

# DX MONITOR

THE OFFICIAL  
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OF THE



INTERNATIONAL  
RADIO CLUB  
OF AMERICA

DEVOTED EXCLUSIVELY TO BROADCAST BAND DXING

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IRCA Address Changes, Renewals to Ralph Sanserino, 11300 Magnolia #43, Riverside, CA 92505.

IRCA Reprints to Reprint Service: Steve Ratzlaff, 295 Pettis Avenue, Mountain View, CA 94041.

IRCA Technical Guides, Foreign Log & Foreign DX Reference: Phil Bytheway 9705 Mary Avenue N.W., Seattle, WA 98117.

IRCA Almanac V orders & IRCA Publisher: Ralph Sanserino, 11300 Magnolia #43, Riverside, CA 92505.

DX TESTS Courtesy National Radio Club - Colorado CPC Machine - Thank You.

November 4, 1990, KVOX-1280, P.O.Box 97, Moorhead, MN 56561, time 0600 - 0630 ELT. Special NRC announcement & Morse code ID. KVOX will use it's nighttime facility. Thanks to Mr. Bob Holton, GM.

November 4, 1990, KLEY-1130, KLEY Drive, Wellington, KS 67152, time 0630-0730 EST. Test tones, march music, voice & Morse code ID's. Thanks to the Chief Operator, Mr. Vernon Napier.

November 4, 1990, WITZ-940, P.O.Box 167, Jasper, IN 47546, time 0530-0600 EST. Test tones, music, voice & Morse code ID's. Thanks to Gary Lee.

November 11, 1990, WSYB-1380, P.O.Box 249, Rutland, VT 05701, time 0530-0600 EST. AdCom music with voice and Morse code ID's. Thanks to Mr. Tom Elmore for this test.

November 12, 1990, WARU-1600, P.O.Box A, Peru, IN 46970, time 0200 - 0230 EST. March music with voice and Morse code ID's. Thanks to Mr. James Swearingen, CE.

November 12, 1990, KRXY-1600, 7075 W. Hampden Ave., Denver, CO 80227, time 0230-0300 EST using 5000 non-directional. Voice and Morse code ID's. Thanks to Mr. Girard M. Westerberg, CE.

FROM THE PUBLISHERS DESK: Just received the 1991 "Passport To World Band Radio". Some interesting reading about some new receivers scheduled to hit the streets in early 1991. Japan Radio Company has the NRD-535. Lets hope the audio is better in the 535. A US maker of radio equipment may get back in the receiver game, the R.L. Drake Company of SPR-4 and R7A fame may market the R8. Hope they both remember to put sensitivity in the AM BCB. Receiver designers have not put sensitivity in the AM BCB in years, lets think positive and maybe they will.....Thinking.....73..Pub.

# BROADCASTING INFORMATION

Editor: Geov Parrish, P.O. Box 15164, Seattle, WA 98115-0164

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Deadlines: every Saturday \* compiled 10/14/90

## GOING OFF THE AIR

call	KHz	power/antenna	state/city
KTED	1340	1000/1000	ND TX SAN ANGELO has been off nearly a year (!)
KBIL	1420	1000/	ND-D TX SAN ANGELO was rock oldies, now silent

## GOING ON THE AIR

WKNW 1400 250/250 ND MI SAULT STE. MARIE on air, adult contemp.

## NEW STATIONS

WMVU	900	910/	ND-D NH NASHUA applies for new xtr location
KFIT	1060	2000/60	DA-1 TX LOCKHART wants ext. of time (synch. xtr)
WJOT	1260	1000/	DA-D SC LAKE CITY applies for 5000/ w DA-D
WNJO	1550	10000/3500	DA-2 NJ SEASIDE PARK granted move to Toms River NJ, 6000/3000 w DA-2, new xtr location

## CHANGES IN EXISTING FACILITIES

WVSJ 1360 5000/1000 DA-2 NJ VINELAND granted move to Washington Township NJ; 5000 w days, DA-2

KWJW 1360 1000/1000 DA-2 TX BAYTOWN granted 5000 w days, DA-2

## CALL LETTER CHANGES

( \$ means change accompanies a station sale; \* check for format info)

KKJZ	540	CA Costa Mesa	KKFN	1230	SD Sioux Falls is \$	KWSN			
		is now *	KJQI	WYYN	1270	FL Tallahassee \$	WNLS		
WZRZ	770	FL North Ft Myers	WRXK	WRSB	1360	NY Binghamton \$	WBNK		
WGHR	890	VA Fairlawn	\$	WCQR	WKDY	1400	SC Spartanburg \$	WLWZ	
WPLA	910	FL Plant City		WFNS				(stn has been silent, may be back)	
new	1060	TX Hawley	KWQA	WRTL	1460	IL Rantoul		WUFI	
WNBW	1170	NY Cornwall-on-the-Hudson		WDEY	1530	MI Lapeer		\$	WWGZ
			WARW						

## FORMAT CHANGES

KJQI 540 CA COSTA MESA was KKJZ, jazz, now easy listening "Joy"

KIIX 600 CO WELLINGTON was country, now satellite adult standards

WTAD 930 IL QUINCY was easy listening, now satellite soft AC

CKXY 1040 BC VANCOUVER was rock, now "adult CHR" (T40 w/no rap or rock)

KFIT 1060 TX LOCKHART was news, talk, now all gospel

KKSD 1080 AK ANCHORAGE was adult standards, now all news

WKNR 1220 OH CLEVELAND was satellite country, now sat. rock oldies (stn still plans to eventually go news-talk)

WKAP 1320 PA ALLENTOWN was adult contemporary, now satellite rock oldies

KHLB 1340 TX BURNET was soft AC, now satellite adult standards ("MOYL")

WCRM 1350 FL FORT MYERS was Spanish/religion, now all contemp. Christian

KSMJ 1380 CA SACRAMENTO was sat. rock oldies, back to sat. black oldies

WFIW 1390 IL FAIRFIELD country, adds network talk

WKIZ 1500 FL KEY WEST was adult contemporary, now satellite rock oldies

## PROPOSED STATION SALES

WYDR-560-TN, WEEB-990-NC, KJLA-1190-MO (now silent), WIXE-1190-NC, KVSF-1260-NM (also silent), Wbfd-1310-PA, WBMS-1340-NC, KTOB-1490-CA

If you hear new stations or format changes, share the info! The reports of other DXers are the best way this column has of staying on top of changes - your support helps a lot!

\* \* \* \*



PAT MARTIN P.O. BOX 843 SEASIDE. OR 97138

# DX Worldwide - West

Time: UTC phone (503) 861-3185

DEADLINE: TUESDAYS

We have a good turnout for you this week. DX is on the rise again and lets hope it continues. So on with reports:

## PAN-AMERICAN DX ROUNDUP

- 560 MEXICO, Santiago Papasquiaro-XESRD 10/13 1210 fair o/KSFO for a while w/same female DJ as before. Still trying for XEYO, which supposedly came on the air late last year. (TRH-CA2)
- 570 MEXICO, UNID "Radio Acir" affiliate excellent at times w/KLAC. Hrd a Nuevo Leon mention, suggesting that XEBJB might have joined the ACIR network. Listed ACIR affiliates too far South, especially for our East wire. (TRH-CA2)
- 660 UNID, SM 10/7 0740 songs weak u/unnullable KTNM. Still need several stations on this frequency, including the new Monterrey station which Neil Kazaross says has moved here from 740 (TRH-CA2)
- 680 MEXICO, Guasave-XEORO 10/13 1256 s/on w/XE anthem, into mx. IDs a few minutes later. Apparent schedule change, used to s/on at 1200. (TRH-CA2)
- 740 MEXICO, Torreón-XEQN 10/13 1219 fair w/KCBS. Lambada mx, GMT-6 TCs, ID "XEQN 740 khz AM" and finally a local ad for a dance in Torreón. Ex-1310, must have moved here when XEBP moved to 1310 from 1450. Whenever XESRD-560 comes in, this station does too. Add to your Mexican lists. (TRH-CA2)
- 880 MEXICO, Chihuahua-XEV SM 10/7 0715 Hrd several IDs, slogans, and 1KW mentions tonight. Station did not move to 1170 as had been reported. Correct your Mexican lists accordingly. (TRH-CA)
- 890 UNID, SM 10/7 0747 fair, but heavy fading. Long songs and GMT-5 TCs. Possibly the unneeded Ecuadorian, but didn't sound like them. (TRH-CA)
- 1170 MEXICO, UNID-10/13 1310 man w/frequent use of "Radio Mexicana" slogans. Suspect that this is XEIB Cabora, but that would mean that XESN-1180 isn't in Cabora after all. Need more re-search. (TRH-CA2)
- 1520 MEXICO, San Luis Rio Colorado-XEEH 10/13 1305 Good w/ sign on and usual "R. Exitos" and "La Campeona" slogans. San Luis stations bombing in this AM. (TRH-CA2)
- 1550 MEXICO, Tijuana-XEBG Sa 10/13 Noted off most of the evening, came on just in time to ruin out chances for the WLUX test. Station might be operating at reduced power, seems weaker than usual. (TRH-CA)

## TRANS-PACIFIC DX ROUNDUP

- 549 AUSTRALIA, Orange- 2CR-weak w/ABC news at 1200 on 10/16, Lots of KMVI splat. (PM-OR)
- 567 JAPAN, Sapporo-JOIK-1415 10/5. Good signal. (RET-CA)
- 585 AUSTRALIA, Bourke-2WEB 1257 9/4 rr mx good faded at top of hr. but managed to get call ID at start of nx. First NA reception? (Probably, Bruce. Good catch. PM) (BP-BC)
- 612 AUSTRALIA, Hobart-7ZL-good 1405 9/4 w/clar, guitar mx //846 (BP-BC)
- 612 AUSTRALIA, Brisbane-4QR loud w/rr mx 1415 9/4, weak het from almost non existant 610 domestics. (BP-BC)
- 657 UNID, 9/26 1405 pop mx, DU accent EE. (RET-CA)
- NORTH KOREA, 10/3 1415 good in KK, Vy strong w/talk 0735 10/7 also. (RET-CA)
- 702 AUSTRALIA, Sydney-2BL-inst. mx 1057 9/4, 6 pips "ABC nx..." 1100 then nx. Good. (BP-BC)
- +Also noted fair with ABC news at 1200 on 10/15. (PM-OR)
- 747 t WESTERN SAMOA, 2AP 0745 fair w/pops, then faded. (RET-CA)
- 774 JAPAN, Akita-JOUB 1415 10/7, fair w/EE program. (RET-CA)

- 774 AUSTRALIA, Melbourne-3LO still good 1417 9/4 //612 (BP-BC)  
 837 JAPAN, Niigata-JOQK 1415 9/30 weak JJ (RET-CA)  
 855 AUSTRALIA, Maryborough/Eidsvoid-4QB/4QO fair w/pop mx and was //612 at 1353 9/4. (BP-BC)  
 864 UNID, at 0713 10/7 weak JJ talk, several listed. (RET-CA)  
 AUSTRALIA, Hobart-7HO-fair w/pops "Hobarts ??? 7HO" ID at 1324 9/4. (BP-BC) (Good catch as this hasn't been reported in a while. PM)  
 873 AUSTRALIA, Sydney-2GB 9/4 1326 huge signal w/teletalk. (BP-BC)  
 890 ALASKA, Homer-KBBI 1400 10/5 nice signal w/legal ID then into NPR nx. 1400 10/7 unbelievably good signal w/sign on anmt. Then a detailed wx report, then into CBC Sunday Morning Show. So strong I wonder if this was being relayed by a closer station? (RET-CA) (Randy: KBBI has been good lately as they are in the Fall. PM)  
 891 FIJI, Lautoka-Radio Fiji 2 w/Hindi vy good 1051 9/4. (BP-BC)  
 UNID, 1405 9/26 pop mx w/possibly DU accent female DJ weak. Hrd several times but no ID yet. Fiji in EE at this time or DU? (RET) (Probably 4RR or NZ. PM)  
 918 JAPAN, UNID with man in JJ weakly in 920 splash at 1420 10/14(PM)  
 927 UNID, weak mx at 1412 10/15. (PM-OR)  
 AUSTRALIA, Glastone-4CC fair w/Beatles "Hard Days Night" ending 1159.55 then "4 double C" ID into nx 9/4 (BP-BC)  
 940 HAWAII, Waipahu-KDEO vy dominant on E/W bev, not nrd on NW bev. 1148 9/4 C&W mx and "K-DEO (rhymes w/radio) Country IDs.(BP-BC)  
 963 AUSTRALIA, Warwick-4WK good but fadey w/C&W program 1337-1349 9/4 at recheck 1403 was finishing nx then ".Tamworth NSW, this is Hoedown" ARDXC log says 4WK relays "Hoedown pgogram nightly //2TM-1287. Checked for 1287 // but nothing hrd. (BP-BC)  
 UNID DU, hrd weak "Love Letters" Nat King Cole at 1401 10/15, faded. (PM-OR)  
 1008 AUSTRALIA, Brisbane-4IP 1334 9/4 fair w/Pops, promo mentioning Brisbane "4-I (static)" Nick says they switched back from 4IO to 4IP. (BP-BC) (Yes they did. PM)  
 1026 AUSTRALIA, MacKay-4MK loud w/pops 1254 9/4 ID "Hits and memories 4MK" (BP-BC)  
 1035 NORTH KOREA, 0726 10/7 talk by man and woman, chorus.(RET-CA)  
 1215 NEW ZEALAND, fair //1008 1235 9/4. (BP-BC)  
 1566 REPUBLIC OF KOREA, Cheju-HLAZ at 1430 9/30 fair w/usual rel. program. (RET-CA)  
 +Also noted w/womanin JJ 1315 9/4. (BP-BC)  
 1629 AUSTRALIA, both RPH stations still here 1025 9/4 and later re-checks, so haven't changed as yet. (BP-BC)

THANKS TO THESE REPORTERS

- TRH-CA TIM HALL-350 G. STREET #F-1-CHULA VISTA, CA. 92010-4559  
 TRH-CA2 TIM HALL DXing at San Diego Bev. site Poway, Ca. ICF-2010, Delco Car radio, R. West loop, 1200' East, 1900' SE.  
 BP-BC BRUCE PORTZER-6546 19TH AVENUE N.E.-SEATTLE, WA 98115  
 DXing at Sombrio Beach, B.C. FRG-7 2000' E/W, 1000' NW/SE  
 RET-CA RANDY TOMER-50 THISTLE RIDGE-EUREKA, CA. 95501  
 HQ-180A, 400' North and 300' wire NE.  
 PM-OR YOUR EDITOR  
 SP-600, 1500' E Bev, 1300' NNW Bev, 200' NE Wire, Ground syst.

+++++

FLASH!! FLASH!! Almanac V is going to the printer this month. If you wish to order a copy send your money in US funds to: Ralph Sanserino, 11300 Magnolia #43, Riverside, CA 92505, USA. Price in the US \$13.00, for the members in Canada \$14.00 US, and for the overseas members \$14.00 US for surface mail & \$16.00 US for airmail.

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**A DXers TECHNICAL GUIDE**

Now in its 2nd edition, this 120 page book answers questions on how receivers work, how to make them work better, what audio filters and loop antennas will do for you, how to build a beverage and phasing unit, and much more. Only \$5.50 for IRCA members, \$6.50 for non-members (add \$2.50 for overseas airmail). Write: Phil Bytheway, 9705 Mary N.W., Seattle, WA 98117.





WESTERN  
DX  
ROUNDUP

Nancy Hardy  
2301 Pacific Ave.  
Aberdeen, WA 98520

WDXR deadlines: Each Monday. Please use Eastern time.

REPORTERS FOR THIS ISSUE:

- (pb) Phil Bytheway-9705 Mary NW-Seattle, WA 98117  
SPR-4, 3' Hagen amp. ferrite loop; ICF 7600D, Shotgun loop
- (NH) Nancy Hardy-2301 Pacific Ave.-Aberdeen, WA 98520  
PRG-7, Radio West loop
- (JH) Jim Hilliker-1705 Withers Ave. #12-Monterey, CA 93940  
GE Superadio
- (MR) Mike Riordan-P.O. Box 1195-Goleta, CA 93116  
Panasonic RF-2200
- (MS) Mike Sanburn-P.O. Box 1256-Bellflower, CA 90706  
GE Superadio II
- (RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118  
GE Superadio, GE long-range portable, SM-2

\*\*\*\*\*  
OF SPECIAL INTEREST:

- 730 KUCL ID, Boise 10/9 0909 "The new magic 93," Mountain time check, "This is KUCL Boise, Idaho," weather, contest (winner in Nampa). CKLG nulled. Had been silent as KIZN. (pb-WA)
- 860 KLZY UT, Salt Lake City 10/13 0830 "G-93" slogan and rock oldies. 0842 promo for Denver football game and gave call letters. DJ rap, ment. Salt Lake City. On top. Ex-KLZX. (pb-WA)
- 1230 KCBN NV, Reno 10/8 0500 fading up nicely over mess with ID "You're listening to continuous hits, on KRNO-FM and KCEN-AM, I'm Mark Allman(?)," Johnny Hates Jazz music, then faded under KWC-KLAV-KKGR. Call change, ex-KRNO. (RW-CA)
- 1270 KXEX CA, Lakeport per call to KWTR, has changed calls to KXEX. Format still oldies/easy listening. (RW-CA)
- \*\*\*\*\*
- 630 (KCIS) WA, Edmonds 10/4 0200 off the air. (pb-WA)
- 700 KSUR CA, Soledad 10/4 1500 new back to classical format //KSUR-FM. Ex-jazz, ex //540 KKJZ-Costa Mesa. Noticed with classical about a week or so ago. (JH-CA)
- 730 KSVN UT, Salt Lake City 10/9 0902 Radio Centro slogan in CKLG null, into Spanish. 0905 "KSVN Salt Lake City" ID back to Spanish. (pb-WA)
- 840 (KVEG) NV, North Las Vegas 10/5 0410 noted off the air. (MS-CA)
- 880 KJJR MT, Whitefish 9/29 0820-0835 good with C&W, SID "Country 88, KJJR," local news, weather. New. Last heard in 1983 from S. CA. (JH-CA)
- 890 \*KDXU\* UT, St. George 10/5 0415-0500 noted with open carrier. (MR)
- 950 KKIC ID, Boise 10/5 2338 heard thru pest XEPB--Mexican ranch music--spots in Spanish. S/off at 0000 in English, "Join us again at 6am on KKIC Boise." New here. (Thought they were C&W). (MS-CA)
- 1080 KSCO CA, Santa Cruz still with talk format. Apparently has been sold to a local group who didn't want a change to children's programming. (JH-CA)
- 1240 KNRY CA, Monterey breaks their CNN news format Sat. & Sun. nights with heavy metal & hard rock 0000-0300 with DJ "Heavy Harv," (formerly programmer & DJ for defunct KZXR-1460). Also, KNRY has been sold to local man who vows to change format back to rock oldies, last heard there in 1986. (JH-CA)
- 1360 KUIK OR, Hillsboro 10/8 0620 Northwest Talk Network ID. 0630 KUIK ID preceded by NW Talk net. There goes another frequency!!! (pb-WA)
- 1380 ?KSMJ? CA, Sacramento 10/1 0425 overtaking KTOM, song by The Manhattanans & phone number 237-SOUL. (MS-CA)
- 1390 (KGER) CA, Long Beach 10/1 0300-0512 off for first time in ages. Various TTs & OCs. (MS-CA)
- KMIX CA, Turlock 10/1 0430 good between KGER TTs. C&W music by Travis Tritt, ID ment. AM 1390 & FM 98.3. Some minor unID

- 1400 KTUC QRM (KSLM or KENN?). Ex-KCEY for me. (MS-CA)  
AZ, Tucson 10/1 0500 loud ID "We're Tucson's finest--KTUC,  
 Tucson." CBS News. Dominant over several unIDs (KUNA?  
 KRZV??). 1400 is a whole new world with KGER out of the  
 way. (MS-CA)
- 1480 KBMS WA, Vancouver 10/15 DJ talk with ID at 0133 "KBMS," then  
 faded out. Ex-KAAR/KVAN. My #1000! (NH-WA)
- 1520 (KTRO) CA, Port Hueneme 10/5 0330-0436 off the air. (MR-CA)  
 KPFX OR, Oregon City 10/5 0330-0430 fair-poor with sports talk  
 show. Heard legal ID at 0430. KTRO off and no sign of  
 KOMA. Lots of splash from KGA-1510 and KFEK-1530. (MR-CA)
- 1560 KNZR CA, Bakersfield 10/1 0746 CNN News, followed by ID and  
 promo for "KNZR news & sports radio" saying they will be  
 carrying football & baseball. (pb-WA)  
 +10/4 2200 logged for call change from KPMC. ID and CBS  
 network baseball. (MS-CA)

That's it for this week! ♥



## Central DX Roundup

Editor:  
 John C. Johnson  
 979 Neptune Boulevard  
 Billings, Montana 59105-2129

### FOR THE RECORD

Report in Eastern time.

Deadline: Saturdays.

#### RIDING GAIN

- [KDF-IL] = Karl D. Forth, 2714 North LeClaire, Chicago, IL 60639  
 Icom IC-R70, Hammarlund HQ-160, spiral loop, longwire.
- [TMJ-IL] = Tom Jasinski, 419 North Raven, Shorewood, IL 60435  
 FRG-7, 2 1/2 foot amplified loop.
- [TN-WI] = Tim Noonan, 4609 Crescent Road, Apt. 5, Madison, WI 53711  
 Drake SW-4A, Radio West Loop.
- [JcJ-MT] = Your editor using an Icom IC-R71A with Radio West Loop.

#### DOWN THE DIAL

- 730 KKDA TX Grand Prarie, 9/30 w/CKDM, CKAC, and slight WGN splatter.  
 0100 make and female voice ID. Mentioned "73 KKDA,  
 rhythm and blues, jazz, gospel...." Faded. [TMJ-IL]
- 800 CHAB SA Moose Jaw, 10/1 fair w/CKLW. 0100 w/ID. [TMJ-IL]
- 870 WKZN ME Gorham, 9/26 poor to fair in WWL null. 0622 with MYOL  
 music. ID, spots, local announcements. Also heard on  
 9/24 and 25 but no ID. Only the 2nd Maine heard here  
 in 20 years! [KDF-IL]
- 880 KGHT AR Sheridan, 10/10 fair to good. 0820 w/Central AR weather,  
 ID "AM 8-80 KGHT." C&W format. When did they change from  
 KKDI? [TN-WI]  
 (JCJ: Tim, 1991 NRC log has them as KGHT so this is not  
 a new call change. John.)
- 1000 WLUP IL Chicago, 10/1. 0200 Noted off the air with SP. [TMJ-IL]  
 WMUF TN Paris, 10/10 fair, no WLUP. 0740 with spot for Paris.  
 0741 ID "Action News 1000." [TN-WI]
- 1010 KXEG AZ Phoenix, 10/11 quite good, alone. 0400 out of Living Word  
 program with promo and ID "KXEG the Christian Voice of the  
 Valley. The spirit of 10-10." Midnight Cry Broadcast  
 followed ID. Not needed, somewhat rare here. [JcJ-MT]
- WITL MI Lansing, 10/9 fair. 0759 w/C&W, legal ID "This is WITL AM  
 and FM Lansing." [TN-WI]
- 1030 KCTA TX Corpus Christi, 10/10 good. 0800 ID out of "Through The  
 Bible" program. [TN-WI]
- 1060 KGFX SD Pierre, 10/14 mix w/KUKQ. 0300 ID out of Eagles song as  
 "KGFX" and quick sign off. Mentioned returns at 0800. Not  
 new for me, but this is rare at this hour. [JcJ-MT]
- 1100 WSGI TN Springfield, 10/10 good. 0734 w/spot, ID, C&W. [TN-WI]
- 1110 CKTY ON Sarina, 9/24 very good o/WBT. 0215 with C&W music, many  
 spots. Heard here before, but never like this! Did they  
 change power or something? [KDF-IL]  
 (JCJ: Karl, 1991 NRC log shows 10kW-D, 1kW-N. John)
- 1140 KNAB CO Burlington, 10/10 fair. 0808 w/C&W, ID, "This Day In  
 History." [TN-WI]
- 1380 KLIZ MN Brainerd, 9/28 fair to poor w/KGLD. 0500 w/C&W music. ID  
 on the hour "13-80 KLIZ Brainerd, the Lakes Country music  
 leader." This into net news. [TMJ-IL]

1480 WBTS AL Bridgeport, 9/25 fair to poor w/WFXW. 2130 noted with music. 2138 sign off. Verified by phone, confirmed 39 watt PSSA. [TMJ-IL]  
1590 WSMA MI Marine City, 9/30 poor o/WAKR, WONX. 0600 w/sign on then quickly lost. [TMJ-IL]  
530 .... IN 9/24 0249 heard unID TIS with travel information for Lake County, Indiana. [KDF-IL]

**25 YEARS AGO**

October 30, 1965 issue of DX Monitor...Gordon Jarvis replaced his \$20 radio with a \$130 Hallicrafter receiver....Apparently foreign DX was good that week, 10 pages of DX World-Wide!...Membership was up to 453.



**OPEN MIKE**



Character is a diamond that scratches every other stone. Congrats to Karl on his Maine logging in Chicago! Looks like the DX season is here! 73, John.



## Western DX Forum

★ ★ ★ ★

*Editor:* Ric Heald • 8539 Bellamy Way • Sacramento, CA 95828 USA • (916) 386-8677

1990/1 DEADLINES - WEEKLY ON TUESDAY

**JIM HILLIKER, 1705 WITHERS AVE., #12, MONTEREY, CA 93940**

Greetings! During IRCA's 25th Anniversary year, I've loved reading the end of CDXR for the "25 Years Ago" feature. The recent mention of KNX tower being toppled by saboteurs on 16 September 1965 caught my eye. Four years ago I heard some ham radio operators on 40 meters talking about that very subject I wrote to KNX CE Erik Disen for some background because he's already sent me plenty of history that year on KNX. Mr. Disen said "to this day, it's still a mystery who cut down the tower and why it was cut down." (Disen should know there was a controversial talk show and someone who was upset at KNX cut the guy wires. I was on the air at KSEW when the story moved on the wire service when I was on the air at KSEW Sitka, AK-Rth.) KNX was off the air for 27 hours. It went back on with a top-loaded antenna supported by 100-foot phone poles. I'll quote Mr Disen's letter for the rest of the story: "Ted Denton, the CE at the time, found a 365-tower used, on the ground and carefully disassembled. The story goes that he made a very good deal on the tower and it was erected as a better temporary tower. The station went back to "normal" operations in about November 1965. The replacement tower was completed in about July 1966. As long as they had an extra tower, the thought was to try DA-D to cover San Bernardino better. The system was too simple, in that coverage was lost in San Diego and Santa Barbara, so the project was dropped." The DA-D and ND-N system lasted from 1968 to 1970. Today, their ND 1/2 wave antenna and the auxiliary antenna of 3/8 wave are positioned in such a way that it appears KNX must be DA at least part-time. Now you know that for about three years, it was! Until next time, 73 and good DX de Jim.

**STEVE MITTMAN, 2248 W. 37TH ST., SAN PEDRO, CA 90732-4506**

(213) 833-1010

(The history of KHJ continues from last week; it's interesting-Rth) A few years ago, the FCC approved that a like AM/FM/TV call can be split amongst various cities (a la KCBS San Francisco and KCBS TV Los Angeles) but the IRCA theory of the time was the split call had to be owned by the same company. So the blows that theory. (That is, KCAL and KCAL FM are owned by one company; KCAL TV by another.) Also, here's another interesting tidbit: Near the end, RKO attempted to keep Ch 9 by moving its City of License from Los Angeles to nearby Norwalk ( a small town near Orange Co. line). Now, don't ask me why "Norwalk" because neither RKO nor Disney are located there. One might have selected the more glamorous choices of say, Hollywood or Burbank. Beverly Hills Or San Pedro, hi. In any case, "moving" to Norwalk didn't work and now Disney is stuck with a Norwalk City of license. They've been trying to move back to Los Angeles, but so far have been unsuccessful.

meantime, the AM (KHJ) was purchased by the owners of KWIZ 1480/96.7 Santa Ana. The FCC considers Santa Ana to be part of the greater Los Angeles area, and the purchase was contingent on the FCC's relaxation of its duopoly rule (which forbade a single owners from owning two or more AM or FM stations in the same area.) This rule was recently abandoned and the sale went through. KWIZ 1480 recently went SS and now 930 is as well; and their new call is KKHJ. (I believe they could've have gone back to KHJ, but the new owners didn't want to tamper with the "legend" of KHJ (?). The FM station, KRTH 101.1 ("K-Earth 101") also has new owners, but is still carrying its very popular decades-old format. Until next time, 73 de SMM.

RIC HEALD, 8539 BELLAMY WAY, SACRAMENTO, CA 95828

(916) 386-8677 1630-2100 PST

Howdy folks! Not much to report, but do have latest Arbitron ratings. Once again KFBK leads the pack with with KRAK (FM) in the number 2 slot. The only other AM station that made the top 10 was KRAK. I enjoyed your report on KHJ, Steve. Back in the late '50s and early '60s our family was in L.A. for a week and KHJ was clearly the leader. I also remember some illegal action with KRLA. They had offered \$10K to anyone who could identify their newest DJ (who hadn't started yet.) But, the GM at KFWB was at a meeting in Minneapolis and heard a DJ with the same name. He called not saying who he was and at the meeting the next day the gig was up. I remember a picture in the paper of KRLA handing a check over to KFWB. There was also trouble with ownership. Seems the owner wasn't a US citizen and in those days you had to be to own a station. Oh well, the fun years, hi. JH that was indeed and interesting story from Paul Harvey Jr. When I travel I flip back and forth with AM (to see what the local scene is doing, then back to FM for the same thing. Actually it's hard to concentrate on driving and DX'ing because when I change frequencies you have 6 seconds to note it then goes back to the clock. So what I started doing was hitting rest stops, dragging the Super Radio from the car and go over to a picnic table. I get some strange looks, especially if I'm wearing headphones, hi. Speaking of the KNX towers, my old employer KRED used to be 3-tower directional at night with 5 kw. The owner decided he'd get better coverage at night if he dropped power to 1 kw ND. His sons both agree it was a poor decision. It's been mentioned before as to where the younger people are in the club (most of whom grew up on FM), but I've heard the hams are asking the same question. Better close before I get into some really mindless dribble, hi. See ya' next week and best of DX de Rth.

**EASTERN  
DX FORUM**

**Richard C. Evans  
5104 N. Lovers Lane  
Milwaukee, WI 53225**

Reports from members living east of the Mississippi River  
Deadlines: Saturdays.

Karl V. Jeter, 2115 Scarbrough Road, Stone Mountain, Georgia 30088  
Hello, fellow dial-twisters! After a summer of complete inactivity radio-wise, things are beginning to perk up in my shack (details already sent to EDXR). I attended NRC's Pittsburgh convention over Labor Day weekend, but unfortunately did not have the time nor funds to make the closer IRCA Knoxville bash. I had high hopes of making it but it just didn't work out. Hope all those who attended had a great time. My trip to PA included several side trips to adjoining states, including Jamestown, NY, Cumberland, MD, Youngstown, NY (near Buffalo?--rce) and Morgantown, WV. I also went up to Erie, PA and Presque Isle State Park (a quick dip in COLD Lake Erie!). It was interesting to listen to so many Canadian AM and FM outlets; much of them very different from the standard fare that I am used to. I discovered by accident that the low end of the FM dial in Canada is not non-commercial like here; I was mystified at first while driving up I-79 towards Erie by a station with commercials down there! Locally,



1400 kHz is indeed open, with the demise of the Alpharetta station, as is 1360, with the move of the Lawrenceville station to 610; it is a little strange to hear the venerable Atlanta calls "WPLO" again, and only 20 kHz from their former longtime home on 590 (now WKHX, "Kicks Country"). In another example of the interesting twists that occur in broadcasting, WGST-640 has added ex-WABC talk show host Brian Wilson in the 1600-1900 slot. WSB-750 has brought in veteran Atlanta ex-DJ Gary McKee in the same time slot. Now it was about 10 years ago when these same two were FM competitors here in the morning time-slot; Brian was part of the "Ross and Wilson" team on WZGC "Z-93" and McKee was at WQXI-FM "94-Q" (now WSTR). Hopefully, there will be more DX to talk about by the next Forum...73's.

Mike Hardester, P. O. Box 8159, Camp Lejeune, North Carolina 28542  
GREETINGS! Well, I'm settled in and have had a chance to check out the AM (and longwave) band, but no serious DX yet. I did note that, unlike the reception I experienced while living in an apartment near Pittsburgh, PA, there are a L-O-T of stations to be logged and their signal easily penetrates the building in which I'm living! Did note a bit of audio on 153 and 162 kHz, so things look promising! This past Sunday (7 October), I had a welcome visit from fellow DXer Charlie Taylor, and his wife, who were out on a "Sunday drive" and decided to stop by. Charlie and I have both had the pleasure of living on and DXing from Okinawa, so there was much to talk over. On DX matters, I received a letter from the California Department of Transportation (CALTRANS) in response to my reception report on their 530 kHz TIS operating in the San Diego area (this was for reception while I was in San Diego earlier this year). From the reply, it appears the operation is from a site in San Ysidro only, however, owing to the varying reception quality I observed in various parts of San Diego County, I'm inclined to think there is more than one transmitter site. Anyway, that's all for the moment. I'm definitely looking forward to a more productive DX year than I've had in the past few years! Very 73 and Best of DX de Mike.

Rick Evans, Apt. 19, 5104 N. Lovers Lane, Milwaukee, Wisconsin 53225  
Not much going on here. We spent the past weekend (Oct. 13/14) in the Minneapolis/St. Paul seeing some old friends and sightseeing in the area (and checking out a truck line I know about). I never listened to the radio except for a couple of minutes to a TIS on the way back. There was a TIS on 530 in The Baraboo, Wisc area to cover road construction on I-94. The north bound TIS near Portage, Wisc. did a good job telling motorists what to expect. The southbound one near Mauston just carried a promo for the Circus World Museum in Baraboo. A sign above MPLS touted a travel info TIS on 88.7. 73.



## the irca technical column

Editor: Nick Hall-Patch  
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Canada

The Ultimate Homebrew Receiver? Not Quite!

continued from last issue NICK'S RECEIVER

My synchronous detector is the simple variety, based on an XR2228 analog multiplier IC. A sample of the 455 kHz IF output is amplified so much that it becomes a heavily clipped wave which matches the signal carrier in both frequency and phase. This square wave is mixed with the unprocessed IF amplifier output to deliver the audio which was initially modulated onto the signal carrier. This type of detector is easier to build and to use than a PLL synchronous detector and deals better with weak signals than some PLL designs. I feel that the quality of the audio derived from this circuit is superior to that obtained from envelope detectors, though I have never made a formal detector comparison.

The amplified input of the XR2228 detector can also be fed by a crystal controlled 455 kHz BFO rather than by the received signal. This "spots" carriers even when the overall signal is too weak or too buried by splatter to deliver readable audio. Crystal control of this circuit is an example of overdesigning, but it does enable me to spot carriers to the nearest 100 Hz on the frequency display. Crystal control will also be necessary the day I start to delve into USB/LSB diversity reception.

continued next page

The MuRata CFG-455I filter (4 kHz minimum passband at -6 dB) was placed before the detector to eliminate any out of passband intermodulation distortion or wideband noise which may be generated in the IF amplifier. This is a technique much used by radio amateurs in their receiver design, and is probably worth the few extra dollars, even though I have not seriously tested its efficacy.

As mentioned in my previous article, the bulk of amplification in a well designed receiver takes place in the IF stages, and that is the case in my present receiver. Two CA3028 differential amplifier ICs and a 2N3904 transistor provide about 35 dB of gain, though they can provide up to 75 dB according to the spec sheets. The rest of the components indicated in the IF amplifier block constitute the AGC circuit. More IF gain is provided earlier in the IF strip, as can be seen in the diagram, but that is not AGC controlled. The IF amp/AGC block is pretty much a direct copy of what appears in Solid State Design for the Radio Amateur and other ARRL publications, though I did monkey about with IF transformers to bring down the gain. The AGC is IF derived from the output of the second CA3028; some further tinkering with the circuit values of the original circuit was necessary to get reasonable AGC response.

Even with tinkering, I'm not really enthusiastic about this IF/AGC circuit. Real DXing can take place with the AGC off, as it doesn't kick in until a -95 dBm signal is applied at the receiver input. Most DXing of domestic channels is fine with the AGC on, in either fast or slow decay positions, depending on conditions. But the IF/AGC subsystem does start to overload when an input signal of -75 dBm or greater is applied to the receiver input. This has meant that switchable attenuation is required to listen to stronger domestics or when using a good antenna such as a Beverage. Also, I would like to have an S-meter that indicates at low signal levels so that I can make antenna comparisons on DX signals. My present S-meter indicates for receiver input levels of -95 dBm to -62 dBm, due to the limited AGC action of this set-up.

The IF filters and their associated circuitry should be considered part of the IF amplifier subsystem also, as they contribute to the gain as well as the selectivity of the IF strip. The circuit between the mixer output and the input to the IF/AGC strip contributes about 25 dB to the overall IF gain, although we'll consider the post-mixer amplifier as part of the mixer circuit, and just discuss the IF filters and surrounding circuitry for now. My first IF filter is a MuRata CFS-455J which might be considered unusual when Collins mechanical filters are available, but the MuRata has a respectable stopband of over 70 dB (85 dB is available with better mechanical filters) and is considerably cheaper. I feel that this ceramic ladder filter deals better with transient splatter and noise peaks than the mechanical filters that I have tried. It doesn't reject the peaks any better; it simply makes them sound a little less offensive. It also handles weak signals without preamplification better than a mechanical filter does. The one disadvantage of the MuRata is its minimum -6 dB passband of 3 kHz. In fact, this passband is usually more than 4 kHz which is rather wide for tight split channel DXing. So a 2.9 kHz Collins mechanical filter follows the MuRata interspersed with a grounded gate amplifier which has a reasonably high signal handling capability. This amplifier is necessary in order to bring very weak signals up to a level which the Collins filter can handle. Almost all DXing is done using the Collins filter, but another MuRata filter can be used instead of the Collins (via diode switching from the front panel) if a wider passband is desired.

Don Moman tested the 50:2000 L-match, the first IF filter and its following amplifier for me, and found that the minimum discernible signal at its input was -134 dBm with a 4 kHz passband, which is pretty respectable, and meant that I would need virtually no overall amplification between the antenna input of the set and the input to the first IF filter. If you look at the accumulated gains and losses through the front end of the receiver, you will see that the receiver is built this way, in fact.

The mixer of a receiver is where most signal-handling and overload problems take place. This receiver uses a Mini-Circuits TAK-3H diode ring double balanced diode mixer module which has an output

intercept of +28 dBm. This provides a higher level of signal handling than is available in any commercially sold receiver, though it is still not the best mixer available. Such a module doesn't add to the complexity of a receiver; in fact, the TAK-3H is the only component in the mixer block of the diagram. For best results however, the module should see a broadband 50 ohm termination at each of its ports, which explains the -3 dB 50 ohm attenuator at the RF and local oscillator inputs to the TAK-3H. The "diplexer" which follows the mixer is a simple RLC circuit which also provides a 50 ohm termination at all frequencies. Details appear in Solid State Design for the Radio Amateur and other texts.

This kind of mixer should be immediately followed by a low noise RF amplifier with a well-defined input impedance, so that the receiver noise figure will not be further degraded after the lossy mixer. The one used here is a "noiseless feedback" amplifier, a grounded base circuit based on a broadband VHF design described by Joe Reisert on page 101 of the November 1984 Ham Radio magazine. This amplifier is supposed to have a noise figure of 2 dB or less using the specified transistor, and the circuit is followed by a 3 dB pad to help keep its signal handling capability higher than that of the preceding mixer. Unfortunately, my post-mixer NE41632B has started to get noisy, though it is only a problem when trying to log one of the RPH Australians using an unamplified loop antenna at dawn. Any suggestions as to where I can get this transistor or one which is as good?

There are two drawbacks to a good diode ring double balanced mixer. One is price; mine cost Can\$50, though US buyers could probably find it for less. The other is that this mixer requires +17 dBm worth of local oscillator power to drive it adequately, which with the 3 dB pad means my L.O. must deliver +20 dBm, on the order of 100 milliwatts. A pair of class A amplifiers with 35 dB gain using 2N5179 and 2N5109 transistors brought my local oscillator up to the required power throughout most of the MW range. Output drops off a bit at the bottom of the band due to a weaker signal from the oscillator circuit around 1000 kHz.

The oscillator itself is a Clapp type using a 3SK85 MOSFET, a 120 uH coil wound on a T106-6 toroid, and a variable capacitor in the 400 pF range, plus various polystyrene fixed capacitors. Very fine tuning, on the order of fractions of a Hertz is provided by a pair of varactors and a 10 turn potentiometer voltage divider. Another example of over-design perhaps, but it could be handy when some form of exalted carrier detection is added to the receiver. This local oscillator yields a 516 to 1650 kHz MW coverage in the receiver, and the geared down variable capacitor allows me to tune within a few Hertz of the carrier with little backlash. I do get some drift problems with this oscillator within a few minutes of switching it on, 100 Hertz or so, but it soon settles down. I would prefer no drift at all, but haven't mastered it yet!

JFET buffers transfer the oscillator signal to its power amplifier and also to the PCIM177 LCD readout module. This useful module is no longer available in the USA, but might still be obtained from Cirkit Holdings in Britain. Current consumption is a couple of milliamps and the readout does not generate RF noise when enclosed in its own small metal case with a JFET buffer.

As this receiver uses a 455 kHz IF, a fair amount of preselection is needed to provide adequate image rejection at MW frequencies. The tuneable RF filter used is a four inductor, three gang capacitor type known as a Cohn filter. Its design parameters can be found in Ferromagnetic Core Design and Application Handbook by M.F. DeMaw, Prentice Hall 1981. As my variable capacitor has five gangs, I tried to make this a one handed tuner by ganging the RF filter and local oscillator sections. It would only work if I placed small variable capacitors across each of the gangs of the RF filter variable capacitors. So it's not quite a one-handed tuner; more like one-handed plus a quick touch up for maximum signal on the three front panel trimmers. I've learned to live with it.

Constructing this filter and the local oscillator was the biggest challenge in building this receiver, as each filter section and the oscillator needed to be shielded. I ended up building a copper clad PC board box around each gang of the variable capacitor. The shielding seems to be successful, but as I'm no metalworker, I do have problems with trimmer capacitor shafts binding somewhat as they go through several sections of PC board.

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The IRCA is a non-profit organization devoted to the hobby of hearing distant stations on the AM Broadcast Band (510 - 1630 khz). **DX Monitor**, the official publication of the IRCA, is published 34 times a year, weekly from October to March, twice in September and April, and monthly from May to August. **DX Monitor** contains members' loggings, articles on radio stations, receiver reviews, technical articles, DX tips, and other material of interest to Broadcast Band DX hobbyists. IRCA is a member of ANARC, the Association of North American Radio Clubs.

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