



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

VOLUME 52 ISSUE 25

April 15, 1985

Well...a biggie issue....just in time...now for those in the U.S. that pay taxes...you should be done by now and with this issue....you can now sit back and relax....no? Inside this big issue are several items that you can build, rip open, and in general mess up your room with....a little bit of everything for everyone!

1985 NRC Convention We've got some tidbits to pass on to you....it's never too early, right? Here goes: Ramada Inn, 144 Anthony Road, Portsmouth, RI 02871. Room reservations will be handled by Craig Healy. DO NOT CALL THE RAMADA INN. Rates are \$55 Single/ \$65 Double. IF YOU'RE INTERESTED IN A TOUR OF NEWPORT AND THE MANSIONS LET CRAIG KNOW NOW!!! Banquet costs, etc haven't been determined yet, don't ask. And when you write to Craig, PLEASE send an SASE. By the way, the location is very close to many a good beach, so bring your swimsuit and shark repellent (just kidding about the last item -HQ). DXing off the beach is very good by the way. When is this party? Labor Day weekend...of course! That's it on details for now....enough to tell the boss you want that weekend off..right. Craig's address....see top of page 12.

NRC Convention Auction items can be shipped now to Craig. And Terry's Travel Agency, see a few issues back, can arrange your trip for you....per Craig. Also, speaking about past issues....we mentioned that Craig would pay for shipping of items that you buy at the Convention's Auction....to clarify that, you will be CHARGED for the shipment but only what it costs to ship the item...again per Craig. Any questions get ahold of Craig.

EXCHANGE Get your items into Russ Edmunds that you wish to sell, or want to buy, or whatever. The date: April 15th, so that they will appear in the May issue. Address: 753 Valley Rd., Blue Bell, PA 19422 Send your letters today!!!

/Musings/ Paul's other address for your Musings is: P.O.Box 4812, Panorama City, CA 91412.

We'd like to mention that those asking for the "NRC Catalog", please, send along a 22 cent stamp....it helps us out greatly!!! Thanks for your cooperation.

CPC TEST (Times shown are Eastern Time)

April 15 KCTA-1030 Corpus Christi, Texas 0500-0600, 50Kw Non-directional, Tones, Music,
Monday ID's. Reports to: Tim Walker, Director of Engineering, Box 898, Corpus Christi,
Texas, 78403 No Collect calls to: 512-643-3561. Arranged by: George Santulli.

LOOK INSIDE:

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NEXT ISSUE: MAY 6

AM SWITCH

Jerry Starr, c/o WHOT Radio, 401 N. Blaine Ave., Youngstown, OH 44505

CALL LETTER CHANGES

Old call: New call:

1030	*New	IL	Vernon Hills	WLMV
1050	*New	NM	Los Ranchos de Albuquerque	KNXX
1130	WWCM	IN	Brazil	WSDM+
	*New	PR	Guayanilla	WOIZ
1350	KBOT	AR	Cabot	KYXZ
1430	WJRB	TN	Madison	WLRQ
1500	KROQ	CA	Burbank	KRCK+
1560	KABI	KS	Abilene	KSAJ

+These stations were formerly silent. The application for new call letters should signal a pending renewal of operations.

APPLICATIONS FOR NEW STATIONS

840	WI	Plover:	500 D1 (by Quantum Broadcasting, previous applicant for 750 kHz)
890	FL	Port Orange:	500 D1
1130	NM	Milan:	5000 D1
1150	MS	Canton:	500 D1
1170	FL	Bushnell:	1000 D1

GRANTS FOR NEW STATIONS

1040	KY	Cannonsburg:	10000 (1000 CH) D3
1130	PR	Guayanilla:	2500 D1

APPLICATIONS FROM EXISTING FACILITIES

630	KJNO	AK	Juneau: 5000/1000 U1
640	WLJV	FL	Royal Palm Beach: relocate XR site, new station not on yet
660	KGDP	CA	Santa Ynez: move to Orcutt, CA, extend CP completion time, new station, not on the air yet
800	KFRZ	UT	Brigham City: power to 1000 D1
860	WAEC	GA	Atlanta: move to Mableton, GA
960	WRFC	GA	Athens: move XR, night power to 2500 (reapplication)
1010	WBIX	FL	Jacksonville Beach: add 5000 watts night, DA
1230	KIFW	AK	Sitka: 1000/1000 U1
	KGfJ	CA	Los Angeles: increase power during KPCC hours from 100 watts to 400 watts. So help me, ALL the services report this as 400.
1270	WNOG	FL	Naples: night power to 2500
1430	KNTA	CA	Santa Clara: night power to 2500
1460	WRLB	NJ	Mount Holly: move to Florence, NJ, relocate XR
1470	WMMW	CT	Meriden: reduce night power of fulltime CP to 2500
1500	WDEB	TN	Jamestown: to 820 kHz in Alladart, TN (reapplication)

GRANTS TO EXISTING FACILITIES

740	WSBR	FL	Boca Raton: daytime power to 2500
790	WTSK	AL	Tuscaloosa: power to 5000 D1
800	WSST	FL	Largo: moves to 820 kHz with 50000/1000 U2 (additional information for previous listing)
860	KTRB	CA	Modesto: 50000/50000 U4
1030	WBDX	TN	White Bluff: day power to 10000 non-DA, station remains U-2
1080	KJEL	MO	Lebanon: to 750 kHz 1000 D1 ++
1520	WCCS	PA	Homer City: to 1160 kHz with 1000/250 U4

++ The FCC listed this first as a grant for a NEW STATION in it's Public Notice and all the services, this one included, listed it thus. We have done some digging on our own and found that this was actually a frequency change granted to existing KJEL. And, with lightning speed, the change to 750 is on already.

OTHERNESS

660	KTNN	AZ	Window Rock: requests extension of CP completion time, new stn.
700	*App	MD	Walkersville: application for new station returned again
720	*App	FL	Hernando: application for new station returned
830	WLND	OH	Cortland: is on the air, another new local signal here
840	*App	NM	Bernalillo: application for new station returned again
	*App	WI	Seymour: application for new station returned
	*App	TN	Frasier: application for new station returned
880	*App	WI	Mayville: application for new station returned
990	*App	CA	Palm Springs: requests extension of CP to move to 1140 kHz
1010	KCMJ	CA	Palm Springs: station is silent
1300	KGHX	AK	Fairbanks: station is silent
1330	WELW	OH	Willoughby: application for fulltime returned
1370	WGNW	WI	Sussex: station is silent
1390	KBBO	WA	Yakima: application for power increase returned

1400 *App WA Silverdale: application for new station returned
1590 WALY KY Gray: new station is on the air

All for this time, 73 and Good DX,

Jerry & BKF

Jerry Starr & Buffalo K. Foonman

ADDRESS UPDATES

== SEND UPDATES TO- JERRY STARR, 401 N. BLAINE AVE., YOUNGSTOWN, OH 44505 ==

640	WHLB	OK	MOORE	address is NORMAN	WP-MO
670	KWNC	CA	SIMI VALLEY	2136 MINIFRED ST.	93063 JH-CA
670	KWXI	AR	GLENHOOD	P.O. BOX 'S'	WP-MO
700	KFAM	UT	SALT LAKE CITY	1171 SOUTHWEST TEMPLE	84101 JS-OH
710	WDSM	WI	SUPERIOR-DULUTH	1105 E. SUPERIOR ST.	JH-PA
760	KMTL	AR	NORTH LITTLE ROCK		72166 WP-MO
830	WLND	OH	CORTLAND	3278 ELM ROAD EXT.	44410 JS-OH
850	WYDE	AL	BIRMINGHAM	90 BAGBY DR. SUITE 310	35209 BH-NJ
860	HLBG	SC	LAURENS	P.O. BOX 860	29360 KG-PA
870	WPRQ	TN	COLONIAL HTS.	224 COL. HTS. RD. KINGSPO	37663 JS-OH
880	KKHC	CA	GONZALES	P.O. BOX 'V'	93926 JH-CA
880	KIKR	TX	CONROE	P.O. BOX 2368	77305 WP-MO
910	WXAM	LA	BATON ROUGE	ONE AMERICAN PLACE	WP-MO
930	KLLS	TX	SAN ANTONIO	8401 DATAPoint DR.-SUITE 900	78229 WP-MO
940	WYLD	LA	NEW ORLEANS	P.O. BOX 19066	WP-MO
970	KCFO	OK	TULSA	3737 S. 37th WEST AVE.	74107 WP-MO
970	KGHR	MN	AUSTIN	RTE. 1 BOX 50	55912 WP-MO
1010	KBBW	TX	WACO	P.O. BOX 2209	76703 WP-MO
1030	KHOG	AR	FAYETTEVILLE	103 WEST MOUNTAIN	72701 JS-OH
1030	KBSH	MO	BLUE SPRINGS	1030 SOUTH OUTER RD.	WP-MO
1070	WINA	VA	CHARLOTTESVILLE	BOX 498	22902 GY-OH
1080	KRPX	UT	PRICE	163 EAST 100 NORTH-BOX 1076	84501 JH-CA
1100	KDRY	TX	SAN ANTONIO	P.O. BOX 6628	78209 WP-MO
1100	WGPA	PA	BETHLEHEM	528 N. NEW ST.	18018 JM-PA
1110	KGFL	AR	CLINTON	P.O. BOX 33	72031 WP-MO
1130	WSJP	KY	MURRAY	1500 DIUGUID DR.	WP-MO
1130	WCXI	MI	DETROIT	18900 JAMES COUZENS HWY.	WP-MO
1140	KVLI	CA	LAKE ISABELLA	also P.O. DRAWER 'T'	JH-CA
1140	KPWB	MO	PIEDMONT	HIGHWAY 'HH'	63957 WP-MO
1180	KTUN	TX	HUMBLE	add SUITE 'D'	WP-MO
1190	KHAD	MO	DeSOTA	P.O. BOX 585	WP-MO
1210	WILY	IL	CENTRALIA	302 S. POPULAR	WP-MO
1220	KCCS	OR	SALEM	4303 MARKET ST. N.E.	97301 JH-CA
1220	WAXO	TN	LEWISBURG	217 W. COMMERCE ST.	WP-MO
1220	KZYH	MO	CAPE GIRARDEAU	P.O. BOX 1610	WP-MO
1230	KLES	MO	JOPLIN	P.O. BOX 1230	64802 WP-MO
1240	WHVN	NC	CHARLOTTE	P.O. BOX 18614	28218 HH-MD
1250	WREN	KS	TOPEKA	1001 FILLMORE	66604 JH-CA
1250	WARE	MA	WARE	P.O. BOX 210	01082 JS-OH
1260	KSNO	CO	ASPEN	620 E. HOPKINS	81611 JS-OH
1300	KPTL	NV	CARSON CITY	1937 N. CARSON ST.-SUITE 227	89701 JH-CA
1300	WNQM	TN	NASHVILLE	3314 W. END AVE.	37203 WP-MO
1310	KAAM	TX	DALLAS		75251 WP-MO
1320	KSIV	MO	ST. LOUIS		63144 WP-MO
1330	WFBC	SC	GREENVILLE	273 S. BONAPARTE ST.	29601 GY-OH
1340	KIKO	AZ	MIAMI	505 RUTHERFORD ST.	85502 JH-CA
1340	KSIL	NM	SILVER CITY		88062 JH-CA
1370	KMMH	TX	AUSTIN	P.O. BOX 1208	78767 WP-MO
1400	KRVZ	AZ	SPRINGERVILLE	P.O. BOX 1069	85938 JH-CA
1430	KELI	OK	TULSA	9191 SKELLY DR.	74129 WP-MO
1440	KPUR	TX	AMARILLO	BOX 30000	79120 JH-CA
1450	WCLI	NY	CORNING	99 W. FIRST ST.	14830 JS-OH
1470	KHSL	IA	SIOUX CITY	P.O. BOX 3088	WP-MO
1480	KBEA	MO	KANSAS CITY	306 E. 12th ST.	64106 WP-MO
1520	WVOI	OH	TOLEDO	P.O. BOX 5408	43613 KG-PA
1530	WMBE	WI	CHILTON	BOX 30	53014 JS-OH
1530	KCTT	AR	YELLVILLE	P.O. BOX 100	WP-MO
1530	KTCR	OK	WAGDNER		74477 BW-OK
1540	KMFO	CA	APTOS	7600 OLD DOMINION ST. SUITE C	95003 JH-CA
1550	WHOO	AL	MOBILE		36633 BH-NJ
1550	WOKG	MS	JACKSON	BOX 3320	BH-NJ
1550	KLFJ	MO	SPRINGFIELD	811 BOONVILLE	65802 WP-MO
1550	KKJO	MO	ST. JOSEPH	1201 N. WOODBINE-BOX 166	64502 WP-MO
1560	WTAI	FL	MELBOURNE	1355 JONES RD.	32935 JH-CA

1570 WBGC IL GODFREY	BOX 608	62035	WP-MO
1580 KLOU LA LAKE CHARLES	311 ALAMO	70601	JS-OH
1590 WCCL MS JACKSON	P.O. BOX 31344	39206	WP-MO
1590 WAIK IL GALESBURG	add. OK-also BOX 431		WP-MO
1590 KEND TX LUBBOCK	1314 50th St.	79412	WP-MO
1600 WAAM MI ANN ARBOR		48104	GY-OH
1600 KXVI TX PLANO	1310 AVENUE 'K'	75074	WP-MO

***** CONTRIBUTORS *****

JM-PA JOHN MALICKY, PITTSBURGH	HH-MD HANK HOLBROOK, CHEVY CHASE
WP-MD WILLIAM PRATER, SPRINGFIELD	BW-OK BRUCE HINKLEMAN, TULSA
BH-NJ BOB HARRISON, UNION	KG-PA KERMIT GEARY, WALNUTPORT
JS-OH JERRY STARR, HUBBARD	GY-OH GAYLE YEAGER, HUBBARD
JH-CA JIM HILLIKER, ANAHEIM	

CAN THEY SURVIVE?

1605-1705 kHz AM Extension Could Yield 1800 New Stations

Just over a year from now - from April 14 to May 2, 1986 - the U.S. and dozens of other Western nations will face off over a negotiating table in Geneva. When they walk away, this country will be well on the way to getting ten new AM channels, probably in 1989. If the number of stations now operating on high-end channels like 1490 kHz is an accurate gauge, the new frequencies could hold up to 1800 new stations.

At issue in the talks will be the proposed extension of the commercial radio AM band from its current upper limit, 1600 kHz, up to 1705 kHz. While the expansion has drawn little public attention, considerable debate is underway within the FCC and in some radio circles over what types of new stations should be created, and who will get the licenses.

As Docket 80-90 demonstrated, Mark Fowler's "free market" FCC isn't swayed by the argument that radio broadcasters should be protected from new competition in their own ranks. Still, those in the industry may be justified in wondering how hundreds of new AM stations will survive at a time when the band is already in deep trouble.

AM now commands only a third of all radio listening, many AMs are struggling to make ends meet, and there seems to be little buyer demand for many AM properties now on the block. New stations in the 1605-1705 range would face the additional handicap of being unable to reach older radio sets not equipped to pick them up.

AM Set Conversion Is Simple, Cheap

Jerry LeBow, who consults several receiver manufacturers, has some encouraging words on that score. "It's easy to add" the extra channels to sets, he says, and "the cost of doing it is almost nil." Once a firm date for broadcasting in the expanded band is known, LeBow predicts set makers will begin in adding the feature several years in advance to be ready for the new stations. And he

notes that many AM sets already pick up signals as high as 1600 kHz.

Next year's session in Geneva will develop technical criteria and a planning method for how countries will submit specific proposals for using the new spectrum when the nations meet again in 1988, when the expansion will likely receive formal approval.

One key decision already made is to treat the ten new channels as an extension of the existing band, rather than as a separate service requiring different kinds of AM receivers. "We propose that the protection ratios, class of emission, and bandwidth of emissions should remain the same," the Commission said in January. "We believe that this would enhance the availability of receivers making this band available to the United States public in the most expeditious and least costly manner."

Minority, Public Radio, Daytimer Needs

The FCC is just beginning to form its ideas for use of the new channels, but it's already clear that new station locations will be chosen according to a revised version of the "requirements list" that was used to locate sites for Docket 80-90 FM drop-ins. The updated list will likely consist of communities, suggested by various groups, where there's a need for minority or public radio stations, first radio service, or an upgrading of daytime-only service.

Limited Coverage Area High On AM Band

In response to requests for comments, the Commission has received a wide range of suggestions on how the new stations should be set up. One of the main problems to be reckoned with is the fact that, high up on the AM band, groundwave conductivity is so poor that even a high-powered station would have only a limited groundwave signal, especially at night.

Most commenters have seemed to favor stations similar to the current Class 3s (maximum 5 kw) or Class 4s (1 kw). However, a 1 kw station at 1655 kHz, given current interference protection, would have primary groundwave signal coverage out to only 24 miles during the day and 4.1 miles at night. At 5 kw, the figures aren't much better - 34.3 miles days, and 4.4 miles nights. Even a boost up to 50 kw, while yielding 58.2 miles during the daylight hours, would have a groundwave reach of a mere 4.8 miles at night.

With these and other problems in mind, the Commission has sought public comment on several specific questions:

- Should there be a single class of stations for the expanded spectrum?
- If more than one class is used, should they be intermixed on the same channels?
- What power levels and protection standards should be applied, both daytime and nighttime?
- To what degree should the technical standards be tailored to meet the needs developed for the so-called "requirements list"?

Another decision for the FCC to make is what to do about approximately 200 Traveler's Information System (TIS) stations operated by federal, state and local governments, many on 1610 kHz. They'll most likely be moved

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R/R FRIDAY, APRIL 5, 1985
TERRY S. ADKINS

Dave Schmidt, 42 Chelwynne Road, Castle Hills, New Castle, DE 19720

Here is the official NRC column which is almost as exciting as hay fever! When sending your items in, please type or neatly write, ELT, skip a line between items, one side of the paper and all that jazz. And here we go:

- 660 WCRV VA RURAL RETREAT - Station due on the air at the end of April. (Info from PAXTON DURHAM via DS-DE)
- 770 WYRV VA CEDAR BLUFF - Station started RS on 3/25. PoP due sometime toward end of April. (PAXTON DURHAM via DS-DE)
- 850 WREM CT RIDGEFIELD - 3/10 1210 male/female anc'r constantly ID'ing as 'AM 85 WREM Ridgefield' promotin 'The Greatest Music Ever Played' starting 3/15, fair w/UNID. (PRY-NJ)...3/9 1500-1510 series of statements by area residents talking about station. Frequent ID's, to start RS 3/15. (RH-NY)
- 1150 WMEX MA BOSTON - First noted w/s/on 0600 3/16 w/oldies format, ex-WHUE/WSNY/WACQ/WCOB/etc. (STAN-MA) Gee, I'd of liked to hear them when they were 'etc'! (DS)
- 1180 WFGN SC GAFFNEY - 3/5 0645-0700 Strong in WHAM's null w/CW music w/clustered ads, ABC news on the 'Early Risers Program', ex-1570. (KG-PA)
- 1190 KBCO CO BOULDER - Noted w/new calls, Album rock format, ex-KADE. (MM-CO)

FREQUENCY CHECK

- 1st Mon - KQIK-1230 0300-0315 w/TT, code ID's. (DKK-CA)
- 1st Wed - KINO-1230 0200-0215 w/TT, voice ID's. (DKK-CA)

MIDDAY - MIDNITE

- 540 KNMX NM LAS VEGAS - 3/4 2011-2017 good w/Mexican ranchera music, Spanish talk til s/off. (CR-IL)
- 610 WGIR NH MANCHESTER - 2/28 1711-1715 strong in WIP's null w/weather, ski reports, sports news, ads. (KG-PA)
- 680 WDBC MI ESCANABA - 3/17 1847-1902 way o/all w/Big Band music, radio promo, time/temp. check, ID into CBS news. Nice but verified already a few years back...1942! (KG-PA) I verified them not to long ago...1968!(DS) 3/20 1845-1900 noted 2 French speaking stations, one w/man talking, other w/rock music and female anc'r. One is CKAC, but who may the other one be? (KG-PA)
- 740 NSVQ TN HARROWGATE - 3/1 1835-1844 alone w/bluegrass music, ads, no data s/off w/ID as Harrowgate/Middlesboro/Tazewell, 0600 s/on, closed w/Battle Hymn of the Republic. How come this is the only station on 740 w/PSA? (KG-PA) Far enough away from Canada. (DS)
- 770 WAIS OH BUCHTEL - 3/1 1828-1830 end of CW music into full data s/off. (WF-IN)
- 870 KUUY WY ORCHARD VALLEY - 3/16 2350 tentative w/high school basketball playoff from Laramie, w/mention of teams. Also noted CW music, all u/strong WWL. (KVJ-GA)...3/4 1951 fair/poor o/u WWL w/CW music, ID, gone at 1959 pattern change. (RIGAS-IL)
- WPRQ TN COLONIAL HEIGHTS - 3/1 1815-1830 o/all w/album rock, Quad-States weather, scripture reading, s/off followed by Lords Prayer, slogan is 'Power Radio for the Quad States'. (KG-PA)
- 940 WGRP PA GREENVILLE - 3/9 1835-1840 overboard w/sports, ads, good in CBM null, March s/off should be 1830. (KG-PA)
- WLVM MI ST IGNACE - 3/9 1840-1845 o/all w/Big Band music, full data s/off (but no mention of power) w/invoke to tune 103 FM, no SSB. (KG-PA)
- 960 WSBY MD SALISBURY - 3/11 1850 call in talk show mixing w/WELI, no ID but mention of Delmarva Flagship station. (RH-NY) Flagship of what? Reports of the Delmarva Chicken Festival? (DS)
- 990 WCAZ IL CARTHAGE - 2/24 1825 w/local news, ID. (JK-MD)
- 1060 WITP MA NATICK 3/4 2031 mauling KYW, must've forgot to switch to nite pattern, abruptly gone at 2045. (JK-MD)
- 1070 WINA VA CHARLOTTESVILLE - 3/9 1817 ID, ads topped thru jumble. (RH-NY)
- WSCP NY SANDY CREEK - 3/9 1630 ID, ads, CW music o/WMB. (RH-NY)
- 1110 WTIS FL TAMPA - 3/2 1832-1839 way o/WBT w/'Rock of Ages', album rock music and clustered ads. (KG-PA)
- 1130 WAMG TN GALLATIN - 3/12 1859 s/off w/mention of 2500 watts, owners names, w/KWKH. (KVJ-GA)
- 1140 KSOO SD SIOUX FALLS - 3/12 1907 noted w/CW music, promo for Oak Ridge Boys LP, later at 1920 w/sports report on high school basketball playoff, very good signal overall, much wanted here. (KVJ-GA)
- 1150 WRUN NY UTICA - 3/11 rock oldies, local like signal. (RH-NY)

- 6 WGGH IL MARION - 3/7 1900 w/s/off anc't, w/mention of religious format. (JK-MD)
 WAYY WI CHIPPEWA FALLS - 3/7 1905 local news, weather into oldie, long saught WDEL just wasn't there! (JK-MD)
- 1190 WJES SC JOHNSTON - 3/2 1823 w/RAB promo, CW music. (JK-MD)
 1210 WAVI OH DAYTON - 3/1 1730-1738+ B/Sol music, ads, promo for Busch/Central University o/WCAU. (WF-IN)
 1270 WLBR PA LEBANON - 3/1 1811 o/WSPR w/local news. (RH-NY)
 1280 WJAY SC MULLINS - 3/13 1830 good w/s/off, 1st heard eight years ago to the minute! (WPT-DC)
 WONW OH DEFIANCE - 3/1 1718-1723 w/MoR/Top 40 music, ad/contest about Defiance college, promo for girls basketball game, o/WGBF w/no WMRO. (WF-IN)
 1370 WTAB NC TABOR CITY - 3/2 1825-1829 alone w/Skoal report, full data s/off w/SSB. (KG-PA)
 1380 WGUS SC N AUGUSTA - 3/12 2130 overboard w/102 PM ID's and CW music, call to anc'r, very embarrassed and relieved I wasn't the FCC, forgot to pull the 'switch'. (JK-MD)
 WSIZ GA OCILLA - 3/2 1809-1832 usually on top w/pop music, weather, sports. (KG)
 WRBQ FL ST PETERSBURG - 3/2 1830-1840 tremendous signal, o/all w/rock music, contest promo, Q-105 ID's. (KG-PA)
 1390 WADA NC SHELBY - 3/10 2025 w/oldies format, ID. New owners went back to old call from WCCS per phone call. (JK-MD)
 1400 WBAT IN MARION - 3/1 1657-1711 w/MoR/Top 40 music, CBS & local news, promo for high school basketball playoff, steady but poor o/WJTM/others. (WF-IN)
 1420 WACK NY NEWARK - 3/4 1821 good w/rock music, ads. (RH-NY)
 WDBF FL DELRAY BEACH - 3/16 1845 fair/good w/ID, promo for Mystery Voice. (WPT)
 1540 WTBI SC PICKENS - 3/7 1845 s/off w/mention of religious format. (JK-MD)
 1550 WMIR WI LAKE GENEVA - 3/11 1727-1730 poor but steady w/ads w/many mentions of the city and SE WI. (WF-IN)
 1580 WVKO OH COLUMBUS - 3/18 1855-1906 completely blocking freq. w/rock music, frequent ID's, off abruptly 1906 (legal s/off time was 1845). (KG-PA)
 WPSK VA PULASKI - 3/18 1906-1940 tentative strong w/pop music, phone # for requests, anc'd EST time as 'Music Time in the Valley', believe WPSK running overboard again. (KG-PA)
 WANB PA WAYNESBURG - 3/11 1846-1920+ overboard w/strong signal w/CW music, Comedy Calendar, weather, FM ID's as 'Your Kind of Country' slogan, legal March s/off is 1830. (KG-PA)
 1600 WUNI WV WHEELING - 3/9, 3/10 1822-1830 o/all w/oldies, no data s/off, to return 0600 w/'more music for You and I'. (KG-PA)

****MIDNITE - MIDDAY****

- 560 KSPO CA SAN FRANCISCO - 3/4 0344 noted on w/new all nite program, had been off MM 0300-0700, sounds regular. (DKK-CA) Sounds like a big fire truck to me! (DS)
 590 KTHO CA S LAKE TAHOE - 3/6 0405-0425 w/pop music o/u KLSN, has been running King. May have been acct. heavy mountain snow as noted extended weather 0425-0432. (DKK-CA)
 670 *KBOI ID BOISE - 3/4 0345-0405+ occasional OC/TT leaving WMAQ/Cuban, no trace of elusive KWKK. (DKK-CA)
 1060 KAMA TX EL PASO - 3/5 0820-0830 cutting KPAY/KUKQ to pieces w/Spanish music & talk, good 'radio Kah-ma' ID. (DKK-CA)
 1090 WSLG LA GONZALES - 3/19 0715 atop w/s/on but quickly faded to KAAV. (SHP-LA)
 1180 WPKB KY FLORENCE - 3/21 0645-0708 good at times in WHAM null w/news, sports, 'Solid Gold' music, traffic report, ads. (KG-PA)
 1190 WANN MD ANNAPOLIS - 3/12 0615-0617 s/on w/SSB, WLIB not on yet. (RH-NY)
 1230 KBOV CA BISHOP - 3/4 0000o/din w/ID, change from KBBS. (DKK-CA)
 1240 UNID 3/6 0358 someone w/King but couldn't make out ID thru din. Never heard King here before so suspect someone just picked him up. (DKK-CA)
 1400 WDUZ WI GREEN BAY - 3/4 0026 briefly noted w/ID. (RIGAS-IL)
 1430 WENE NY ENDICOTT - 3/12 0713 news, weather, well o/WNJR. (RH-NY) %\$#!(BH-NJ)
 1480 KPHX AZ PHOENIX - 3/4 0443 noted atop w/fine signal in Spanish, KWUN must have been off. (DKK-CA)
 1500 *KSTP MN ST PAUL - 3/11 0200 noted off this AM leaving Spanish. (MM-CO)
 1560 KTXZ TX W LAKE HILLS - 3/18 0243-0301 rock oldies, promo as 'Austin's All Star Rock N' Roll Radio', ID, AP news. (KVV-GA)
 1580 *WPGC MD MORNINGSIDE - 3/5 0601-0613 o/all on anc'd ET w/TT, music, whatever happened to FCC rules and regulations? (KG-PA) Sold at auction! (DS)

****OTHERNESS****

- 535 WKKW 3/9 1155-1205+ this Allentown (PA) FM noted here w/fair audio, CW music, news, ad, weather. Heard of 2 different sets so not a receiver problem. (KG-PA)
 1622 KPF941 NY YONKERS - 3/20 2235 noted back on w/S9 peaks thru much noise, now ID's as WOZI/KPF941 Yonkers Radio and gives the WOZI-Presque Isle, ME address for mail. (STARR-OH)

****RANDOMS****

That's everything rec'd up til 3/20, we had to get this in the mail a bit early as we're involved in some major house projects now.

Look for some stuff from NC with the next report as we'll be down there again around 4/15 or so.

Our friend C W WILLIAMS has moved out from WETB and WJSO and is now working for an FM station in the Evansville, IN area. Hope that all appreciated his interest in doing the series of tests this past season.

****DIALERS DEPT.****

STARR-OH/Jerry Starr, Hubbard, OH/HQ180, Loop
 SHP-LA/Steve Ponder, Bossier City, LA
 KG-PA/Kermit Geary, Walnutport, PA/HQ180, R389, SM2, LW
 RIGAS-IL/Christos Rigas, Chicago, IL/R2000, ICF 2002, Superadio, LW
 WPT-DC/Bill Townshend, Washington, DC/DK160
 DKK-CA/Don Kaskey, San Francisco, CA/HQ140X, SM2
 KVVJ-GA/Karl Jeter, Stone Mountain, GA
 JK-MD/Joe Kureth, Uniontown, MD/SX43, LW
 MM-CO/Wayne 'Mountain Man' Heinen, Aurora, CO/R390A, Loop
 PRM-NJ/Paul Mount, Teaneck, NJ/TRP
 WF-IN/Wendall Ford, Westville, IN/C E C AM-FM Tabletop
 STAN-MA/Stan Moss, Bradford, MA/HQ180, Loop
 RH-NY/Richard Harrison, New York, NY/Grundig 3400

And we'll see you all in 2 weeks! 73's - Good DX!

STATIONS "OWN" CALLS

Call Letters Now Eligible For Trademark Protection

From PAGE 4
 elsewhere. Cordless phones are also being cleared out. The Commission ordered that none operating between 1600 and 1705 kHz be manufactured after October 1, 1984.

Radio's two trade associations, NRBA and NAB, both have strong views on how to put the new spectrum to use. NRBA advocates using it to resolve incompatibilities left over from the 1981 international radio meetings in Rio. Under NRBA's plan, first priority would go to stations suffering interference or unable to upgrade because of foreign stations.

NAB agrees with that priority, and also recommends giving first opportunities for new stations to daytimers, minorities, and public broadcasters. NAB says that Class 1 clear channel stations are impractical because so few could be fit in, while Class 3 would suffer from "severely restricted service areas." So it suggests Class 3 fulltime stations with minimum power of 5 kw days and 1 kw nights. "Significant nighttime protection requirements would allow these new stations to provide greater service to the public," NAB suggests.

Broadcasters were handed a new weapon against confusingly similar call letters last week. A federal agency ruled that stations own their call signs and can register them as an exclusive "service mark" (a trademark for a service) that is protected against infringement. The ruling from the U.S. Patent and Trademark Office reversed an earlier denial of registration for the calls WSM/Nashville.

To qualify for registration, a service mark must be owned and in use by the applicant. WSM was turned down when an examining attorney ruled that the FCC owns call letters. But the Trademark Trial and Appeal Board disagreed, saying, "The FCC neither adopts nor uses call letters as service marks, so it does not own any such marks. Even prior to its new (call sign) rules, the agency did not assert ownership of call letters. It acted only as a third party to resolve disputes between two owners of the call letters, the broadcasters who actually use them."

Weapon Vs. Confusing Calls

Stations with registered calls will have a much stronger case should someone in the market adopt a similar call sign. Benefits of registration include a tripling of any damages collected, the power to force infringers to disclose profits, warning of the registration through the use of a symbol (an "R" inside a circle), and immediate access to fed-

"Stations with registered calls will have a much stronger case should someone in the market adopt a similar call sign."

eral courts, which in some cases may be preferable to local or state courts.

Registration takes about a year and usually costs \$500-\$1000, which covers attorneys' fees and a charge of \$175 for each category in which a service is registered. A lawyer experienced in trademark law, Dow, Lohnes & Albertson partner Arnold Lutzker, predicts "a fair number" of stations will register calls, and said he's familiar with one broadcast group which intends to file for each of its stations.

Technical Snafus Cost WKED \$2400

FCC inspectors who checked out WKED/Frankfort, KY uncovered a host of technical violations, resulting in a fine of \$2400 imposed by the Mass Media Bureau. WKED's shortcomings included improper antenna base currents, lack of control and monitoring equipment for remote operation, inaccurate remote meters, failure to conduct equipment performance measurements, and improper station power, modes, and

operating times.

In other action, the Commission fined WRUN/Utica, NY \$1600 for two violations. The station failed to maintain effective locked fences around antenna towers, and neglected to conduct a partial antenna proof of performance at least every three years, plus a skeleton proof in years when no partial proof was performed.

KDLT
"Radio"
 P.O. Box 636
 540 KHZ Delta, Utah 84642

INTERNATIONAL DX DIGEST

Chuck Hutton, 437 Hardendorf Ave., Atlanta, GA 30307

Times are GMT

For ELT subtract 5 hours.

Deadline: Monday

And the rest of the Kazaross Report that started issue before last....

- 700 BRAZIL QTH unknown fair with little DRM! at 0021 2/12 // net with pp talk. The Beverages sure help the ZY's when cx are good! (Kaz)
- 702 ANGOLA Luanda to fair peaks // 1088 w/mellow instrumental mx accompanied by woman vocalist, PP woman annrc 0337-0341 2/13. Peak good-very good at 0355 // 944 and 1088 w/light, rhythmic Afro mx, man and woman PP annrcs mentioning Angola. (Kaz)
- 746t KENYA Nairobi very poor audio w/747 het notched. Mx noted 0310-0312 10/15. Variator is often noted here and comes on between 0251 and 0255. Carrier noted 2105 Saturday 11/12 and went off shortly after. Listed Saturday s/off is 2110. This comes in best on the 60 degree Beverage which makes sense since bearing is 78 degrees. Was common in October and November but rarely audio. Only occasional carrier in December/January. Carrier again several times in February; only traces of audio-still too weak! (Kaz)
- 747 NAMIBIA Gobabis-I checked prior to 2400 2/11 as 594 was heard and had only a SAH u/Dugadougou which s/off at 0000. Just a carrier in QRN from winter rain storm until 0153 2/12 when soft woman vocal peaked poor-fair // 594, 3270, 3295. Namibia not heard next night even though Angolans were much better. About 7200 miles distant! (Kaz)
- 760 BRAZIL Fortaleza ZYH588 tuned into R. Uiraperu ID fair-good 2302 10/8. (Kaz)
- 827 MOROCCO Dujda per report in DXW2 this did move to 827 but only briefly. It is now back on 828 and once again generates vicious het w/Libya 827. Was generally u/Libya w/FF woman talk 0103-0107 10/16. It runs // 819 some but not all of the time. 819 always AA (at least at night). (Kaz)
- 830 BRAZIL QTH unid-a new channel for ZY's here, poor // 840, 860 etc. On peaks it mixed with YVLT (which isn't terribly strong here) w/PP talk 0009, 0013 2/12. Max listed power in 84 WRTH is 500 watts-perhaps a new stn. (Kaz)
- 840 BRAZIL QTH unid poor, mixing u/St. Lucia // 830, 860, 700, 1200, 1220, 610, 620, 690 etc. w/PP talk during xint cx 0008 2/12. (Kaz)
- 891 PORTUGAL Faro noted w/PP talk u/Algeria at 2202 10/14 then it rose clearly atop until 2204. Also later at 2232-2234 mixed with Algeria before the Algerian superpower buried it. This stn is the asource of low growl often noted with Algeria. (Kaz)
- 900 ITALY Milano poorfair generally o/Canadian w/cl mx // 846 0344 10/15. Briefly noted slightly atop // 846 w/cl mx and vocals 0043 10/16. (Kaz)
- 914 SURINAM Paramaribo boogvery good w/unusual format of T40 mx 0022 0/9. Best since last season. (Kaz)
- 918 UNID African suspected per cx and antenna. Pop mx poor 22272228 10/8 and then overtaken by 920 slop. (Kaz)
- 944 ANGOLA Luanda to good peak // 1088 (also good) w/pop hit "Man From Brazil" 00170020 10/9. 1367 // not in. Listed // channel of 702 had carrier only. This well after 702 Morocco's 2300 s/off and carrier cut. (Kaz) In at 2130 2/11 with poor signal. Nicely audible // 702 and 1088 w/mellow songs, PP woman annrc then light tempo rhythmic Afro mx 0335-0355 2/13. At least a carrierr (nonTVI) here most nights. (Kaz)
- 945 UNID in good Afro cx w/mx 2226 w/Angola 944 het notched. At 2301 10/8 noted ending 30 seconds of NA (not France) singing accompanied by instruments. Maybe Sao Tome. Does anybody have a tape of the nowdefunct 4807 Sao Tome anthem from 2300 s/off? I must keep after this one. (Kaz) Sure don't but that shouldn't be hard to get considering the number of people that heard the SWChuck
- 960 BERMUDA Hamilton to xlt peaks well o/SS and weak domestic GRM w/ZFB ID's by man and woman and program schedule mentioning many religious programs 00310035 10/9 in semiauroral cx. (Kaz)
- 963 NORTH SEA good with British EE jock mentioning "on Caroline", good, rock mx 0513 10/15. (Kaz)
- 981 ALGERIA Algiers fairgood w/LV de la Resistancia Chilena pgm in SS with Radio Algeria ID's and fanfare 00180020 10/13. (Kaz)
- 990t SPAIN the likely source of SS talk here on TA Beverage well u/CBY and taken out by WYNR fadeup 2236 10/9. Two 10 kw'ers listed. (Kaz)
- 999 UNID African carrier. I suspect Cameroon and this was in prior to 2300 but gone at 2303 recheck just like // 4972. Not on TA Beverage at 60 degrees and not Spain which when it is nonauroral is loud on that Beverage. This thing is noted almost everytime Africans are enhanced but no clear audio has yet to make it. (Kaz)
- 1017 MOROCCO Tanger poor w/FF talk then mx // 594, 1044 and 1053 were superb at the time 2150 10/17. Listed as 1 kw but right on the coast. (Kaz)
- 1034 GUINEA BISSAU to fair peaks past WBZ sloop and 1035 het w/lively mx // 5475 SW 2221 10/8. (Kaz)
- 1052t LIBYA Tripoli presumed source of definite TT clobbering 1053 Moroccan 0404 10/15. Heard last year w/AA. (Kaz)
- 1070 FRENCH GUYANA Cayenne fair // 3385 w/piano mx mixed w/YVMA at 0033 then both lost to Cuban fadeup // 1060, 2/13. (Kaz)
- 1079.6 SPAIN SS here peaked almost as good as WTIC briefly 2217 10/9 and audible for better part of 15 minutes w/what sounded like SER mx through the horrible low growl/het. "España" mentioned and only in on TA Beverage. Noted up to 1079.7 at 23212324 10/11 w/talk in SS and growl. The 150 degree Beverage had no trace of this and the YV was in u/WTIC on that Beverage. European members who's here? (Kaz)
- 1088 ANGOLA Luanda fading in at 2115 2/11 w/audio; early time for mid-February. Peaked up to good listening level // 702 and 944 suring xint opening 03350355 2/13. (Kaz)
- 1106 CAMEROON Douala quite poor w/1107 het notched w/African high-life mx // very strong 4795 2223-2224 10/8. Also poor w/more GRM from Spain 1107 2241 10/9 w/similar rhythmic, lively Afro mx. Carrier has been in many times on Afro Beverage when Afro cx are good. (Kaz)
- 1116 ITALY Bari fair with II talk 0457 10/15. Very good-xint w/no DRM at early time of 2107 10/30 w/II man and woman annrcs. Later noted as // 846. (Kaz)
- 1170 PORTUGAL Vila Real fair // 1062 w/romantic PP song atop channel 2238 10/14. Poor-fair and dominant w/WWVA phased // 1035 w/disco song 0052-0054 10/31. (Kaz) To xint peaks!! 2229-2234 w/PP annrc and mx // 1062 and 1035. Was atop domestic GRM even when it faded. New England daytimers were already off and WWVA had not arrived yet. On 10/9 poor-fair 2253-2255 // 1035, 1062 w/PP talk thru several others. Occasionally through WWVA phase null w/same song as 1035 2335 10/12 but with SS LA GRM, probably usual HJNW. (Kaz)
- 1188 MOROCCO Casablanca poor // 1197 w/lively mx, FF annrc thru CHTN sloop 2226 10/9. Bill Bailey heard this last season and I've been after it ever since. Xint TA cx at sunset tonight! (Kaz)
- 1260 SPAIN thru WEZE and well u/CIHI w/SER net mx // 792 0332 10/15. (Kaz)
- 1278 FRANCE Strasbourg poor // 675 and 164 with pips 0004 10/13. Is this AN now? (Kaz)
- 1278 UNID TT here o/France 0511 10/15, soon faded. (Kaz)
- 1280 BRAZIL Rio de Janeiro ZYH455 mixed w/domestics 0046 2/12 // 1220, etc. (Kaz)
- 1296 SUDAN Sennar finally on GP channel with NA at s/off 2201-2201:30 10/12. Same NA as last season on 1295. (Kaz)
- 1300 BRAZIL QTH unid poor, mixed w/domestic GRM w/the dominant domestic phased out 0039-0043 with PP talk // net. (Kaz)
- 1305 UNID cl mx o/growl was not // 254 Algeria. Maybe Poland (1503 plays lots of cl mx) 0507 10/15. (Kaz)
- 1314 SPAIN-listened across the hour at 0000 10/13; very good peaks with SS man and woman annrcs after T40 mx. However, no ID. (Kaz)
- 1325 MOROCCO Safi still of GP channel-poor signal // 774 (774 o/Spain at the time) at 2125 2/11. First time audible this year; was heard well occasionally last season. (Kaz)
- 1332 MADEIRA Funchal first and only time heard 2219-2224 10/12 poor with choral mx // 603 etc. Italy was on top at 2219, faded under Madeira at 2221 and back on top at 2223 with 1.5 Hz SAH. (Kaz)
- 1350 FRANCE Nice/Nancy under about 4 domestics; FF man // 164, 675 into EE T40 song 0438-0442 10/15. Great TA cx. (Kaz)
- 1367 SENEGAL St. Louis // 1304 w/FF talk and single pip on the hour 2200 10/12. Please note that Connelly's reported receptions of these on 368 and 1305 are actually on 1367 and 1304. With no readout in a car rx, Mark would have no way of knowing this. (Kaz)
- 1404 FRANCE synchros poor-fair // 1377 and 1206 with FF talk followed by choral mx 0434-0435 10/15. (Kaz)
- 1530 VATICAN nicely o/WCKY w/IS 0258-0300 10/15. Well o/WCKY w/choral singing 0545 12/29 with flutter fades. Good high end cx. (Kaz)
- 1539 SPAIN Valladolid fair-good o/slop with teletalk in SS mentioning Valladolid 2206 10/12. 0614 12/29 SS fair in WPTR sloop // loud 1584. (Kaz)
- 1548 ENGLAND poor-fair w/TC by woman "It's 4 o'clock" then BBC pips. No local ID copied. WPTR sloop greatly hinders reception on this channel even after CBE is off. 0400 10/15 w/TA's all over the dial. (Kaz)
- 1566 AZORES Vila de Porto rose atop Tunisia at 2152 10/12 w/PP song. Tunisia back atop at 2155. Both to very good peaks. Azores not heard much on 1566 this season unlike last year when it was regular. (Kaz)
- 1617 UNID domestic pirate noted here with Greek mx 0036-2042 10/1. On 10/9

was on 1625 at 0147 and 1623 at 0221 again with Greek mx. I've heard this in past seasons and hope nobody is confused into thinking it's a TA. (Kaz)

All this off of Kaz's IC-R70 and phased Beverages at 55 and 147 degrees.....

- 530 COSTA RICA Cartago TICAL SS man with sports pgm about futbol en Costa Rica w/interviews to 0417; ID "Esta es Rumbo" promo w/march mx; ads and MoR LA mx at 0422; QRM from "NB" beacon 2/20, fair. (Frodge)
- 531 ALGERIA Ain Beida 3/11 at 0300 weak o/SAH w/AA mx // 549. (Connelly)
- 549 ALGERIA 3/10 0328 AA singing, xlnr. (Connelly)
- 558 FIJI 3/16 Fijian talk 0750. Improving South Pacific conditions these days as winter approaches there. (Wood)
- 576 ALGERIA Bechar 3/11 at 0258 poor w/AA talk by man. (Connelly)
- 580 PUERTO RICO WRAQ San Juan SS man with news, remotes, promo "La Gran Noticias", nx to 0419 then commentary; many ID jingles 0412 3/9, fair. (Frodge)
- 660 CUBA CMEB R. Progresso, Santa Clara 3/15 0500 formal end of day's programming, time check for midnight, into next day's pgm. Power of 10 kw listed in WRTH 1985 seems about right. Clear after HRN s/off. (Wood)
- 660 HONDURAS La Ceiba listed; 3/15 0500 full ID and s/off without anthem. Contrary to WRTH 1985 which no longer even lists the name HRN, used only that ID at s/off. To judge from strength and from absence of a // on (fairly clear) 670, I suspect the main Tegucigalpa transmitter has moved from 670 to 660. Any comments from Thomas or others? Dominant; revealed Cuba after s/off. (Wood) 660 has been better than 670 or 680 forever here.....Chuck
- 666 PORTUGAL Lisboa 3/11 0301 man reading nx in PP-signal fair to good. Many hets were noted at the time throughout the lower part of the band from Iberian peninsula and North African stns. If I'd used the HQ180A or R390A, many more loggings would have resulted. Belmont definitely beats Billerica for DX from the south of the Mediterranean area. (Connelly)
- 700 JAMAICA Montego Bay JBC 3/13 0657 reggae, 0700 Jamaican-accented DJ, into soul and rock, promo'd his show as running 11:30 PM to 5 AM daily, M-F. ID "On the new one" (Radio One of JBC). Checked other JBC channels but no sign. A little WLW and a latin, perhaps Colombia, at times but mostly good. Country #68 and unexpected. (Wood)
- 747 JAPAN JDIB Sapporo 2nd net w/man in JJ very good at 1100 time pips 3/26. (Heinecken)
- 765 SIEGALL R. Bzzz w/native music for IP's in NW Ohio, good over WJR when using inverted, V fed, Beveraged, shunt fed dipole, over half. (Vobbe)
- 765 SENEGAL Dakar only fair thru WABC splatter w/man in vernacular 2314-2320 3/19. (DeLorenzo)
- 770 COLOMBIA RCN Bogota HJKH 3/14 0435-0500 RCN nx pgm, reporters checked in from various cities and gave their license numbers after their reports. WRTH 85 has switched R. Tequendama, formerly listed on 770, with Emisora Nueva Granada, formerly on 610; no name ID heard, only RCN network. Comments? (Wood) I could not verify the switch-Chuck
- 774 INDIA Simla 3/16 1620 tabla mx, North Regional services // 1395. Simla is a "hill station" in the Himalayas. My first Indian catch below 1071 KHz. Quite good. (Wood)
- 774 JAPAN JOUB Akita 2nd net w/two men talking in JJ 1113-1130 3/26. (Heinen)
- 774 SPAIN synchronos 3/10 0350 SS talk to fair peaks through WABC slop. (Connelly)
- 790 CUBA Radio Reloj?? only "RR" CW heard w/local WSGW; Reloj confirmed by a WV DX'er 0226 3/9, poor. (Frodge)
- 820 COLOMBIA R. Bolivar HJAD 3/15 0435 typical ID "Somos profesionales, somos R. Bolivar. Somos Todelar, lo moderno en radio". Promo for reporter from baseball training camps in Florida. Excellent, dominant over WBAP. (Wood)SS man with futbol promo; man with sports interviews and call-ins; sports program continued to 0330 then LA mx w/many promos; taking turns w/WBAP-WAIT-CMBU 0228 3/9, fair. (Frodge)
- 828 JAPAN JOBB Osaka 2nd net w/pgm // 747 and 774 easily separated from WCCD 3/26 1135. (Heinen)
- 870 COLOMBIA Barranquilla Mar Caribe HJBS 3/14 0900 rooster crows, wake-up show, tropical mx, over/under KAIM. (Wood)
- 875 KOREA PDR Wonsan 3/15 1630 Pyongyang ID in Korean, almost Soviet-sounding instrumental mx, a kind never heard from South Korea. (Wood)
- 890 WINDYCITY Music Radio; new station never heard here before. Talk from 0300 to 0600 CST w/anncr Steve Doll. Usually hear WLS with Top 40 music. (Vobbe)
- 891 ALGERIA Algiers 3/11 0312 fair w/AA moaning. (Connelly) Good w/AA vocal 2255-2259 3/19; squeezed out by WLS at 2259. (DeLorenzo)
- 920 ECUADOR Machala CRO HC.. 3/17 0807 full s/off text, said it would return at 5:30 local (=1030), "Gloria a ti" anthem, off 0810. Dominant, as so offer here. (Wood)

CONTINUED PAGE 30

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Once again we have a small column. In fact, it has all been "donated" by Pete Nolan, Evolutions Editor, of Galveston, TX. Thanks, Pete. And for the rest of you, in a word, contribute!" Here we go.....

- 610 WZZK AL Birmingham - Now CWM.
- WGIR NH Manchester - Drops Ad. Con. for NX/TLK.
- 630 KJNO AK Juneau - CWM.
- 770 WAIS OH Buchtel - New station, w/ CWM.
- 790 KXTC CA Clovis - Now silent.
- 860 WOAY WV Oak Hill - Drops CHR for REL/Gos.
- 870 WPRQ TN Colonial Hgts. - New, station, with religion as a start up format.
- 900 WKJK NC Granite Falls - Drops CWM for REL/GOS.
- WTOF OH Canton - Ex-WNYN, w/ Ad. Con., now REL.
- 920 WHHI SC Orangeburg - Ex-WKSD, CWM, now Black Programming.
- 930 WSOC NC Charlotte - CWM...remember when the WSOC call was on 1220, in North Syracuse...as the Sound of Quality.....
- 950 KKIC ID Meridan - Silent
- 990 KTKT AZ Tucson - Transstar Satellite Ad. Con.(And another #1 Rock Station from the '60's changes formats!!)
- 1030 KHVY CA Folsom - New Station, CWM.
- 1070 MJKK WV Beckley - Goes CWM, "K-Country 11".
- 1110 KISD WA Oak Harbor - New, Ad. Con.
- 1130 WAIZ MS Gulfport - Ex-WGUF, NX/TLK., now CWM.
- 1140 WKZF AL Hazel Green - Ex-WIXC, now CWM.
- 1170 WACV AL Montgomery - Ex-WCOV, now with MYL format.
- 1230 WTSV NH Claremont - Drops Ad. Con for CWM.
- 1240 KYOR AZ Globe - Now silent..
- 1270 KSCB KS Liberal - Now CWM.
- 1360 KAMT WA Tacoma - Now Album Rock. (AOR).
- 1390 KCEY CA Turlock - SMN Stardust.
- 1400 KCKK WA Goldendale - New, CWM.
- KPNA WA Tacoma - Now Silent....as I remember, this was ex-KINT, owned in the 1960's by the Tacoma News Tribune (TF).
- 1440 WLXN KY Lexington - EX-WBUY, now REL/GOS.
- 1450 WSYW ME Millinocket - EX-WMKR, Ad. Con., now "Sunny 98", simulcasts with FM.
- WPAM PA Pottsville - Drops CHR for Stardust Adult Standards.
- 1460 WRTL IL Rantoul - MYL.
- 1470 WVMV PA Portage - Ex-WRML, with CWM, now Ad. Con.
- 1570 WVVV WV St. Mary's - New, mix of REL and CWM.

Well, that is it for this time. Several interesting changes, continuing the trend to paid religion or CWM, when a lot of red ink shows up in the books. Thanks, again, Pete, for sharing your info with the members.....and for the rest of you, let us all hear what is new on YOUR dial!!!!!!!

73's...

SPORTS NETWORKS

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

One/two networks this week, courtesy of Richard E. Berg-Andersson. Baseball coming soon.

Madison Square Garden Radio Network: NY Knicks (NBA) and NY Rangers (NHL)

- 930 WPAT-NJ 1230 WFAS-NY 1300 WQBK-NY 98.3 WSUL-NY
- 950 WIBX-NY 1240 WGBB-NY 1340 WALL-NY

Craig Healy, 66 Cove Street, Pawtucket, RI 02861

1600-1800 KHz Range

Times are GMT

Deadline: Last Sat. of Month

April 1985...Loggings:

1613 GUATEMALA Rabinal 0931 1/25 RAB (Neal)
 1616 ??? 2300 2/23 KA83348 poor w/ 3 IDs every 3 mins. (White)
 1619.5 ??? 0934 1/25 UBT (Neal)
 1622 NEW YORK Yonkers 0215 3/4 KPF-941 Fair w/ male anncr. and oldies. QSL received already for this! (Demmitt)
 1629 ??? 0459 1/24 KA81126 (Neal)
 1632t PAPUA NEW GUINEA Ok Tedi?? 1927 3/4 OKT not listed but possibly this. (Thew)
 1632 ??? 2050 2/22 BRNJ good w/ continuous IDs (White)
 1632 ??? 2009 2/23 BRN good w/ continuous IDs (White)
 1632 ??? 2113 2/24 RRP fair w/ continuous IDs (White)
 1633 ??? 0442 1/24 HSN (Neal)
 1635 ??? 0246 3/12 R372 weak w/ beacon format (Ramsey)
 1635 ??? 0247 3/12 R110 fair w/ beacon format (Ramsey)
 1637 ??? 0245 3/12 S446 fair w/ ID every 5 mins. (Ramsey)
 1647 ??? 0330 1/31 KA83901 (Neal)
 1651 ??? 0929 1/25 KA83M, also w/ dash 0450 1/24 (Neal)
 1684 COLOMBIA Mercaderes 0936 1/25 MER (Neal)
 1689 PAPUA NEW GUINEA Mount Hagen 1929 3/4 MH (Thew)
 1689.8 ??? 0926 1/25 E396 (Neal)
 1703 ??? 0323 1/31 KA83756 (Neal)
 1725 ??? 1980 2/23 Carrier pulsing 80 times/minute. Each pulse seemed to be divided into about 5-10 parts. (White)
 1769 ??? 2022 3/4 2AAV (Thew)
 1784 ??? 1941 3/4 2AAW and dash (Thew)

Credits:

John Demmitt Bellefonte, PA Receiver, Antenna
 John Ramsey W. Hartford, CT ICOR R-71A, 60' LW, TUN-3
 Eric Thew Mt. Lawley, Western Australia FRG-7700, FRT-7700, random wire
 Sam Neal Cleveland, TX TS930S, 132' vert., 5 beverages-SE,E,NE,NW,W
 Thomas White Arlington, VA Receiver, Antenna

The FCC has stopped taking applications for broadcast station remote pickup stations on 1606, 1622, and 1646 kHz. This is in preparation for the deletion of the service in this part of the band, due to the coming expansion to 1700.

John Demmitt's logging on 1622 is interesting. It appears that they are going to run the thing every now and then. I should have requested a test from them earlier in the year. Getting too noisy now.

Top End Yearbook is still available for First Class postage and a couple of loggings. About 400 listings and very handy!

Coming unplugged

Station manager Marty Rowe and sportscaster Brett Buckwalter were in for a rude awakening when they reported for work at KBAK in Everett, Wash., early on the morning of Jan. 28. Someone had made off with most of their radio station overnight.

"We had to hustle, but we got back on [the air]," Rowe told a local newspaper reporter, explaining the theft of about \$80,000 worth of electronic equipment from the facility. KBAK, which had signed off at midnight Sunday, returned to the air only 82 minutes late, utilizing a mobile broadcast studio left untouched in the intrusion. Later, KMYZ in Everett loaned some studio equipment to the station. KBAK recently changed its call letters from KBAK to KBAK and had planned to replace much of its old equipment when it moved to new studios in downtown Everett next month. However, Rowe said the theft included much of the \$35,000 worth of new gear being stored in anticipation of the move. The main studio, newsroom, and production booth were described as "left practically bare" by the burglary, which Everett police are investigating.

"It wasn't done by 12- or 13-year-olds," Buckwalter summed up. "They knew what they were doing."

BROADCASTING

Britain To Get More Radio Outlets

London, Feb. 26.

Britain's first low-power community or neighborhood radio stations may be on the air by the end of this year, following a World Administrative Radio Conference decision to extend the VHF waveband, which the British government is expected to approve in a few weeks.

But any proposal to finance Community Radio (CR) from public funds is certain to be opposed by both BBC, which operates 32 local radio stations, and the 48 indie stations, which depend on ad revenue and are themselves struggling for survival.

The Greater London Council has already earmarked £600,000 (\$654,000) for four CRs in the capital, including for minority ethnic groups. The federal government hopes other municipalities will follow suit. Alternative financing (via subscriptions, grants etc.), is also being pondered.

PETER KEMP

The figure printed below is taken from a paper recently published in the journal *Solar Physics*. The sunspot number for the next two cycles has been predicted using a "nonlinear oscillator model". The interesting result is that the upcoming solar cycle may be the lowest in the last 260 years. In addition, the next two solar cycle minima should be very low compared with the last two cycles. Both of these results could have interesting implications for radio propagation during the next 25 years. This type of model is still quite controversial but it will be interesting to see how well it reflects reality.

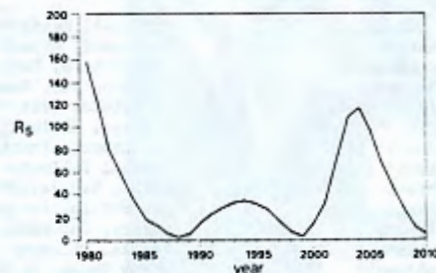


Fig. 5. Annual mean sunspot numbers, R_s , forecast with the nonlinear oscillator model. The forecast is averaged from a number of simulation runs with small parameter variations.

From: D.P. Gregg, A nonlinear solar cycle model with potential for forecasting on a decadal time scale, *Solar Physics*, 90, 185-194, 1984.

Richard Eckman
Boulder, CO

R&R Friday, March 8, 1985

FCC Asks Congress For \$50 Million In Station Fees

The FCC this week asked Congress to approve a schedule of "administrative fees" that would collect \$50 million a year from broadcasters and applicants. Most of the fees cover applications and facilities changes, but every commercial radio station would have to pay an annual fee ranging from \$150 to \$1250. If approved, the fees will probably go into effect sometime in 1986.

The proposal may provoke strong opposition from broadcast trade groups because — unlike past fee schedules accepted by the industry but never passed by Congress — this one contains no deregulatory benefits as a tradeoff for the fees.



Mark Fowler

A previous fee program operated by the Commission was struck down by the courts in the 1970s because it wasn't specifically authorized by Congress. As a result, the FCC was forced to refund \$50 million — \$33 million of it to radio stations — that it had collected improperly between 1970 and 1977.

So-called "cost of regulation" fees cleared the Senate with little or no comment in 1981 and again in 1983 as part of larger broadcast deregulation bills. Those levies never became law, however, because neither of the bills ever passed the House.

Fees Adjusted For Inflation

Under the FCC's new proposal, the fees would be adjusted at least every two years

Annual Fee — \$1250
Class B FMs
Class C FMs
AMs over 5 kw
Annual Fee — \$600
Class A FMs
AMs 1-5 kw
Annual Fee — \$200
AMs under 1 kw
Assignment & transfer
Application (sale) — \$600
New & major change CPs:
Application — \$375
Hearing charge — \$6000
Grant fee — triple annual fee

to reflect any change in the Consumer Price Index (CPI). The Commission would be authorized to impose a 25% late payment penalty, and to waive payments for an entire category if that would serve the public interest.

FCC Chairman Mark Fowler told a House Appropriations Subcommittee this week (3-5) that the Commission drew up and sub-

RADIO K A P B
 Avoyelles Broadcasting Corp.
 MARKSVILLE, LOUISIANA

mitted the new plan at the request of the Office of Management and Budget (OMB). Although revenues would depend on volume of applications, Fowler estimated the program could pay for 54% of the Commission's proposed fiscal year 1986 budget of \$92.3 million. An additional \$1.6 million a year and 45 positions would be needed to administer the program.

The FCC's 1986 budget request represents a cut of \$1.3 million over the current fiscal year (which ends September 30) and calls for a total 1033 staff positions. That's 17 more than this year, but 140 fewer than the agency's 1984 workforce. The Commission is also asking Congress for \$1.8 million to supplement staff pay for the current fiscal year.

DX TEST RECEPTION REPORTS

As of March 8, 1985

Raymond Arruda
Eric Bueneman
Thomas Conatser*
Ernest Cooper
G. Harley DeLeurere*
Karl Forth
Kermit Geary* (t)
Rob Gerardi* (t)
Bob Harrison
Pat Hartlage
Wayne Heinen
John Herman*
Henry Holbrook*
Tom Jasinski*
Chuck Kaufman
Tom Laskowski*
John Malicky*
Greg Myers
Timothy Noonan
Christos Rigas
Ken Romstadt*
David Schweikart
Charles Spellman
Jerry Starr* (t)
James Wallace*
Roger Winsor*

Acushnet, Massachusetts
Hazelwood, Missouri
Sevierville, Tennessee
Provincetown, Massachusetts
Hendricks, West Virginia
Chicago, Illinois
Walnutport, Pennsylvania
Benton, Illinois
Union, New Jersey
Louisville, Kentucky
Aurora, Colorado
Vinita, Oklahoma
Chevy Chase, Maryland
Shorewood, Illinois
Lebanon, Ohio
West Lafayette, Indiana
Pittsburgh, Pennsylvania
Richmond, Virginia
Milwaukee, Wisconsin
Chicago, Illinois
Toledo, Ohio
Fairfax, Virginia
Baltimore, Maryland
Youngstown, Ohio
Bellaire, Ohio
Champaign, Illinois

* reported reception of 4.0 watt signal - tone only
(t) supplied audio tape

N.B.: Jim DeVan wishes to thank these 26 DX'ers who reported reception of his DX Test of February 25th. Gold verification certificates and information packets have been sent to all reporters. It is amazing that the 4.0 watt PSA signal was heard at distances up to 700 miles against the 50-kilowatt signals of KXEL and WPTR.

AM Birth Control May End

Washington DC... The Commission has proposed repealing the so-called "AM birth control measures," which place restrictions on the filing of certain AM applications.

The rules, comprising Section 73.37e, excluded otherwise acceptable applications for new AM stations and major changes in existing AM stations, unless those stations would bring service to unserved or underserved areas.

Also, the rule allowed minority or public radio stations to file for certain clear channels, even if they did not meet otherwise applicable restrictions, the FCC said.

In the proposal, the Commission said it had developed the rule at a "much earlier stage... when it was necessary to preserve opportunities for stations in underserved areas of the country."

Taking into account the "maturity" of AM radio across the country, the FCC said it questioned the continued demand for additional AM service in the remaining eligible communities.

Commentors in the proceeding said the rules made it difficult for daytimers to apply for full-time AMs. NAB agreed that the Commission should eliminate the rule.

Kermit Geary
W.A.I.T.
24 HOURS A DAY
AM 82

Strong Signals

WZAL Reaches Fifteen States During Radio Test Broadcast

By Leslie Fritz
Neighbor Staff Writer

Radio enthusiasts from all over the country tuned in last month to a "test" broadcast on Henry County's WZAL radio, said station manager Jim DeVan.

WZAL's special broadcast was heard in cities as far away as Denver, Colo. and Provincetown, Mass., DeVan said.

He reported that the McDonough station received 28 written reports and three cassette tapes of the broadcast from listeners in 15 states.

"In February, our station was approached by the National Radio Club," DeVan said. "They asked us to operate for an hour or so between midnight and 6 a.m. so that club members whose hobby it is to 'DX' or listen for distant stations, could try to tune in WZAL."

DeVan explained that WZAL is licensed to operate as a daytime station, but that the Federal Communications Commission does allow test broadcasts from midnight to 6 a.m., provided that they are done noncommercially and on an irregular basis.

"We selected Feb. 25 as the date of the broadcast, and the time was publicized to National Radio Club members in their weekly newsletter," he said.

He continued, "I set my alarm for about 12:45—I only live about two and a half miles away—and went down to the station and played records for an hour and 15 minutes."

DeVan played easily recognizable music, including selections such as Frank Sinatra's "New York, New York," Bobby Darin's "Mack the Knife," and recent popular music, as well as "The Stars and Stripes Forever" and "Dixie."



Staff Photo by Henry Hall

JIM DEVAN LISTENS TO TAPES OF BROADCASTS SENT BY LISTENERS. WZAL TESTED A STRONG NIGHT SIGNAL AND RECEIVES NUMEROUS RESPONSES

"I wouldn't ordinarily play 'Dixie,'" said DeVan, "but the idea during one of these test broadcasts is to play easily identifiable songs."

Between song selections, DeVan played station identification tapes and "tone sweeps," a varying tone signal that sounds like a cross between a siren and the Emergency Broadcast System test.

"The tones seem to cut through all the interference, and some of the more distant DXers were only able to hear the tone," observed DeVan.

"For some reason, a woman's voice giving the station identification seems to cut through interference better than a man's voice does," he remarked.

"WZAL would like to be able to broadcast at night all the time, but because 1540 is a clear channel used by a 50,000 watt station in Iowa, we must leave the air at sunset,"

explained DeVan. "Even though the Iowa station is not heard well here, our being on the air could create interference since AM radio waves travel much farther at night than during the day," he noted.

"We daytimers have a national organization that is lobbying for extended hours and policy changes that would allow us to have nighttime service someday," said DeVan.

The station issued a special acknowledgement certificate to all those who wrote in response to the special broadcast.

DeVan explained that DXers collect certificates, letters and other memorabilia from the stations that they hear and to whom they write.

WZAL received letters from listeners in New Jersey, Wisconsin, Illinois, Massachusetts, Missouri, Virginia, Maryland and Indiana.

SHOE By Jeff MacNelly



STATION PROFILE

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Guest Editor - Douglas E. Orf



In 1984, WGAR, changed its broadcast format from "adult contemporary" to a country and western motif. That was what one of the many changes that has occurred in the sixty year existence of Ohio's twenty-first oldest radio station. Not only changes in format but call letters and owners has given WGAR a rich and varied history.

Among the most recent changes was the installation of the predominately solid state (it contains four tubes) Harris, MW 50 transmitter in 1978, and experimentation with a stereo exciter (STX-1 Harris) in 1979, both of which resulted in the first full stereo broadcast on October 1, 1982 from the Epcot Center at Disney World East.

The original permit to broadcast was granted in 1924 to the M.F. Broz Furniture, hardware and

STATION PROFILE WGAR 1220

Guest Editor - Douglas E. Orf

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The original permit to broadcast was granted in 1924 to the M.F. Broz Furniture, hardware and radio company located at 13918 Union Avenue, Cleveland, Ohio. The call letters were WDBK when it went on the air May 15, 1924 for an unbroken term of operation for one month to September of 1924.

The M.F. Broz Furniture, Hardware, and Radio Company was replaced as owners by Stanley J. Broz who moved the broadcast location to the Boltan Square Hotel on Carnegie Avenue in Cleveland from 1925 to 1927, WDBK transmitted from the Boltan Square Hotel using the slogan "Broadcasting from Cleveland".

In July of 1927, Mr. Stanley Broz sold his interest in the station to a Mr. W. F. Jones who operated an automobile agency in Akron, Ohio. The change-over required an interruption in transmission (September and October of 1927) while the stations location was transferred to the Akron Beacon Journal Building in Akron, Ohio. When broadcasting resumed in November of 1927 WDBK had become WFJC.

So it was to remain until September of 1930 when Mr. Jones sold out to a Mr. George A. Richards, owner of WGAR Broadcasting Company. Under Mr. Jones' proprietorship, WFJC had its wattage increased from 250 to 500 watts.

On December 15th, 1930, WFJC was returned to Cleveland airwaves under its new identification of WGAR (for its owner, George A. Richards). Operating initially under the license granted WCSO, a station WFJC had to share broadcast time previously.

It was under the WCSO license that WGAR commenced broadcasting from the 14th floor of the Statler Hotel Building at 12th and Euclid Avenue, Cleveland. It has two 100 foot towers and counter-poise.

Adding to the equipment assembly was a Western Electric 6-B transmitter. Power remained at 500 watts but the new transmitter was capable of one kilowatt. This was in 1931. Changes came rather rapidly after that. Seven months later in August of 1931, the station was again relocated to Harvard Avenue, Cuyahoga Heights, Ohio, with two new towers and "T" type antenna. In April of the following year, the "T" type antenna was replaced by a single wire vertical antenna. One year after the move back to Cleveland, in December of 1932, the wattage was doubled to 1000 watts. By December of 1935, the occasion of its fifth anniversary in operation, WGAR was affiliated nationally with NBC Blue Network and had acquired a new 385 foot Truscon vertical radiating antenna.

By 1936, WGAR had co-affiliated with the Mutual Broadcasting Company (later to drop them both). On September 26, 1937 WGAR affiliated with the Columbia Broadcasting System. In 1938 they raised the daytime power to 5000 watts and the nighttime power to 1000 watts. Concurrent with their power increase the station installed a Truscon directional antenna system. The towers were 485 and 150 feet respectively.

the war years and the years immediately thereafter saw even more growth and change. In 1941 the frequency changed from 1480 to 1450 kilocycles to eventually become 1220 kc. In 1944. On July 4, 1977 the wattage was increased to 50,000 watts.

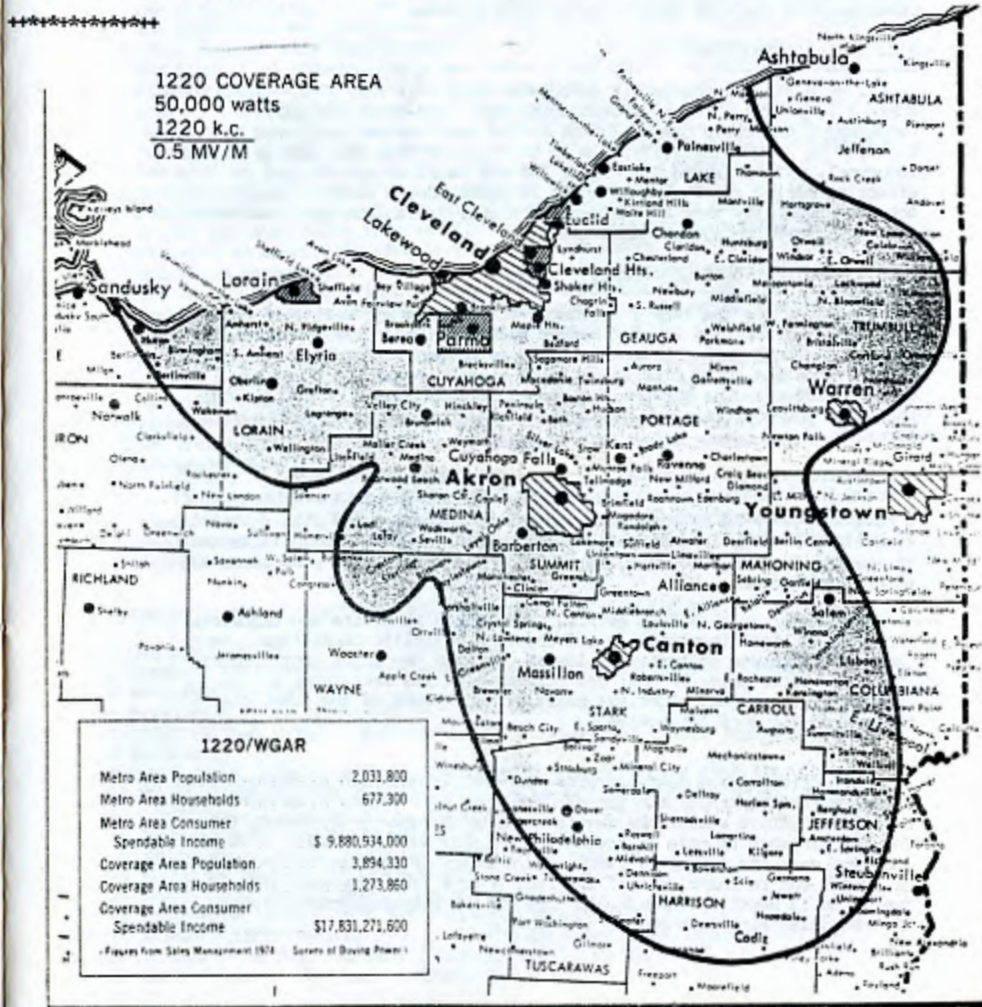
The overseer of all of these changes, the owner, Mr. George Richards died in 1951. Three years later, WGAR was purchased by the Nationwide Insurance Company for a reported \$1,700,000. The new owners (under a subsidiary corporation known as Peoples Broadcasting Company) operated

the station with relatively little change from 1954 to 1962.

In 1962 WGAR terminated its affiliation with CBS after nearly twenty five years. After a brief fling with NBC, it signed on with ABC in 1965. In 1970, the entire operation, both the studio and transmitter were combined at Broadway Heights, Ohio. Aside from the studio building, here is located the station's five tower array. From the base of each of the 200 foot towers, in the shape of a rhumboid, extends a group system of 120 wires, each 300 feet long, buried a foot below the surface. The entire ground system contains 34 miles of copper wire.

It had characterized itself as the "oldies" music station, WGAR continued to operate under the same managers with the new name of Nationwide Communications Inc. As of 1983 it has maintained its relationship with ABC though now as its "country cousin".

Many many thanks to Robert Reymount - director of engineering at WGAR AM and FM for providing this information. And close friends James D. Thompson and D. Kirk Kidner, in helping in the preparation of this profile.



Mark Connelly -- WALTON DX Labs -- 29 JAN 1985

Often technical articles in the DX press mention a parameter known as "Q"; seldom is there any mathematical description of what this quantity is - the DXer reading the article usually does get the idea that Q has something to do with selectivity, be it of a receiver, a loop antenna, or of a preselector / tuner used on random length wires. Q is also mentioned with regards to coils: a coil with higher Q allows greater selectivity and gain when used in a tuned circuit than does a coil with low Q. "Q spoiling" is also mentioned, chiefly with regards to tuned circuits employed in phasing systems. This may confuse some - (why, after all, should we want to spoil Q? .. doesn't that reduce gain & selectivity?) Hopefully, when you finish this article and get a chance to run the BASIC program contained therein, some of these questions will be answered.

What is Q, anyway?

The letter Q, derived from Quality Factor, is applied to a parameter which describes the efficiency of a tuned LC (inductor / capacitor) tank circuit, an assemblage of several such circuits (as in a filter), or a single inductive element to be used in a tuned circuit. Capacitors use a similar loss-describing parameter (D, Dissipation Factor) but, as capacitors are generally several orders of magnitude less lossy than inductors in tank circuits used at frequencies below 30 MHz, their loss contributions won't be dealt with in this article.

Q of a single inductor

Q of a single inductor is calculated by $Q = (F * L) / (R * 159.15495)$, where F is in kHz, L is in microhenries (uH), and R is in ohms. Conversely, effective resistance of an inductor may be calculated by $R = (F * L) / (Q * 159.15495)$. A J. W. Miller # 9258-224 (220 uH molded inductor), with a listed Q of 55 at 790 kHz would therefore have an effective series resistance of about 20 ohms. Coils used for loop antennae generally have a considerably higher Q than the small molded inductors used in tuner bandwitches.

Q of a parallel-tuned LC circuit

The need for the tank Q parameter arises from the fact that components used in tuned circuits are not purely reactive (inductive or capacitive) - resistance (both series & parallel) may be present. Furthermore, loads imposed upon the tuned circuit may also possess resistive impedance characteristics. The greater the amount of loss caused by resistance, the lower the Q of the tank in question will be; tuning sharpness will decrease.

Resonance in an LC tuned circuit occurs at $F = (159154.95) / \sqrt{L * C}$ where F is in kHz, L is in microhenries (uH), and C is in picofarads (pF). A parallel-tuned LC circuit, such as a loop antenna tuned with a variable capacitor, if comprised of perfect components, should have infinite gain at the one frequency to which it is tuned and zero signal present at all other frequencies.

Of course, no such loop exists. Gain which is finite and bandwidth which is not infinitesimally small describe real-life conditions. Many factors contribute to resistive losses, but the two major contributors (at frequencies below 30 MHz) are effective series resistance of the inductive element and effective parallel resistance of the load. Note the use of the word "effective".

Effective series resistance of the coil in question is derived from actual DC resistance of the winding and from core losses - the latter part of this effective resistance may be somewhat frequency-dependent, but, for the purposes of this introductory article, we'll consider it to be constant over the frequency range of interest. Effective series resistance of a coil can be calculated if the coil Q at a frequency near that of operation is specified (as in the case of the previously-mentioned 220 uH Miller miniature molded inductor).

Effective parallel load resistance is the actual load resistance in the case of a high-impedance load such as a FET amp. input directly fed from the "tank high" and "tank low" (e. g. ground) points or a multiplied-up value of the load's resistance if the load is loosely-coupled to the tank by means of a tap on the tank coil, a link coil near the tank coil, a small-value coupling capacitor, or a large-value coupling inductor.

Q is a selectivity measurement which is defined as the ratio of the resonant frequency of a tuned circuit to the 3 dB bandwidth of that circuit. The RLQ (BASIC) program takes as operator input the effective shunt (parallel) resistance contributed by the load, the effective series resistance of the coil, the value of the inductor (in uH), and either the frequency or the value of the capacitor. Output generated includes a swept-frequency table giving the magnitude of impedance in ohms (to which signal voltage is proportional), ratio of complex to resistive impedance, required tuning capacitance at each frequency given, and phase shift from the zero-degree reference phase at resonance. Other output information includes 3 dB bandwidth, phase shift caused by a 5 pF shift in tuning capacitance from resonance (an important parameter for phasing unit design), resonant frequency shift caused by a 5 pF shift from resonance, and, of course, the Q for the circuit whose characteristics were inputted.

Output is in a write-to-diskfile format; the program may be modified for direct transferral to paper. Three sample output files are reproduced after the program listing. In each case, a very-high-Q inductance (such as would be used on a loop antenna) of 220 uH is used. The first file uses a 330K load impedance, such as one would have at the input of a FET "front end card": the tuning is very sharp and phase angle changes very rapidly with any shift in the tuning capacitance. The first file demonstrates a desirable situation for a loop antenna or wire tuner whose output is connected directly to a receiver or to a broadband amplifier ahead of a receiver; conversely, this case is undesirable for a tuner used in a phasing system because the change in phase angle per unit change in capacitance is so great that adjustment required to produce a null is exceedingly touchy and narrow-banded - nulling attempts are virtually useless. On the other hand, the only detriment to such high Q in a standalone active-loop is the possibility of the FET amp. going into oscillation. Reducing the gate-to-ground resistor to about 100K usually provides just enough Q-spoiling to stop undesired regeneration without wrecking havoc with gain & selectivity. The second and third files demonstrate (at 600 kHz and 1200 kHz respectively) the characteristics of the tank circuit of the first output file when loaded by a 15K Q-spoiling resistor. 15K has been established as a value which works well in phasing applications: it allows enough Q-spoiling to make null achievement manageable and null bandwidth sufficient without reducing signal level excessively and without reducing phase-shift-per-capacitance-shift to a point that not enough shift for nulls can be produced with modest variations in tuning capacitance.

The program and sample outputs which follow should help the loop, tuner, and phaser designer to simulate many tuned circuits without the need to build them first and without the need to make hours of exhaustive measurements.

(program listing) (DEC PDP-11 BASIC-PLUS-2 V2.2 - 000)

```
1 DIM G(10),FX(10)
2 STARS="*****"
3 P=3.1415927/K=180/P
4 D=(2*.5)/2\EL=E-.0001\EN=E+.0001
5 PRINT"PROGRAM TITLE = RLQ.B2S"\PRINT"Parallel R-L-C Tank Analyser"\PRINT
6 FL=0\FH=0
7 INPUT "DATA OUTPUT FILE TITLE";SS\OPEN SS FOR OUTPUT AS FILE #18
8 PRINT #1,STARS\PRINT #1\PRINT #1," This is file: ";SS\PRINT #1
9 INPUT "(min. = 25) shunt R, ohms";R1
10 IF R1<25 THEN PRINT"illegal value"\GO TO 14
11 INPUT "(max. = 500) series R of inductor, ohms";R2
12 IF R2>500 THEN PRINT"illegal value"\GO TO 18
13 INPUT "(min. = .1 / max. = 50000) L, uH";L
14 IF L>50000 OR L<.1 THEN PRINT"illegal value"\GO TO 20
15 ANSWER=0\INPUT "Resonant freq. in kHz if known (else enter 0)";ANSWER
16 IF ANSWER<>0 THEN C=25330/((ANSWER/1000)^2)*L\GO TO 25
17 INPUT "(min. = 10 / max. = 1000) C, pF";C
```



```

25 IF C<10 OR C>1000 THEN PRINT "Illegal value" GO TO 22
26 FOR I=1 TO 3
27 IF I=1 THEN C=C-5
28 IF I=2 THEN C=C+10 REM ORIGINAL C + 5
29 IF I=3 THEN C=C-5 REM ORIGINAL C
32 LA=L*1E-6 CA= C*1E-12
33 FR=1/((2000*P)*(LA*CA)^.5)
35 IF I=1 THEN XFH=FR
36 IF I=2 THEN XFL=FR
37 NEXT I
38 PRINT #1, " shunt R = ";R1;" ohms / coil R = ";R2;" ohms"
39 PRINT #1, " L = ";L;" uH / C = ";C;" pF"
40 PRINT #1, " Resonant Frequency = ";FR;" kHz"
41 F=FR/GOSUB 900/R=AL
42 F=XFL/GOSUB 600/XBL=B
44 F=XFH/GOSUB 600/XBH=B
50 SB=0/S=0
100 FOR N=1 TO 10
105 IF SB=0 THEN F=FR*(1-(((10-N)^2)/101.25))
110 IF SB=2 THEN F=FR*(1+(((N-1)^2)/20.25)+1)
120 GOSUB 600 REM MATH
160 G(N)=A/R\FX(N)=F
170 IF N=1 AND SB=2 THEN 300
180 IF S<0 THEN 210
185 POS= " #####.##      #####.##      ###      #####.0      #####.###"
190 PRINT #1
192 PRINT #1, "      F, kHz      MAG.2, ohms      MAG 2/R      CE,pF      PHASE, DEG"
200 PRINT #1, " _____"
210 S=1
250 PRINT #1% USING POS,F,A,A/R,CE,B
300 NEXT N
301 SB=SB+1
302 IF SB=1 THEN GOSUB 700/SB=SB+1
303 IF SB=2 THEN 100
304 IF SB=3 THEN GOSUB 800/GO TO 1000
500 REM >>>> Parallel Impedance SUBROUTINE <<<<<
510 US=(U1*U2)-(V1*V2)
520 VS=(V1*U2)+(V2*U1)
530 UU=U1+U2/VV=V1+V2
540 DE=(UU^2)+(VV^2)
550 IF DE=0 THEN DE=1E-9
560 U3=((US*UU)+(VS*VV))/DE
570 V3=((VS*UU)-(US*VV))/DE
580 RETURN
600 REM >>>> Math SUBROUTINE <<<<<
610 W=F*2000*P
615 U1=R1/V1=0
620 U2=0.0001/V2=-1/(W*CA)
625 GOSUB 500
630 U1=U3/V1=V3
635 U2=R2/V2=V*LA
638 GOSUB 500
640 IF U3=0 THEN U3=.0001 REM PREVENT DIVIDE-BY-ZERO ERROR
650 A=((U3^2)+(V3^2))^-.5 REM MAGNITUDE OF IMPEDANCE
670 B=(ATN(V3/U3))*K REM PHASE ANGLE IN DEGREES
675 CE=25330/((P/1000)^2)*L REM EQUIV. RESONATING C IN PF
690 RETURN
700 REM >>>> -3 dB Low Side Point SUBROUTINE <<<<<
710 FOR M=1 TO 9
715 IF G(1)>EH THEN GL=1/GO TO 797 ELSE GL=0
717 IF G(M)>EL AND G(M)<EH THEN FL=FX(M)/GO TO 795
720 IF G(M)<E AND G(M+1)>E THEN F1=FX(M)\F2=FX(M+1)/GO TO 730
725 NEXT M
730 F=(F1+F2)/2
740 GOSUB 600
750 IF A/R>EH THEN F2=F/GO TO 730
760 IF A/R<EL THEN F1=F/GO TO 730
770 FL=F
795 BL=B
797 RETURN
800 REM >>>> -3 dB High Side Point SUBROUTINE <<<<<
810 FOR M=1 TO 9
815 IF G(10)>EH THEN GH=1/GO TO 897 ELSE GH=0
817 IF G(M)>EL AND G(M)<EH THEN FH=FX(M)/GO TO 895

```

```

820 IF G(M)>E AND G(M+1)<E THEN F1=FX(M)\F2=FX(M+1)/GO TO 830
825 NEXT M
830 F=(F1+F2)/2
840 GOSUB 600
850 IF A/R>EH THEN F1=F/GO TO 830
860 IF A/R<EL THEN F2=F/GO TO 830
870 FH=F
895 BH=B
897 RETURN
900 REM >>>> Peakfind SUBROUTINE <<<<<
910 GOSUB 600
920 AL=A
930 F=F-.01/GOSUB 600 REM TEST FOR INCREASING MAG. 2 @ DECREASING F
940 IF A<AL THEN 990 REM NO SHIFT IN PEAK
945 AL=A
950 F=F-10/GOSUB 600 REM 10 kHz DOWNWARD INCREMENT
955 IF A>AL THEN AL=A/GO TO 950
960 F=F+.001/GOSUB 600 REM 'HOME IN' ON SOLUTION
965 IF A>AL THEN AL=A/GO TO 960
990 RETURN
999 REM ***** PROGRAM OUTPUT CONCLUSION *****
1000 BH=PH-FL/PRINT #1
1002 TMTS=" Average Phase Shift (+/- 5 pF from resonance) = "
1003 PRINT #1,TMTS;(XBH-XBL)/2;" deg"
1004 TMTS=" Avg.Res.Freq. Shift (+/- 5 pF from resonance) = "
1005 PRINT #1,TMTS;(XFH-XFL)/2;" kHz"
1006 PRINT #1
1007 IF GL=1 OR GH=1 THEN 1009
1008 PRINT #1, "      3 dB Bandwidth = ";BW;" kHz"
1009 IF GL=1 THEN 1011
1010 PRINT #1, "      Low Side -3 dB point = ";FL;" kHz";" Phase = ";BL;" deg"
1011 IF GH=1 THEN 1013
1012 PRINT #1, "      High Side -3 dB point = ";FH;" kHz";" Phase = ";BH;" deg"
1013 IF GL=1 OR GH=1 THEN 1020
1014 PRINT #1, "      Tank Circuit Q = ";FR/BW
1020 S=0/PRINT #1/PRINT #1,STARS\CLOSE #1%
1025 PRINT #1,INPUT"(1=YES) MORE CALCULATIONS";S
1030 IF S=1 THEN PRINT #1/PRINT #1/GO TO 7
1050 END

```

(end of program listing; output files follow) →

WMMW gets 24-hour license

By DON SCHILLER
Record-Journal-staff

After seven years of trying, Meriden's only radio station has received approval from the Federal Communications Commission to begin 24-hour-a-day broadcasting.

The go-ahead makes WMMW the first station in central Connecticut to broadcast around-the-clock, said Sandy St. Pierre, WMMW's news director.

It also permits the AM station to put its five new towers to full use, boosting power output from 1,600 watts to 2,500 watts and broadening its broadcast area to Middletown and the Connecticut shoreline, she explained.

St. Pierre said the AM station will begin broadcasting until midnight or 1 a.m. next Monday and will convert to a

24-hour schedule on April 11. WMMW goes on the air at 6 a.m. and signs off at sundown.

The station received preliminary approval for 24-hour broadcasting on Thursday, according to St. Pierre, who added that final approval will come "when all the paperwork is complete" and is virtually assured.

"That should be no problem at all," she said. "We could go on tomorrow if we really wanted to."

The news director said the expanded broadcast schedule has been in the works for seven years. Approval was held up by difficulties in tuning the station's five new 170-foot towers, located in the city's north end, and by the voluminous amount of paperwork that had to be filed with and processed by the FCC, she explained.

"We had a lot of trouble tuning the towers ... and getting the signals to go where they were supposed to go," she

explained. "We had to call in engineering consultants to straighten things out."

The switch to a continuous schedule will result in more news broadcasts. St. Pierre said the station plans news broadcasts in the early evening, and a news wrap-up at 11 p.m. each night.

The music format will not be changed; the station will continue to offer a mixture of Top 40 and "adult contemporary" selections, she explained.

St. Pierre said the station expects to hire as many as two additional disc jockeys to cover the late-night and early-morning shifts, and may also take on a new part-time news person.

The station now has a five-person news department.

In addition, the station expects to broadcast the entire New York Yankees schedule, St. Pierre said. With its current schedule, WMMW can only carry day games.

This is file: 06220330K.TXT

shunt R = 330000 ohms / coil R = 1 ohms
 L = 220 uH / C = 319.823 pF
 Resonant Frequency = 600.003 kHz

F, kHz	MAG. Z, ohms	MAG Z/R	CE, pF	PHASE, DEG
120.00	172.79	0.001	7995.5	89.610
220.74	352.90	0.002	2362.9	89.722
309.63	583.35	0.003	1200.9	89.716
386.67	914.13	0.004	770.1	89.658
451.85	1442.92	0.006	563.9	89.538
505.19	2398.93	0.011	451.1	89.302
546.67	4447.34	0.020	385.3	88.781
576.30	10274.10	0.046	346.7	87.287
594.08	41058.00	0.184	326.2	79.321
600.00	223006.00	1.000	319.8	-0.025
629.63	8593.74	0.039	290.4	-87.857
718.52	2287.99	0.010	223.0	-89.470
866.67	1102.70	0.005	153.3	-89.764
1074.08	673.47	0.003	99.8	-89.866
1340.75	464.11	0.002	64.0	-89.912
1666.68	343.04	0.002	41.4	-89.937
2051.86	265.21	0.001	27.3	-89.952
2496.31	211.57	0.001	18.5	-89.962
3000.02	172.79	0.001	12.8	-89.969

Average Phase Shift (+/- 5 pF from resonance) = 76.6183 deg
 Avg.Res.Freq. Shift (+/- 5 pF from resonance) = 4.6908 kHz

3 dB Bandwidth = 2.23169 kHz
 Low Side -3 dB point = 598.889 kHz Phase = 44.9352 deg
 High Side -3 dB point = 601.121 kHz Phase = -45.0722 deg
 Tank Circuit Q = 268.856

This is file: 0622015K.TXT

shunt R = 15000 ohms / coil R = 1 ohms
 L = 220 uH / C = 319.823 pF
 Resonant Frequency = 600.003 kHz

F, kHz	MAG. Z, ohms	MAG Z/R	CE, pF	PHASE, DEG
120.00	172.77	0.012	7995.5	88.980
220.74	352.77	0.024	2362.9	88.435
309.63	582.84	0.040	1200.9	87.591
386.67	912.28	0.062	770.1	86.330
451.85	1435.02	0.098	563.9	84.295
505.19	2367.16	0.161	451.1	80.638
546.67	4255.63	0.290	385.3	73.073
576.30	8418.71	0.573	346.7	54.934
594.08	13844.60	0.943	326.2	19.351
600.00	14679.80	1.000	319.8	-0.002
629.63	7423.97	0.506	290.4	-59.686
718.52	2261.13	0.154	223.0	-81.197
866.67	1099.67	0.075	153.3	-85.752
1074.08	672.79	0.046	99.8	-87.412
1340.75	463.88	0.032	64.0	-88.220
1666.68	342.95	0.023	41.4	-88.606
2051.86	265.16	0.018	27.3	-88.985
2496.31	211.55	0.014	18.5	-89.191
3000.02	172.78	0.012	12.8	-89.339

Average Phase Shift (+/- 5 pF from resonance) = 15.4684 deg
 Avg.Res.Freq. Shift (+/- 5 pF from resonance) = 4.6908 kHz

3 dB Bandwidth = 33.8992 kHz
 Low Side -3 dB point = 583.314 kHz Phase = 44.9282 deg
 High Side -3 dB point = 617.213 kHz Phase = -45.068 deg
 Tank Circuit Q = 17.6996

This is file: 1222015K.TXT

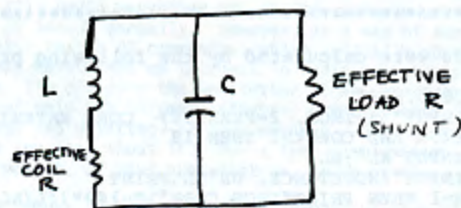
shunt R = 15000 ohms / coil R = 1 ohms
 L = 220 uH / C = 79.9558 pF
 Resonant Frequency = 1200.01 kHz

F, kHz	MAG. Z, ohms	MAG Z/R	CE, pF	PHASE, DEG
240.00	345.46	0.023	1998.9	88.500
441.48	704.95	0.047	590.7	87.198
619.26	1163.06	0.078	300.2	85.462
773.34	1814.51	0.122	192.5	82.960
903.71	2832.97	0.190	141.0	79.008
1010.38	4566.82	0.306	112.8	72.134
1093.34	7638.92	0.512	96.3	59.162
1152.60	12073.40	0.809	86.7	35.938
1188.16	14684.90	0.984	81.6	10.121
1200.01	14918.70	1.000	80.0	-0.001
1259.27	11273.00	0.756	72.6	-40.952
1437.05	4375.59	0.293	55.8	-72.973
1733.34	2181.03	0.146	38.3	-81.614
2148.16	1341.53	0.090	25.0	-84.860
2681.50	926.44	0.062	16.0	-86.455
3333.35	685.35	0.046	10.4	-87.379
4103.73	530.08	0.036	6.8	-87.974
4992.62	422.97	0.028	4.6	-88.384
6000.04	345.48	0.023	3.2	-88.680

Average Phase Shift (+/- 5 pF from resonance) = 29.3848 deg
 Avg.Res.Freq. Shift (+/- 5 pF from resonance) = 37.613 kHz

3 dB Bandwidth = 133.418 kHz
 Low Side -3 dB point = 1135.18 kHz Phase = 44.9662 deg
 High Side -3 dB point = 1268.6 kHz Phase = -45.0271 deg
 Tank Circuit Q = 8.99434

CIRCUIT MODEL



PT-114-72 u=2000 AL = 1270 mH / 1000T \$1.70
(use for 100 - 500 kHz inductors)

L (uH)	Turns
10000	89
4700	60
2200	41
1000	28
470	19
220	13

T-106-1 u=20 AL = 325 uH / 100T \$1.65
(use for 475 - 1100 kHz inductors)

L (uH)	Turns
470	120
220	82
100	55
47	38

T-106-2 u=10 AL = 135 uH / 100T \$1.65
(use for 1100 - 3500 kHz inductors)

L (uH)	Turns
100	86
47	59
22	40
10	27

T-50-6 u=8 AL = 40 uH / 100T \$0.60
(use for 3000 - 7500 kHz inductors)

L (uH)	Turns
22	74
10	50
4.7	34
2.2	23

FT-82-77 u=2000 AL = 1060 mH / 1000T \$0.90
(use for 100 - 2500 kHz transformers)

FT-82-43 u=850 AL = 557 mH / 1000T \$0.90
(use for 2000 - 7500 kHz transformers)

Inductances were calculated by the following program:

```

5 PRINT"COIL.B2S"
10 PRINT"INPUT*(1=IRON, 2=FERRITE) CORE MATERIAL";CORE
20 IF CORE<>1 AND CORE<>2 THEN 10
30 PRINT"INPUT"AL";AL
40 PRINT"INPUT"INDUCTANCE, UH";L\PRINT
50 IF CORE=1 THEN PRINT"IRON CORE" T=100*((L/AL)^.5)\GO TO 100
60 IF CORE=2 THEN PRINT" FERRITE CORE" T=1000*((L/(1000*AL))^.5)
100 PRINT "AL = ";AL; " * L = ";L; " UH * # TURNS = ";T
110 Q=0\PRINT"INPUT"(SAME CORE, NEW L) (1=YES) RUN AGAIN";Q
120 IF Q=1 THEN 40
200 END
    
```



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*Sales Rep
Mike Paschetti*

THE M STREET JOURNAL

Dear DXers,

MSJ is a new, weekly newsletter containing radio station format news, FCC and CRTC applications and actions, construction permit activity, and other news not previously available in an inexpensive radio trade publication. In May, I'll begin marketing MSJ to the radio industry at a cost of \$45.00 annually. However, as a way of saying "thanks" to the DX community, which initially sparked and has maintained my interest in radio over the past 10 years, I'm offering the newsletter at an introductory rate of only \$25.00/year--slightly under my cost for postage and printing--to club members. Just mention where you read about it! For a free sample issue, more information, or your subscription, write us at:

The M Street Journal, P. O. Box 540381, Houston TX 77254

73,
Peter A. Nolan, Publisher
The M Street Journal

DUSTY DIALS

Tom Farmerie, 62 Sunrise Ave., Grafton, MA 01519

A Look at the History of Radio and DX

This edition of DUSTY DIALS will take a break in the BCB DX memoirs of Ray Lewis, and feature some old QSLs and photos.

The first two QSLs are a natural pairing. The WKAT QSL was quite sought after in its day, and the subject of a Pat Reilly quip. The CKKO QSL is simply stunning, with colors of a violet and midnight blue. This 100 watt Vancouver station was not an overly difficult catch before the war, and this was one of two QSLs received by the late Dick Daneker from a location near Philadelphia.



1500-120



The next page features some photos from the 1937 - 1938 era, and all four were NRC members, and in fact, three of them still are, with Bob Botzum being the exception as he passed on over a decade ago. It has been my pleasure to meet Howard, Carroll, and Pete, all three are living treasures of our club's illustrious heritage. These photos were from a set produced by the old NNRC. Many of those in the set were, and some still are, members of NRC. A few others will be featured some time soon, including people like "Pop" Jenkins, who was born in 1874, and the enigmatic Nancy Lee "Nite Rider" Saxton, an NRC member of the 1930s.

It has been over a year since we lost Carleton Lord. He gave me a copy of this self-caricature that he drew for KELLER'S RADIO LOG in the early 1940s, with the remark "... I never could draw hands!".



Count De Veries Whistles Merrily At The Europeans Roll In.

When I was putting together the 50th Anniversary Book, Carleton was very displeased with the photo that I took at the 1982 New Jersey convention. Well, it was the best of the two photos I took of Carleton, ERC, RHC, and Pete Clarius, and it was included as a historic meeting of four NRC greats.

The photo that follows was taken at the summer 1937 meeting of NNRC members. Front row left, the handsome individual is none other than Carleton Lord.



Prominent NNRC Officials Leaving Executive Committee Meeting



Another Lord cartoon is at the left. A forerunner of NRC's Captain Glotz:



Carroll H. Weyrich
"Baltimore Snoozer"



Peter A. Clarius
"Pete"

Member
Newark News Radio Club



Howard G. Kemp
"Brass City Night Owl"

Member
Newark News Radio Club



Robert W. "Bob" Botzum
Reading's Nite Owl DXer



These two XEFW QSLs are for a March 1949 DX program. Wonder if there were more than two versions of the card, and where the young lady is today?



This is a photo taken at the 1939 Erie Pa. convention, maybe the only surviving copy of the photo. Joe Becker is on top, Stone, Reilly and Edge plainly in front row.



THE MODESTO BEE
16 MARCH 1935

KTRB goes to 50,000 watts

Modesto AM radio station KTRB recently received authorization to increase its broadcast power from 10,000 watts to 50,000 watts.

The new power level is the maximum allowed for any AM standard band broadcast station in the United States.

Pete Pappas, chief executive officer of KTRB, said the new improved signal will be heard from Redding to Bakersfield, the Bay area, the central Sierra and parts of the Monterey Peninsula.

The station plans to soon begin construction of a fifth transmitting tower at its site on Claribel Road. Full power operation is scheduled by late summer.

Modesto, Ca.
890 kds
via M. Hardester in
(sob) Modesto.

Bridgeport's WNAB to be sold

BRIDGEPORT (UPI) — The owner of a New Jersey radio station will purchase WNAB-AM radio in Bridgeport in a deal that will free the current owner of more than \$1 million in debt.

The sale of the station to Stamford native Jonathan Hoffman was approved this week by a U.S. Bankruptcy Court judge. Hoffman will pay \$545,000 for the assets of WNAB and the license to broadcast on the 1450 frequency.

WNAB has operated under Chapter 11 since May 1983 and the transaction still must be approved by the Federal Communications Commission.

Hoffman, whose family once owned Hoffman Fuel Co. and real estate business, owns WMJY-FM in Long Branch, N.J.

The sale will free the current station owner, Harry W. Lawson, of the sta-

tion's \$1.3 million in debts.

Lawson will not receive any of the \$545,000 purchase price, which instead will be paid to the station's two largest creditors. Lawson paid about \$700,000 for the station in 1982.

Late last year, it appeared WNAB would be sold to Nutmeg Financial Services Inc. of Norwalk under a similar arrangement with Lawson and his creditors.

But Lawson's attorneys said Wednesday that several other offers were made for the station, and Hoffman's was accepted Tuesday by Judge Alan H.W. Shift.

WNAB and its parent company, Lawson Broadcasting Co., owe more than \$511,000 to Equico Capital Corp., the minority business financing division of Equitable Life Assurance Society.

Michigan Record-Journal 15 MARCH 85

Mike Hardester
401 Birchwood Court
Modesto, CA. 95350

Note: Day pattern is virtually north/south
Night pattern is east/west

Xmtr site is about 5 miles from my QTH. I can see it now: "Serving the Central Valley on 800, 1720, 2580, 3440, 4300, 5160, 6020, 6880, 7740, 8600, 9460, 10320, 11180, 12040, 12900, 13760, 14620, 15480, 16340, 17200, 18060, 18920, 19780, 20640, 21500 kilohertz and all points north, this is the Country Voice of the Great Central Valley: K-T-R-B, Modesto, California, the United States of America. The following program is in Nepalese for our listeners in Kathmandu, Yo Radio K T R B Ho."

The underlined freqs are regularly hrd harmonics. Aside from over-modulation, a "clean" signal.

- 1044t MOROCCO 3/11 0315 bits of talk and mx, dogged by WHN and WBZ slop. (Connelly)
- 1070 COLOMBIA R. Santa Fe 3/15 0325 Banco de Colombia ads, RSF's usual late-evening show of Argentine tangos. So beware--tangos on 1070 don't necessarily mean LR1 R. El Mundo. Former SW // 4965 has been inactive for months. Dominating KNX. (Wood)
- 1134 INDIA Calcutta 3/13 1700 Indian vocals w/squeezebox type accompaniment. Very good on the Buenos Aires beamed Beverage whose back beam hits Calcutta, and only South Asian at the time. (Wood)
- 1161 IRAQ jammer 3/18 1610 usual bubbling sound on this freq where Abadan, an Iranian port near the Iraqi border, is listed. (Wood)
- 1180 CHILE Santiago R. Portales CB118 3.24 0430 s/off on a local Sunday; interval signal several times. S/off time may vary from day to day, or this may be regular Sunday s/off. (Wood)
- 1180 COLOMBIA Manizales Caracol 3/14 0500 typical Caracol news shows with check-ins from different cities, mention of "Caracol Puerto Carreno" and other affiliates. Later into tangos, a late-night favorite in Colombia. (Wood) But not the biggest late-night favorite, hi--Chuck
- 1198 IRAQ don't count jammers as loggings and 100% ID is hardly possible, but the bubbling sound of an Iraqi jammer is unmistakable and was atop an unid JD here 3/13 1655. (Wood)
- 1200 BRAZIL Radio Cultura ZYK520 3/27 0457 PP nx of President Elect's illness, 0500 complete formal ID including all calls, all frequencies and mailing address, into light mx. Topping WOAI much of the time, Brazil #14. (Wood)
- 1200 VENEZUELA Radio Tiempo YVOZ Caracas SS woman w/canciones de amor y baladas, man with short talk between songs, woman intros; mx continues past 0530 3/12, fair. (Frodge)
- 1200 PERU R. Tawantinsuyo OAX70 0810-0840 bilingual morning show in SS/Quechua, "Songs and Legends of my Land". Time checks between each record, full ID by female 0830. Fairly clear thru WOAI; after WOAI s/off 0831 only another Latin, probably Cuba. This is the unid I had mixed w/Arequipa on 3/14, so my 2nd Preuvian on 1200 and total #9 from Peru. (Wood)
- 1200 PERU R. Radial Andina 3/14 0915 morning show, amny ID's, mentions of Departamento de Arequipa, cerveza (beer) ads, time checks, one ID was simply "Radio Andina". Strong over WOAI, listed 10 kw seems correct. (Wood)
- 1200 PERU unid a second Peruvian heard over/under Arequipa when R. Radial began to weaken 3/14 0930, mentioning Depto. de Ayacucho, nx and furniture store ads. R. Tawantinsuyo, Cusco is the closest to Ayacucho reported on 1200 (nominal 1190). Will keep checking. (Wood)
- 1224 IRAN/IRAQ Abadan 3/13 VoIRI had AA talk on "Qur'an al Karim" (literally the Noble Qur'an) with typical Iraqi bubbling jammer 1659. (Wood)
- 1233 THAILAND unid 1620 Thai talk heard; 3 stns listed including 2 at 10 kw, all on different networks; no // observed. (Wood)
- 1251t LIBYA 3/12 0522 big het against 1250 domestics. (Connelly)
- 1260 BRAZIL Sao Paulo Radio Mulher 3/13 0513-0600 DJ show, phone interviews, ads for a slimming aid, sambas and tropical mx; voice and sung ID's as Radio Mulher. Except for possibly the slimming ad, didn't seem particularly feminine, despite its name. I've heard a Brazilian with canned evangelical pgms here, a format so different I think it is a different station. Brazil #12 and Brazil may soon overtake Colombia as #1 S. American country here. Good, a little KGL. (Wood)
- 1270 CUBA Camaguey R. Reloj CMHD 3/18 0355 second ticks and SS nx, o/u KHDI. Cuba also dominant on 1360 then. (Wood)
- 1296 ENGLAND Drfordness BBC European Service 3/15 0515 ending Polish and going into Czech. Fair, not enough to report. Country #69 and my lowest frequency Euro catch. (Wood)
- 1305 SENEGAL Dakar Senegal-Inter 3/16 0700 FF nx quite readable, woman newscaster, // also heard on 765. Africa #5 and my first African country. w/more than one stn heard. (Wood)
- 1314 NORWAY Kvitsoy 3/13 0455 10 note guitar or similar stringed IS to 0500 s/on, Norwegian ID, into nx, quite good and heard on 2 different Beverages but not the third. My second logging of this one, also tentative 3/12. This home service IS is not the same as the external service IS, also heard over 1314. (Wood)
- 1332 IRAQ another jammer here 3/13 1655; JOSF under. (Wood)
- 1335 ECUADOR Machala R. Nacional El Oro 3/13 0800 news, 0805 sports, into Ecuadorian mx, many ID's as Radio El Oro and Radio Nacional El Oro; Machala #3 here. (Wood)
- 1368 ITALY synchronized net 3/16 0515 classical violin, II anncts, good. (Wood)
- 1395 INDIA Bikaner North Regional Service 3/16 sitar mx, vocal duets, //

- 1404 FRANCE synchros 3/15 0508 pleased to hear an ID actually mentioning the country name--something quite rare among European state broadcasters; AA ID as "Radio Faranga" (= France); Muslim blessing and into AA talk on Islam in standard AA; later North African mx; // Nice 1557. Good, France #2 here. (Wood)
- 1404 GUINEA Conakry 3/16 0555 open carrier, 0558 IS on stringed instrument, 0600 s/on. A steady S9 here. (Wood)
- 1410 MEXICO Los Mochis XECF 3/13 0559 s/off after full s/off text specifying 1000 watts and choral "Mexicanos al Grito de Guerra". #2 Los Mochis here; clear, little KERN. (Wood)
- 1440 LUXEMBOURG Marnach 3/12 0520 GG talk bouncing in and out of the co-channel domestic pile. On this channel a TRF is as good as an R71A or R390A. (Connelly)
- 1440 MEXICO Villa Constitucion B)C) Sur, XEVS0 0600 ID simply as "XEVS0", time tone, time check in MST, into mixed nortena and dance mx. Good, clear signal. All available sources show a night power of just 150 watts for this. Reported, asking if such power was in use then. If so, would be my lowest powered catch from here. Note that B)C) Sur is on MST whereas B)C) Norte is on PST, 3/17. (Wood) Hope it is 150 watts as that would be a real thrill--Chuck
- 1460 CHILE Santiago R. Yungay CB146 3/17 0534 briefly atop w/promo and call letter ID, romantic mx then lost. (Wood)
- 1467 MONACO Monte Carlo TWR 3/15 0505 GG sermon, perfectly readable, solid S7 on the R1000's S meter, 0525 FF ID, light piano mx, 0530 into other lang, unid because fading by then. This is the loudest European lately, excelling DW Malta-1557. (Wood) 3/12 0511 absolutely local like!! with GG talk by man, then religious choir mx. Loudest TA tonight. (Connelly)
- 1521 SAUDI ARABIA Duba 2/20 0315-0343 poor with deep fades and heavy DRM from WPTR-1520. Usual male chanting in AA followed by commentary in approximate 15 minute segments. Faded out into het by 0350. My first TA and country # 13. (Turner)
- 1557 FRANCE Nice R. France Culture with FF man and woman w/operatic vocal mx; much more tx till 0550 then variety mx; modern jazz after break at 0600; severe DRM from 1560 WQXR 0525 2/26 poor. (Frodge)
- 1557 NEW ZEALAND 2ZH 3/18 0717 time check "it's 7:17", light rock, relaying 2ZP. Earlier f/in now winter is approaching in NZ. 1557 is a very busy frequency here. (Wood)
- 1557 UNID (France or Malta) 3/12 0510 fragments of AA mx and talk. (Connelly)
- 1566 IRAN Bander Abbas 3/13 1705 AA religious talk; no jamming hrd this day but often heard. (Wood)
- 1566 SWITZERLAND 3/12 0543 brass band, 0545 GG talk, about 4th time heard here. (Wood)
- 1575t PORTUGAL 3/12 0506 rock mx in bad DKLM slop. (Connelly)
- 1580 MEXICO Hermosillo La Grande de Sonora XEDM 3/17 0545 well atop KDAY/KNIX, many ID's as "La Grande de Sonora", greeting listeners in B.C. Norte, nortena mx, electricity ads. (Wood)
- 1584 SPAIN 3/12 0504 SS nx w/pronounced fast SAH. (Connelly)
- 1593 WEST GERMANY Langenberg 3/12 0503 fair w/GG nx about new USSR leader Gorbachev. Some WUNR-1600 slop. (Connelly)

Notes/veries/corrections/leftovers/slurs and miscellaneous:
(Dave Schmidt's favorite section....)

Wood's veries:

- 670 ALASKA Dillingham KDLG attractive, specific black/white card showing Alaskan animals. Mgr Les Robinson says KDLG has had reports from ANZ, Japan and Scandinavia. Enclosed Alaska Public Radio Network station guide and NPR station list.
- 705 ST. VINCENT Kingstown R. St. Vincent partial data b/w card from Jeannette Duncan, manager. In government envelope with attractive stamps.
- 765 SENEGAL Dakar ORTS QSL card showing map of Africa on globe, tower and antennas, in light blue with full details, unsigned, in 5 weeks. Seems to replace former black card showing cora (stringed instrument) leaning against tree. My first African verie here.
- 830 BELIZE usual QSL card with date and freq; printed power changed to 10 kw and 834 to 830 KHz. Signed by A. Cheong, Chief Broadcasting Officer.
- 850 ALASKA Nome KICY specific letter and sked from Jim Brewer, Station Engineer in 6 weeks.
- 920 ALASKA Soldotna KSRM unreadable GM wrote "confirmed" at bottom of my report and returned. Included discount card and bumper sticker. (Wood)
- 920 ECUADOR Machala C.R.O., call not known, partial data letter explaining that their current 920 frequency replaced 915 and name C)R)O) replaced

Ondas Drenses-both still listed in WRTM 1985. Did not specify the dates of these changes but seem to be several years ago. Included magnificent dark blue and yellow silk pennant showing a monkey at the microphone. Pennant gives new name but old frequency suggesting that the two changes were not simultaneous. In 5 weeks by registered mail bearing five colorful stamps, largely stuck on top of each other. Signed by Jose Ugarte Aguilar, Gerente General.

- 930 URUGUAY Montevideo R. Monte Carlo CX20 formally worded, detailed letter from Gloria Gasperini on airmail weight letterhead. First South American verie here.
- 1250 ALASKA Homer KBBIspecific letter and info sheet from David L. Molvik, CE. Said had recently had a report from an Oahu DX'er (whom I recently met), also Australia, and a phony report from Italy. (Boo! Chuck)
- 1330 MEXICO Irapuato R. Variedades, XEBD pleasant letter and 4 stickers from Alejandro Martinez Duran, Subgerente in 3 weeks. Said they once received a report from the South Pacific Islands.
- 1610 ANGUILLA Caribbean Beacon partial data letter, flyer, mint stamp from Gareth L. Hodgk, SM.

Paul Ormandy of Oamaru has taken the trouble to drop me a note saying that he believes a possibility for the unid Latin on 1425 reported in IDX several times recently is TI.. R. Guapiles which he has heard recently. Thanks for that bit of info, Paul. Now in return, someone please help Paul with the unid Radio Relej on 710 with SS news and GMT-4 TC's.

Mark Connelly-Belmont, MA	TRF, digital readout
Marc DeLorenzo-Holliston, MA	HQ100, phased LW's
Harold Frodge-Midland, MI	DX302, 185' LW
Wayne Heinen-somewhere in CO	R390A, MWI loop
Richard Turner-Dartmouth, MA	RF2900
Fred Vobbe-somewhere in MI	???
Richard Wood-Hilo, HI	R1000, R71A, 3 Beverages

Is Cincy Radio For Real?

Local Radio Execs Launch Bogus Blurb Ploy To Prove This Point To TV Advertisers

By JERRY STEIN

Cincinnati, Feb. 26. A number of Cincinnati radio station execs, members of the Cincinnati Broadcasters Assn., have banded together to launch a bogus radio advertising campaign to make a point with buyers of tv ad time.

The broadcasters, who aren't going public with their identities, hired ad man Jerry Galvin of Galvin, Menderson, Maier and Press, to come up with a wild radio campaign that would be the basis of a subsequent product identity study. Galvin, who also hosts the syndicated "Talktalk" show from WVXU radio, developed the concept of "Plummet Mall," a subterranean shopping center that exists only in Galvin's mind.

The plan was for the CBS members to air a series of commercials for four weeks. The copy is so outrageous that few would take the ads seriously. One ad, for instance, stated that because the cold weather caused a shift in the earth's crust, Plummet Mall has been lost somewhere between Cincy and Lincoln, Neb.

The series of ads concluded this month. A research firm, hired by the CBA, now will make a study to see if the ads jarred the listening

public's attention. Because most Cincy radio stations aired the commercials for the phantom mall, the survey should point to a lofty recognition factor in the broadcast market.

Results are expected to be in by March. And if identity for Plummet Mall is as high as expected, the broadcasters will use the survey as a selling point to get advertisers to buy more radio time.

The Plummet Mall ruse is not the first commercial artifice to be used in Cincy. In 1973, WEBN began airing a gag ad for Tree Frog Beer, and the Schoenling Brewing Co. actually made an offer to bottle the stuff. WEBN made the point if it could sell a bogus beer, considering what it could do with a real product.

Schoenling bought the idea. The brewery gave WEBN an account to air commercials for Schoenling's Little Kings Cream Ale.

Galvin, who declined comment on the Plummet campaign, is an old hand at benign deceptions. His Sunday radio show takes a wild, imaginary subject as a premise and listeners are invited to call in to add imaginative contributions to what ever fantasy subject is being discussed.



Just what the doctor ordered!

Well-Aware

A timely discussion of good health habits and practices for the entire family.

Another healthy idea from Providence Hospital.

Monday - 1 to 2 p.m. - WCAR 1090 AM

WCAR TALK
1090 AM. INFORMATIVE LISTENING

VIA MAIL

Gerry Thomas

As has been widely proclaimed, the ICOM R70/R71 family of communications receivers is a potentially outstanding breed. A recurring complaint about these receivers, however, centers around ICOM's choice of filter in the passband tuning (PBT) circuit when receiving in the AM mode. The R70 (and I assume, the R71/A) uses a muRata CFW455HT ceramic filter in this mode, a relatively inexpensive filter with the following specs---6kHz at -6dB, 18kHz at -50dB and a maximum stopband attenuation of 35 dB. The last figure is of particular interest in that nearby signals of even moderate strength can find their way under the skirts of this filter and produce audible (occasionally intelligible) interference. This state of affairs is in stark contrast to the outstanding performance of the FL44/A, an optional (and expensive---\$159.95) filter available for the SSB PBT circuit.

The obvious solution to the PBT-AM problem is filter substitution. Unfortunately, space limitations are such that very few high quality filters are available which will fit and no quality filters (to my knowledge) have the same (strange) terminal lay-out as the stock CFW455HT. So, early attempts at correcting the PBT-AM problem revolved around mounting filters on the underside of the circuit board and bending filter leads to fit. This method, as well as the one whereby a filter was mounted nearby and connected to the solder points via heavily shielded cable, did not succeed because signal leakage at one point or other negated the improved specs of the more expensive filter. (Similar difficulties had been encountered in the past when trying to substitute high quality filters in certain brands of portables (i.e., Panasonic).) It became obvious that a more drastic solution was needed---a small, high quality filter would have to be found and the tracings on the circuit board reworked.

Finally, I did locate a ceramic filter of much higher quality than the stock filter, and of nearly identical size. Installation is not that difficult but is really not for the faint-hearted because new mounting holes must be drilled in the circuit board and copper tracings must be removed. Nonetheless, selectivity is improved and leakage is nil. In fact, I've modified my R70 so that the super FL44A can be used in the AM PBT mode and I can detect no difference in leakage between the FL44A and the substituted filter. Incidentally, the filter used in this mod is the muRata CFG455I with the following specs---4kHz at -6dB; 10kHz at -60dB; and a stopband attenuation of 70dB.

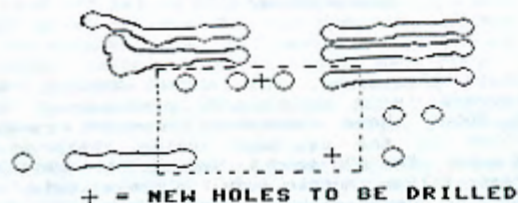
Before performing this mod, make sure that your warranty has expired because the procedure described below will undoubtedly terminate it.

What you will need--

- (1) muRata CFG455I filter
- (1) hand or power drill
- (1) #60 drill bit
- (1) soldering iron and solder
- (1) desoldering tool or wick
- (1) Phillips head screwdriver
- (1) razor blade or X-acto knife (a Dremel tool with a small grinding bit is much preferred, however).
- (1) length (<2") of hook-up wire

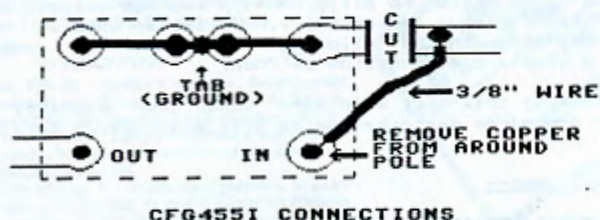
Procedure

1. Remove top cover of R70 as per manual instructions.
2. Locate on top of the circuit board the AM PBT filter. It's labeled F15 on the schematic and is at the left rear of the board.
3. Follow instructions in the manual for accessing the bottom of the main circuit board. These are the same instructions in the manual for installing the FL44 crystal filter in the SSB PBT circuit; but, obviously, you won't be installing an FL44 so don't remove the SSB filter, resistors, etc. You just want to get at the bottom of the circuit board.
4. Locate the solder points of the stock ceramic filter on the underside of the board (see illustration).



STOCK CERAMIC FILTER TRACINGS

5. Using your desoldering tool, remove the solder from the five (5) solder points and remove the filter from the board.
6. Now, take the new CFG4551 filter and bend the ground tab on the filter so that you can press the filter against the copper tracings on the bottom of the board and thereby create indentations to mark the places to drill the new mounting holes. You will have to drill two new holes (one for the input terminal and one to accommodate the ground tab) and you will have to enlarge the existing mounting holes (in the three remaining corners) to accommodate the slightly larger terminals of the new filter.
7. Drill/enlarge the holes as illustrated; drill from the copper tracing side of the board (to avoid ripping the tracings from the board).
8. Take your razor blade/X-acto knife or Dremel tool and carefully cut or grind away the circuit board coating that surrounds the hole which you drilled for the tab of the new filter (you want to get to bare copper).
9. Now remove the coating as well as a small circle of copper that surrounds the new hole you drilled for the input pole of the new filter. When you insert the new filter, you don't want this pole touching any of the surrounding copper.
10. Finally, cut or grind away the copper tracing as illustrated below.



CFG4551 CONNECTIONS

11. Now insert the CFG4551 on the component side of the board (the space formerly occupied by the stock filter) and press down firmly so that the new filter is seated snugly against the circuit board.
12. Fold the ground poles of the new filter toward each other so that they meet at the ground tab of the filter.
13. Bend the tab against the board tightly and solder the poles and tabs to each other and to the circuit board.
14. Take a 3/8" piece of ordinary 18-20 gauge hook-up wire (I tried shielded wire and ferrite beads with no discernable improvement over the hook-up wire) and solder one end to the pole marked 'IN' on the illustration.
15. Scrape away the plastic coating on the illustrated copper tracing and solder the other end of the 3/8" wire. Route the wire away from other solder points and press against the circuit board.
16. Replace the circuit board and top cover of the R70.

You have now completed the filter substitution mod.

Turn on the R70 and notice that the travel of the PBT knob is much tighter than before. That is, intelligibility on moderately strong

stations is lost at about the 9:00 and 3:00 o'clock positions (instead of 7:00 and 5:00, if at all). Most importantly, if you performed the mod correctly, you should be able to detect no difference in levels of audible splatter between the PBT 'on' and 'off' positions when tuned a few kHz away from a strong station.

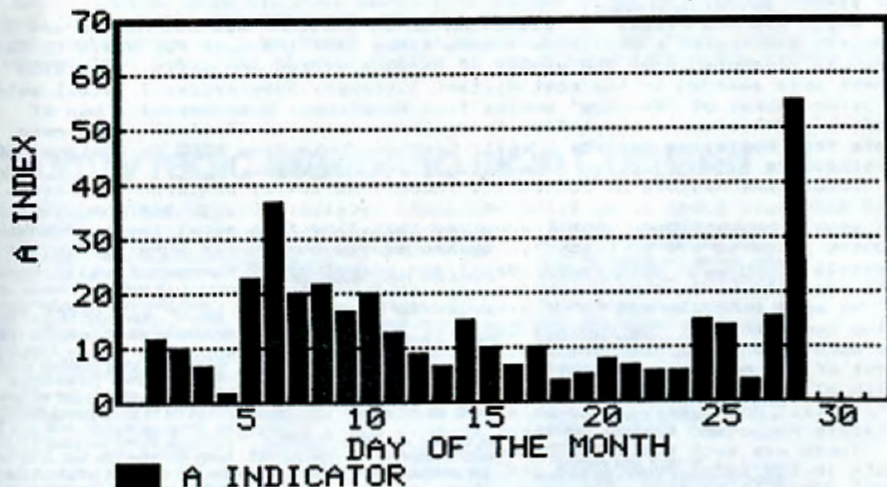
If you are interested in this mod but can't find the muRata CFG4551, I'll mail you one for \$19 (ppd) or I'll perform the mod for you for \$30 (plus return shipping). Please send inquiries or questions to: Gerry Thomas, 3635 Chastain Way, Pensacola, FL 32503.

Finally, I have not tried the preceding mod on the R71/A but I assume the procedure is identical. I would be very interested in hearing from anyone who tries the mod on these later models.
73's---GT

Afr GRAPH

Russ Edmunds, 753 Valley Road, Blue Bell, PA 19422

AFR GRAPH/FEBRUARY 1985



This graph shows the daily variations in Afr, the Fredericksburg (VA) index of geomagnetic activity in the earth's magnetic field. High values (above 20) indicate that medium wave signals in upper latitude paths will likely be absorbed, thus resulting in "auroral conditions", with signals from the South and from local stations predominating due to this absorption of the more northerly signals. Low values over a period of time indicate a likelihood of more receptions of the higher-latitude paths --- more, and more northerly TA's and TP's. Several days of low values following higher ones are needed for conditions to return to "normal", due to residual absorption. Long periods of extremely low values (6 or less) are necessary to raise the possibility of good high-latitude conditions throughout the entire MW band, although this is not the only requirement. For additional information on the use of the Afr and related indices as a DX tool, consult the NRC Reprints List for relevant articles. (The Reprint List can be obtained from the NRC Publication Center, whose address is located on the back cover). ---RJE

DUSTY DIALS

Tom Farmerie, 62 Sunrise Ave., Grafton, MA 01519

A Look at the History of Radio and DX

'WHEN I LISTENED IN', by S. Ray Lewis,
part four, edited for DX NEWS

Because of the increased interest in radio listening, I decided to form a listeners club in 1933. It was known as the TOLEDO RADIO CLUB, and still is in existence today as a radio amateur group. When the TRC was about seven years old, we had grown too large to meet in each other's homes, so a large one room clubhouse was built on the back of a lot owned by a club officer.

During these years of increased club activity, I also wrote a monthly newsletter, to keep everyone informed. I also continued to increase my own personal DX log, and spent an average of 15 hours each week at the dials of my receivers. Total verifications continued to grow, and at one time (1937) I almost achieved my goal of actually verifying all U.S.A. standard broadcast band stations! Only two U.S. stations eluded me, according to RADEX lists.

Over this span of years, I also had the pleasure of hearing and verifying many foreign stations. As a matter of fact, my record included the following: 105 Canadians, 61 Mexicans, 50 Cubans, 10 from U.S. territories including Alaska and Hawaii, 23 South Americans, 13 Central Americans, 14 from New Zealand and Australia, 3 Africans, 15 Europeans (from 13 countries), and 10 Asians (from Japan, Korea, and the Philippines). The balance of my grand total of 1307 verified stations were domestic.

A rare opportunity for DXer's to prove their expertise at dial twisting presented itself in 1936. RADEX announced it would sponsor a MYSTERY DX CONTEST. On two nights of a particular week, special DX programs from stations around the country would be broadcast. They were to be of one hour duration and aired during the morning hours from midnight to 6 a.m. Winners of various prizes would be determined by a mileage factor, using airline miles. The DXer setting the best score - with verified receptions - would win a magnificent Scott 27-tube chrome plated receiver, including a 4 tube Volume Range Expansion Unit. This extra unit was said to be the forerunner of stereo sound.

While winning prizes for listening to DX stations was not new to me, this contest was really a challenge! Many times over the past few years it had been my pleasure to be the winner of various prizes and gifts. Generally these were awarded to the most distant listener. Some prizes I recall were: a large basket of "Skookum" apples from Wenatchee, Washington; a box of uniquely delicious pinon toffee from Albuquerque, New Mexico; a ten peso note from Monterrey Mexico; a small birthday cake from KGVD in Montana; and a miniature bale of cotton from Baton Rouge Louisiana.

Before the Mystery DX Contest, I checked my aerial and ground systems, and made sure tubes in my Silver-Marshall receiver were in tip-top condition. It should be mentioned that I acquired this fine 1931 model receiver several months prior to the DX Contest. It had proved to be far superior to the Crosely Showbox in both power (gain) and selectivity. However, I still used the same old variometer as a wave trim in the antenna circuit!

My work schedule had to be arranged to permit me to be up all night on the two nights of the Mystery Contest, for which I was really primed! Well, to make a long story short, I won the contest and was soon the proud recipient of the magnificent Scott receiver. It was truly a sight to behold - with all four of its subchassis being chrome-plated. It was a real beauty! The retail cost was said to be about \$650.00. (Editor's note: a Dusenbers chassis was under \$7,000.00 then, so this was a hell of an EXPENSIVE radio).

There was much publicity connected with my winning the Mystery DX Contest, both in the local newspapers and in various radio magazines. I think that most DXers in my area came to our home to view the Scott Receiver. At least my family thought so! Congratulations from several well known DX clubs came in, and I recall hearing from the NRC, WNRC, Buffalo Evening News Radio Club, and the Chicago Daily News Radio Club. Shortly after winning the Mystery Contest it was my good fortune to also win a large colorful 12" World Globe with a 24 hour alarm clock built into the base. This complemented the Scott, which I had placed in an extra large juke box cabinet because of its size.

One might think that anything I did in radio, after winning the Scott, would be anticlimactic - but it definitely was not. However it did change my life style somewhat and also had some effect on the other members of my ever growing family. Many people I had not previously known came to see us, and new friendships were formed. Then too, membership in our club increased. But I could not help but reminisce now and then and think back to my first two homemade radios. Then I would marvel at the great progress which had been made in radio during the 16 years since 1920! And I was glad to have been a part of that progress.

In the late 1930's, the Toledo Radio Club was growing, but Amateur Radio was replacing DX listening as the focus.

A DXer might adopt a moniker, "nom de plume", like the amateurs. Mine was "The Lotus City DXer", simply because back in those days, Toledo was known as The Lotus City. It's now The Glass City. Joseph J. Becker Jr. was known well to the DXing fraternity as "The Hamilton Night Owl". A DXing minister from Toledo was known as the "DX Card Collector", for he sent only cards to stations, and requested that cards be sent as verifications. Quite a number of DXers from other cities, mainly in Ohio, visited me during the mid-to-late 1930s. I well recall with pleasure, visits from Joe Becker and Carleton Lord, then of Akron.

Taking into consideration all of the people I met during my DXing years, Becker and Lord were my closest friends and correspondents. Through our years of correspondence and visits, I truly believe that more radio information was learned from them than any of the others. About a decade ago, Carl Lord and I, together with our wives, met for an evening at a Holiday Inn in Ohio. The conversation eventually got around to the DX years, and we both agreed that one of the very best DXing times was way back in 1934, during the month of October.

On one particular morning it was like "Orient On The Air", from 04:30 to about 06:00 A.M. Japan, Taiwan, Indo China, The Phillipines, and Korea all had radio signals generously sprinkled over the entire spectrum of the broadcast band. Even the ANZAC countries "down under" (Australia and New Zealand) could be heard with amazing ease. Many other DXers got in on this real bonanza of stations that came in from the far East. When these stations verified my reception, most of their cards letters and pictures were really outstanding, and I was truly delighted to receive them!

- conclusion of part four -

The accounts of that particular morning in October 1934, with its far East opening, have been heard from other veteran DXers in addition to Ray. Ray is one of the few surviving DXers active in those days. Part five will conclude Ray's story, with an account of his participation in the WERS War Emergency Radio Service, which although not BCB oriented, is nevertheless quite interesting. Part five will also have some words from Ray to those of us in the National Radio Club today. Ray has also sent me some photocopies of some of his best verifications, which will run in future DUSTY DIALS.

I am in need of only six post Sept. 1942 issues of DX NEWS: vol. 33 no. 31; vol. 35 no. 10; vol. 36 no. 3, 20, 30; and vol. 38 no. 1. Can someone send me photocopies or loan them? I will gladly trade for photo copies of any issues back thru 1933 of your choice (I don't have 9/35-8/37, 9/39-8/42).

Country radio station to air in Cortland

By DIANE LANEY FITZPATRICK
Tribune Staff Writer

CORTLAND - When the sun comes up at 6:06 a.m. April 1, Cortland area radio listeners can tune to a new country station on their radio dials.

The city's first radio station, WLND, will go on the air on the first day of April.

Nancy Hoffman, sales manager for the family-owned Cortland Broadcasting Co. radio station, said WLND will begin broadcasting at 830 on the AM dial from sunrise to sunset, by April 1. If there are unseen delays, she said, the station will definitely go on the air during the first week of April.

The station will broadcast country and adult contemporary music, Hoffman said.

"It will be about 90 percent country music," Hoffman said. "We have a real good format."

The reconstruction of the tower, located on Phillips Rice Road, was completed Tuesday, Hoffman said. More equipment is being installed now at the studio and it is expected to be ready by April, Hoffman said.

The studio and offices are located at 3278 Elm Road, Cortland.

The Cortland Broadcasting Co. is jointly owned by Hoffman; her father, Glenn Barker; and her two sons, Chris and Tim Hoffman.

Barker, who had operated two

other radio stations before taking on this venture, will be general manager of the station.

The 830 kilohertz spot will have a strong signal in Cortland, northern Trumbull County and Mahoning County, but also will come in on radios as far away as East Liverpool to the south, Lake Erie to the north, Cleveland to the west and Mercer, Pa. to the east.

The 830 kilohertz spot was much sought after because of its strong signal.

Hoffman's family was granted the 830 frequency by the Federal Communications Commission after a four-year wait.

via Gayle Yeager

Last year, the Cortland Broadcasting Co.'s application was countered by an application for the same frequency by WOKG, a Warren station, now located at 1570 on the dial. The two broadcasters settled out of court and Cortland Broadcasting's application was approved.

Hoffman said the news and advertising content of the station will concentrate in the Cortland area, but also will include Mecca, Bristol, Johnston, Vernon, Kinsman and other northern Trumbull County communities.

Hoffman said most of the station staff has been hired. Family members plus several more disc jockeys and sales representatives will make up the full staff.

WLND will be the fourth radio station based in Trumbull County.

The Tribune Chronicle, Thursday, March 7, 1985 A9

RADIO KICY

Arctic Broadcasting Association
P. O. Box 820
Nome, Alaska 99762



WPE CALLBOOK PROJECT SOLICITS LISTINGS

For the first time ever an SWL Directory is being compiled for holders of WPE Short-Wave Monitor call signs. More than twenty-five years after the inception of the registration program by Popular Electronics magazine, the Great Circle Shortwave Society has undertaken the monumental task of researching and compiling lists from various sources, as many records are no longer available.

During a ten year period beginning around 1960 the now defunct magazine sponsored the WPE program under the leadership of columnist Hank Bennett WPE2FT/W2PNA. Some 40,000 calls were issued to SWLs the world over.

One of the fastest growing radio listening organizations around, GCSS already has a number of member volunteers working as Regional Editors in their respective call areas. They are listing the WPE call signs, names, and addresses (city and state only, current one preferred) to be published in this unique Directory.

Even if you had a WPE call that was later converted to a WDX prefix under Hank's current program (he is now WDX2FT, for example), we still want to include you in the call book. There is no charge for your listing. Just send your own along with any others you know of to: GCSS WPE DIRECTORY, Attn: Vern A. Weiss, WPE9GHF/WA9VLK, Box 874, Kankakee, IL 60901. This may be done with a QSL or post card, or by letter. If known, please include the date on your registration certificate.

Great Circle also has plans to offer exact reproductions of the original Short-Wave Monitor registration certificates. Information about this, or the GCSS awards program, the weekly SWL net conducted on ham radio by Larry Wheeler WPE9AVS/K9ZCH, and many other features of special interest to short-wave enthusiasts are published regularly in the club's newsletter which can be had free for a 20-cent stamp sent to the same address.

In order to make the WPE call book the most complete and accurate possible, please be sure to get your listings in to us. GCSS also hopes to be able to give credit in the publication itself to all sources who contribute to the project with call sign listings.

73

Paul W. Moratto
Paul W. Moratto WPE5AVL/KC5JK
WPE6 Regional Editor
Box 8824, Universal City Sta.
N. Hollywood, California 91608

WCAR TALK

1090 AM INFORMATIVE LISTENING

"Your Travel Connection"
with
Tom Schiavi

Thursday Mornings from 8:00 AM to
9:00 AM on WCAR Radio 1090 AM.

Featuring professionals in all phases
of the industry, vacation ideas, week-
end trips, and listener participation.

VIA JRS

RADIO STATION WJMS
630 KC

OFFICE MICHIGAN-WISCONSIN BROADCASTING CO., INC.
IRONWOOD, MICH. 49938

The opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the Editors, Publishers, or the National Radio Club, Inc., or its subsidiaries.
Times are local per Muse.

And good day again, as the weather warms up and BCB DX cools down. We're a little light on theme Musings (favorite personalities) this issue, but the great turnout of Musers more than makes up for that. Our next deadline (Apr. 20) will be for your "sound-offs", of which we have several on hand already; #27 (May 25) will be the antitheses to the gripes with praise for NRC- or DX-related topics; and #28 (June 29) will contain your comments about the proposed expansion of the BCB. And now ... on with it!

Morris Sorensen - 111 Town Line - Milton, ON L9T 2X1

February 19 was an interesting yet frustrating day for this DX'er. At 11:53 pm EST I noted SS t1k on 1584 kHz along with bets and traces of audio on 1557 and 1575. Previously I had been tuning the 160M (1.8 mhz) band on my DX-302 where I had heard east coast amateurs working Europe. Unfortunately 1584 faded completely around 0000 ID time and the others were too weak to even tell the language. Too bad, as it was the closest I've come to logging a TA from this location, even though they were relatively common for me up in Northern Manitoba. Oh, well. I have added some good domestic catches lately, including WFBC-1330 at 10:05 pm on 2-22; CBZ-970 at 9:02 pm on 2-24, WGBA-1550 at 5:56 pm on 2-27, and WJNB-1580 at 6:56 pm on 3-3 (rather late for them to be on, I thought). I was pleased to read a recent Musing from Hamilton's Dave Whatnough, whom I met at a CIDX convention back in the '70's. Dave mentioned that CFAR-590 in Flin Flon, Manitoba is rarely if ever reported. That was a semi-local for me when I lived in various Northern Manitoba locations between 1971-1980. They usually simulcast with CVAR-1240 in The Pas, Manitoba, and ID as "AR Radio". I'm heading up to Northern Manitoba (specifically, to the town of Leaf Rapids located about 600 highway miles NW of Winnipeg) later this week and will report any interesting radio observations to DX News. In case this makes it by March 16, I will just mention that as a teen-ager growing up in the '60's my favorite radio personalities were probably Cousin Bruce on WABC and "Jungle" Jay Nelson who did the morning show on CHUM. If I had to pick three favorites today, at least in the local area, I would give the nod to Rober Ashby of CHUM for his knowledge of the oldies (Love his Sunday morning oldies show), Ross Carlin of CKEY (formerly known as "Ramblin' Ross Carlin" on CFMW) who is also very knowledgeable, and Rocking Robin of CING (FM-106) Burlington who is unique and almost impossible to describe.

Paul Swearingen - P. O. Box 4812 - Panorama City, CA 91412

If you've been a little confused about the address juggling ... I'm still living at 7310 Ensign, at least for the time being, but am using the P. O. Box for business purposes, magazines, etc., as it takes a month or more to get a box out here, and should I decide to vacate to greener pastures I won't have to go through the usual address change hassle again. My favorite three radio personalities? I was in high school when I belatedly discovered rock and roll, and WLS's Art Roberts (where is he now?) became my favorite DJ ... a laid-back, "intelligent" announcer in an era of screamers. WDAP's Dan Henry and WHB's Johnny Dolan probably tie for second place ... Henry was doing the weather for Channel 4 and Dolan afternoons for KMBZ when I left the midwest a few years ago. And a little-known jock from the current era on KMRJ-96.9 Pittsburg, Bruce Elliot, with his pre-recorded drop-ins, I feel surpassed Rick Dees (KJIS-102.7/1150) in overall smoothness of delivery, although Dees is zanier than anyone I've ever listened to. If we include non-jocks ... give me Jack Benny any time. He was a true master of timing, which few jocks (weaned on the Drake-Chenault format) ever understand. 73.

Karl V. Jeter - 2115 Scarbrough Road - Stone Mountain, GA 30088

I finally got a chance, after all the overtime at work, family illnesses, and visits from relatives, to send in a Muse. Unfortunately, I missed the "theme" Musings, but if Paul doesn't mind, I'd like to relate a story that combines two of the most recent: former station employees and favorite veries (Sure ... I'm a sucker for a good story -pls). During my senior year in high school in NC, I began to DX seriously, and I sent a report to WLB-1100 in Carrollton, GA. I never heard back from them, and the following year I moved to Carrollton to start college at West Georgia. I also began a part-time job at that same station, and asked a couple of people if they remembered my reception report - none did. One night while at work I went into the room where the FM automation equip was, looking for something and noticed, on a high window sill, a piece of paper. Dragging it and a layer of dust down, I was shocked to find a piece of stationery, and the salutation, "Dear Mr. Jeter ...". The letter had been started, never finished, and forgotten! Sadly, that verie was lost again later by me, and I re-verified WLB-1100 a few years later in 1975 after moving to Atlanta. I would like to acknowledge some recent correspondence, including George Mulfinger for helping me on my UNID 1490, WQOK (should've known that one ...) and Jerry Starr for that same UNID as well as for correcting my gaffe on KESM-1030 ... must've been daydreaming when I wrote down 1140. Oh, well, thanks, guys! Also, a nice letter from Ernie Cooper, along with a tape of "Forward - March!!" He does a good job with his show - I suggested he go into syndication! DX lately has been sparse, but some nice stuff has been heard, especially after some maintenance down on the beverage "farm". On 3-12, much-wanted KSOO-1140 finally

bagged 1907-1920 with c&w mx, a promo for the new Oak Ridge Boys album to be premiered on KSOO, and a report on a high school basketball tournament in Rapid City. This was heard amazingly well, with no real interference. Earlier that same eve, WANG-1130 hrd at s/off 1859 with mention of 2500 watts. There was a real opening on 1140, as in addition to KSOO, also noted s/off from unkn KPWB at 1915 and KCKL at 1930. A phone tip from S. D. Warren in MS brought in a tentative reception on KUUY-870, heard at 2350 on 3-16 with c&w mx and a report from a high school basketball tournament game, with schools from Laramie and Sheridan mentioned. No ID's hard, but seems pretty likely to be KUUY. I'll have to keep trying (despite WXL) as I was never able to extract a verie from the old 1530 station there (nor I from Kansas -pls). Finally, on 3-18, KTXZ-1560 hrd with rock oldies, AP news, and the slogan "Austin's All-Star Rock and Roll Radio - is KTXZ", this 0243-0301. Reports are out to all just mentioned except KUUY; only a few veries in lately: WAKO-910, WKDQ-910, WJMW-770, and WSJP-1130. Oh, yes, also received nice letters recently from Pete Kemp and Bill Prater - thanks, guys! Time to go ... 73's.

Randy Seaver - 1154 Via Trieste - Chula Vista, CA 92011 (619) 422-3397

I thought I might share how I got started in DX'ing and some of my early DX experiences. In the summer of 1962, I met Randy Lee, whose brother was playing on my brother's Pony League team. He got me interested in DX'ing, and by early 1963 I was an NRC member. Initially, I used the family Zenith console (circa 1940) radio which was in the garage of the house next door in my father's workshop. I DX'ed sitting on a ladder with a blanket around me in order to be able to reach the controls. I DX'ed only on Friday nights since that was the night my dad went bowling, and he came home late. Very soon, the Zenith was moved to our living room where I had to wait until the TV was off to hear anything, due to the TVI. I had to use the Zenith speaker so I had to keep the volume down to avoid waking the rest of my family in the wee hours. My dad was not too keen on this new hobby of mine (partly because of my DX friends who came around!). That attitude change one early am in March, 1946, when he came in around 1 am and said, "What are you listening to, Seattle?" I turned the volume up just in time for him to hear the speaker say, "This is 3LO in Melbourne; the time is 6 o'clock". This surprised even me, since I was hoping for WABC on 770, and convinced him that what I was doing was at least semi-legitimate. I heard 8 or 10 DU's that AM and that was one of my best DX mornings ever. That summer I got my first job in engineering and saved enough money to buy an HQ-160 from Tom Colthurst, who was going away to college. With the HQ-160 and a 100-ft. longwire, I quickly became an avid foreign DX'er. In late 1964 I heard several Europeans and Senegal-764. BBC-1214 was heard one am until 1:15 am PST. Of course, I didn't have a tape recorder then! Through the two clubs, I started meeting and writing to other DX'ers. Gary Scrimgeour lived in La Jolla then, and, together with Larry Godwin and Art Peterson in the Bay area, the four of us started tape-sponding on a regular basis. This resulted in the "California DX Tape of 1965-66", which had the best of our DX over that DX season. Replaying that now makes me green with envy over the low noise levels and the clear channels. Unfortunately, those days are gone forever, but life goes on and the DX continues to roll in, but only if the radio is ON! Alas, that is way too infrequent these days. 73's de RJS.

Richard E. Wood, Ph. D. - Box 5074 - Hilo, HI 96720

About one-fourth of the reports I send to U. S. stations at addresses given in the NRC Domestic Log are returned to me as undeliverable. I also suspect that some of the stns from which I get no response did not have my reports delivered. Most of the stns I write to are not very obscure ones, but are at least medium-sized, the kinds of regional and even clear channels I mostly hear here in HI. So, without denigrating the fine volunteer work done by the Log editors, I have to suggest a thoroughgoing revamping of the station addresses column for the next issue, possibly a strict policy of no automatic reprinting of an address from the 7th Edition without independent confirmation of each address. Let me request current addresses for the following: KOLQ-920 NV, KLIF-1190 TX, WREN-1250 KS, and KYUL-1280 UT. I know other DX'ers have had similar problems with some of these, especially WREN. (The problem may be with the P. O.; I don't think WREN has moved from the QTH they were at when I visited them in 1974, trying to convince them that they wanted to hire me -pls) Think of our overseas DX friends in Finland, New Zealand, etc., many of whom actually try to report U. S. stns without a precise address, just using the city name. It may have worked in former times, but not now. I have to agree with Wally Wawro that something seems to have happened to the Latin on 540, which was XEWA San Luis Potosi. I don't hear it now, despite superb conditions here to Mexico lately which logged me two graveyarders on 3-8, XEEX-1400 R. Felicidad, Culiacán, Sin. (unlisted in WRTH 1984) and XEOW R. Variedades, Los Mochis, also in the state of Sinaloa on the central-western coast, on 1400 - my first Mexican on 1400 and only my third catch of 1440 where KRE is normally a powerhouse. I owe these two catches to increased vigilance on the graveyards, now that one of my favorite NRC features, Graveyard DX Achievements, is back. Thanks to Bill Hale for taking it over, and I hope he can unearth my past records, as I don't have them handy, though my past QSL's are here. Speaking of Mexico again, XELW R. Felicidad, Cd. Guzmán, Jal., 1510, sent a delightful verie letter and scheduled two sessions to greet me on the air. Word of the first reached me too late, but the second, sked for 3-9, has a chance of being heard, since they chose the time of my reception (sunset skip). Thanks to Jack Woods of OR for sending me Harold Beverage's original 1924 article, with important advice on building a star-shaped radial system simply stretched along the ground, as I could never dig

it into the lava field. I plan to do this, first on my South American beverage, then maybe on the others. Beverage's work is still relevant today; in reading it, remember that what he called "short wave" is what is now called "medium wave." Today's SW was unexplored back then. I agree with Mark Connelly's suggestion that abbreviations like EG English, FR French, be adopted by NRC, bringing it into line with NASWA and other leading SW clubs. Weather has been rainy lately ith a few nights of high noise, but mostly good cxs to all areas - Europe, MidEast, Africa, East Coast, and especially South America. Aloha.

Richard W. Turner - 286 Hixville Rd. - No. Dartmouth, MA 02747 (617) 996-2948

Much has happened since my last Muse, over a year ago ... I quit my job with Thom McAn in October and after two and a half months, I joined Hanover Shoes as assistant manager in their North Dartmouth Mall store. So, Ray Arruda, if you need shoes ... A sad note in October, also, as my grandfather passed away. He was a DX'er too and is still sorely missed (Our condolences to you and your family, Richard -pls) ... Had a great time at Ray Arruda's Thanksgiving GIG; thanks, Ray and Arlene ... My house got broken into on Washington's Birthday. Thank God they only took \$300 in cash and not my radios, hi ... WHUE-1150 has been off recently. They are supposed to come back on the air in late March with new call letters WMEK. Took advantage of their absence to log CHSJ and WCIC (?) with mention of CT ski report. Has WCNX changed calls? ... Local WBSM-1420 is being sold for \$2.1 million to a NY outfit ... Got a nice logging of WBLM-1240 PA on 2-22 at 5 am, no sign of WOCB ... Decided to change my logging procedures. From now on, any current domestic station that changes call letters, frequency or city of license will not count as a new station. More than one station per foreign country outside US and Canada also will not count as a new station. As such, totals are 197 stations from 12 countries, 29 states, and 6 Canadian provinces. All for now. 73's and best regards.

***Jesse James Is Now Selling Radio Tubes**

Gene Martin - 3303 E. Evans Avenue - Denver, CO 80210

I suspect there are a good many unregenerate old-timers out there, like me, who have eschewed the new state-of-the-art radio receivers and carry on with the tried and true communications receivers that were state-of-the-art 20 or 30 years ago. These remarks are inspired by my recent experience of purchasing 5 new tubes for my HQ-180 for \$47.43, and that sum was reduced 40 percent from the listed total for the five. Can you imagine finding the 6C4 listed by a local store for \$17.45 before the discount? The 6BA6 for \$14.10 and the 6BE6 for \$14.20? This experience made me realize that I must have a treasure-trove of old radio tubes kicking around the office, perhaps 40 or 50 retired from service years ago, yet none of them truly bad tubes. Over the years with whatever radio I was using at the time, I was always replacing tubes, seeking better performance, and most of the time, the replacements turned out to be no better than the older tubes. Yet I never threw away the old ones, but kept them on hand, and I've got a slew of them now. For example, I have a Philco 80 bought in Cincinnati, still in the carton, never used, brand-new, and I think I paid 39 cents for it. My years in Cincinnati were 1944-50. I got it figuring I might use it someday inasmuch as just about all radio of that era used this 80 rectifier. I wonder how much an 80 would cost nowadays if one could be located. In my next report, I'll try to list all the tubes I have which I don't need and are most likely still serviceable. I always made it a practice to throw away sure-enough bad tubes, such as the one 6BA6 rejected in the recent testing. By the way, the old HQ-180 is operating in splendid form now with its \$47 worth of new tubes, and I have given up my thought that it needed a general overhaul. In the belief there must be many Oldtimers out there who want to find replacement tubes for their receivers, I would greatly appreciate hearing about good places with less than extortionist prices for tubes. There must be a number of them around the country, and DX'ers need to know about them. (I've dealt with Fair Radio Sales Co. - P. O. Box 1105 - Lima, OH 45802 and ETCO Electronics - North Country Shopping Center - Rt 9 North - Plattsburgh, NY 12901 and find them to be reasonable. ETCO's 6BA6 was \$4.16 and Fair Radio's was \$2.00 in my 2-year-old catalogs, for example -pls)

Albert S. Lobel - P. O. Box 26762 - San Diego, CA 92126

At the present time I am waiting on NRC HQ's to send me the computerized listing of the information I have already sent in to them for the telephone number lists in the NRC Log Book and the prospective updaters for it that will come out. There are still large amounts of unrepresented stations in the list. I'd like to have all stations in the list. I need a lot of Canadian stations yet. Come on, you Canadian members, let's get those telephone directories out and copy those numbers for me. If you don't want to take the time to copy the numbers out of the telephone directory then just tear out the page with the numbers and send them to me. I'll do the copying. All you have to do is just tell me what your area code is. you can write that down at the top of the page somewhere or in your cover letter or a plain piece of paper if you do not write a cover letter. Remember, I want the FM and TV stations as well! I plan on doing a list of those for WTPDA after my list for the NRC log is completed. I'm also a member of WTPDA, IRCA, IWCA, SCADS, ASWLC, and member #13003 of the old Radio Canada Shortwave Club. 73 and good DX.

John Herman - P. O. Box 171 - Vinita, OK 75301

Well, another winter is gone and weather-wise I won't miss it. Better DX is the only thing that makes winter easier to stand. New loggings have been slowing since the first of the year. I've logged 19 new ones since Jan. 1 but 8 of them were Cubans. Just started allowing those guys back into my log. A real surprise for me was hearing R. Bahamas, ZNS-3, on 810 kHz. That was on 2-7 at 1835 CST. Had KOMO mullied totally and no sign of the usual WSJC. ID's were for the Bahamas Radio Network and R. Bahamas with funeral announcements, weather, ads mentioning downtown Freeport and music. The night before I heard KSPV-990 on a friends' Rotel stereo. They were booming in over XET at 1855 with csw mx. ID at the top of the hour by a female DJ, "KSVP, Artesia". The WZAL test on 2-25 was heard pretty well here with minimal interference from KQGL and an unID SS station; assumed that was KUQQ. The tones were in well as were the ID's. Got the verie back and it is impressive looking. CE James DeVan said I was the only one reporting that identified the Four Tops song, so it will be interesting to see how well they were heard in other directions. I was very surprised to hear anything on the 4-watt transmission. The tones, much weaker, were heard. Mr. DeVan sounds like a good prospect for club membership. (Sign him up! -pls) He said he DX'ed in the '60's and that his wife recently got him a DX-400. Seemed to me a very DX'er-friendly CE. 11 veries in for '85 so far, with most of them already in Waynes' column. 194 veries from 323 reported, about a 60% return. Jerry Starr, the number for WJEP is (912) 228-5683, in Thomasville, GA. Address is P. O. Box 90, Thomasville, GA 31799. 73's for now.

Greg Myers - 1518 Professor CT - Richmond, VA 23228

Looks like spring has arrived here with temps hitting the '60's; I guess the DX season will be leaving us before too long. Hopefully the rise in temps will also bring up the spirits of some station personnel as veries have dropped considerably since Feb. compared with January's results. 18 out of 20 stations reported veried, and one of those two holdouts is the WQPM test which I assume I heard, going by everyone else's reports in DWN. (Outstanding results, Greg -pls) Speaking of tests, I have been able to hear all the tests this season. I hope there will be more to come. Recent veries include a nice verie from the WZAL test, an even nicer v/l from one of the better catches of the season, KSO-1460; the engineer mentioned that they had just installed a new antenna system and hadn't corrected their problems yet so they were operating on an ND system; all is in order now, and their strongest null is toward Richmond (God must be looking out for us dumb Germans). The engr. also mentioned that he had lived in Richmond a few years back and had worked at WRNL, WLEE, WRGM (now WKIE), WEET 8now WRJY), and WGOE (now WPTH); some people get around! Other veries include: v/q WQQW-1590, v/l WKLB-1290, v/l WDOC-1310, v/q WNYC-830, and a v/q from CBMO-1250. Long overdue thanks go to Jerry Starr for his nice v/l from WHOT-1330 for a Dec. '84 report; thanks, Jerry! And thanks are in order for Dave Schmidt's WQIQ test which was much needed here. That's all for now; you had better DX while you can!!

Radio Roundup

Pete Kemp - P. O. Box 73 - Bethel, CT 06801

Greetings all ... Big News! After a 15-year battle WREF-Ridgefield, Ct is on the air, as of noon, March 15. WREF will program basically the "Big Band" sound with a few current mellow artists thrown in for good measure. WREF is a sister station to WOCH-Greenwich, another affluent community, and is programming for the 35+ audience. General Manager Drew Wilder (previously with WLAD 1979-83) states that the station will program from 6:00 am to 6:00 pm daily, with hopes of becoming the area's first 24-hour AM operation soon. 850 kHz will not be the same in these parts again ... Steve Albert, one of the famous Albert Brothers Sportscasters, has left a TV spot on WCBS to become morning sportscaster on WABC-AM ... WNEE, in Memphis, is changing its call letters to WLVS ... The USFL's Memphis Showboats can be heard on WRBC-AM ... In Philadelphia, Bill Webber of WFIL is changing his time spot after 17 years. He is moving from the 10:00 am-2:00 pm spot to make room for the station's new Info-tainment Show with Bill Gallagher, and will surface with only a 6-9:00 pm spot ... More big news. The famous WMEX call letters will be returning to the Boston Market. The original WMEX became WITS and now WMRE. On March 17, St. Patrick's Day (isn't that a great day to switch in Boston?) WHUE-AM becomes WMEX. Programming will be Goldies. I wonder if Arnie "Woo Woo" Ginsberg will put in a visit? ... Andre Baruch, the original announcer for the "Your Hit Parade" show, which aired from 1935 to 1958, will be recreating his role and the show, together with his wife, former big band era vocalist Bea Wain, on WNEW-1130 every Sunday evening from 6 to 7 pm ... Washington DC's popular morning team of Jackson Weaver and Frank Harden are celebrating their 25th anniversary with WMAL ... The United Arab Emirates has signed an agreement, in the neighborhood of 109 million dollars, for the construction of a radio/TV complex for Abu Dhabi ... CNN has opened a news bureau in Nairobi, Kenya ... CFCF-AM has rehired the abrasive Ted Tevan for a mid-day spot. The station is hoping to pull out of a drastic drop in listeners that the oldest station in Canada is experiencing. More changes will probably follow ... WGN-Chicago is moving its facilities from the Tribune Broadcasting Center, on Addison Avenue to the Tribune Tower on

North Michigan Avenue ... WLS-AM is no longer simulcasting its evening programming on FM ... NBC has pulled the rug out from under CBS, having secured the radio rights to the NFL, for the next two years cost - \$11 million. So much for now.

Ken Onyschuk - 10731 Lloyd Dr. - Worth, IL 60482

Very little DX done here, due to log updating and work schedules. My only new logging in '85 was a Sat. back in January when I hrd WKSS-1030 with soul mx and ID at 5 pm. I've done a little here and there, but nothing special in my mind. I got the log updater in Jan and it took quite a while to get thru that one. Does that mean that we'll see no more log updaters in DX News? In the last bulletin, several DX'ers listed their favorite stations. My favorites, in general, are WJOL-1340 Joliet, a nice info-MOR stn; KYW-1060 Philadelphia, that I've listened to for 19 yrs; the old POL WFEL-1000. I now hear the same format on 104.3 WJMK, but I do prefer an AM stn. like WISN-1130 or WOWO-1190. For EZL mx, at work, I like WRDC-1530 Elmhorst. I find I listen more at work than at home lately, but that should change as BB season starts. Back in Dec. I went to Rob Kramer's GTG, but was disappointed at the poor turnout. I'm eyeing the summer conventions, but have no commitment yet. My job future is either with the Post Office, at which I hope to improve service, or the G. M. plant in St. Charles, MO where my brother-in-law works. I'm awaiting a call any day to take a gov't test there, before the hiring starts. With no plans to buy an HQ-180 or similar receiver in the near future, I'm probably going to sell 1 of 2 Superdials I own and get a medium-priced AM-FM cassette recorder. I'm tired of buying those \$20 Sears recorders; I want something respectable. My 11-yr-old son has a nice Sanyo set that I use a lot, but I'd rather have my own. Mostly it's for taping TV wrestling interviews for friends. I have some tapes of stns from yrs ago still. Somday still, I'm gonna get another Sony ICF-S5W. But that's on the back burner, friends. My location here really discourages me. More news here is about FM personality cgs, which I don't listen to. Nice to see new AM stns granted on 930 and 1030. Hope the programming is interesting and informational. That will do it for now. "Celebrating" 2 yrs. on the job 3-19, St. Joseph's Day - my Polish friends. 73.

Marching Through February

Ernest Cooper - 5 Anthony Street - Provincetown, MA 02657 (617) 487-9337

Fri., Feb. 1 - Somebody in this general area is carrying Silly Sally on 1490 - anybody know who? Noted at 1:08 am. SM 2-3: Noted were several SS's, like a Cuban Minute Man on 570, another Cuban on 600 with a tremendous signal, a R. Tricolor on 655 at 1:23, lively mx on 905 at 1:49, unID, and another SS on 950. MM 2-4: Needed WPCX-1290 was in with L. King at 1, but at the next break they had given way to WNSA with the same program. WBAL and WJR were off today. R. Sutatenza-810 was annihilating WGY here all AM; WGY is in here all day! And an unID TT'er on 1310 at 2:30 and 1590 at 2:40. Tue. 2-5: "Chicago's Christian Connection" WCFL-1000 said at 2 they would return at 5 CST with "Sunrise Chicago". They are off every Tuesday for these four hours now instead of MM's as of yore, so tell your 1000 kHz daytimer friends they can test on a Tuesday AM and have a chance to be heard! At SSS, WPCR-1540 PA in u/WPIR as I tried for WKIE; reported, no verie as of this typing, 3-15-85. Wed. 2-6: Unn WBEC-1420 with Celtics West Coast BKB at 12:42. Thur. 2-14: WHUE-1150 off; and they've been silent every morning since, and all day for the last two weeks prior to coming back as WMEX, says Stan Morss. MM 2-18: The WQIQ-1590 TEST was in u/WPTH's r/c, and after WPTH went off, WQIQ fought it out with WEIT. CKIM-1570 was off this AM and a TT'er was there at 1:59 as he went off with no ID. The hastily-arranged TEST from WFR-850 CT made it here u/WIHD's carrier, 2:30-3:15 am, thanks to a telephone call from NRC'er Dennis Jackson the morning before; they're WREF now and will test again, he says. Tue. 2-19: UnID TT on 1040 with no ID, 2:02-2:44 am. Wed. 2-20: Twilightting netted WSKB-1040 finally 5:30-5:45 s/off; this is a tough channel here twixt WBZ and WEN! Also a report to WJTB-1040, 5:45-6; neither has verified yet. Fri. 2-22: WIZY-1580 has been slipping through u/CBJ these days, but try to get a verie outa them! MM 2-25: The WZAL-1540 test made it with the sweep tones, which surprised me as WPIR is a bomber here. 2-26: Day report to WRS-1350 NH, ex-WKZU. Wed. 2-27: It's tough to get anything u/WIN but tonight WSEN made it on 1050 5:23-5:38 pm when they faded out. SM 3-3: Unn WLLM-1580 testing at 1:44. MM 3-4: UnID TT on 910 o/CHRL 12:35-12:58 am. Thur. 3-7: WRRO-1440 for a surprise atop at 1:52 am, reported. Fri. 3-8: UnID TT'er on 730 2:26-3:03 with occasional csw tunes, WPKX?

Roger Winsor - 311 W. Springfield, #4 - Champaign, IL 61820

Some changes in formats of a couple of stns. heard: WJUN-1180 Newburg, IN is REL, Sunshine Radio nCID. Nothing new heard, but the following DX was: 3-4: KCWB-1550 Fargo with oldies before midnight and on, logged to 12:31 for a second try at verifying this one, gave ph # (218) 236-8800. That PM KLPW-1220 MO hrd at 6:15 s/off: KHAD-1190 also, no SSB either; KIWO-1030 noted on top at 6:50p, cx to east poor; 3-5 KDFP-1580 AR, KQYX-1560 MO to 6:30p s/off; 3-7 WMAX-1480 noted at 5:45p s/off so still D-1; 3-8 WJUN-1180 5:50-6:00p ment. 6:45a s/on. KIUI-1560 MO 6:15p s/off with Oak Ridge Boys singing of SSB, very distinctive, hrd often to 6:17; 3-9 WMMG-860 GA on top in CJBC null with r&r 9:10 to 9:45p fadeout; 3-11 WERT-810 IN not much stronger daytimes after being quite weak lately, so must

have tuned up XR, log from 9:42 to 10:00a (317) 637-WGRT given; WXLW-950 now is Radio Auction D3, not counted in my log, though; 3-11 KAAW-870 MO in well enuf at 6:41a to log to 7:00 Ai net nx, some WPRO/WKAR QRM; 3-13 KHOG-1030 AR at 6:57 to 0705 fadeout, much KCTA. They really put out compared to WKSS, which is gospel, by the way, ex-RCK. 3-15: WEMQ-630 6a ex-WKEX with format change to oldies, sound automated, no DJ, jingles every 15 min.; logged from 7:00 to 7:45 pm with very few spots; 3-16 WIRV-1550 KY hrd with ID at 12:30a; ann. as ET. First ET hrd in a long while. Never any frequency checks like before either.

I hardly DX any more after midnight. So many in parallel with Larry King or NBC Talknet. On 1250, 1260, 1280, and 1290 the same music can be heard on Saturday nights as WEMP, WNDP, WGBF, and WIRL are all on the satellite. Imagine being a satellite babysitter at a radio station. Doesn't sound like much fun. Radio has changed a lot in the last 30 years. That was the year I started listening in suburban Chicago, Berwyn, when I first joined the NRC. Veries in from WZAL Fvd 2500 and 4w, KURM, WPCR mentioning DX as a science overlooked and sounded quite pro-DX. Ben Hill was the vs, Dave Schmidt. He might do a test. I'm going to try to find out if either WJTX or WILL are going to be doing any testing. In closing, I've heard KUUY-870 at least 6 times now since first hearing them last month. Easily could be heard coast-to-coast. Good DX to all!!

Stephen H. Ponder - 4105 Glen - Bossier City, LA 71112

Hello again from Louisiana, the Great State of Gubernatorial Flamboyance! It's been quite a while since my last Muse, so I guess an introduction might be in order. I'm a 31-year-old bachelor who teaches math, science, and computers at a private high school in town. I also serve as the associate pastor of a small Baptist church in Shreveport. I've been a member of the NRC since 1975. I was "brought up" in the knowledge of DX'ing by none other than the great Ron Schiller himself, who has taken somewhat of an extended breather from DX'ing. I am also a ham (KASUOR) and love novice CW on 40. Well, I guess that's enough about me for right now. No DX to speak of, since my Wedge Loop decided to go bad all of a sudden, but I hope to get it operational again during the Easter break. My main DX machine is a Heath GC-1A, but a recently-acquired RF3100 is running a close second. I also use a Hutton-modified TRF and a Radio West Shotgun Loop. I hope to become more active in DX (and the NRC) again, but it all depends upon my allotted amount of free time, hi. That's all for now - good DX!

Barry Hayes - 9 Henry St. - Wilkes-Barre, PA 18702

Not too much hand-checking being done lately due to a heavy work schedule here at home where I've started a design and art studio. Also, I'm thinking now about the upcoming FM season. My Superadio is incapacitated. The tuning string (and I mean string) has broken inside so the set must be tuned with the radio open from the inside. My attempts at trying to "rethread" the tuner have failed. Can anyone recommend a good digital readout RX for FM DX'ing? It would be much appreciated. (For a take-along portable, with stereo FM and digital FM readout, I can recommend the Sharp FV-610 very highly. It's quite selective and sensitive -pls) The few things of interest noted: 2-19: WDOF-1390 VT at 1830 with c&w mx. Previously hrd. on 1400. 1931 WERN-1460 MI. 3-5 0000 Malta-1557, nice sig. with AA chanting; no sign of Nice. 3-17: 1830 WPIC-790 Sharon, PA weak with s/off. That's all for now.

Michael J. Manning - Box 2729 - APO New York, NY 09109 (50th TRS)

Hello, this is my first Musing. I am 24 years old, a member of the USAF, stationed in West Germany. Well, I too can finally add something. On 17 Mar 85 I was listening on my Sony ICF-2002. It was about 0230. I cranked up my Palomar loop and decided to DX. I tuned in on 930 kHz; it was only a few seconds before I heard CJYQ, the rock of Newfoundland. I couldn't believe it, so to take advantage of the situation I tuned in on 1210. You got it, WCAU, my hometown station! I thought that it couldn't be done. Sure enough, I pulled the ICOM R71A off the shelf, hooked the loop up, and Bam! DX was gone. All the major stations in Europe seemed as if they all came on the air at once. I guess it's what we call temporary auroral blockage to the north. So I learned that you have to keep your ear out for awhile if you want to hear the TA's. Hey, I'm spoiled with Radio Luxembourg, Radio Caroline, and Laser. So I wish everyone in the club Happy DX from the Rheinland Pfalz. (It's good to hear from you, Michael. Keep that European DX coming in to these pages! -pls)

Conrad R. Durocher - Rt. 1, Box 2245 - Dickinson, TX 77539 (713) 339-1143

Howdy from home for a change. Hope this finds all well and happy. Just now getting over our 20-day USO tour (1-19/2-8) that took us halfway around the world: Hawaii, Guam, Philippines, Indian Ocean, Masirah, Arabian Sea. Since customs saw 18 of us go through each time, we were asked to leave all Walkmans and radios home ... darn. got to see a lot of radio-related stuff along the way. In Guam, we stayed in barracks at Andersen AFB, right next to the HF communications center. Got some great photos of log-periodics and rhombics. At Clark AFB, Philippines, got more photos of log-periodics and "bird cages". On the way to Wallis NAS, PI, we had to go by VOA's relay station; I counted 12 rhombics in all directions and a giant rotating log-periodic beam. Gilley took a tour of the facilities and

"forgot" to take me along. At Subic Bay, PI, I spotted an R-2000 in the exchange catalog for \$350 (couldn't pass it up ... sorry, Mike). Still waiting for shipment to arrive (along with many beads and trinkets). Next stop was Diego Garcia, a British-owned, U. S.-leased reef island 1,000 south of India. The only radio stuff I saw there was the U. K.-operated telephone satellite station (rates: \$10 for 3 min). Next stop was Masirah, a tiny island off the coast of Oman in the Arabian Sea. It is owned by a sheik, policed by Pakistanis, and portions are leased by the U. K. and U. S. I spotted 3 towers at island's end and found later this was the BBC relay on 1413 kHz. We were the helicoptered a few miles to play on ships of the Indian Ocean Battle Group. All of the ships had the BBC piped into the staterooms, and I had to find the receivers. Each ship has a TV/video/radio center. Here's where I finally got to mess around with R-71A's and R-2000's. One ship had two R-2000's, one for backup. Antenna space was their downfall, surrounded by constant HF communications. One of our shows on a carrier was delayed due to SSB coming through our P. A. speakers (powerful stuff). At this point, we were 14 hours ahead and one day behind Houston. In all, I shot 29 rolls of slides and the sorting continues. Funny thing, upon return home, I jumped on SW and had no trouble pulling in KTRW Guam, VOA and FEN Philippines. But Masirah-1413? A little more wire and the R-2000 ... just maybe ...

(2nd Muse) Howdy from the road. Hope this finds all well and happy. Am proudly announcing two new additions to the shack: an R-2000 and a 550' reverse question mark lw. The antenna's name (my own) comes from its configuration as seen from a bird's eye: The lead-in is at the short end above the shack. The wire surrounds the yard area 30' ft. above ground. The long end crosses power lines (no noise when crossing perpendicular), over a dirt road, down a 4-ft. cliff, and out 150 ft. on pilings 2 ft. above 4 ft. of salt water looking directly north. Question to antenna nuts: If I wish to terminate the long end, will the water itself offer enough grounding? How about the last piling which is 3 ft. into the bottom? ... Still trying desperately for KFMW-1200 before season ends, but WOAI says "nope", not today ... On 1030, I've logged all the new ones except KHOG; WKSS is the dominant here. Who's the SS with the whistling "ring around the Rosie"? ... On 1400, local KILE used to get lost in the pile at SS but no more with its 1 kw... TF: Thanks for the WLS profile. Grew up with it in NE and it's still a local here at night. ... Jeff Cohen: OK on the Saugus QTH. Lived on Essex St. behind Sears for 6 1/2 years; nice DX QTH ... WW: Nice catch on KTNW-1180. Wish I could get rid of it by Marti time, whenever that is. Yep, CBK-540 has been easy here also. On 1380, the dominant here is KAWL, No. Little Rock with MYL. ... Richard Wood: When do you find time to play Doctor? Great catches! I called a KTRH talk show to let them know in HI; and he catches KFMW to boot! ... Paul: Ditto on friendly KGBC-1540 Galveston. It sounds like the sales people do their own spots ... The strongest/loudest signal in the Houston area is KKY2-1320 with LAT. I'm surprised it's not reported more. That's it for now. Where'd I put that roll of wire ... ?

Warren E. Greenberg - 145 Cottage Road - West Roxbury, MA 02132

Not much to report since my last Muse. Had a great time at the convention in Colorado this last Labor Day weekend. At this last convention I ended up planning my vacation around the convention and got to see quite a bit of that part of the country. If it wasn't for the conventions I wouldn't have that much of an excuse to see the various parts of the country. So that is one reason that I like the conventions. In January I purchased an ICOM-R71A receiver and so far I am quite impressed with it, compared to the FRG-7 receiver. I spent the first week of March on the island of Guadeloupe and using my modified TRF doing a little listening, but I didn't get a chance to do any serious DX'ing. I wished Mark Connelly's list had come out a few weeks earlier so I could have brought it with me so I could have provided any additional info. In June I will be taking a transfer at work and will be on the road 100% of the time. Pending any problems I will be able to get back to this area for the 1985 convention in Rhode Island.

New AMs Proposed

The Commission still does not know when AMerz will be able to operate full time on foreign clear channels, a privilege that would be contingent upon negotiations with Mexico and the Bahamas.

Progress has stalled in US negotiations with Mexico because a Mexican telecommunications strike last year has delayed bilateral meetings. FCC officials said they hope to arrange more meetings this spring or summer.

The US and Canada already have reached an agreement that permits full-time operation on Canadian clear channels, but filings for those AMs on channels 690, 740, 860, 990, 1010 and 1580 are suspended until the Mexican and Bahamian negotiations are complete.

Docket number is MM 84-281.



box 789 norfolk, nebraska 68701

VERIFICATION SIGNERS

Wayne Heinen, 4131 S. Andes Way, Aurora, CO 80013

Catch "AM Interlude" on HCJB Saturday nights.

590	KHQlqm	Donald C. Boone	BCTech	JH	1250	KBBilz	David L. Molvik	CE	RW
630	KHOWf	Art Harlow	E	ET	1270	WHBF1m	Frank L. White	CE	PT
650	CISLl	Susan Ingaldson		WH	1280	KSOKl	Richard T. Wartell	GM	PT
660	WNBCqb	u/u		RW		WJAY1	Art Ramsey	CE	GM
670	KLPgc	Les Robinson	M	RW	1290	WNLBl	Glenn D. Lynch	GM	GM
	KWNKlmb	M.A. Cabranes	GM	JH	1300	KPTLLmb	Howard E. Cadot	CE	JH
680	WCBMf	Chenelle Pines		RD		WSSG1	Don Smith	OpM	KG
700	KGRVlmb	Lyle Arndt	GM	RW		WSYDl	B. Hull P & GM	GM	GM
720	WGNq	James J. Corollo	CE	RD	1310	WDOCl	u/u	GM	GM
730	KCDMq	u/u		JH	1330	KMILlmb	Charles McGregor	OpM	PT
	KDAZl	Jim Hogg	CE	JH	1340	KSILlmb	John Moss	CE	JH
770	WLWLLz	Bob Perkins	P	JS		KIKOl	William Shoecraft	O/M	JH
	WAISlmb	Dave Norris		JS	1350	KCORl	Marvin Fiedler	CE	PT
	WAGCqz	Winston H. Loyd	CE	RW/RD		WKZUlmb	Dave "Emerson" Bodge	OpM	OpM
790	KGHLlmbqz	Theresa Binon	PD	RW	1360	CJVLlzb	Paule Geneste	PD	TF
	KGHlch	John J. Webber	CE	RW	1390	CJCYqb	Jim Martyn	PD	RW
	KKBQlmb	Jon Bennett	CE	BP		KSLMlmb	David R. Freer	CE	JH
800	CHABfb	Mike Soar	CE	RW	1400	WHGB1	Thomas L. Vernon	CETF	KG
830	WCCOq	u/u		RW		KART	Allen D. Lee	CE	WM
	Belizeq	A. Cheury		RD		KBCBb	u/u	RW	RW
	KIKl1b	John Bruce		JH		KRVZl	Joe Jindra	GM	JH
860	CJBClzb	M. Ferney		RW	1410	KOOQ	Greg Babbitt	OpD	WM
870	KUUYl	Walter Boller	ActGM	WH		KJCHl	Glen Dodeon	CE	PT
880	KMUC1	John N. Dick	GM	JH		KNALl	Russell C. Walters	CEPT	
	KWIP1m	Eric Norberg	GM	RW	1440	KEYS1	Nathan Lindsey	DoE	PT
	KQLXlmb	Michael D. Ray	GM	RW		KPURLmb	Clarla Lahimi	OpM	JH
910	KURY1b	Joel P. Buffington		JH	1450	KVSL1m	R.W. "Dutch" Holland	PD	JH
	KOXR1b	Manuel Pérez	VP/GM	RW		KDAP1bzb	Jane Callison	OpM	JH
920	KGALLqb	Doug La Vallee	PD	RW	1460	KKHPTl	Mel Rauh	CE	WM
	WBBB1	Greg McDowell	PD	TF		WXOKl	Law Carter	GM	PT
	KSRMar	u/u	GM	RW		KSOL	Jerry L. Bowers	DoE	GM
	WKOKy	Philip Klinger	EinCh	RD	1470	WJDYl	Paul Butler Jr.	A	TF
930	KROE	Bill Condos	A	WM	1490	KCUZ1bu	Graig Larson	PD	JH
950	KMER1b	John Dallas Evans	PR	JH		KNOW	Ken Rush	PD	PT
970	KJLT1	John G. Townsend	GM	PT	1500	WTOFq	u/u	PT	PT
980	KSVcQ	u/u	CE	JH	1520	WVOLLmbzh	Tim Perry	CE	KG
990	KOTM	Eddie Bell	CE	WM		WREAL	Ed Garrett	CE	GM
	KSPVq	Jack R. Dexter	CE	WM	1530	KCMN	Tanya Henderson	OffM	WM
1020	KBCQ1	Elmer Felio	CE	JH	1540	WZALLmb	James W. Devan	P/GM	W/KG
1030	KHOG	David T. Nolan		WM		KMFOL	Grant R. Wrathom	O/CE	JH
	KCTAFmb	Tim L. Walker	DoE	RW	1550	KXXR1	Donal L. Bailey	CE	JH
1040	WHBOb	Ed Pendino	E	JS		WXVAL	T.C. Gullett	GM	GM
1050	XBGL	Bernardo Bichara	Gta	PT		WYNXl	Allison Owens	OffM	FW
	KORElmb	Peggy Gates		JH		WJLYl	J. Van Alfred	Winsett	GM
1080	WJYAl	Jim Moore	OpM	KG	1560	WTAILbu	Gary Hess	P	JH
1090	KBOZ	Steve Campbell	TD	WM		WFSPf	Arthur W. George	P	GM
	KKYN	Janie Kirkland	M	WM		KEGGlmb	Sharon Stewart	GM	BP
1100	WWWF	R. Dale Kocias	E	RW	1570	KGCR1	Rhoda Isgrigs		WP
1100	KLLf	Gail Stubblefield	O	WM		KCVR1z	George L. Sampson	VP	RW
1110	KHAC	Fareed Ayoub	SM	WM	1580	KNIXchs	Eric B. Schecter	CE	RW
	WHIMr	u/u		RD		KOKElmb	John Williams	Nx/SxD	BP
	KFABc	Jerry McKenna	CE	RW		KRZIlmb	Keith Reid	NxD	BP
1120	KMOXf	Jim Butler	DTop	RW	1590	KMOZlmb	Ray Hicks	VP/NxD	BP
1130	WAMGl	Lee Raines	E	FO		KENDlmb	Carol Fogerson	SlsA	BP
	KWKHf	u/u	PD	PT		WERAl	Mark Wurtzburger	PD	TF
1140	KPWH1	u/u		BP		WQQWq	P. Miller	CE	GM
1170	WHNE1	Phil Castleberry	GM	KG	1600	KRXYl	Girard M. Westerberg	TD	TD
1200	KFNWf	Mank A. Mohr	CE	JS	1610	Caribbean	Beacon ltr.		RW
1210	KCLGf	Eric Kehew	CE	RW			Gareth L. Hodge	SM	RW
	KREW	Don Bennett	CE	WM					
1220	CKSM1b	Robert Lorander	TD	TF	WELCOME TO NEWCOMERS: Richard Wood HI				
	KCESlmb	Dan Sheets	PD	JH	Jim Hillier - CA, Richard D'Angelo				
	WRIB1	Eugene R. Faltus	CE	RD	THANKS TO THE REGULAR GANG Bill Prater-MO				
1240	WYGLl	David Bernstein	GM	KG	Frank Orcutt-NY, Greg Myers Va, Tony				
	KTAM1	David Walker	CE	PT	Fitzherbert-CT, Kermit Geary PA, Frank				
1250	WREN1m	Eric L. Carmen	CE	JH	Wheeler-PA, William Moser-ND, Phil				
	CHWOq	u/u		GM	Tallman-OK, Jerry Starr- OH, 73 WH-CO				

HAP PAGE (Handicapped Aid Program)

Sam Barto, 47 Prospect Place, Bristol, CT 06010

Your bids and Orders for Direct Sale items go directly to the Address above, not to any of the NRC Addresses. Make your Checks and Money Orders out to "HAP". Do not send CASH thru the mail. This page brought to you as a Public Service of the NRC.

HAP BID ITEMS: ITEM #617:KEXX match book, brown, white. #618:GMF (Aust.) blue, orange cloth arm patch (2x3"). #619:KQDS black, yellow cloth arm patch (2x4") nice! #620:WIBA sticker (4x9")/m/c. #621:CHREX-11 (Spain) sticker (2.5x4.5") B&W. #622:KXHI sticker (3x11") blue, white. #623:KQGG sticker (4x12") red, B&W. #624:JOFE (Okinawa) sticker (1x4")/m/o-rare! #625:KROY T-Shirt (S)/m/o-very nice! black-nice! #626:WJLH sleeveless T-Shirt (S-M) gray, white. #627:KQBR T-Shirt (M) orange, black-nice! #628:WJLH sleeveless T-Shirt pennant (4.5x8") red, white, blue-cloth-rare! #629:KLYL pot holder (6x6")/m/c-very useful. #630:CHMS red, white station pen. #631:CHFX blue, white station pen. #632:Radio Korea-1984 felt pennant (4x8.5")/m/c. #633:RRE (Spain) cloth pennant (4.5x8")/m/c. #634:Radio Polonia QSL card (4x6")/m/c. #635:Radio Polonia QSL card (4x6")/m/c. #636:KXAP ref. sticker (3.5x4") blue, white. #637:KWRM ref. sticker (3.5x4") blue, white. #638:KXAN ref. sticker (3.5x4") blue, white. #639:KXEL ref. sticker (3.5x4") blue, white. #640:KTEM ref. sticker (3.5x4") blue, white. #641:KFRD ref. sticker (3.5x4") white, blue. #642:KGRB ref. sticker (3.5x4") blue, white. #643:VOA sticker (3"cir) white, red, blue. #644:Radio Renana de Barcelona cloth pennant (6x8")/m/c-very nice! #645:Radio Vilnius cloth pennant (4x7.5")/m/c-beautiful! #646:Union City Radio (Pirate) sample B&W letter QSL (8.5x11"). #647:KRYG ref. sticker (3x4.5")/m/c. #648:KQWZ red, white station pen. #649:GRC metal badge (3"cir) bronze. #650:RBI DX Club certificate (8.5x11")/m/c. #651:KYLQ/KXUZ sticker (4x14") yellow, black. #652:KLLK sticker (3x9")/m/c. #653:Radio Nauraki (NZ) ref. sticker-odd shaped, m/o-beauty! #654:WFKR sticker (3x11") blue, white. #655:GICR decal (4"cir) m/c. #656:CHMS plastic ID card (2x3")/m/c. #657:CHFX sticker (4x11")/m/c-very nice! #658:Beacon Radio 701 (UK) odd shaped sticker, m/c. #659:KQEI "20th Anniversary" paper pennant (5.5x8") blue, yellow. #660:WJUP "Trivial Pursuit" T-Shirt (M), white, blue. #661:Radio Vatican First Day Cover w/ stamp (3.5x7")/m/c. #662:KQGT pepper shaped decal, green, B&W. #663:KTCM decal, odd shaped, m/c. #664:KXKX large "Top 500 Hits" poster, B&W. #665:Radio Tirol (Italy) sticker (4x4") red, B&W. #666:Radio Aire (Ireland) decal (5x5")/m/c. #667:SEFF Radio Freedom (NZ) sticker (3x6") red, B&W. #668:Radio Oxford (UK) decal (4x8")/m/c. #669:Radio Valera (Venezuela) decal (4x6")/m/c-nice! #670:Voice of Turkey sticker (4"cir) m/c. #671:Radio Libertaire (France) sticker (3.5x5") B&W. #672:HIGH sticker (4x7")/m/c-very beautiful! #673:KUSA cloth hat, red, white. #674:RTE Radio 2 (Ireland) plastic litter bag (10x20") red, yellow. #675:Viking Radio newspaper w/ exotic photo-great! #676:Radio Cacique de Sorocaba (Brasil) station poster, m/c. #677:BBC Radio Manchester 1984 diary book w/ ads, photos, maps-nice! #678:CFRM C60 cassette "Collectors Edition" of hits-great! #679:RTE Radio 2 paper holder (9x12")/m/c. #680:GKSN paper holder (8.5x11")/m/c. #681:WJUP chopsticks pennant of sorts honoring The Vapors, red, gold... very unusual! #682:KXHI large 1985 flower poster, m/c. #683:KSPF 1960s large poster, m/c. #684:KROK T-Shirt (M) blue, white, yellow. #685:KXIN T-Shirt (M) sleeveless, red, yellow, purple. #686:GKY Radio Winnipeg sticker (5"cir) red, white, blue. #687:Radio Monte Carlo sticker (2.5x6") red, white. #688:Radio Clwyd (Wales) decal (5.5"cir) m/c. #689:Radio TV-Cultura (Brasil) decal (2.5x3.5")/m/c. #690:Radio Korea QSL card (4x6")/m/c. #691:WTOG plastic ID card (2x3")/m/c. #692:RRC QSL card (4x6") red, B&W. #693:RHZ QSL card (3.5x5.5")/m/c-nice! #694:BBC Radio 1 match book, m/c. #695:NHK sticker (3x5")/m/c. #696:Radio Italia sticker (3x5")/m/c. #697:Radio 4 (Spain) sticker (3x5")/m/c-rare! #698:CFSL sticker (4x1.5") red, blue. #699:WJLH metal badge (1"cir) B&W. #700:RBI QSL card-City Scene (4x6")/m/c. #701:RBI QSL card-Painting (4x6")/m/c. #702:RBI QSL card-Childs Painting (4x6")/m/c. #703:RBI QSL card-City (4x8")/m/c. #704:RBA Radio Nacional QSL card (3.5x6") blue, B&W. #705:Northsound Radio (UK) 2 different DJ photos (4x6") B&W-nice! #706:Top Italia Radio sticker (4x4") blue, white. #707:Red Rose Radio (UK) decal (5x5")/m/c. #708:WZGO metal license plate (6x12")-nice! #709:Radio Polonia ref. sticker (2.5"cir) m/c. #710:Radio Polonia ref. sticker (2.5x2.5")/m/c. #711:KBUK sticker (3x11") brown, tan. #712:Radio Nederland QSL photo (4x6") B&W-nice! #713:RBI-1984 very large cloth wall calendar, m/c. #714:Radio Budapest cloth pennant (4x6")/m/c. #715:AWR Radio (Portugal) cloth pennant (4x7.5") blue, gray. #716:Radio Habana Cuba plastic covered cloth pennant (4.5x7.5") purple, red... The following are DX Club bulletins: #717:RIB 1984 complete. #718:ASWLC 1979 complete. #719:PRENDX 1977 complete. #720:PRENDX 1978 complete. #721:VHF-UHF Digest 1971 complete. #722:VHF-UHF Digest 1976 complete. #723:NNRC 1972 complete. #724:NNRC 1976 complete. #725:NNRC 1977 complete. #726:NNRC 1974 complete. #727:NNRC 1975 complete. #728:NNRC 1973 complete. #729:NNRC 1978 complete. #730:SPZEX 1979 complete. #731:SPZEX 1980 complete. #732:RCMA 1981 complete. #733:DSNOI 1977 complete.

ADDITIONAL: Send your bids and orders for direct sale items to: Sam Barto, 47 Prospect Place, Bristol, CT, USA 06010.

DIRECT SALE ITEMS: The following stickers/decals are \$2.5 each or any five (\$12.50). CFHM, BBC Radio 4, MOBE, CKRM, CECH (yellow) (blue), GHQO, KXKS (large) (small), 96-FM, KEY-101, KFRC, KSJO, KQUR, KILZ, KXLY, KXKK (large) (small), WJMR, KXKX, DJ-TV, Radio For Music, Radio Bucharest, RBEL Radio, WAMP, KQRB, WYXJ, CFNB (small), KXHN, KHAR, WTY, Canadiana, Milano, KXKH, SXK, KXAL, KXYS, KLOS (Party), RFB, WJUP (large) (cir), BBC Radio 2, Canals, Milano, NNRC, CKKH, KXKH, KELE, KNIN (large) (small), KXRE, WARD, KXKY, BBC-NS, BBC Radio Highlands, NNRC, CKKH, KXKH, Radio Kuwait, WJAL (large) (small), KXTA, Radio Budapest (red) (blue) (small), 128, KXAN, Radio Kuwait, WJAL (large) (small), KXTA, RFB Radio 2 (cir) (triangular), CHAB, KNUR, GKNQ, KQVI, CFNE, CKKH (large) (small), RFI, Talecom-RI, RNE, Polakie Radio (large) (small), City 27, RFI (blue) (white), 4XQ, Radio Carcom-RI, RNE, Polakie Radio (large) (small), RFI, Radio 270, WQFM, KXKH, KXKH, Telecom-Sovets, DC-101, line, 2CH, Radio El Mundo, SAIM, RFI, Radio 270, WQFM, KXKH, KXKH, Telecom-Sovets, DC-101, KBO, KFRW, WRR, Radio For Music, CFBA, RBA (rock) (TV), NNRC, Radio Shetland and REMP.

ADDITIONAL DIRECT SALE ITEMS: ANARCON-84 large poster \$1.00; BBC World Service poster \$2.25; RFI litter bag \$2.25; WJUP or KIVI litter bag at \$2.25 each; KBOI paper hat at \$2.25; NNRC book covers at \$2.25; CBE plastic litter bag \$5.00.