

The magazine of the National Radio Club

SINCE 1933-

Volume 58, No. 28 - July 29, 1991 (ISSN 0737-1659)

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23 .. Yvonne Daniels

Remaining DXN Schedule, Vol. 58 Issue # Deadline Pub. Date 29 Aug. 16 Aug. 26 30 Sept. 13 Scpt. 23

Bridgeport '91 ... If you haven't reserved your room at the Holiday Inn for the NRC Bash at Bridgeport you have a day or so - until July 31 - to do so, unless you really want to sleep in the back seat of your car that weekend. The price is a flat \$58 per room. To reserve, call (304) 842-5411, and be sure that you mention the National Radio Club. The hotel's street address is 100 Lodgeville Rd. Also, if you'd like to pre-register, the basic charge is \$25.00, with \$15.00 extra for the Saturday night banquet and \$9.00 more for the Sunday morning brunch. If you bring a family member who prefers not to register, the charge for use of the hospitality room is \$10 per person. You can either send a check (made out to "National Radio Club") to convention host Bill Swiger at RR 1, Box 152A - Bridgeport, WV 26330-9368 or charge it by calling Mike 'n' Sue Knitter at (608) 423-4159 from 7-11 pm Easter Local Time. If you reach the answering machine, be sure to give your card type, card number, expiration date, name as it appears on the card, total to be charged, and evening telephone number (if they have a question). Bill says he's picked out three courses for the Saturday banquet!

From the Publisher ... This issue, like most summer issues, is rather squashed, in spite of so few contributions to Musings that Dave decided to hold them for next issue (after a late trip back from South Carolina). We should catch up next issue, #29, which most likely will be a 48-pager (especially if you all flood Dave with Musings, hi!). Dave also notes that the OC that you may have heard on 990 belonged to WANT, Richmond, VA, whose staff walked out on July 12 (after the owner disappeared without compensating them), leaving the transmitter on!

They joined ... Mitchell S. Paul, Minneapolis, MN; Robert Bell, Toronto, ON; Charles Broyles, Pittsboro, NC; Ed MacDonald, KR0I, Kansas City, MO; Mark Whittington, Austin, TX; Rodney Anderson, Seaview, WA; Dan Kinsella, Stow, MA; Danny Roberts, Slaton,

TX; Scott E. Barnett, Ferndale, MI, and James Bagge, Springfiled, MA. Welcome, all!

Opportunities ... Kiwa, Inc. - Dept. NRC - 612 S. 14th Ave. - Yakima, WA 98902 now is offering the LFH-4S filter to replace directly the wide stock filter in the Sony 2001D/2010. Price is \$14.00, postpaid, U. S. and Canada, and \$15.00 elsewhere. Grove Enterprises -Dept. NRC - P. O. Box 98 - Brasstown, NC 28902 is offering The Listener's Lawbook, by Frank Terranella, covering listening laws throughout the U.S. Order BOK16 for \$11.95, postpaid in the U.S. And - say that you saw it in NRC's DX News when you order.

Walt Breville sent along news of "Radiofest '91" August 7-10 in Elgin, IL. The antique radio meet, which will feature a flea market, auction, and various talks by experts, will be held at the Holiday Inn Convention center (708)695-5000, 345 River Rd. Registration is \$8.00 in advance, \$10 at the gate; for more information, contact the Antique Radio Club - c/o Carl Knipfel - Rt. 3 - Veterans Rd. - Morton, IL 61550.

Partial DXN Schedule, Volume 59

Deadline Pub. Date

1. Sept. 27 Oct. 7 3. Oct. 11 Oct. 21 2. Oct. 4 4. Oct. 18 Oct. 28

DX Time Machine

From the Pages of DX News 50 years ago ... from the July 19, 1941 DXN: Lists

were published of all BCB and SW stations in Bolivia, Brazil, Chile Paraguay, and Venezuela.

25 years ago ... from the Aug. 20,1966 DXN: Norm Shacat, Malden, MA reported logging 39 stations so far during the month ... Janette Edge, Buffalo, NY thanked members for "helping keep the Club up on top where it belongs", and to "please drive carefully"

10 years ago ... from the August 10, 1981 DXN Tamara Taylor, Nashville, TN acquired an RF-2600 and logged 23 new stations during the month ... Captain Glotz warned NRC'ers to be sure to attend the convention in Rockaway, NJ.

AM Switch

Jerry Starr

c/o WHOT Radio 4040 Simon Road Youngstown, OH 44512-1320

Status changes in AM stations, supplied by the FCC and NRC members

CALL L	ETTER	CHAN	GES	
Old ca	11:		New	call:
650	KMCE	CA	Rancho Cordova	KRDX
680	WLFF	FL	Saint Petersburg	WRMD
	KHKR	MT	East Helena	KVCM
770	WVTI	FL	North Fort Myers	WRXK
910	WBN1	VA	Roanoke	WWWR
980	WMAK	KY	London	WBBE
1040	WHOO	FL	Pinellas Park	WMTX
	CKXY	BC	Vancouver	CIMA*
1080	WDJX	KY	Louisville	WXLN
1140	KZZP	NV	North Las Vegas	KLUC*
1240	WOCB	MA	West Yarmouth	WUOK
1280	WYSY	1L	Aurora	WBIG
1330	WBIG	SC	Conway	WPJS
1370	KIKS	KS	Iola	KALN
	CKLV	PQ	Valleyfield	CKOD*
1380	KMUL	TX	Muleshoe	KLZK
1400	KZTR	CA	Santa Paula	KKZZ
1410	WMML	AL	Mobile	WLVV
1460	WLKQ	GA	Buford	WXEM
1480	WRDW	GA	Augusta	WAKB
1520	WBHT	TN	Brownsville	WNWS
1560	WSMD	MD	La Plata	WMOM
1570	*New	HI	Haiku	KUAU
Notos.	MILL	-114	O had abanes to V	770

ADVERTISE FREE AM-950

OTHERNESS 580 KA

RADIO TRADE TIME

794-1950

Weekday Mornings at 6:15 to 6:30 Midday 12:15 to 12:45

(Non-Commercial Items Only)

AM-950 WAKM Radio

Notes: KLUC-1140 had change to KZZP set aside and remains KLUC. The CKLV-CKOD change has not been released by the CRTC as far as we can find but this change was confirmed by station manager Jean Pierre Major. CKXY-1040 was referred to as "CIGM" in last month's Otherness column, an error from one of our sources. Manager T.E. McBride confirms this change to CIMA.

APPLICATIONS/GRANTS FOR NEW STATIONS None

APPLICATIONS FROM EXISTING FACILITIES

1340 WPBR FL Palm Beach: city of license to Lantana, FL

1390 CKKC BC Nelson: to 880 kHz with 700/700 U1

GRANTS TO EXISTING FACILITIES

610 KAVL CA Lancaster: powers to 5000/4000 WOSU OH Columbus: changes in antenna system 870 KAIM HI Honolulu: relocate transmitter site 1040 WAMN WV Green Valley: powers to 1430/250 1050 KLOH MN Pipestone: powers to 9000/400 1070 WIWS WV Beckley: changes in antenna system 1150 KASM MN Albany: reduce day power to 2100 WMLX KY Florence: to 1160 kHz with 5000/1000 U4 1230 VOAR St. Johns: to 1210 kHz with 10000/10000 U1 1340 KTOW OK Sand Springs: relocate transmiter site WJRZ NJ Toms River: relocate transmitter site

			expensive self-supporting towers. This site has been up for over a year now but the station so far has conducted just a few days of tests with carrier. While it is not uncommon to see new stations that never get built it is odd that the owners would get as far as building an elaborate operating transmitter plant but never go on the air. Their FM remains silent too.
690	WADS	CT	Ansonia: station is SILENT
730	WSTT	GA	Thomasville: station is SILENT
760	WVNE	MA	Leicester: new station is ON THE AIR, IDs as "Leicester-Worcester" and for those of you not familiar with NewEnglandSpeak that's pronounced "Lester-Worster"
770	WRKX	FL	North Fort Myers: station is SILENT
840	KVEG	NV	Las Vegas: according to the station their antenna is U3, not U4 as listed in the Log
970	KQAQ	MN	Austin: station has been SILENT since 3-15 but still operates from 7AM to 2PM Sundays ONLY
980	WBBE	KY	London: silent as WMAK, is back ON THE AIR
990	WHIA	GA	Dawson: station is SILENT
1000	KNDA	TX	Odessa: station is SILENT
1010	KPSL	CA	Thousand Palms: silent station back ON THE AIR
1060	WAMT	FL	Titusville: station is SILENT
1160	*App	OH	Batavia: both applications for a new station here have been DISMISSED by the FCC
1200	WXRA	NY	North Syracuse: is now here ex-1220 kHz
1220	WTCN	Miri	Stillwater: station is SILENT
1240	WPNF	NC	Brevard: station is SILENT while transmiter site is being relocated, expected to return by the time this reaches you
1280	KRAN	TX	Morton: station is SILENT
1310	KIQQ	CA	Barstow: silent station is back ON THE AIR relaying KVVQ-910 Hesperia, CA
1400	WJFW	MS	Columbus: station is SILENT
1430	WWLO	FL	Gainesville: new station is ON THE AIR
1480	WABK	GΑ	Augusta: silent as WRDW, station is ON THE AIR
1520	TMNW	GΑ	Garden City: station is SILENT
1560	WWGM	TN	Nashville: station is SILENT
1570	WBUZ	NY	Fredonia: station signed off for good 6-6-91 by order of the FCC. Scratch this one from your Log
1600	WAST		Ashtabula: FCC has revoked the license of this station which has been silent since the early 80's, scratch this one from your Log too.
JOURN	AL & NR	C DX	ADER, RON MUSCO, BRIAN VERNON, OLLE ALM, M STREET AUDIO SERVICE!

KANA MT Anaconda: silent station has been sold, will be

WLSY KY Newburg: on a recent trip to Louisville we had

the opportunity to view this new station's

antenna site and they have, in fact, installed a

complete new 4-tower system including two rather

returning to the air

Need more information about Medium Wave DX'ing?

Mail \$1.00 to NRC Publications - P. O. Box 164 - Mannsville, NY 13661-0164; ask
for the Reprints Catalog.

73 and Good DX, Jerry & BKF Jerry Starr & Buffalo K. Foonman

1290

WCCC

Domestic DX Digest - East

William Hale

734 Burleson San Marcos, TX 78666-4335

DX Catches in the Eastern U. S. and Canada, with 24-hr. ELT

MEDIUM WAVE RAMBLINGS

■ Some of you may appreciate the following anecdote from an recent exchange of letters between myself and Radio Shack. I wrote to them asking about the possibility of resurrecting the TRF, or 12-655. Recently, I found out that since it was no longer manufactured, I cannot secure parts for mine. So, unafraid and unabashed, I wrote to their president (you know, the guy who writes us in every one of their sale flyers) and inquired about the chances of them bringing the radio back as an entry-level DX tool (actually all I wanted was parts, hi). Their reply goes something like this... The 12-655 was discontinued due to lack of sales, and no manufacturer in the Far East is now producing any kind of like radio. The letter went on to say that...incidentally, most of the customers for this radio were DX'ers...and those incarcerated in various prisons...and they...get more requests from them than anybody to bring back the 12-655. So there you have it. The TRF, DX'ers and convicts! Some of those cons, by the way, are the NRC's most faithful members. Well, it was worth a shot. On to other news...

Doug Smith of Nashville, Tennessee writes to say he heard WQZQ-FM 102.5 relaying WTVF-5's newscast.....of the three stations on the Nashville Sounds minor-league baseball network, WDBL-1590 is the only AMer....and WYOR-560, WKXB-710, WPFD-850, WQZQ-1200, WHNK-1430, WWGM-1560 are all Nashville-area AMs which are silent, with WAIN-790, WCOR-900 and WRLT 100.1 threatening to follow suit is their financial woes aren't solved.

Chuck Reh reports that the CBC English Service is back to it's pre-Gulf War schedule. He first noted them off AN on 7/1.

Remember, MY deadline for Issue 29...the August 26 Summer's Almost Gone Issue...is August 10th. Then it's September 7th for Volume 58's Swan Song. And then, and thenl...we christen Volume 59. So let's get back in the swing of MW DXing with lotsa reports! Canadian members, please note... from past experience, please give the mail at least 1 days for your reports to reach DDXD-E headquarters. Better be safe!

SPECIAL

740	CBL	ON TORONTO - 7/5 0500 very good with end of Oh Canada - sign-on
		info; could this mean that the CBC Network is no longer NSP? (RD-IA3) [Yeahsee rAMblings, above Ed.]
760	WVNE	MA LEICESTER - heard 7/11 from 1700 - 2000 sign-off with canned REL; 1st day was 6/22; USA Radio News net at :00, some pgms from IBN: address
		is 70 James Street, Suite 140, Worcester, 01603; Steve Tuzeneu is station manager and phone is 508-831-9863; CP is on (RM-CT)
820	WXRT	IL CHICAGO - noted these new CLs which are the CLs of Diamond's FM station in Chicago; presumably they'll simulcast; the FM's format is "adult AOR", with slogans including 93XRT and Radio Chicago; still silent
		when I visited Chicago 6/13 (DS-TN)
910	WCMG	TN COLUMBIA - 6/15 1516 good with UC, Columbia ads; had to leave before hearing an ID (too many bugst) so don't know whether they've
		officially moved, but this is the 1st time I've heard them since moving here, so suspect the move to Columbia has occurred (DS-TN)
1200	WOAI	TX SAN ANTONIO - 7/15 hrd with The Sports Final this AM; they only carry the show on Sunday nights/Monday mornings, but it's a start; so
		scratch their MM SP [Fd -TX]

1360 WDRC
1370 WXXI

NY ROCHESTER - as of 6/20 this public radio station is off 0100-0600

ELT due to serious deficit; FM 91.5 is off 0000-0600 ELT; both had been 24 hours; TV is being reduced 1.5 hours in July as staff have been laid off, so this is simply not a short-term stop-gap, the result of budget cuts in Albany (JR-NY)

CT HARTFORD - still silent as of 7/19 (RM-CT)

WZAO WV GLEN DALE - 6/25 0559 good with sign-on beginning Good morning, Miracle Valley. WZAO is once again taking the airwaves for Jesus Christ, gave address as: 1401 Wheeling Avenue, Glen Dale, WV [their ZIP Code is 26038, by the way - Ed.] then - America The Beautifut, legal IDd as WZAO Glen Dale - Wheeling, no mention of Moundsville, which is listed as City-of-License, so must've moved; was silent as WQPN (REH-ON)

1480 WMAX MI KENTWOOD - as of 7/1, is CNN Headline News on a fulltime basis; ex:REL (PLB-MI)

1550 WLII WI MADISON - still simulcasts WWQM-FM Q106 w/C&W despite CL change; probable sold WHIT CLs to someone else... (DS-TN)

1560 WPAD KY PADUCAH - 7/5 0029 heard with NOS mx; used to be IRN C&W mx (MH-NE)

WWGM TN NASHVILLE - 6/15 SILENT; I think they went bankrupt (again) (DS-TN)

UNIDS AND UNID HELP

960 UNID 77 - 4/23 1940-1955 someone here with Montreal Expos BB on EE net; unable to get ID, but probables are WEAV and CFFX; mostly under WHYL (RJE-PA)

1190 UNID ?? -6/23 0406 good with It's time to return to Talknet All Night
Information & Entertainment on K(B?)HL Turbo??, noises and time pips Talknet; HELP! (MBDXP)

1320 UNID ?? -6/26 0046-0100 in the mess with WJAS, WQIK, WGLD and Mexican; Oldies 103 WLDE (not sure of the CLs - doesn't match anything in the FM Atlas anyway...) non-ID and EDT TCs (DS-TN3)

1380 WH?? 7? - 5/9 0700-0703 sounded like the last two letters were "GB", but there are many phonetically similar combos; C&W mx (RJE-PA)

1400 UNID 7? -6/27 2152-2224 with sports pbp mentioning 3rd quarter (maybe indoor football? [They call it Arena Football -Ed.]), ad for Sunshine Auto Parts; also hrd 6/28 2204-2215 with ...28 seconds to play and mentioning players Harvey and Robertson (DT-ON)

1550 UNID ?? -6/20 2200-2210+ someone testing w/OLD; played Signs at least 4 times in a row before fading - the mess; no sign (ouch!) of an ID... (DS-TN)
UNID ?? -nightly since 7/1 during CBE SP (0100-0458) with Talknet; no :00

IDs hrd, just OC and time pulses from :59 to :06 (REH-ON)

1600 UNID ?? - 6/15 0703 good with nx in SS including many mentions of Nicaragua; loops east-west, so it isn't the station outside Atlanta; strongly

suspect KSSA (DS-TN)

TIS AND OTHER STUFF

530 TIS IL LA SALLE area - 7/13 1000 noted ~ 90 sec tape loop extolling the historical significance of the Illinois and Michigan Canal System, and a related museum; never hrd CLs in about 15-20 minutes of monitoring [Ed.-IL]

WNQI 569 MD COLLEGE PARK - 7/6 1050-1144 Maryland State Highway
Administration Traveller's Advisory Radio Network with tape loop; looped
NE/SW; wx: WNQI 579 (WN-MD) [These guys change CLs, too?? hi - Ed.]

WNZY 507

MD COLLEGE PARK - 7/6 1046-1145 Maryland State Highway

Administration Traveller's Advisory Radio Network w/tape loop; looped

NNW/SSE; QTH is questionable as this comes in alternately with WNQI 569

...call could be WMZY 507 or WNGY 507; previous announcement is about
30 db down under current one (WN-MD)

WNQA 284 MD CUMBERLAND - 6/12 1545 60-second message including U.S. 40 construction updates; for specific tourist info, listeners are advised to go to the Allegheny Co. Tourist Board in downtown Cumberland (why not plug special events on the station as long as it's there?) (TS-MD)

TIS PA VALLEY FORGE - 1st hrd 5/21 1915; new experimental TIS here with short loop annet of a pilot program for PA Turnpike; this gets out 25+ miles at night; haven't any CLs on tape, so will have to dig somewhere else for details (RJE-PA) [Editor's note: Russ reported this as a TAS, which I assume means Travellers Advisory Service. If that's what they are now known as, we'll report as such. What's the scoop?]

1610KID 702 VA APPOMATTOX - 6/14 1300 60-second message including historical importance of Appomattox and what to see in the park (TS-VA)

KQC 714 WV HARPER'S FERRY - 6/12 0930 with rec, historical and special events info (TS-WV)

NY ALBANY - 6/28 2340-0005 with Larry King Show, 2400 WABY-,

NC WAYNESVILLE - 6/28 2200-2211 with AC; CLs at 2205; break thru over WXDX and unID with pbp (not baseball, see UNIDs) (DT-ON)

IL ROCKFORD - 6/23 2200 fair with WROK Rockford legal ID, ABC Nx, local wx, ad for Petry Construction and morning show promo, SID, back

TN CLARKSVILLE - 6/20 ~1800 poor with C&W | WYCQ-102.9; note format change from EZL; signal stinks for 2.5 kw non-DA; completely inaudible at home in West Nashvillel (DS-TN2)

THANKS TO ALL THESE FINE REPORTERS

RUSS EDMUNDS, WB2BJH//Blue Bell, PA//Nissan caradio

DOUG SMITH, W9WI/4/Nashville, TN/Superadio II + Palomar Loop or TN1 = Warner Park - Nashville, TN w/Kenwood TS-680 + Palomar loop or TN2 = Joelton, TN w/Delco caradio or TN3 = home QTH w/TS-680 + Palomar Loop

SHAWN AXELROD & WAYNE MC RAE//Valhalla Beach, MB DXPedition//R-70 + south MBDXP & west beverages

JIM RENFREW//Rochester, NY/ JR-NY

TOM SANDERS//WV = Harper's Ferry, WV//JVC Caradio or MD = Camberland, MD//JVC Caradio or VA = Appomation, VA//Sony ghetto blaster

NH-MN NORT HERNXPOSURE//Monday Nights//CBS-TV

REH-ON CHARLES REH!//Learnington, ON//R-390A + Sanserino Loop + TR-3000 open reel tape

PHIL BOFRSMA !/Spring Lake, MI !! PLB-MI

WN-MD WALTER NISSEN//Silver Spring, MD//

MH-NE MIKE HAWK, KBOGXE/GT//Omaha, NE//sorry, Mike. No GY records - Ed.]

RD-IAx RICK DAU//1 = Iowa City, IA/R-1000 + RW Loop///2 = Clear Lake, IA//Ford caradio + lotsa pepsi//3 = on U.S. 218 near Charles City, IA//same Ford caradio

RM-CT RON MUSCO//Poquonock, CT//

DT-ON DON TRELFORD//Scarborough, ON//R-2000

Ed-IL Ye Editor, N5SZC/lon I-39 at LaSaile, IL/Deico AM\$/FM\$ Caradio

1190 someone underneath with brief bursts of 1000 hz tone (DS-TN) 1440 WBKI GA BREMEN - 6/24 0615 briefly good with very long ID/promo for GOS format (DS-TN3) 1450 KATE MN ALBERT LEA - 7/5 0359 very good with ID: Southern Minnesota's station for the original hits...KATE, Albert Lea (RD-IA2) WHOCL MS PHILADELPHIA - 6/24 0624 briefly over the mess with ...in Philadelphia, think I had same annor with Mississippi mentions a few seconds later (DS-TN3) WGNS TN MURFREESBORO - 7/2 0415-0501 with Sports Final, 0555 1450 WGNS, nx; over/under OLD unID; poor (DT-ON) 1460 WXOK LA BATON ROUGE - 6/12 0557 alone with B:GOS and lady DJ giving live legal ID as AM-1460 WXOK in Baton Rouge (REH-ON) 1570 WCRL AL ONEONTA - 6/24 0630 fair with sign-on, over/under unID (DS-TN3) WBGZ IL ALTON - 7/5 0016 ID as The Big Z, then a Missouri Network pgm (MH-NE) 1580 KBLA CA SANTA MONICA - 6/23 0320 good with California Business Nx; new 1600 KLEB LA GOLDEN MEADOW - 6/15 0628 xint with C&W, You're with KLEB; hrd again on SRS 6/20 (DS-TN) 0800 TO 1600 HOURS ELT 1490 WJJM TN LEWISBURG -6/15 ~1530 very weak with C&W, WJJM SID; 1490 #1 (DS-TN1)

Wayne Heinen 4131 S. Andes Way Aurora, CO 80013 FIDO NET 104/108 (303) 699-6335 (prepaid only)

DX Catches in the Western U.S. and Canada, with 24-hr. ELT

1060 KFNA TX El Paso

6/25 0720 Good Signal ... lots of ID's "KFNA, La Nueva 10-60" slogan. Tnx to Neil Kazaross for tip. (Silent station Returns) (TH-CA)

Midnight to Midday

970 KBBT OR Portland

6/26 0319 Noted new format and "9-70 the beat" slogans. (Hey Tim, what's the new format???-ed) (TH-CA)

1560 WPAD KY Paducah

7/14 0122 Excellent signal dominating the channel for a half hour. Format now satellite OLD. (WH-CO)

Midday to Midnight

1230 KADA OK Ada

6/24 2318 ID w/ ments of //FM 96.7 (MH-CO)

1230 KNUZ TX Houston

6/26 2304 Ai Nx and ID (MH-CO)

1360 KFNS TX Amarillo

6/26 2252 ID and TLK...another ID @ 2259 (MH-CO)

1400 KCOW NE Alliance

6/27 2308 Area spots and Icl BB game. (MH-CO)

1460 KGGO IA Des Moines

6/24 2305 Rock Mx. Stronger than I get it in Omaha! 1240 UNID (MH-CO)

1490 KGOS WY Torrington

6/27 2303 Ments of severe Wx in the area. (MH-CO) 1490 KRTN NM Raton

6/26 2246 ID & Wx w/ments of 1cl Rodeo. (MH-CO)

TIS

530 TIS CO

6/25-6/27 1200-???? Heard starting 6/25 all day w/ repeated massage "Testing 1,2,3 testing. This is mes- 220' LW sage 1 testing 1,2,3,4,5" No ID's hrd. Not sure if they went off. (Thanks Mike, looks like we've got another West Loop semi-lel TIS coming on the air-ed) (MH-CO)

530 WMSU510 Denver CO

7/14 0145 "From Denver this is WMSU510..." female tape loop with traffic info for I-25, I-70 and Icl roads with construction. 3rd Icl TIS on this channel. (WH-CO)

1610 WNUB568 CA Chula Vista

6/17 1956 On RS today, w/inane tape loop. (Details ???-ed) Low power til 6/28. Sounds like 10 w. SS/EE started 7/1. Xmtr near I-5 & L Street., about 2 miles from my QTH. New NSP Pest. (TH-CA)

1610 TIS CA Del Mar

6/30 2200 New station on for San Diego County Fair. Fair w/parking info. Poor on car rx Rancho Bernardo to Escondido. Good from work a few miles from Del Mar. Seems weekends only. No call or slogan. CA # 230. (TH-CA)

1610 KNEC996 CA Tejon Pass

6/6 0340 Hrd, Balboa Park WNPF405 silent this AM. (TH-CA)

1610 KOP20 NM Sandia Peak

6/4 0308 Poor/fair with usual tape loop. WNUE 568 not on RS yet. QRM from WXK790, Phoenix. (TH-

UNID's

890 UNID

6/17 0656 And mornings since. BFL Mx, Probably KVOZ, 2nd station w/female vocal \$\$B likely KBYE. Both needed for f/ups. KDXU s/on varies from 0655-0715. (TH-CA)

6/24 0320 Station w/ call like KBME w/ female & "Kidd County" WX. Nothing in Road Atlas fits. Lcl KSON off. (TH-CA)

1520 UNID

6/3 0335 Poor w/ man giving Sx, Maybe needed KFXX? (TH-CA)

Contributors!

(MH-CO) Mike Hawk, Evergreen, CO - ATS-803 w/

(TH-CA) Tim Hall, Chula Vista, CA - ICF-2010, Radio

(WH-CO) Wayne Heinen, Aurora, CO - R390A w/ 41

How to place orders ...

By mail: Write to NRC Publications - P. O. Box 164 - Mannsville, NY 13661-0164. Enclose check or money order; NY residents, add state and local taxes. If ordering by credit card, you may write to NRC - P. O. Box 24 - Cambridge, WI 53523-0024; include information below plus your signature. By phone: Call (608) 423-4159 from 7-11 pm ELT. Have ready your VISA/MC information: Card type, number expiration date, name on card, evening telephone number. State and local taxes will be added to WI residents' orders.

International DX Digest

Jim Renfrew

61 Wilcox Street Rochester, NY 14607-3832

Foreign DX Catches. Times are UTC; for ELT, subtract 5 hours

We have some great late season DX being reported this month, some TPs from John Bryant (beverage-less!) and Mike Riordan, Mark Connelly is still getting TAs, and Chris Vito and Tim Hall are hearing some good LA DX.

A special feature this month is David Gleason's up-date of Puerto Rico Jim

TRANS-PACIFIC

- 783 unID Could be 2YB, Wellington. Het noted after 1205 6/23, but not on earlier checks. [JHB*WA]
- unID Could be 2XS, Palmerston North, or several Australians. Het noted after 1205 6/23, but not on earlier checks. [JHB*WA]
- unID Could be 1YK/1YX Whangerer or 4RK Rockhampton Australia. Het noted after 1205 6/23, but not on earlier checks. [JHB*WA]
- 1026 NEW ZEALAND 1ZN/1ZK Whangare: 1140 6/23. Program // R. NZ International 9700 SW. [JHB*WA]
- 1035 NEW ZEALAND 2ZB, Wellington 1142 6/23. Also // RNZI 9700 SW [JHB*]
- 1044 NEW ZEALAND 42B (?) Dunedin 1142 6/23. Also // RNZI 9700 SW. I have a QSL rec'd November 90 for a reception of 4ZB in April 90. The station manager stated that in the interim - they had left MW and were now "ZB-FM" on 89.4. They did not even have any 4ZB letterhead left. The programming was clearly RNZI. Could there be a new "Zed Network" station on 1044? [JHB+WA] (Could any of our NZ readers shed light on this one for John? - Jim)
- 1053 NEW ZEALAND 2ZP (?), New Plymouth 1143 6/23. Presumed, het only. [JHB*WA]
- 1116 NEW ZEALAND 2YX, Nelson 1145 6/23. Presumed, CLA mx // 1143. [JHB*WA]
- 1143 NEW ZEALAND 1YW, Hamilton 1145 6/23. Presumed, CLA mx // 1116. [JHB*WA]
- 1152 NEW ZEALAND 3ZC, Timaru 1145 6/23. As others above, // 9700 SW. [JHB*WA]
- 1161 NEW ZEALAND 2XM, Wellington 1145 6/23. Presumed, very strong het. (JHB*WA)

- 1475 MALAYSIA 1200-1215 6/21. In with fair Signal, female announcer, lots of splash from KUTY and KWIZ. >>>> 1200-1230 6/28. In with a good signal containing lyrics "you are my hero." [MR-CA] isee additional Editor's Comments below - Jim)
- 1503 unID 1155-1206 6/23. Strong het that lasted from tune-in until band fade. Could this be 2XG/3XG R. Rhema? My info shows off at 1200. [JHB*WA]
- 1566 SOUTH KOREA 1230-1235 6/28. In with a poor signal and male announcer. Lots of splash from KNZR and 1570 SS station. [MR-CA]
- 1615 NEW ZEALAND "OR" Beacon in during the same time period. [JHB*WA]

TRANS-ATLANTIC

- SPAIN Seville 0426 6/3. Fair w/man in SS, some QRN. Local WRKO off. [MC~MA]
- unID (Saudi? Spain?) 0349 5/29. Het against WWKB. [MC-MA]
- VATICAN 0245 6/12. A surprise for this time of year, Vatican blasting in over WCKY with a "winter signal". Harp IS, man and woman in a Slavic language, Vatican ID. Great signal! [MC]
- SPAIN Cordoba 0347 5/29. Man and woman in SS. One of the more consistent, late spring/summer TAs. This part of the year strongly favors the top 200 kHz of the dial and lower-latitude paths. [MC-MA] (I believe you, but why is it so? - Jim)
- SPAIN 0343 5/29. SS talk, poor, very fluttery. [MC-MA]



- 1593 GERMANY Langenburg 0250 6/12.
 Man in GG. Polar flutter type fading evident. [MC-MA]
- 1611 VATICAN 0259-0301 6/12. Somber organ mx, Slavic sounding talk by man and woman R. Vatican ID, harp IS. Program similar to, but not parallel to 1530. This was tonight's best TA excellent signal, way better than Anguilla 1610, incredible for a June reception. [MC-MA]

PAN-AMERICAN

- 540 MEXICO XETIN, Tijuana S/off 0600 throughout June, but now goes to OC around 0300. Keeps OC on all night now (but why? They're 100% automated, might as well run a tape if they're going to use the electricity, hi!). Signal not as huge as before. [TRH-CA]
- 660 HONDURAS LV de Honduras, La Celba 0401 6/15. Man w/several "HRN" 1Ds. [CV-FL]
- 660 unID 0205 6/15. Looped SE. Lowkey SS male announcer playing
 contemporary SS mx, then "Radio
 Ah Emeh" (AM) at the top of the
 hour; later brief anthem and
 sign off at 0352. WRTH shows
 Radio Quisqueyana, Dom. Rep.
 w/HIAM call, but they don't
 announce calls down there, right?
 ICV-FL1 (Wrong! I've heard a
 number of DR calls through the
 years, WRTH says HIAM s/off is
 0400 Jim)
- 730 COSTA RICA R. Relej, San José
 0432 6/15. Man and woman playing
 light SS mx and R. Relej IDs.
 CCV-FLJ (Tip: check SW parallel
 4832/6006 when you're looking for
 this one Jim)
- 740 MEXICO XEQN, Torreon 0442 6/25. Fair w/KCBS w/talk by man, OIR network plugs, IDs. Rarely this good at home. [TRH-CA]
- 770 <u>COLOMBIA RCN, Boqota</u> 0904 6/13. Alone on frequency w/"Colombia La Cuesta En RCN." [CV-FL]
- 770 MEXICO R. Costera, Cd. Cardel
 0331 6/24. Beautiful fade-up
 o/other unID SS w/full ID,
 including "... un mil vatios de
 potencia." Gone minutes later.
 Listed as off at this time. [CV]
- 950 MEXICO XEKAM, Tijuana 0754 6/6. Totally off, leaving XEPB. Spurs have most recently been on 940, 960 and 1030. [TRH-CA]
- 950 MEXICO XEPB, Hermosillo 0755 6/6. Station now signs off at 0800 (ex 0700) w/anthem. [TRH-CA]

- 970 MEXICO XEEZ, Caborca 0510 6/25.
 HUGE signal w/promos by woman,
 local ads. Mentioned Norteña/
 Tropical/Ranchera/Romantica
 format and I have heard all four
 types of mx on this station.
 S/off now later than 0500, and
 their new 5 kW power seems to be
 used at night as well as in the
 day. Slogan "La Super Zeta".
 (TRH-CA)
- 1030 MEXICO unlD 0803 7/1. Noted XE anthem, probably the new </off time for XEMPM. XEQR noted later. [TRH-CA]
- 1080 MEXICO XEDY, Cd. Morelos 0801*
 6/22. Noted new s/off time for this station, also sounds like a power increase; will try to confirm power. Slogan still R. Gallo. [TRH-CA]
- 1100 ANTIGUA ZDK, St. Johns 0508 6/16.

 Carrib accented DJ playing dance mx, ID, brief anthem and s/off at 0522 (not listed 0504) over Caracol and strong off back of ware. [CV*FL] (Should be off at 0204 on a Sunday night! Jim)
- 1170 MEXICD (cf. 7/1 IDXD) The reason that Mike Hawk's XERB-1170 log isn't shown on the Mexican List is that it was reported to have moved to 810 kHz a few years back! If Mike caught the ID on tape and is sure about it, we can change the List. I don't remember the actual 810 log, but I believe it was from a regular contributor to DXN who had taken a trip or cruise through the Cancun-Cozumel area. [TRH-CA]



- 1239* <u>HAITI R. Antilles Inter-nacionales, Port-Au-Prince</u> 0327
 6/22. Local-like signal creating havoc against domestics w/creole man talking right over top of hour and ID by woman at 0410 into FF mx. (CV*FL)
- 1505 ANGUILLA R. Anquilla, The Valley, 0204 6/22. Fair signal w/woman signing off and saying goodnight.

TP TIPS FROM JOHN

An extraordinary opening to NZ. I was tipped off by listening to the morning VK/VE7/W6 ham net on 1830 kHz. The ZL hams were S-7 while the VK4s were at S-2 or so. 1615 "OR" beacon in NZ (1 kW) was also at extraordinary levels. How I wished that I'd gone to the coast this AM to beverage as I had planned!

I must comment that I would have never been able to check parallels in the short amount of time available with a hollow state receiver. The NRD 525's 200 memory channels were the key to this reception. I could manually "tune" through the 13 to 15 channels I had set up in less than 1 second per channel, including 9700 and 1615, all by just hitting one button. First noted the signals at 1131, by the way, but didn't tumble to the new (?) parallel programming with RNZI until 1140. Also note that the next morning (June 24) the 1.8 MHz New Zealand conditions were still quite good, but I had zero NZ MW except a weak het on 1026 kHz.

STATION NEWS

AUSTRALIA: The Australian government's parliamentary relay, heard about 1000 UTC, is gradually increasing as the network takes shape. New outlets are: 2PB, Newcastle 1458; 5PB, Adelaide 1539; 3PB, Melbourne, 1593. IA.Cushen on Radio Nederland Media Network 4/4 via Mike Fern in NASWAl

CUBA: R. Mambi (ex-La "W") 1280 (ex-1030); R. Enciclopedia 1320 unheard during week's stay in Santiago, R. Progreso (not R. Revolución) Mayarí Arriba. [A. Pepin in WRTH-LA-NLJ; 794 unID R. Progreso [Krueger in WRTH-LA-NL in UKVK]



ECUADOR: R. Consular, Playas on 1605 (nom 1600). [Ribibeiro da Motta in WRTH-LA-NL in UKVK]

FINLAND: 963 Pori is now off 2200-0300. [OA via ARC in UKVK]

GERMANY: 520/801 BR new "B-5 Aktuell" from May 6th. This is an all-nx program repeated and renewed every 15 min. w/nx, traffic and wx info 0500-2300 M-F, 0600-2100 SaSu. From 1600-2130. 801 is relaying foreign language programs. [R. Blödorn via BE in ARC in IKKVK1

ICELAND: 207 damaged tx to probably be
replaced by a 500 kW tx. [BT in ARC
via UKVK]

IRAQ: R. Baghdad on 1431 Missan, 1224 Al Nasiriya and 1197 Nineva. [UADX in

IRELAND: Atlantic 252 is now
transmitting 24 hrs. [Broadcast via
Communication in UKVKJ (may still be
directional at various times ~ Jim)

<u>JAPAN</u>: NHK-1 (Dailch: Hoso) was scheduled to begin 24 hrs 7 days on April 1st. The network has been broadcasting 24 hr on and off since summer 90 w/R. Japan EE language nx at 1500 and at other times. [Bill Harms via DA via ARC in UKVK]

<u>KUWAIT</u>: R. Kuwait reactivated its MW stations from Kuwait. Reported hearing them on 530 and 1341, although the signal strength is not what it was before the Iraqi invasion. [GVG in WDXC1

LIBERIA: On March 28 the National Patriotic Front of Liberia's radio station in Voinjamaa was heard on 585 w/a nx bulletin in EE at 1900 UTC. During the bulletin the station was heard to identify itself as ELRV, the VO the Liberian Broadcasting Station. [AMID in WDXC]

MEW ZEALAND: The YC program, which formerly carried concert mx on MW, has moved to FM. Since the remaining programs (EZL, sx, jazz) do not produce enough commercial revenue, RNZ is taking them off the air. However, the stations will carry parliamentary broadcasts 0200-1030 Tu/We/Th UTC. The frequencies are 657, 882 and 963 kHz. [AC on RNMM 6/6 via Mike Fern in NASWA]

PARAGUAY: 619 (nom 620) R. Wassaindy, 861 (nom 860) LV de la Cordillera, 1061 (nom 1060) R. Boquerón. [J. Anderson, Pampas in WRTH-LA-NL in UKVK]

PUERTO RICO: Here are a few changes in Puerto Rico radio operations that may be of interest: 630 WOBS, 910 WPRP, and 760 WORA, as of 6/3 have been called La Gran Cadena, a name they used for a while in the late 70's also. They had been Cadena OBS for last 7 years. Format is news talk, all 3 in parallel most of the time, with local commercial inserts and a few local programs. 680 WAPA, sold recently, alternates between NotiRadio and Wapa NotiRadio. In drive times is // with

two) and out of money.

As there are several AM networks here, I thought I would detail several of them. First, NotiUno (one word with two caps) is a network run as a cooperative by founding stations 1320 WUND, 840 WXEW, 1280 WCMN, 1170 WLED, and 930 WEKD. The co-op produces news 5:30-9 AM and 4-6 PM for all the members who share in income. The rest of the day the stations are totally independent. They also allow other stations to join the net in exchange for running spots carried in network programs. These include 1340 WNDZ. 1550 WKFE, 1430 WNEL, 1070 WLEY, and the Guayama 1540 station. The San Jaun participant is called NotiUno all day, as is the Cabo Rojo-Mayaguez station on 930. 580 WKAQ is a 24 hour news station. In the same hours as the NotiUno net, they rent time on several other stations, 1120 WMSW, 710 WKJB, 850 WABA, and 1260 WISO, to rebroadcast news in a network. Both these nets are in operation due to the inability of any single AM station to cover the island due to rugged terrain and low ground conductivity. As radio ratings are done here on an island-wide basis, the stations or groups with the greatest coverage are at an advantage. In the last rating, March of this year, AM radio had less than 20% of total audience, although there are twice as many AMs and FM stations here. [David Gleason, Cadena Salsoul, Caquas, PRJ

UNITED KINGDOM: 1053/1089/1107/1485 BBC Radio 1 is only broadcast 0500-2300 (BE in ARC in UKVK)



RADIO EXTERIOR DE ESPAÑA

SI ESTAS LEJOS. SIENTENOS CERCA

QSL INFORMATION

"...IRCs are now exchangeable in any country for one or more postage stamps representing the minimum postage prepayable on an unreqistered letter sent abroad by air. Whereas before January 1, 1991, an IRC was exchangeable for the minimum postage for a letter sent by surface. Additional coupons were required for an 'air letter.' ("Air letter" in this case, merely refers to a letter sent by air ... " [Fern A. Burns, Manager, International Agreements and Studies Branch, Office of International Business, United States Postal Service in letter to Mike Hardesterl (Post offices outside of capital cities offer limited IRC acceptance in many countries, so it is still better to use mint stamps whenever possible - Jim)

EDITOR'S COMMENTS

I received a card from Mike Riordan that the 1475 Malaysia item in the most recent IDXD was checked for accuracy with Pat Martin before submission. (WRTH says it is on 1476). Tim Hall also wrote in that he and Neil Kazaross logged this station on 1475 back in 1989 with frequent mentions of Malaysia Broadcasting Service in a non-EE broadcast. Malaysia is an excellent catch. Thanks for the clarifications! Mike is looking forward to some Baja Eclipse DX on July 11th. I remember failing to hear Cuba 640 about 20 years ago during an east coast eclipse!



CONTRIBUTORS

[MC-MA] Mark Connelly, Billerica MA;

[JHB*WA] John Bryant, Orcas Island WA; NRD 525, 40' wire, 7'0" above ground, an inland location.

Chris Vito, Hollywood FL; Sony ICF 2010, Sanserino Loop, 1288' beverage at 110°(*).

Mike Riordan, Goleta CA; DX-440, Panasonic RFB-300, Select-A-Tenna

[TRH-CA] Tim Hall, Chula Vista CA; Sony JCF-2010, Radio West Loop

Todd Brandenburg, KA0KAN

1337 SW Woodhull, #6 Topeka, KS 66604

DX on the FM band, from April through September

time-Paul didn't want to do another 48-pager, so if you don't appear below, you WILL get first priority next issue

The E-skip here has been nearly nonexistent. I heard a CBC relay 2009 101.9 WOCD NY New York-good to fair w/ WSGC/WCIB w/ from (1 think) northern Ontario, but no other stations were logged from that area. Oh well.. I finally got the antenna set up in my apartment, and it works fairly well, so I'll be able to catch E-skip from there

You've heard me mention ceramic filters here. A company in Minnesota is offering the narrowest DXers use with no minimum order. unlike other outfits. Digi-Key (1-800-344-4539) has 110 kHz bandwidth filters (part TK2309), 150 kHz (TK2308) and 180 kHz (TK2307) for \$1.41 each or \$11.99 for ten. Add \$5.00 if the total order is less than \$25. I'm told that if you use more than 2 110's that the distortion will increase. You will also lose a little sensitivity.

Let's hope the E-stop increases a lot 73's till next time.

Russ Edmunds, 753 Valley Rd, Blue Bell, PA 19422 Here's more. Not real eventful so far. When I've had the time- no openings and when there've been openings, no time (I hear ya! trb): LOCAL:

89.1 WYBF PA Radgor Twp.- This shared-time and facilities operation runs Mon, Wed, Fri Staffed primarily by students of Cabrini

89.1 WXVU PA Villanova- Other half of shared-time and facilities duo first heard 6/18, 2034, also w/ progressive rock in stereo This one runs Tues, Thur, Sat and Sun. Villanova provides most of the engineering support. Don't know exactly where tower is, believeon the Villanova campus.

6/17/91 tropo

0658 91.7 WJAZ PA Summerdale/Harrisburg- w/ jazz and familiar 'Temple Radio Network' ID // WRTI-90.1, with WKDU mercifully

6/20/91 Tropo

0655 95.3 WFTR VA Front Royal- atop this, my only usually vacant channel w/ lcl nx, ID, and CNIN nx.

7/1/91 F-ckir

2015 95.1 WXLX AL Prattville/Montgomety- w/ mix of classic rock and eurrent 'mainstream' rock and 'The Fox' non-ID o/u normal WZZO/ WAYV Hrd this DXing from Macon, GA both 12/90 and 4/91 trips, so it's familiar, hi

7/3/91 tropo

0702 92.9 WLTJ PA Pittsburgh- ID in nx followed by soft hits format of

Eric Bueneman, 5002 Cross Ridge Ct, Woodstock, GA 30188 Realistic STA-90 rx, Archer VU-110 in attic

6/13/91 E-skip

2129 101.3 XHPR VER Veracruz- good w/ some splash from WKHX-FM 101.5 w/ lcl ads in SS mentioning Veracruz, into SS AC

2130 88.9 nID good to fair mixing w/ WMBW w/ nx in EE, mention at 2102 88 ! WIIS FL Bradenion. You've been listening to 'The Family end of newscast of the '7:00 newscast from the V.V.V (or B.B.B. or V B.C. or something similar)' WMBW took over soon after 6/2/19/ 17000

0020 106.1 WSTH-FM AL Alexander City- good w/ intermittent stereo w/ WZL1 with CWM, 'South 106' slogan

0038 101.1 WBVR KY Russellville- good to fair w/ 'The Beaver' slogan, new CWM releases, first time noted here since 1988!

and WVRK-102.9 w' AC/OLD, 'Magic 102.7' slogan, Igl ID w/

Chattanooga at 0100, change from Dance/CHR and 'B-103'. 0101_107 5 W298AA GA Roswell- unusually good way over WYHY w. REL mx pgm, translator of WMBW-88.9 Chattanooga, beamed Roswell)

0111 9.3 WHVK TN Tullahoma- poor u/ WVFJ w/ CWM, 'Huntsville's Country' slogan. 7/1/91 E-skip

1950 98.1 WCTK MA Fall River good of WTXT/WBFM w/ CWM, PSA, wx for Providence RI, Today's Country for Southern New England' slogan

Welcome to another edition. I have more loggings than space this 1956 97.5 WALK-FM NY Pagatchogue, LI-good taking WSSY apart w/ wx forecast, Igi ID at 1956, Icl ads, jingle ID into AC/OLD // WALK-1370

> jazz, 'CD-101.9' slogan, this is the stn where WSTR-94.1's 'Jazz Flavours' is produced

> 2009 101.9 WCIB MA Falmouth- good w/ WSGC/WQCD w/ Boston Red Sox baseball.

> 2026 102.5 WCRB MA Waltham- good over WZBQ-FM/WGHR/ et al w/ CLA music, ERC's favorite station (or one of them!).

> 2040 97.9 WWSH PA Hazleton- good w/ ads for the Wall Street Journal and an auto parts store in West Hazleton, soon lost to splash from semi-lel WKCX-97.7.

> 2046 98.9 WKLX NY Rochester- good over WQMT w/ OLD, lcl ads and wx forecast for Rochester.

> 2058 99 1 WAWZ NJ Zarephath- good w/ WAHR in prayer requests in REL pgm, owned by Pillar of Fire, but wasn't enough to outdo WAHR's fire, hi!

> 2111 94.5 WYYY NY Syracuse- good over WMUU-FM/WAPI-FM/ WBYZ w/ AC/OLD, 'Y-94' slogan, FM side of WSYR-570.

is now on the air, first heard 1754 6/17. Stereo, progressive rock, 2132 93.7 KLXK Min Minneaposis- good over WDJC/WFBC-FM w/ 'Twin Cities' Classic Rock 9317 KLXK' slogan, into Classic Rock, easy to confuse w/ KSD-93.7 St. Louis MO.

> 2133 94.5 KSTP-FM MN St Paul- good w/ WBYZ with AC/OLD, Sunny 95' slogan

> Tom Sanders, 1472 Hunters Riege Ct, Davison, MI 48423 Pioneer SX-850 with R.S. fringe FM antenna 20 ft at 20 feet Technics

6/16/91 E-skip

1810 94.1 WEZY FL Lakeland- w/ liner 'easy music to help you relax, with Easy 94.1, WEZY

1820 94 1 WCHY GA Savannah, very briefly o/u 2 other stos, mention of 10pm 'Heart Songs' show and Chevrolet dealer spot

1825 96.9 WAIV FL Jacksonville, no CLs, spot for LB (?) Furniture at 10221 Beach Blvd (US 90), promo for Baackyard Picnic contest with entries to be sent to PO Box 6877, Jacksonville Jingle nonID 'Oldres all weekend, 96.9 Kool-FM' Strong stereo signal for 5 minutes.

1830 93.1 unID- CL nx on 93 1, probably WTM! Miami.

1830 93.9 unID- In and out through the entire opening w/ Latin sounding 'wave' music, probably WLVE Miami Beach Heard most of 2 breaks with NO CLs or stn liners.

7/1/91 E-skip

2100 89.3 WSCI SC Charleston- in and out w/ 'Gershwin At The Library of Congress', the sx for SC and net ID 'You're listening to the SC Educational Radio Network, public radio in the Palmetto State'. Lel ID 'Broadcasting from the aircraft carrier Yorktown at Patriots Point, this is WSCI Charleston, 89.3 FM'.

Hour' here on WJIS, Bradenton-Sarasota- Ft. Myers- Tampa Bay' Strong losal quality signal or most of this opening.

2103 88 5 WMNF FL Tampa- briefly heard CLs and a phone 29-9663, heard this one before

2111 97.5 WPCV FL Winter Haven- 'Country 97' w/ spots for Answer Right (') and a bar in Kissimmee, then wx for central FL and temps for the Space Coast and Gulf Coast

0045 102.7 WBDX GA Trenton-fair to poor between WZBQ-FM 102.5 2120 94.5 WWLV FL Daytona Beach- 'Love 95', heard briefly with 'love song requests'

> 2125 90 5 WBVM FL Tarapa ContChr, time check at 9:25 and nonID Thanks for listening to Tampa Bay's WBVM'. No sign of WKAR East Lansing.

SSW from xmtr site in NE Cobb County (atop Sweat Mountain nr 2131 90 9 WKTZ FL Jacksonille- no Cks, but a plug for Riverton Tower Apartments 'at 5353 Arlington Expressway, on the beautiful St. John's River at the Mathews Bridge" (all Jacksonville landmarks)

2140 96.9 WINK FL fit Myers- the new Wink 96.9' heard briefly earlier; spot for \$19 Dave Mason concert as part of Riverfest at Centennial Park, and promo for the Alexander and Bennett morning show AC mx with di Jeff Hickocks (9) followed

MARCONI MEMORIAL AWARD PETER W. KEMP

Peter W. Kemp was born in Nashua, New Hampshire and raised in Starriford. Connecticut. His life long love of radio communications began at an carly age- winding coils around paper tubes-and continues to this day.

Mr. Kemp graduated from the Stamford, Connecticut Public Schools, later receiving a baccal aureate degree from Central Connecticut State University in Technology Education, a Master's degree from Western Connecticut State University in Instructional Technology, a Certificate of Advanced Graduate Studies in Curriculum Supervision and Educational Administration from Southern Connection: State University, with additionall graduate course work from the University of Maryland and the University of Connectinut. He is a member of Phi Delta Luppa and Epsilon Pr Tau Honor Societies in Education.

the joined the United States Navy, earning the rank of First Class Petry Officer. His last two tours found him serving as Non-Commissioned Officer in Charge of A dvainistration Support Services at the Joint Sobe Processing, Center (NSA) in Okinawa,

Japan, and as Special Assistant to the Director of Cryptologic Training at the Naval Communications Training Center in Pensacola, Florida. Mr. Kemp received an Honorable Discharge

Upon completion of his Naval collistment, Mr. Kemp became Coordinator of Technology Education at the Bethel, Connecticut Middle School. He is the developer of the BEARS Projects—incorporating innovative radio communications activities into all areas of the curriculum. Since the inception of the program, over 600 students of all ages have become hoensed. His students are most proud of having provided emergency communications during the Mexican earthquake and Hurricane Hugo, having established direct radio support of St. Croix. Mr. Kemp is a Merker Teacher, in the State of Connecticut, having taught many In-Service Training Seminar's for the State Department of Education. He has written several articles which have a ppeared in The Technology Teacher, School Shop and the National Education Association's Journal.

An active radio amateru, Mr. Kerup holds the callnign of K212. He has held a variety of positions within the ARRL, including three terms as Connecticut's Section Manager. He currently serves as Assistant Director for the New England Division and as an Educational Consultant to the American Radio Relay League. He has worked with Roy Nead (K6DUE) in the movie, "The New World of Amateur Radio", and the Talcott Mountain Science Center's interactive satellite video series, "On the Shoulders of Giants" Mr. Kernp is a member of the ARRL, AMSAT, 10-10, and numerous local radio clubs. He has authored articles for QST, 78 Magazine, World Radio and the National Radio Club +

In addition to his amateur activities, Mr. Kemp has served on his town's Cable Television Advisory Council and the Committee For the Implementation of the Enhanced-911 system. When not tuning the duals, he may be found compling, four-wheel driving or learning more about his computer.

Mr. Kemp resides in Bahel, Connecticut.



Laura McCusker

c/o WROW - 341 Northern Blvd. Albany, NY 12204

News of the industry, of interest to DX'ers

It's always nice to get an "indecent"news item to start off the column... A umanimous 3 judge panel of the US Court of Appeals for the DC Circuit ruled in a May 17 decision that the congressionally-enacted 24-hour ban on the broadcasting of "indecent" matter was unconstitutional. The case was sent back to the FCC with instructions by the court to hold a proceeding to identify a "safe harbor" period during which such material can be broadcast. In addition, the FCC was instruc- most-kest-in-Peace dept., the country's ted to look at the definition of "chil-

dren", which it placed at ages 17 or younger for "indecency" purposes, and to consider what wate should be looked at to determine whether "children" are in the listening or viewing audience. The 24-hour ban, passed by congress in '88, never actually went into effect. In Jan. '89 the court of Appeals stayed the ban's effective date and the FCC put into effect a "safe harbor" of 8pm-6am until further court action ... In the Alfirst all-kap station, kway, Los Angeles, has bit the dust, but the format is still alive & twitching, WSYW 810/lndiarapolis, is planning on going all Rap, probably by the time this sees print. WS'IW currently simulcasts the Classical format of it's FW sister station. The Far "Symphony 167", will not be affected ... hore station news: WPNT 820/Chicago his applied to become a non-directional 5kw daytimer. They plan to add 820 as a second AM signal on the 531' self-supporting tower at Belmont & Lavergne Aves, currently being used by WSBC. WSBC is 1 of 3 1kw stations in the Windy City which divide up various hours on the 1240 frequency ... In the "On the Block" dept., a full 48% of all radio stations in the US have been sold at least one time since 1984. That's 5.328 stations out of an on-air total of 11,195. That tally from a report done for the Radio Business Report by the M Street Journal. More grim statistics - 2,032 stations have been sold at least twice in that time period; that's 18% sold at least twice, for a total of at least 7,360 station sales trans-

actions over ? years. The actual total number of transactions is even higher, since a number of stations have sold more than twice since 1984 ... And finally, a staple of radio listening may be on the way out. By the end of the summer, stations should know if the FCC will consider shortening ERS tones. In Sept. of '89, the NAR filed a petition with the FCC requesting a rulemaking proceeding to investigate 3 improvements to EBS: i.i to allow a shorter attention tone, 2.) to permit stations to write their Own. EE'S scripto, and 3.) to allow stations to fully automate EBS monitoring/control functions. The shortened tione is important to many broadcasters who feel that the current tone and script, which totals about 1 minute of wirtime, are too long and invite Listener tune-out.....

> into sources - -Radio Business Report, Radio Week

Professional Sports etworks

Barry S. Finkel 10314 S. Oakley

Chicago, IL 60643-2409

Network listings for team sports stations

Here is some miscellaneous information about minor league baseball broadcasts (from Tom Sanders and Russ Edmunds).

Scranton/Wilkes Barre Red Barons

960 WPCN-PA 1240 WBAX-PA 1400 WICK-PA 1460 WEMR+PA 95.9 WBNE-PA 1550 WARD-PA *partial schedule only

Carolina League flagship stations (from Keys' 1991 game program)

Durham Bulls 620 WDNC-NC Frederick Kevs 820 WOS1-MD Kingston Indians 960 WRNS-NC Lynchburg Red Sor 930 WLLL-VA Peninsula Piramus 88.3 WHOW-VA Salem Buccaneers 1240 WROV-VA

WSGW WIOG AM 790 102.5 FM

P.O. Box 1945 . Saginaw, MI 48605

Durham Bulls (from June-July Bulls | fillustrated newspaper and game program)

620 WDNC-NC (all games) 680 WPTF-NC (weekend games) 1340 WCBQ-NC (all games) 1430 WRX0-NC (Mondays)

1450 WIZS-NE (Fridays)

Formats

Tony Fitzherbert

356 Jackman Avenue Fairfield, CT 06430-1728

Changes in programming status; reported by NRC members and others

Welcome to the early summer Formats Column! With the PTA events almost over for the year, and my retirement as middle school PTA president two weeks' away, I can catch up on everything. By the way, my reward for an adequate job of PTA president was nomination and subsequent election to the post of Vice President of the state PTA. So I will be still serving the children of the state of Connecticut next year.

On to radio....WADS - 690, of the blue collar towns of Ansonia, Derby, and Shelton, in Connecticut's Naugatuck River Valley, is silent. This little station has fished for a format, from Spanish to AC, and could not put it together. And a recent CBS news item noted that over 6000 disc jockey jobs have been lost in the past ten years because of automation and the satellite programming. More somber news...Dave Schmidt writes that WADS-1380, in Wilmington left the air on 4/28, as the land atop Mt. Cuba was sold for housing. The five tower array was toppled on 4/30, and was hauled off for scrap on 5/2. Al Holtz sent a clipping noting that the station is hoping to get back on the air from a new facility. This will have to be seen to be believed. And Geov Parrish is ill...and we hope that he is restored to health quickly.

WSSH-AM - 1510, in Boston is now being <u>leased</u> to the folks that own WBIV-1060. So the Spanish programming is now being carried over a better signal. WBIV, Natick? Now Spanish religion, probably on every radio in Natick, Wellsley, Concord, Weston, and the other extremely wealthy towns west of Beantown. And here in southwestern CT, WHMW, WHMM, WXCT, WNLK, and others are programming mostly Spanish on weekends, to pay the bills. WMMM - 1260 has an Irish show, and even WICC - 600 airs an Italian show on Sunday mornings.

The following format changes will portray what a wasteland the AM dial has become. Our contributors are Dave Schmidt, Mike Hawk, Joseph Johnson, Eric Bueneman, Pete Taylor, Geov Parrish, Rick Dau, and Laura McCusker. Additionally, Laura, Rick, and Joe bring us Dial Scans from various metropolitan areas. Here we go on some great reading for the beach...bring your radios!!!

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WYOR TN Brentwood - Silent (GP).
560
570
    WTKN
          FL Pinellas Park - All news (GP).
           MB Winnipeg - Rock oldies "KY-58" (GP).
580
    CKY
590
    WROW
           NY Albany

    Automated EZL (LMcC).

590
    CKYC
           ON Toronto
                         - Ex-CKEY, now CWM (GP). To fill CFGM void??? Hope they
                         have better luck than the station on 640 (TF).
610
    WSNG
           CT Torrington - SMN AC (GP). My closest unheard (TF).
610
    KDAL
           MN Duluth
                         - Talk, AC (GP).
610
    KYJC
           OR Medford
                         - SMN AC (GP).
610
    KONA
           WA Kennewick-Richland
                                 - Oldies (MH).
630
    KXOK
           MO St. Louis - Black AC/Jazz (EB).
           CA Rancho Cordova - SS//KNCX - 1110, Dual ID's in English (PT).
650
    KMCE
           ND Williston - CWM (GP).
660
    KEYZ
680
    CJOB
           MB Winnipeg - Adult standards/news/talk (GP).
690
     WADS
                        - Silent (TF).
           CT Ansonia
690
    WPDQ
           FL Jacksonville
                             - News/Talk, A(i), Sun Net. (JJ).
                        - Country oldies (GP).
690
    KHEY
          TX El Paso
730
    WJTO
           ME Bath
                         - Satellite oldies (GP).
740
     WDFZ
           TN Tullahoma - Satellite CWM (GP).
     WWAX
750
           PA Olyphant
                        - BRN Business News (DS)
     WJXL
          AL Jacksonville - Contemporary Christian (EB).
820
     WAPO
          TN Jasper
                         - Southern Gospel (EB).
           PA Johnstown - CWM (GP).
850
    WJAC
           TN Knoxville - News/talk, CBS/BRN "All news 850" (EB).
850
    WUTK
           AL Valley Head - AC/CHR (GP).
870
    WORX
870
    KORD
                        - SMN Pure oldies (GP).
           WA Pasco
890
    WQIS
           MS Laurel
                         - SMN Touch UC (GP).
900
    CJER
          PQ St. Jerome - Local French programming (GP).
910
    WTXN
           AL Pepperall - Silent (GP).
910
    KVIS
           OK Miami
                        - Southern Gospel, Religion (GP).
    KQED
920
           NM Albuquerque - News/talk (GP).
           OR Grants Pass - Noncommercial news/talk (GP)
930
    KAGI
940
    WINZ
          FL Miami
                        - All news (GP).
940
    KIXZ
          TX Amarillo
                        - Nostalgia "Magic 94" (MH).
          MS Houston
940
    WCPC
                        - Gospel (GP).
950
    WHVW
           NY Hyde Park - Kool Gold Oldies (TF).
           PA Barnesboro - Silent (GP).
950
    WNCC
960
    WBRU
          SC Beaufort - Oldies, SMN "Kool Gold" (JJ).
                        - Modern Rock (GP).
970
    KESI
          OR Portland
    WMAK KY London
                        - Silent (GP).
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980 WPRE WI Prairie du Chien - CWM (MH).
1000 WJHH
          GA Soperton - Silent (GP).
1020 WIBG NJ Ocean City - Spanish // WREY-1440 (GP).
                        - News/Talk (TF).
1030 WBZ
          MA Boston
1030 WXSS
          TN Memphis
                        - Silent (GP).
                        - AC/CHR "East 105 AM" (EB).
1050 WBPE GA Convers
1050 WNTR MD Silver Spring - Sun News/talk (GP).
1050 KJTO
          OK Tulsa
                        - Satellite adult standards (GP).
1060 WBIV MA Natick
                        - Now Spanish religion (GP).
1060 KHYM TX Gilmer
                        - Gospel, religion (GP).
1070 WFLI TN Lookout Mountain - Southern Gospel (EB).
1080 KWJJ OR Portland - CWM//FM (GP).
1080 KRPX UT Price
                        - Silent (GP).
1110 WJMC
                        - Silent (GP).
          MI Petusky
                                                                 P.O. Box 1
          NC Charlotte - BRN Business News (JJ).
1110 WBT
                                                            Eau Claire, WI 54702-0001
1120 WHOG
         AL Hobson City
                             - Black programming (GP).
          SC Hilton Head
1130 WHHR
                             - BRN Business News (JJ).
1130 WAMG
          TN Gallatin - Southern Gospel (GP)>
1140 WBXR AL Hazel Green
                             - Unis oldies (GP).
          TX Mineral Well
                            - CWM (GP).
1140 KJSA
                        - Soft AC//FM (TF).
1150 WMEX
          MA Boston
1150 WCUE OH Cuyahoga Falls - FRN Religion (MH).
1150 KMXN
         CA Santos Rosa
                             - Spanish 0600-2200 PST (GP).
1180 KLAY
          WA Lakewood
                       - Now here with talk and sports (GP).
1190 KJEM
         AR Bentonville
                             - Adult standards (GP).
1190 KORG CA Anaheim
                        - Brokered religion and ethnic, AM drive is a Korean
                        program! (GP).
1190 WOEQ FL Royal Palm Beach
                                   - New station, Spanish (GP).
         CA Rocklin
                        - Family Life Radio, religion (MH).
1210 KEBR
1210 KLDI WY Laramie
                        - Satellite rock oldies (GP).
          TN Etowah
                        - Silent (GP).
1220 WCPH
          VA Woodstock - Satellite CWM (DS).
1230 WAMM
1240 KOFE ID St Maries
                        - News/talk (GP).
                        - EZL, Drake EZL during non drive times (GP).
1240 WRTA PA Altoona
1250 WXKU PA York
                         - Still uses WNOW call, MOR, live DJ's, for FM-"Mix"-
                         type format (DS).
1250 KIKZ TX Seminole
                        - CWM//106.3 FM (MH).
1260 WBBK GA Blakely
                        - Sun News/talk (GP).
1260 WZBO
          NC Edenton
                        - Talk (GP).
          AL Tuscaloosa - Adult standards (GP).
1280 WNPT
1280 KFRN
          CA Long Beach - FRN Religion (MH).
1290 WQIN
          PA Lykens
                        - Oldies (DS).
                        - Religion (GP).
1290 KRGE
          TX Weslaco
                        - CWM//KWDX (GP).
1300 KKAS TX Silsbee
1310 KMYX CA Taft
                        - "Thunder" Contemporary Country//FM (GP).
1310 KFKA CO Greeley
                        - News/talk (GP).
1310 KOYL TX Odessa
                        - Silent (GP).
1310 WGH
          VA Newport News
                             - Traditional CWM (GP).
          NC Forest City
                             - CWM (MH).
1320 WAGY
                         - CNN Headline News (GP).
1340 KKAM
          CA Fresno
1340 KOMY CA Watsonville
                             - Silent (GP).
1340 WTAN PL Clearwater - All GREEK!!! (GP).
1340 WHAT FA Philadelphia
                             - Talk days, jazz/oldies nights, Gospel on Sundays
                              (DS).
1350 WKRQ FL Cocoa
                        - All news (GP).
1350 WIOU IN Kokomo
                        - Satellite oldies (RD).
1360 WYSE
          GA Bainbridge - Silent (GP).
1370 KFON TX Rollingwood
                             - AC//KEMJ-FM (GP).
1380 WIZO TN Franklin - Adult standards//WHNK-1430 (GP).
                        - Transtar AM standards (DS).
1390 WFBL NY Syracuse
1400 WAZX GA Alphareta - Spanish AC (EB).
1400 WFTG KY London
                        - CWM//FM (GP).
          OH Portsmouth - Satellite rock oldies (GP).
1400 WPAY
1400 WBIZ
          WI Eau Claire - SMN Kool Oldies (GP).
1410 KCOL CO Fort Collins
                             - All news (GP).
1410 KNAL TX Victoria - CNN Headline News (GP).
                        - Adult standards "The Coast" (GP).
1420 KYNG OR Coos Bay
                       - Contemporary Christian (GP).
1420 WPLY
          WI Plymouth
1430 WLTG FL Panama City
                             - All News (GP).
1430 WRTH
          MO St Louis
                        - Unistar AM only "1430 Worth" (EB).
1430 KNSP
          MN Staples
                        - Silent (GP) -
                        - Standards //WIZO on other side of Nashville (GP).
1430 WHNK
          TN Madison
                             - Drops pre-teen for all news (GP).
1440 WPRT FL Winter Park
1440 WFTQ MA Worcester - Rock//FM (GP).
1440 WHIS
         WV Bluefield - Business news (GP)
1450 KOBO CA Yuba City - Ethnic/variety//KEST (GP).
1450 WDXR KY Paducah
                        - Satellite CWM (GP) .
                        - CNN Headline News (GP).
1450 KYKN OR Keiser
1450 WFXX PA South Williamsport - CWM//FM (GP).
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1450 WFTR VA Front Royal - Satellite AC, live 0500-0900, talknet at night (DS).
                            - Satellite CWM (GP).
          AL Phoenix City
1460 WPNX
1460 WBPA
          KY Elkhorn City
                             - Silent (GP).
                        - Family Life Radio, religion (MH).
          WA Kirkland
1460 KARR
                        - Drake CWM (GP).
1470 WBIT
          GA Adel
          IN Anderson
                        - Oldies (RD).
1470 WHUT
          MS Brookfield - Talk (GP).
1470 WCHS
                        - Oldies, Jazz nights (GP).
1470 WROO
          PA Farrell
          NY Poughkeepsie
                             - All talk (TF).
1490 WKIP
          NY Syracuse - Black, UC (GP).
1490 WOLF
1490 WNTJ
          PA Johnstown - All news (GP).
1490 WFAD
          VT Middlebury - AC/Full service (GP).
          CA San Jose - "X-Rock 1500, hard rock (GP).
1500 KSJX
1510 WJIC NJ Salem
                        - Sun Network Talk (DS).
                        - AC, Travelers' Info 50% of the time May to Sept, note
1510 WVAC OH Norwalk
                        call for all of those who vacation in Norwalk (TF from
1510 KDVE TX Nederland - CNN Headline News (GP).
1520 WDCY
          GA Douglasville
                             - CWM (EB).
                             - AC//FM (GP).
1520 KAMX NM Albuquerque
1530 WCEG
          MA Middleborough
                             - Drake oldies when on the air (GP).
1540 KXEL
          IA Waterloo
                        - "Real Country" Satellite CWM (RD).
                         - The WARD Shopping Club, radio version of the Home
1550 WARD
         PA Pittston
                         Shopping Club, sells all kinds of knick-knacks, polkas
                         on weekends (DS).
1550 WBSC SC Bensonville
                             - Pure Oldies, was Gospel (DS).
1550 KVAN WA Vancouver - Locally produced AC, leased to a local broadcasting
                        school (GP).
1560 WMOM
          MD LaPlata
                         - To be news/talk (GP).
1560 WPAD KY Paducah
                        - Drops Christian for Adult Standards (GP).
1560 KLTI
          MO Macon
                        - Silent (GP).
                         - AC/New AC//FM (GP). What is New AC? (TF).
1570 WIFF
          IN Auburn
                       - French AC (GP).
1570 CKLM
          PQ Montreal
1580 KBLA
          CA Santa Monica
                             - Was KDAY, now Business News (GP).
          KY Georgetown - Oldies //FM (GP).
1580 WKTK
1590 KLIV
          CA San Jose
                       - CNN Headline News (PT).
          MD Ocean City - Talk (DS).
1590 WETT
1600 WAOS
          GA Austell
                       - Spanish CHR "La Favorita" (EB).
1600 WARU
          IN Peru
                         - AC RD).
1600 KTAP
          CA Santa Maria
                             - Spanish (GP).
   Now, Rick Dau brings us to Peoria, IL, for a Dial Scan
1020 WPEO IL Peoria
                         - Gospel.
1140 WVEL IL Pekin
                         - Religion.
1290 WIRL
          IL Peoria
                         - News/talk.
1350 WXCL
          IL Peoria
                         - CWM
1470 WMBD Il Peoria
                         - Oldies.
   And Joseph K. Johnson lies beneath the moss covered weeping willows softly
caressed by the southern breezes in Savannah, GA, listening to the following Dial
Scan....
                       - News/talk, CBS.
630 WBMQ
          GA Savannah
900 WEAS
          GA Savannah
                        - All Christian radio, CBN Net.
                        - Gospel.
1230 WSOK
          GA Savannah
                        - CWM//FM, ABC Net.
1290 WCHY
           GA Savannah
1400 WSGA
          GA Savannah
                       - SNN, SMN Hits 40's to 70's.
1450 WIZA
          GA Savannah
                       - Inspirational, A(i) Net.
1520 WNMT GA Garden City - Country and Western music.
   And up to Albany, where as the state legislature struggles to pass the state
budget (for eight weeks!!) Laura McCusker turns on her radio for the following
Dial Scan.....
590 WROW NY Albany
                        - Easy listening "Always Beautiful 590", sports.
620 WVMT VT Burlington - Oldiers "Classic Hits WVMT".
640 WNNZ
          MA Westfield - Talk, "640 WNNZ, Where It 's Good Talking with You".
810
    WGY
          NY Schenectady - Talk and AC, talk overnights.
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WABASH-PERU BROADCASTING CO., INC. P.O. Box 1010 Peru, Indiana 46970 860 WSBS MA Great Barrington - AC "86 AM, the Station that's in tune with You!". NY Saratoga Springs - Satellite adult standards. 900 WKAJ WIZR NY Johnstown - Satellite big band music. 930 980 WTRY NY Troy - Oldies "Great 98". NY Schenectady - Talk, OTB results, sports. 1240 WVKZ 1260 WBNR NY Beacon - Satellite oldies (Laura - WBNR is a regular up there?? Beacon is about 80 miles south of Albany). 1300 WQBK NY Albany - Talk. 1320 WATR CT Waterbury - AC "The One You Turn To". (Explains why I can hardly hear this station in Fairfield, he's directional NW!). 1390 WEOK NY Poughkeepsie - Satellite big bands.

1400 WABY NY Albany - Big band, live AM and PM drives, satellite other times. - CWM//FM.

1460 WGNA NY Albany 1540 WPTR NY Albany - News/talk/sports.

Well, a huge column. You are up to date as of 5/2611 As you hear new sounds on familiar frequency (like Greek on WBZ during drive times or all Asian on WCBS), be sure to let your fellow DX'ers know via the Formats column, A huge "Thank you" to all of our contributers. Let us hear from you!!!

KTMO / FM - 98.9 . KBOA / AM - 830 P. O. Box 509 . Kennett, Missouri 63857

Ontests George Sherman 104 Pinewood Circle Apple Valley, MN 55124-9319

Promotion of the DX hobby through competitive listening.

1990-1991 final contest report (loggings/points from 10/1 through 4/30)

	GTP	C#1	C#2	C#3	C#4	C#5	C#6	C#7	C#8	C#9	C10
Mike Hawk, Omaha, NE	6321	2103	2565			353			1300		177
Nancy Hardy, Aberdeen, WA	3387	1354	295	75	110	135	172	15	1068	86	
Robert Kramer, Chicago, IL	3071	1916		625				475			
Dave Hascall, Fortville, IN	1637	969	430	25	50			35	128		
Doug Smith, Nashville, TN	1284	996							288		
" Madison, WI	1255	703	130			511	211		50		
Bill Hardy, Aberdeen, WA	1062	462	140			103	135		222		
William Moser, Lk Preston, SD	1056								1056		
Robert Vance, Ft. Belvoir, VA	936	831	90					15			
John Tudenham, Joplin, MO	709	577							132		
Ed Janusz , New Jersey										77	

GTP= grand total points; C#1 state & province points; C#2 new loggings; C#3 tests hrd; C#4 new stns on air; C#5 stns hrd 10/1-10/7; C#6 log all freq's up to 3 ea; C#7 low power stns; C#8 "Letterama"; C#9 10AM-2PM loggings; C#10 stns heard 1/1-1/7 GYers hrd: Kramer 55; Hawk 52; N. Hardy 50; Smith-WI 10; B. Hardy 15; Smith-TN 7; Hascall IN 8; Vance-VA 4. GY points included in state & province points (contest #1)

WANNA BE THE CONTEST MANAGER? I'm wanting to quit so I have more time for other things. If you would like to volunteer for the 1991-1992 DX Season, do it now: 73 & good DX:

BY JOHN D. BOWKER

THIS IS THE COMPLETE LIST OF U. S. BROADCAST STATIONS ON THE INDICATED FREQUENCY AS PUBLISHED BY THE FEDERAL RADIO COMMISSION IN 1934. "S" MEANS SHARED; "SH" MEANS SPECIFIED HOURS; "T" INDICATES TRANSMITTER LOCATION; "D" MEANS DAYTIME OPERATION ONLY; "U" MEANS UNLIMITED TIME. L = LIMITED TIME WITH DOMINANT STATION SHOWN.

Frequency (kc)	Call letters	Main studio and transmitter location	Power	Time designation
1050, clear		Abilene, Kans T—Milford.	5 kw	L-KNX.
	KNX	Los Angeles, Calif	25 kw	U.
1060, clear	WTIC	Hartford, Conn T—Avon.	50 kw	S-WBAL.
	WBAL	Baltimore, Md	10 kw	S-WTIC.
	WJAG	Norfolk, Nebr.	1 kw	L-WTIC, WBAL
	KWJJ	Portland, Oreg	500 w	L-WTIC, WBAL

Interference-reducing Antennas for the BCB

by Denzil Wraight - Burgwaldstr. 3, W-3553 Schoenstadt, Germany

There is probably little of value which has not already been researched or patented as a way of improving reception on the BCB: the main problem is finding it! Over the last two years I have been looking at the early radio literature in my attempt to understand the problems better. One of the most useful findings were references to 'anti-interference' antennas in literature of the 1930s. Since I have seen few post-war references to such arrangements, it seems well worth repeating this experience, especially because the reception improvements can be quite startling.

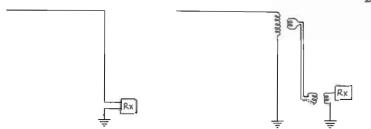
The aim of most radio reception can be simply stated: to hear the desired station-and nothing else! Discrimination against unwanted stations or distant noise sources is often achieved with directional reception, either with loops alone, or with phased and combined loop and omnidirectional antennas. The vertical whip or inverted L antennas often used in phasing combinations are more susceptible to the interference from household appliances than screened or balanced loop antennas. Thus, the directional omni thoop array is often 'contaminated' by interference received by the omnidirectional antenna and ways must be found of reducing this interference if the effective system noise floor is not to be determined by nearby interference.

A possible confusion must be avoided at the outset: "antiniterference" or "anti-static" antennas are sometimes referred to as "noise-reducing" antennas, which could be misleading. The background "noise" on the BCB is produced by distant thunderstorms or man-made electrical interference and will not be reduced by an "anti-interference" antenna; it only deals with interference in the vicinity of the antenna (up to about 90m on the BCB), since the principle strategy is that of reducing electrostatically-induced interference.

The interference to be combated is mostly generated by household appliances, fluorescent lighting, and TVs, but the presence of interference may not be audibly obvious unless one happens to hear the moment when an appliance is switched off and the received "noise" drops suddenly: other interference has a distinct signature. Local interference on the BCB is mostly vertically polarized and generated with respect to ground; thus, any antenna which is balanced with respect to ground should be able to reject some of this interference. Screened, or balanced loops do not respond to the electrostatic wave and have a well-known reputation for being relatively insensitive to nearby interference, compared with vertical (capacitive) antennas which respond mostly to the elctrostatic component. At a distance from the interference source where the electrostatic amd magnetic components are of equal strength (a distance of about 30m and 90m at the high and low ends of the BCB respectively), the advantage of the screened or balanced loop over vertical or inverted L antennas will not be great. If, in the presence of nearby interference, a vertical antenna sounds about as "noisy" as a screened or balanced loop, then "antiinterference" techniques can be probably judged successful, or unnecessary.

Interference-reducing antennas can be roughly divided into two categories: those which depend for their effect upon being placed away from the interference, and those which attempt to balance it out, regardless of their position.

The best introduction is to be found in Terman (1) and a number of articles (2-9) show the interference-reducing antennas known in the 1930s, a time when, before the enforced suppression of appliances, interference was a considerable problem for BCB reception. Although any improvement of the antenna/receiver grounding in fig. 1 will increase interference rejection, further improvement is possible when the antenna or its feeder is near a source of interference. Strafford (2), who patented several details of anti-interference antennas for his company, Belling Lee (UK), which marketed the antennas, gives an arrangement as shown below.



Normal antenna

'anti-interference'

The difference between the two types is in the use of a balanced line feeder and the point where the line is connected to the antenna. The fig. 1 antenna picks up interference, and the downlead may contribute substantially. Although different explanations of the 'anti-interference' mechanism were offered in the 1930s, practical experience showed that a substantial reduction of the pickup of nearby interference resulted when connection 2 is used. The balanced feeder is practically unaffected, since interference voltages cancel out in the receiver transformer. Furthermore, it permits the antenna to be placed away from the interference field of the house. In fig. 2 an element of balance may also be involved in the antenna's rejection of interference.

It is no exaggeration to expect reduction of nearby, electrostatically-induced interference of the order of 30dB-40dB, as compared with an indoor antenna or badly constructed outside antenna. The reduction in comparison with a reasonably-sited outside antenna will not be so large, but even 10-15dB can make the difference between receiving weak signals and only interference.

It is also possible to connect a vertical whip as fig. 2 and I have my 10m whip with the transformer 6m from the ground. Contrary to expectation, there was no measurable loss of signal voltage (i.e. \pm 3dB) on groundwave stations, as compared with the transformer at ground level. If a vertical whip is mounted on the house structure, the upper part of the antenna should be above roof level, where the interference will be weaker. An existing CB-band whip could form the upper part of such an "anti-interference" antenna.

Thus, there are three cardinal rules for antenna placement:
1. Put it as far away from any house and mains wiring as possible.
2. Make it as high as is feasible. 3. Use a balanced feeder. This may even require that the downlead from an inverted L be at the end furthest from the house. Even if one is using a battery-powered radio, there will still be electrostatic coupling of the antenna and antenna feeder to the mains wiring, and one can expect local interference to be re-radiated by your own house-mains wiring. It is important to recognise that a good signal-to-interference ratio is more important than the highest possible signal input, since the feeder arrangements described below cause a signal loss of about 6dB due to transition loss and capacitive shunting.

In order that the antenna-receiver signal transfer be made without introducing interference, a balanced line is better than coaxial cable and any residual unbalance can be compensated (16,17). Use zipcord for the line, which is cheap, easy to obtain, durable and has no significant loss at BCB frequencies (14). A screened, balanced line was found to give only marginally better rejection of signal ingress and is hardly worth the extra effort and expense. The antenna transformer should have a high degree of coupling to minimise signal loss (wind the secondary over the primary) and an inductance of about 5mH ensures operation with low loss down to 150kHz; 2-3mH is sufficient for use down to 500kHz (10). My antenna transformer was wound on a Siemens B64290-K618X830 25mm ferrite toroid with 37:7 turns, which ratio was determined empirically (11). A toroid gives good coupling, but is not obligatory, and ferrite rod can be used. Reference 3 stresses the importance of low capacitive coupling across the electrostatic screen, for which reason the windings are separated by 1.6mm (on a cylindrical iron dust core). It also advises that an electrostatic screen at the antenna transformer (connected to antenna ground) may do more harm than good. Antenna transformer ratios in the range from 1:4 to 1:7 will be roughly correct, but optimum voltage transfer will depend on your antenna/feeder, and can be adjusted when receiving steady, daytime groundwave signals. The step-down ratio is necessary in order to reduce the capacitive shunting by the line of the antenna voltage. Both windings of the balanced-to-unbalanced transformer (on the same Siemens toroid type) at the receiver have 8 turns, for use down to 150kHz. The inductive reactance of this transformer in a 50 Ohm circuit should be roughly 200 Ohms at the lowest frequency of interest. Other toroids or ferrite rods can be used. Although a 1:1 balun could be used at the receiver I have used a conventional transformer, which permits the use of an electrostatic screen (use copper, aluminium foil, or p.c.b.) should this give an advantage, but centre-tapping the balanced side of the transformer and grounding it to receiver ground will cause current to flow, probably inducing some noise and is not recommended. The best possible, independent ground connections for the antenna and the receiver should still be used. At least a single ground stake should be used, as deep as is practicable and the connection to the antenna/receiver should be of low inductance. The mains ground is NOT suitable and even house water pipes may be unsatisfactory.

These arrangements will cover the BCB and longwave and 41so give usable signals on SW. There may be several dB loss on SW and those interested in making an all-bands antenna should consult reference 8. Lankford has reported satisfactory SW reception with an "antiinterference" inverted L antenna (20), but results must be tested experimentally at each location

While the connection of fig. 2 will reduce interference, there may still be a large residual level if the whole antenna is near a strong noise field. A balancing arrangement (7) is of interest where the antenna cannot be placed away from interference and provides a useful source of ideas for those restricted to indoor antennas. The operation depends upon a counterpoise antenna and a bridge, balancing circuit. Other references (15-18) indicate some of the circuits which have been devised for balancing the pickup of the antenna or of the line itself and which permit the remaining interference to be balanced out.

My first antenna at this QTH was an inverted L running up the side of the house and in under the roof. The daytime interference was terrible and only strong stations were audible. With the erection of a 10m whip some 15m away from the house as suggested by (13) came astonishing results: virtually no interference and a receivable station on most of the BCB frequencies during the day. When the whip was connected as an "anti-interference" antenna, with the transformer connection 6m from ground, it appeared to give extra protection from fluorescent lights, but this is difficult to test, unless one uses a standard interfering signal as described in (3) or (7). In cardioid mode, intelligible, atmospheric-noiselimited signals of less than -109dBm (1.6uV across 50 Ohms) can be routinely heard at midday in summer on 1215kHz from BBC Radio 3 (650km distant) even though 15 40W fluorescent lights are in operation only 16m away: fluorescent light interference is inaudible.

The bottom line: even with this 'anti-interference' antenna $y\underline{o}\underline{u}$ will still be able to hear TV horizontal output and other RF nasties in your neighbourhood, which even special directional nulling techniques may not eliminate (12), but these will probably be at a level where they no longer prevent intelligible reception of even the weakest signals. Some experimentation will probably be required for optimum results.

My warm thanks go to Graham Maynard and Dallas Lankford, whose sharing of ideas and experience have helped develop my antenna system, and for reading a draft of this article.

The Answer Man

Got a question about radio? Send it to NRC's Answer Man: Russ Edmunds - 753 Valley Rd. -Blue Bell, PA 19422-2052. No question is a dumb question, and Russ will answer all, from basic to highly technical. Watch for the answer in DX News!

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-via Barry S. Finkel