 84 !!!

73 from NRC SWAT TEAM:

Mountain Man, The WIZ, Buffalo K. Foonman, ELK, Waterbug, The Silver Fox, Outlaw, Alphonso Bedoya.



## NATIONAL RADIO CLUB 1984 CONVENTION RESERVATION FORM

NAME: \_\_\_\_\_ NUMBER IN ROOM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_

STATE/PROVINCE: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_\_

PHONE: \_\_\_\_\_

ARRIVAL DATE: \_\_\_\_\_ DEPART DATE: \_\_\_\_\_

TYPE ACCOMMODATIONS: Twin Double Single/Double Occ. \$35.00/Night  
Each Extra Person: \$5.00/Night

RESERVATIONS will be held to 6 PM without a deposit. All night with a one night deposit. Deposit may be Check, American Express, VISA, Master Card, or Diners Club.

MY DEPOSIT FOR ONE NIGHT \$ \_\_\_\_\_ IS ENCLOSED.

CHECK \_\_\_\_\_ CREDIT CARD NUMBER \_\_\_\_\_

CARD TYPE \_\_\_\_\_ CARD EXP. DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

Please make deposit checks if you send a room deposit by check payable to the Springs Motor Inn. Anyone wishing to prepay the \$32.00 registration fee may make their check payable to **NRC CONVENTION 1984**. MAIL all items to:

WAYNE HEINEN 1642-C SOUTH IDALIA CIRCLE, AURORA, CO 80017



# NATIONAL RADIO CLUB

Founded over 50 years ago, in September 1933. The NRC is a Non-Profit organization devoted solely to the Medium Wave DX hobby. It is operated solely by Volunteers. Dues cover printing, postage, and operational costs, and are subject to change without prior notice.

Any reproduction of material contained in "DX NEWS" without permission of the National Radio Club is prohibited. All material submitted for publication becomes the property of the National Radio Club, Inc. unless otherwise agreed upon in advance in writing.

HEADQUARTERS - P.O. Box 24 - Cambridge, Wisconsin USA 53523  
(608-423-4159 NO Collect Calls Please)

MEMBERSHIP CENTER - P.O. Box 118 - Poquonock, CT USA 06064

PUBLICATIONS CENTER - P.O. Box 164 - Mannsville, NY USA 13661

Change of Address go to HQ Address. Inquiries about joining the National Radio Club go to the Membership Center Address. Orders & Inquiries about Club booklets & reprint publications go to the Publications Center Address.

Yearly Dues for United States members:

NEW Membership-\$20.00 Renewals-\$19.00

Yearly Dues for Canadian members:

NEW Membership - \$21.00 Renewals - \$20.00

For dues for other countries, contact the Membership Center Address.

... Pattern Book, Reference Manuals as well as numerous DX'ing Aids. Inquiries should be directed to the Membership Center Address.

DX NEWS is printed by Nick, Dick, Cindy, and Dee of Big Red Q Quickprint in Madison, Wisconsin.



**THE WORLD'S OLDEST AND LARGEST  
\*\*\* ALL MEDIUM-WAVE DX CLUB \*\*\***



NATIONAL RADIO CLUB, INC.  
POST OFFICE BOX 24  
CAMBRIDGE, WISCONSIN  
USA 53523

FIRST CLASS  
U.S. POSTAGE  
PAID  
CAMBRIDGE, WI  
PERMIT No. 27

CARL LABELSTEIN 1105/15  
8209 WEST 78TH MATTER  
OVERLAND PARK, KS 66204

FIRST CLASS