



DX Monitor

Devoted Exclusively to
Broadcast Band DXing

October 19, 1985

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Issue Number 727

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No word on DXWWE or WDXF. Jim Hall's move to Erie is apparently taking up more of his energy than he thought. WDXF will probably show up in the mail the day after I drop the bulletin off at the printer...watch for two of them next week.

What's Happening?

First of all, we're pleased to be the first to inform you that there will be another Ray Briem show on SWLing and DXing on ABC Talkradio. The program will originate from KABC-790 on Friday night/Saturday morning, December 7, 1985. It will be carried nationwide; a list of stations will appear in a future DXM. Guests will include Richard Wood (via phone), Bruce Elving (via phone), and Grant Manning, Stewart McKenzie, and Paul Swearingen live in the studio. More details will be announced later.

There will be another Seattle area get-together on Saturday, November 2, at 1630 PST at the home of Craig Parsley, 133 12th Avenue, Kirkland, WA. The GTG will feature a guest speaker from Icom at 1930 PST, with demos of the R-70 and R-71A

Flash Tips

WMGO-1370 to test: WMGO in Canton, MS will conduct a DXtest on Monday morning November 11, 1985 from 0400 to 0430 EST. This is a holiday for many of us, so you might want to check it out. The test will include tones, music, voice IDs and morse code IDs. Send your reception reports to Gene Dow, Executive VP, WMGO, Box 182, Canton, MS 39046.

KQIN-820 going full-time: The latest word from KQIN in Burien, WA is that they will begin nighttime operation in a few days, as well as boost power to 50 kw days. The format, currently satellite-fed "Star Station" format, will also change. These guys may get out pretty well at night. (Gulp!)

News from Headquarters

As a reminder, from now on send your membership dues, renewals, and address changes to John Clemmer, P.O. Box 482, East Moline, IL 61244. We're now in the process of getting the club books transferred from Rich Segalas to John, and working out the details of updating and maintaining the address labels for the bulletin (John will maintain membership records, Doug Nyholm will generate the labels on a computer, and Seattle will mail). Hopefully, no one will fall through a crack in the process. However, there may be some delays if you send dues or address changes to the old San Francisco address. If anything weird happens to you, like your bulletins stop coming, you address change doesn't get processed, or bulletins keep coming after you drop out, let us know and we'll straighten things out. But keep in mind that it normally takes about three weeks from the time you send in a change or renewal to the time it's reflected in your bulletin deliveries.



EASTERN DX ROUNDUP

EDITOR:

KARL J. ZUK

**154 OLD POST ROAD NORTH
CROTON-ON-HUDSON, NY 10520**



"All the DX
that's fit
to print!!!"
and some RAW BITS!

Congratulations to
Gardner Smith...
New DX tip editor
for "The Lowdown."

Reporters in this action packed issue.....

- BH-MD Bill Harms, 23 Walden Birch Court, Woodlawn, MD 21207
Panasonic RF-3100, Yaesu FRG-7, one meter wedge, 30 meter longwire.
- KVJ-GA Karl V. Jeter, 2115 Scarbrough Road, Stone Mountain, GA 30088
Hammarlund HQ-160 and several Beverages.
- GS-DC Gardner Smith, 1000 Perry Street, Washington, DC 20017
W9ALZ..Sony ICF-2010 with internal loop.
- WW-RI William Wyllie, 95 Peck Street, Franklin, MA 02038
on vacation at Prudence Island, RI with his Sharp GF-450, built-in ant.
- KZ-TN Karl J. Zuk, 154 Old Post Road North, Croton, NY 10520
Heathkit GR-1009...Dxing at Knoxville Airport, Alcoa, TN.

and special guest appearance by.....

RW-CA Robert Wien, 1309 Dentwood Drive, San Jose, CA 95118 (Thanks, Bob!)

- 206 PHC MN, Lake Wobegon. 9-28 1800 Looked it up on the FAA Air Chart. The chart name is "Raw Bits." Wouldn't you know. It's in an area of Minnesota which the FAA warns is "not adequately surveyed." (GS-DC)
- 530 WNAL785 MD, Woodlawn. 9-15 1000 Near I-70 and I-695. HAR (Highway Advisory Radio) advising motorists of ongoing construction on the Baltimore Beltway (I-695.) The message is changed once a week and the announcer is male. It is operated by The Maryland State Highway Administration. Veries can be sought from: Philip R. Ulrich, Public Affairs Officer, Maryland State Highway Administration, Baltimore, MD 212..(I don't know the zip.) Prefers ppc. 10 watts, very good range. Audible in Laurel, MD, 20 miles away. Back on air after being absent for several months. (BH-MD)
- 530 (Movie) MD, Woodlawn. 8-29 2000 Westview Drive-in. Audio for movies at the drive-in. First noticed when viewing a show. With WNAL785 back on the air (above) I assume there is a problem with interference. Only audible in the vicinity of the theatre. (BH-MD)
- 550 WGNG RI, Pawtucket. 9-15 2000 C&W music, local spot, into news. All alone, excellent signal for 500 watts of night power. Rare here, last logged on 10-81. (GS-DC)
- 610 WIOD FL, Miami. 9-15 2030 Dick Clark "Rock, Roll and Remember" show. Break for local ID. Excellent, all alone on channel. (GS-DC)
- 620 WRJZ TN, Knoxville. 9-26 0432 Strong with slogan "Joy 62." Religious, Contemporary Christian music format. It was "Testifying Morning." Call up and praise "Heeem." (KZ-TN)
- 690 WVOK AL, Birmingham. 9-28 0744 with BJ Thomas record, weather, then Bruce Springsteen's "I'm On Fire." Good. (KZ-TN)
- 730 WLIL TN, Lenoir City. 9-28 0725 C&W music, ads for auto parts, Dairy Queen, then Skoal Fishing Forecast. Slogan: "Lenoir City's only full-time radio station." (When did they get night auth?) CNN news at 0730, weather from NOAA weather radio at 0733 (sounded lousy.)Fair. (KZ-TN)
- 740 WGSM NY, Huntington. 8-24 1945 Good signal, battling WCAS Cambridge, MA. ID slogan "Only The Good Songs." (WW-RI)
- 750 CBGY NF, Bonavista Bay. 8-26 (no time) Good, over WSB, Atlanta, GA. Parallel to 740. (CBNw, Marystown, NF?-kz)(WW-RI) (Nice-kz)
- 810 WGY NY, Schenctady. 9-26 0456 with songs by Neil Diamond and Air Supply. ID as "81-WGY" sung. Fair. (KZ-TN)
- 820 WBAP TX, Fort Worth. 9-26 0457 with song:"My Baby's Got Good Timing." C&W truckers' show. Promo. Don Harris DJ. ID at 0500: "WBAP Fort Worth,Dallas, and Richmond Hills" into ABC-I news. Where's "Richmond Hills?" (KZ-TN)
- 830 WLND OH, Cortland. Robert Wien advises that this is probably John Demmitt's UNID he thought was WQND. WOND has no cp to move to 830. (RW-CA)
- 900 WKXV TN, Knoxville. 9-26 0730 with end of "To The Bible" broadcast, into another religious show, "Good Tidings." Religious block programming. Slogan:"One of the first gospel stations in Tennessee, since 1953, AM 900 WKXV. Good. (KZ-TN)
- 910 WKXV TN, Knoxville. 9-28 0757 with singing ID "WKXV Knoxville." Religious Block programming. Good. (KZ-TN)
- 910 CHRL PQ, Roberval. 9-8 2233 Strong signal with French and English rock songs like Sheena Easton's "Strut." (WW-RI)



Don't let your DX get away!! Send your tips to Eastern DX Roundup TODAY!!..

- 920 CFLS PQ, Levis. 9-8 2231 Heard their music behind local WHJJ, Providence, RI. Programming in French. (WW-RI)
- 930 WSEV TN, Sevierville. 9-28 0720 with end of a Mickey Gilley record, then local sports, Carter Real Estate ad, birthday cake giveaway contest. C&W format. Good. (KZ-TN)
- 930 WSOC NC, Charlotte. 9-20 2015 C&W format, local WFMD, Frederick, MD has lost its sting in recent years. (GS-DC)
- 970 CBZ NB, Fredericton. 7-27 2200 with CBC network, over WYNZ, Portland, ME. News, weather, and sports, followed by program "Anthology." ID as "CBC New Brunswick." (WW-RI)
- 990 WNOX TN, Knoxville. 9-26 0730 C&W music, ID "AM-99" + 9-28 0714 ID as "Your NASCAR connection in Knoxville..WNOX." after promo for car race coverage at 1245 that day. Crystal Gayle record (calling GS!-hi-kz). 0715 obvious pattern change with break in song and change in signal strength. ID slogan "Proud Country..WNOX Knoxville." (both KZ-TN)
- 990 KGTM TX, Wichita Falls. 9-21 0637 with easy listening music and mentions of AM Stereo. (KVJ-GA)
- 990 WWWF AL, Fayette. 9-18 1959 with sign off with vocal over SSB. (KVJ-GA)
- t1000 WKMK FL, Blountstown. 9-2 0130 with Hurricane Elena info, no ID heard, but mentions of locations around Blountstown, weak under WCFL, Chicago,IL. (KVJ-GA)
- 1040 WBZW TN, Powell. 9-28 0758 with ID "A Household Name, 1040, WBZW Powell - Knoxville." 0800 news. Format is nostalgia music. (KZ-TN)
- 1050 WJSB FL, Crestview. 9-2 0135 on for Hurricane Elena emergency. Gospel music, also noted later with CBS news, then local announcements and weather info. (KVJ-GA)
- 1060 WNOE LA, New Orleans. 9-2 0210 Mentions of running full power all night and simulcasting with their FM. (KVJ-GA)
- 1060 UNID 9-5 2315 Unid engineering test, very strong over KYW Philadelphia, PA. Don't see anything new authorized here, it's not CJRP, Quebec City, PQ. I can usually hear them through KYW. Ideas? (GS-DC)
- 1090 WGOC TN, Kingsport. 9-20 1945 Sign off under local WBAL, Bal'mer. (GS-DC)
- 1110 UNID 9-28 0714 mixing with WBT,Charlotte, NC, with C&W music and phone number for birthday announcements. Strong, but no clear ID. Possibly "WCGM", but I have nothing like that for this frequency. (KZ-TN)
- 1110 WBCA AL, Bay Minette 9-2 0244 with C&W music, Elena location given, announcements. (KVJ-GA)
- 1140 WASG AL, Atmore. 9-2 0255 with two announcers discussing probabilities of Elena's landfall at various locations. (KVJ-GA)
- 1170 WBRW NJ, Somerville. 8-23 1947 Heard after local WJCC, Norfolk, MA, goes off. WBRW signed off at 2000. (WW-RI)
- 1170 WVSG NY, Cornwall. 8-26 2000. with much interference from WKZE, Orleans, MA (IDs as their FMer WKPE), WJCC, Norfolk, MA, and WBRW, Somerville, NJ. Good signal after WBRW went off, then they signed off shortly after. (WW-RI)
- 1190 WAYD AL, Ozark. 9-28 0700 with C&W music. Good. (KZ-TN)
- 1240 WIMZ TN, Knoxville. 9-28 0624 FM simulcast with their "FM 104." Rock format with "Dress You Up" by Madonna. But can I take you anywhere? (KZ-TN)
- 1250 CBOF ON, Ottawa. 9-21 2015 Tres forte avec chansons de Francais. (GS-DC)
- 1250 WTMA SC, Charleston. 9-21 2020 Football on "Citadel Sports Network," under the above french fried station. (GS-DC)
- 1270 WEIC IL, Charleston. 9-15 2035 with ads for Kelly Girl, Wabash Tire, and "The Major League Baseball Show" (sports talk). (KVJ-GA)
- 1300 WMTN TN, Morristown. 9-28 0812 with sports followed by C&W format. Show "The Best Of The Country" with the best of traditional country music. Interview with a guy in a cabin in The Smoky Mountains on the phone, asking what he was making for "country breakfast", etc. 0830 locally produced news. Lots of feedback, cuing records on the air, fun stuff. (KZ-TN)
- 1320 WRJW MS, Picayune. 9-2 0125 Information from a power company concerning outages, and C&W music. (KVJ-GA)
- 1340 WCDT TN, Winchester. 9-11 2015 in briefly under nulled local WIGO, Atlanta, GA, with femme DJ, C&W music and ID. (KVJ-GA)
- 1340 WKGN TN, Knoxville. 9-26 0425 Soul/Jazz format with Billy Ocean's "Mystery Lady." Singing ID and Mutual news at 0430. Good. (KZ-TN)+9-28 0648 with "The Caravan" gospel show. Fair. Slogan "Where Knoxville Gets News..WKGN." (KZ-TN)
- 1360 WIXZ PA, McKeesport. 9-21 1950 with West Virginia University football game. I've seen McKeesport from Amtrak. Abandoned steel mills, etc. (GS-DC)
- 1360 WKXY TN, Milan. 9-10 2005 Heard ID during Cardinals Baseball broadcast. (KVJ-GA)(Ihave WKXY, you have WKXY, who's right?-kz)
- 1370 WCOA FL, Pensacola. 9-2 0120 with report on emergency preparedness. (KVJ-GA)
- 1400 WGAP TN, Maryville. 9-26 0700 AP network news, 0705 local ad, then local news, ads for Blount National Bank, weather, sports. Good. (KZ-TN)₃



Get the Wood 1440 WRBE MS, Lucedale. 9-2 0055-0105 Good with C&W music and news, and even an ad for auto supplies during a Hurricane Elena Emergency Broadcast. (KVJ-GA)
 out
 and
 SEND IN YOUR 1470 WMBR TN, Alcoa. 9-26 0657 with heavy metal rock, ads at 0701 for Red Food, Greenbelt Village Discount. ID as "WMBR Alcoa - Maryville." (KZ-TN) LOGGINGS
 TODAY! 1480 WABB AL, Mobile. 9-2 0113 "Your primary

station for emergency info." Loud and clear, must've been night time directional and/or on day power. (KVJ-GA)
 1490 WITA TN, Knoxville. 9-28 0645 with phone-in show "The Bible Answer Man." ID as "AM 1490 WITA." Good. (KZ-TN)
 1510 WRAN NJ, Dover. 9-21 1945 over WMRE Bawston. MOR rock, 500 watts night power. (GS-DC)
 1520 WDSL NC, Mocksville. 9-21 1930 Sign off, mentioned they've been on the air since 1964. (GS-DC) (That's one long air shift-hi-kz)
 1550 WYNX GA, Smyrna. 9-6 1937 Huge SSS signal. Gospel music. (GS-DC)
 1550 WRHC FL, Coral Gables. 9-9 0200 Spanish station, ID in English and Spanish, giving location as Miami. Alone on channel. Yuppie audio. (GS-DC)
 1580 WSKT TN, Knoxville. 9-28 0630 with Mutual news. At 0835, "It's Singing Time In Tennessee" with the best in gospel music. Strong. (KZ-TN)
 1580 UNID 9-17 0701 with sign on, long choral SSB, followed by "WURD, your Christian alternative for The Unifour (?)"... into gospel music. I have checked all my sources, no such calls listed, any ideas? (KVJ-GA) (How about WORV, Hattiesburg, MS or WUIV Icard Township, NC. WORV is located close to four counties of MS. Could this be what Unifour means?-kz)
 1590 WATM AL, Atmore. 9-2 0045 with locations of shelters, they said they were expecting 15 inches of rain. They had hurricane, tornado, and flash-flood warnings in effect simultaneously! (KVJ-GA)

SEWERS!
 I was in Knoxville 9-25-9-29 covering U of T football. I heard many clears along with what I reported, such as: WNBC, WLW, WOR, WGN, WABC, WBBM, WWL, WCBS, WLS, WCKY, WOWO, and WWSA. Sony has a new, multi-mode AM car stereo radio out, the new model XR-A33, previously only available in Canada. According to Leonard Kahn of Kahn stereo fame, it is the best AM Stereo radio you have ever heard. I am sending NHP details of a mod to disable this radio's muting circuit, which seems to be its one pitfall. PLEASE SEND IN YOUR TIPS! IT'S YOUR COLUMN! DON'T USE INFORMATION YOU DON'T CONTRIBUTE TO!! Puleeze! The attack cats are headed for Pennsylvania and heading south. Don't have your radio or leg eaten! Write today!

FCC official urges steps to save AM

By Bill McCloskey
 Associated Press Writer

WASHINGTON — Arguing that "AM radio is broke," a key Federal Communications Commission official has suggested sweeping changes in rules that govern the AM radio band in an effort to rescue the medium.

AM radio has been losing listeners to FM stations for several years because music, a staple of radio programming, simply sounds better on FM, said James C. McKinney, chief of the FCC mass-media bureau.

He suggested yesterday it might be time for changes that would allow an AM station in a major market to duplicate the programming of an FM station that has the same ownership as the AM station.

Current FCC rules generally prohibit a broadcaster from holding two licenses in the same area.

"A lot of AM radio could remain viable if studio production costs could be sharply curtailed," McKinney said.

FM signals, which go out in a straight, line-of-sight pattern, are providing local, community-based service, he said, arguing that AM stations with signals which travel up and down in a sideways "S" pattern

should be allowed to become regional or even national in reach.

McKinney envisioned a series of AM transmitters along a narrow corridor — "say I-95 from Washington to the North Carolina border" — providing news, traffic and weather information on a single frequency with only minor disruption in overlap areas.

"Why should we continue to prohibit a single owner from purchasing ... stations ... in two communities 20 miles apart and allowing that operator to build a single studio that would program to that entire region?" he asked.

He had said in an earlier interview that he expected the FCC to allow experimental operation of a "synchronous transmitter" so an AM station in Laughlin, Nev., can send its signal into east Las Vegas.

He said a station already was operating with a synchronous transmitter arrangement in Lowell and Worcester, Mass., to "fill a hole" in the coverage area of WLLH, which is licensed to Lowell.

The commission has received no complaints about distortion of the signal caused by the overlap, McKinney told a group of electrical engineers in a speech last week.

He emphasized in his speech that his ideas were "more philosophical than a revelation of an impending new FCC policy," but he made it clear at another meeting yesterday that better use should be made of AM radio's ability to send a signal long distances, especially at night.

He said that in the short run, format changes are the key to the success of AM stations. But he urged the engineers to go back to their stations and make sure that the transmitters are sending out the best possible signals, reminding them that worn-out equipment will not enhance the quality of the sound on AM.

"AM radio simply cannot win a head-to-head fight with FM when the station acts as nothing more than an extension of the record industry," McKinney told the engineers. "Music simply sounds better on FM and there is not a 13-year-old in any of your households who won't understand that."

San Diego Evening News
 September 28, 1985
 via Albert Lobel

CENTRAL DX ROUNDUP

Robert Kramer
6416 N. Richmond
Chicago, IL 60645

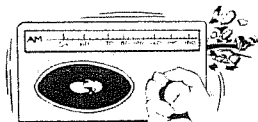
SPECIAL, UNID, CHANGES, et. al.

- 820 CHAM ON HAMILTON, 9/30 0230 C&W mx, YL DJ, fair w/CKJS slop, has been here, ex-1280 since late August. NJW-MB
- 1440 CFGO ON OTTAWA, 9/30 0114 T40, lcl spots, fair w/CJOI. Already has stickers saying "1200-CFGO" but still on 1440. NJW-MB
- All da Rest
- 560 KILZ CO DENVER, 9/28 0335 C&W mx, YL ancr, w/wx & ID fair w/KWTO. NJW-MB
- 610 KRKE NM ALBUQUERQUE, 9/21 0221 YL w/ID, rck mx, poor but all alone. NJW-MB
- 630 KVMA AR MAGNOLIA, 10/5 0726 good o/KXOK w/lcl spots. RK-IL NJW-MB
- 980 WONE OH DAYTON, 9/28 0300 ABC Direction nx, lcl wx, ID, C&W, fair w/KRBZ & CKHM//
- 1000 KTOK OK OKLAHOMA CITY, 9/28 0257 TALKNET, ID & ABC nx, poor u/WCFL. NJW-MB//KDF-IL
- 1010 WCNU FL CRESTVIEW, 9/1 2220 fair w/mx, ID, FL Net. nx, on for hurricane emergency//
- 1050 WJSB FL CRESTVIEW, 9/1 2054 fair w/hurricane info. KDF-IL
- 1110 WBCA AL BAY MINETTE, 9/2 0305 good w/storm info. KDF-IL
- 1150 KROC ON HAMILTON, 9/28 0230 CHR/T40 & ID, good w/CKX. NJW-MB
- 1190 WSGI TN SPRINGFIELD, 10/5 0712 fair mixing w/WHHT w/lcl PSAs. RK-IL
- 1320 KSIV MO CLAYTON, 10/5 1930 good-fair w/s/off no SSB. RK-IL
- 1350 WSLR OH AKRON, 9/28 0342 promo for OH State football, ID, C&W mx, fair w/KRNT. NJW
- 1370 KXPL MT BUTTE, 9/27 0100 non-stop mix of oldies & BFL mx, 0200 lengthy ID which ment. how stn covers 7 states & Western Canada on the "Regional Clear Channel of 1370", fair o/CFOK & others. NJW-MB
- 1380 WQHK IN FT. WAYNE, 9/28 0120 OM w/C&W mx, IDs, fair & fighting KOTA. NJW-MB//NJW
- 1410 CKSL ON LONDON, 9/28 0113 T40/CHR, ID as "1-4-1 CKSL", contest promo, fair w/KCOL//
- 1430 CJCL ON TORONTO, 9/28 0100 BN nx, lcl wx, ID & MYL, poor-fair w/WIRE & WIL, NJW-MB
- 1450 KYNT SD YANKTON, 9/23 2055 ID, wx for all of SD, rck mx, fair o/mess. NJW-MB
- 1580 KAMI NE COZAD, 9/23 2045 ID by OM, mx, w/others. NJW-MB
- WLIM NY PATCHOUE, 9/1 0250 w/ET w/ID o/UNID TTer. KDF-IL

3 For All

KDF... Karl Forth 2714 N. LeClaire Chicago, IL 60639
(H4-160, IC-R70, spiral loop)
RK... Somebody else
(R-1000, H4-129X, Radio West Loop, Kowalski Loop)
NJW... Niel Wolfish 31 Southlawn Stroll Winnipeg, MB R3T 5E9
(Superadio, DX-400)

TOP END



A monthly column of loggings, discussions & information for the 1600 - 1800 kHz range. Deadline: The last Saturday of the month All times are GMT

Craig Healy 66 Cove St Pawtucket, RI 02861.....

October 1985...A week late due to Hurricane Gloria and a computer failure.

From Eric Thew-Ballajura-W. Australia

- 1634 ??? 1155 9/3 A373 and dash.
1650 ??? 1245 7/2 G441 and dash.
1662 PAPUA NEW GUINEA Kubuna 1331 9/7 KUB beacon.

G441 and A372 logged on FRG-7700, FRT7700 and wire. KUB logged with a DX400, whip antenna and a finger on the whip.

A call from Phil Sullivan brought this:

1720h DOMINICAN REPUBLIC 0045-0130 R. Clarin noted w/ mx, voice ID @ 0126.

R70 rcvr and antenna.
Noted here per tip, no solid ID, Though. (ed)

Tom Farmerie is still looking for people to do some DF on selected stations. Should take just a bit of your time. Volunteers, please??
As part of the project, he is collecting fade in/out times. He is looking for the time the signal is 20 db down from nighttime strength.

That's it from here. Where is everybody??

Nancy Hardy
2301 Pacific Avenue
Aberdeen, WA 98520

WESTERN DX ROUNDUP

All times are
Eastern Local

Phone for hot WDXR tips: (206)532-6827 till 10pm(PLT)

DEADLINES: Tuesdays

REPORTERS FOR THIS ISSUE:

- (LHC) Les Carpenter-23171 La Vaca-El Toro, CA 92630
(RHM) Roy H. Millar-13714 30th Ave. N.W.-Marysville, WA 98270
Grundig 5077 w/longwire, Sony ICF2010 w/SM-1, Airline 3980
w/"Shotgun"
(RT) Rich Toebe-2388 American Avenue-Hayward, CA 94545
Grundig 3400, Radio West loop
(RT-CA1) DXpedition to Ano Nuevo, CA
Grundig 3400, 2 parallel 1200' Beverages, terminated 500
ohms 2600
(RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
GE Superadio, GE long-range portable, SM-2
(ØW) John Wilkins-4385 Hoyt St. #205-Wheat Ridge, CO 80033
R-1000, 4' box loop

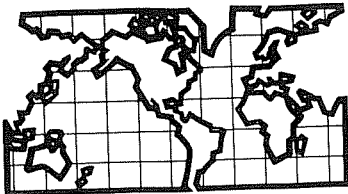
OF SPECIAL INTEREST:

- 880 CKLQ MB, Brandon 9/16 0200 "Q Country News," wx, then C&W mx. Not too strong, but more or less dominant on SM, w/KRVN off. Someone in the background, too, w/C&W mx, probably KJJR. Ex-1570. (ØW-CO)
- 1470 XERCN ECN, Tijuana "La señal que recibo es de nuestra emisora X.E.R.C.N. (ante X.E.B.C.)" per verie of 3/9/83. (RHM-WA)
(For those who don't know Spanish, translated that means "The signal that you received is our broadcasting station XERCN, previously XEBBC."--NH)
- *****
- 540 *KVIP* CA, Redding 9/25 0456 susp. w/TT strong looping NE. (RW-CA)
WEIZ GA, Columbus 10/2 0500 ID "WEIZ, owned & operated by ---"
Sounding like s/on. 500 watts per NRC Log; 5th Columbus call. Ex-WDAK. (RHM-WA) (Roy, you get the first "Penguin Fat" of the season for this fine catch!!--NH)
- *KWMW* IA, Fort Dodge 9/16 0116 ET w/tones, OC, and mx at 0148. Good signal o/KNOE. (ØW-CO)
- KNOE LA, Monroe 9/16 0111 plug to "advertise on KNOE," then American Country Countdown. Pair in CBK null. (ØW-CO)
- 630 KIDO ID, Boise 8/15 0256 very faint u/KFI-640 splatter w/CBS nx. (KFI splatters everything from about 625 to 665 kHz.) (LHC-CA)
- 650 KYAK AK, Anchorage 9/30 0221 shock! Alone u/CISL w/promo. (RW-CA)
CKOM SK, Saskatoon 9/16 0312 "Super Star Weekend" w/DJ Jeff Hayes. Pop mx, only one ad 0312-0350. Very good signal, WSM (not strong) nulled. New, SK #14. Ex-1250. (ØW-CO)
- 670 KPUA HI, Hilo 9/29 0217 good signal, o/u KBOI. Mx by Toto, call letter ID. (RT-CA1)
- 690?*CBU?* BC, Vancouver 9/30 0820 susp. w/TT way o/XETRA. (RW-CA)
(XETRA) ECN, Tijuana 8/20 0234 off the air. Noted back on at 0305. (LHC)
- 700 WLW OH, Cincinnati 8/20 0300-0305 fair w/"700 WLW News." Heard during KPAM nx break & while XETRA-690 was off. "The Voice of the American Trucker." (LHC-CA)
- 730 KTOX ID, Boise 8/19 0826 weak w/unID talk show. (LHC-CA)
+9/30 0816 nicely on top w/Ray Briem talk show, giving L.A. area phone number (213), moderate KDWN-720 slop. (RW-CA)
- KURL MT, Billings 9/30 0847 good o/KTOX w/ID while looking for poss. KXEQ call change, ex-KSVN? (RW-CA)
- 750 KAMA TX, El Paso 9/22 0528 "Radio Cama" ID w/SS talk, o/KXL. New, good signal. (RT-CA)
- CJWW SK, Saskatoon 9/16 0400 CBS nx, 0405 C&W mx. Here on reg. sked as of 9/15. Ex-1370. "Super Country" slogans. (ØW-CO)
- 760 CKQR EC, Castlegar ex-1230 9/28 0629 w/Cistic Fibrosis message, "The new AM, QR 760" slogan, full ID, then ad for Castlegar firm. Many other PS type anncts during morning w/"Sports Update" at 0830 QRM free. I don't understand such grants as this 20/10 for Castlegar; needless, I would venture to say. (RHM-WA)
- 770 (KOB) MM, Albuquerque 8/26 0306 announced that they were leaving the air, presumably for periodic silent period. (LHC-CA)

- 820 ?CHAM? ON, Hamilton 9/28 0528 unID C&W noted u/WBAP this time of morning looping ENE. Don't think KQIN is nights yet, bad KGO-810 slop most of the time making reception very difficult to pick out. Also noted 9/30 at 0138 (quite early!). CHAM is C&W, don't think KCBF is, but loop bearing wrong! Other ideas? (RW)
- 840 WHAS KY, Louisville 8/18 0058 very weak w/ABC nx & "Million Dollar Weekend" programming. (LHC-CA)
- 860 KWPW NE, West Point 9/27 0734 TC; telephone # at 0740. (RHM-WA)
- KTRB CA, Modesto 8/24 0250 good w/"Music Country Network." Verie letter from Ed Moran of their engineering staff states "We are in the middle of construction right now, the towers are all up, and the cables are run, but we're still fiddling with the phasor design and the ground system. About the middle to the end of October, we should have finished the dummy load test of the transmitter, and the 10kw test of the phasor. Near the beginning of November, we hope to be on the air with the full 50kw." (LHC-CA)
- 970 KUZZ CA, Bakersfield 8/8 2306 fairly good u/unID Mexican w/"Country Music Countdown" promo, Subaru ad, and "California Country" slogan. (LHC-CA)
- 1010 KIQI CA, Oakland 9/23 noted w/nighttime service for the first time--was definitely not on the night before. It's been nightly since, so I'm afraid it's probably permanent (but I keep hoping it's a bad dream, hi!). (RT-CA)
- 1040 KLHT HI, Honolulu 9/29 0729 call letter ID heard, then went into block relig. program. (RT-CA1)
- 1060 KRSP UT, Salt Lake City 8/28 2320 fair u/o KUKQ w/wx & ads. (LHC-CA)
- 1170 *KLOK* CA, San Jose 9/28 0422 w/OC. (RW-CA)
- 1190 KPZE CA, Anaheim 8/26 2244 completely dominating freq. just before pattern change. Slogans: "The new AM 11-90, K-Praise." (RT-CA)
- 1230 KDOV OR, Talent 10/2 0800 s/on mixing w/KRDR w/local KWYZ utterly null'd out. Rather questionable as to counting as new as have KDOV Ashland, OR verified; but it is new on 1230 here. (RHM-WA)
- 1240 KPOD CA, Crescent City 9/26 0513 well on top w/area wx while looking for KSAC. Uncommon here. (RW-CA)
- KSUE CA, Susanville 9/29 2205 in good u/KNRY w/ID, quite early. Heard while looking for KSAC. (RW-CA)
- KELK NV, Elko 9/30 0136 nicely on top w/local spot. (RW-CA)
- 1250 KLLK CA, Willits 8/26 2305 bombing in on channel w/mx by the Talking Heads, etc. Slogan "Mendocino County's most powerful radio station." (RT-CA)
- 1270 KCOK CA, Tulare 8/14 2225 good w/local contest, ads, KCOK jingle, and request line phone numbers. (LHC-CA)
- KPLY NV, Sparks-Reno 8/21 2248 fairly good w/Macy's ad, program promo, wx, and ID. Ex-KORY. (LHC-CA)
- 1280 KQAK OR, Eugene-Springfield 9/27 0952 call change ex-KYKN, KBDF. O/u KKAL, KJOY w/Barbra Streisand mx. Call ID noted "The Quake" slogan noted. (RT-CA)
- 1290 KMJK OR, Lake Oswego 9/30 0255 sat on this freq. for 45 min after KHSL 0200 s/off, finally heard call change, ex-KLIQ, w/Dr. Ruth Westheimer talk show. ID as "KMJK" & ment. of "Lake Oswego" at 0255. Difficult to read in tight KMEN null w/KCUB in background, freq. otherwise dead! Don't think KMJK puts much power this way. (RW-CA)
- 1300 KPTL NV, Carson City 8/21 0058 fairly good w/Ai nx & promo for local high school football. (LHC-CA)
- 1320 KQIQ CA, Lemoore 8/26 2233 w/SS programming, "Kah Coe Eee Coe" ID, on top of channel. (RT-CA)
- KNNC CA, Oceanside 8/13 2033-2045 weak but good overall w/ads, Mutual rx, Mutual sports, and wx. "KNNC K-News-North (San Diego) County." Ex-KEZL. (LHC-CA)
- 1340 KATY CA, San Luis Obispo 8/16 0210 barely heard "Leave your dial right where it is, KATY, San Luis Obispo." (LHC-CA)
- KRAM NV, Las Vegas 8/16 0233 fairly good for a moment w/"The station that plays the most country - KRAM - 1340 - AM Stereo." (LHC)
- 1360 KFIV CA, Modesto 9/29 2155-2200 ex-KZUN heard at SSS w/IDs "This is the new K-5, KFIV," ID on hour through bad KEEN-1370 slop "You can count on us, KFIV, Modesto" into SNN nx. (RW-CA)
- 1370 KSOP UT, South Salt Lake City 9/30 0130 nice signal o/KWRN in KEEN null w/ID while looking for KXTL. (RW-CA)
- 1460 KLCZ CA, Salinas 9/15 1023 ex-KDON, now pop format. Slogan is "Classy 14-60." (RT-CA)

UNID:

610 9/25 0458 unID in KFRC null w/Talknet, ABC nx on hour. New affil.?(RW)
Out of room--see you all next week! ♡



DX WORLDWIDE - WEST

Pat Martin - Editor

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TIME UTC

DUs have improved a little around here, but not like they were a few years back. This week the DUs have been stronger than the TPs. Also we have a good report from a DXpedition to the California Coast by Doug Nyholm and Rich Toebe. Several other DXers also attended including Neil Kazarov from San Diego and Art Peterson from Richmond. On with reports:

PAN-AMERICAN DX ROUNDUP

- 895 COLOMBIA, Santa Marta-Radio Galeon, quite good with Colombian Pops at 0535 on 10/4. This is getting to be a semi-regular. (PH-Or)
- 1610 ANGUILLA, The Valley-Caribbean Beacon 10/2 from 0200-0400 and 0900-0910 (no sign on heard circa 0845 or 0900) with rel. prog. Intermittently atop TIS, but generally badly mixed with no ID heard. (RHH-Wa)

TRANS-PACIFIC DX ROUNDUP

- 155 U.S.S.R., Khabarovsk-9/29 1128 in vly weak w/soft violin mx. USSR LWers in vly poorly this time around. (RT-Ca)
- 182 U.S.S.R., Petropavlovsk-9/29 1019 the first time of the Russkies To show, and almost so faint as to be unreadable. Good thing I have DXers ears, hi. (RT-Ca)
- 191 U.S.S.R., Blagoveshensk-9/29 at 1119 RR male talk, lots of static better signal level. (RT-Ca)
- 531 UNID, 9/29 1218 vly faint bu readable w/musical selection, probably Australia. (RT-Ca)
- 540 AUSTRALIA, Longreach-4QL 9/29 at 1106 in w/opera //837, a nice solid signal. (RT-Ca)
- 558 FIJI, Suva-noted at 0630 w/vly weak signals, but one of the first DUs of the night on 9/29. (DH-Ca)
- 567 UNID, 9/29 1108 soft vocal music, HZ most likely as the Aussie on this channel is listed as ABC3, like 4QL, and they weren't in parallel. (RT-Ca)
- 621 TUVALU, Funafuti-Hrd vly briefly w/poor signals and typical island sounding prog. 9/29 at 0704. (DH-Ca)
- 657 D.P.R. KOREA, Kangnam-Good signals at 1257 9/29 w/typical North Korean prog. (DH-Ca)
- +Also noted 9/29 at 1327 in like gangbusters with usual exciting program (almost as good as 9977, you comrades of Kim il sung,hi)(RT-Ca)
- NEW ZEALAND, Wellington-2YC-0820 -with soft music (RT-Ca)
- 670 HAWAII, HIto-KPUA 9/29 at 0617 mixing equally with KBOI, mx by Toto male ancr call ID, Good signal. (RT-Ca)
- 693 UNID, 9/29 vly weak DU sounding ancr at 1348, but too much KHBR for ID, possible 4KQ which seems more likely (DH-Ca) (Doug: The JJ here also is a possible as I have heard them in EE about this time, and the ancrs sound vaegely DU, if the signals are weak.PH)
- 735 AUSTRALIA, Grafton-2HR vly good signals 9/29 at 1032 with opera type program. (DH-Ca)
- TAHITI, Papeete-Hetting vly early 9/29 around 10:30 local, then fair signals later next to KCBS hrd several times in passing (DH-Ca)
- TAHITI, Papeete-FR3 weak w/FF singing, lots of KCBS splatter, at 0650 on 9/29 (AWP-Ca)
- 747 JAPAN, Sapporo-JO1B HHK2 good with talk in JJ at 1104 9/29 (AWP-Ca)
- +Also noted 9/29 at 0950 good w/JJ talk. One of the few J05 to come in that morning. (RT-Ca) (It is strange that location and antennas can make so much difference, as you were hearing DUs and I was hearing TPs a little later that morning all over the dial. PH)
- AUSTRALIA, Toowoomba-4QS 9/29 at 1116 vly good // 4QA-756 (DH-Ca)
- 756 NEW ZEALAND, Auckland-1YA-9/29 0914 good signal w/show tunes. (RT-Ca)
- t AUSTRALIA, MacKay-4QA likely the one w/AdC pips 9/28 followed by anthem and tone test at 1400. Could be needed 2TR, but doubt it, no sign of 1YA. (RHH-Wa)
- 760 HAWAII, Honolulu-KGU 9/29 0710 Jim Bohannon Show o/KFMB was looking for new Canadian. (RT-Ca)

- 765 AUSTRALIA, Bega-2BE 9/29 1346 fair w/ pop rock mx (RT-Ca)
 774 FIJI, Suva-9/29 at 0700 w/island type mx, then 6 pips, into Aussie
 nx and fanfare open. Nice signal, later noted in Hindi. (RT-Ca)
 +Also noted 0705 9/29 w/vy good signals // 891 and 1467 (DN-Ca)
 +Also noted 0700 9/29 6 pips and nx from Radio Australia //891 (AWP-Ca)
- 792 JAPAN, Akita-30UB 9/29 1244 in strong w/JJ talk (RT-Ca)
 AUSTRALIA, Brisbane-4QG- 9/29 noted several times in passing with
 what I would call good signals for this frequency here, which always
 seems tough. (DN-Ca) (4QG is one of the easiest DUS up this way.PH)
- 801 UNID, 9/29 0904 weak u/XEROK, could be anybody as sounded EE (RT-Ca)
 (possibly be 4QA as DN reported above)
- 810++ FIJI, Labassa-9/29 0902 what a surprise to hear Hindo mx u/KGO and
 It's ABC nx //774 Once KGO came back with local talk, I couldn't
 hear it anymore. (RT-Ca) (Great catch so close to KGO. I hear them
 up this way from time to time, but an extra 550 miles helps.PH)
 +Also noted 0904 weak but easily IDed under KGO, was //774 w/Native
 Hindi on 9/29. (DN-Ca)
- 819 NEW ZEALAND, Rotorua-1YZ 9/29 at 1251 caught this loud and clear with
 "S and a half minutes to 1" to (RT-Ca)
 +Also noted fair w/talk 0710 9/29 (AWP-Ca)
 AUSTRALIA/NEW ZEALAND, 1YZ/2GL hrd most of the night w/1YZ way on top
 early then 2GL towards dawn. (DN-Ca)
- 828 AUSTRALIA, Sale-3GI-9/29 1233 in well w/jazz mx //837 (RT-Ca)
 JAPAN, Osaka-30GB 9/29 1244 completely took over channel for 20
 minutes after 3GI logging w/JJ talk on JOBB. (RT-Ca)
- 830 HAWAII, Honolulu-KIKI, excellent w/oldies from the 60s 0713 9/29(AWP)
 837 AUSTRALIA, Rockhampton-4RK 9/29 in as early as 0900 w/pips, Aussie
 nx hrd later //828 w/Jazz and again at 1300 w/News (RT-Ca)
- 844/843.8 KIRIBATI, Tarawa 9/29 0831 female talk in local language, then inst.
 e21 style Beatles mx, diff on 844 at this time as Kaz and DN said
 they had it on 843.8. (RT-Ca) (They have been drifting around for
 several months from about 843 to 845 KHZ.PH)
 +Also noted Kiribati w/native mx 9/29 at 0621 (DN-Ca)
 +Also noted 0630 to 0645 9/29 C&W tune, then march mx, native singing
 and anmt by female, no break across hour. (AWP-Ca)
- 846 AUSTRALIA, Canberra-2CY quite good next to Tarawa 843 with Classical
 mx and anmt by man at 1015 on 10/4. (PH-Or)
- 850 HAWAII, Hilo-KHLO 9/29 0540 good signal o/u KHDY w/ads for shops
 in Hilo Shopping Center, call letter ID (RT-Ca)
- 891 AUSTRALIA, Townsville-4AY 9/29 1322 w/pop rock mx, lots of jingles
 w/4AY call. Wierd not hearing 5AH (RT-Ca)
 +Also noted quite well w/4AY nx at 0900 on 10/4, followed by spot,
 then wx and rr mx. (PH-Or)
 +Also noted 9/29 at 0840 way on top with rr mx IDs. This could now
 make 5AH hard. (DN-Ca) (Both have been noted here mixing.PH)
 NEW ZEALAND, Wellington-2XW-weak w/rr (Bad Moon Rising) mixing w/Fiji
 0723 9/29 (AWP-Ca)
 AUSTRALIA, Adelaide-5AH at 1233 9/29 good w/Honky-Tonk style music
 (piano) (AWP-Ca)
 FIJI, Lautoka-Radio Fiji mixing w/2XW at 0723 9/29 (AWP-Ca)
 JAPAN, Sendai JOHK 9/28 1400 w/NHK pips, but no call hrd (RHM-Wa)
 UNID, 9/29 1341 3 different signals on frequency, one 4AY, others
 sounded like JJ and KK, probably (RT-Ca)
- 900 HAWAII, Kahului-KHUI good w/rr and nice call ID 0731 on 9/29 (AWP-Ca)
- 1005 AUSTRALIA, Brisbane-410 9/29 0856 mentions of Brisbane, pop mx, lots
 of slop and het noise from 1010. Poor (RT-Ca)
 NEW ZEALAND, Tauranga-1ZD in well 9/29 at 0753 and // 1044 and 1098
 which also were in well. (DN-Ca)
 +Also noted good with rr at 0750 9/29 (AWP-Ca)
- 1026 NEW ZEALAND, Synchros 1ZH/1ZK 9/29 1012 on top of channel with talk
 by woman // 1035, underneath them was 4HK w/rr (RT-Ca)
- 1035 NEW ZEALAND, Wellington-2ZB 9/29 0653 pop mx //1044 Good. (RT-Ca)
- 1040 HAWAII, Honolulu-KLHT-first noted 9/29 at 0600 then AH. (DN-Ca)
 +Also noted at 1129 on 9/29 caught call letter change, into rel. pgm
 at 1130 (RT-Ca)
- 1044 NEW ZEALAND, Dunedin-4ZB 9/29 at 0651 pop mx, talk by male ancr
 who took a phone call. Fair. (RT-Ca)
 P.R. CHINA, FS 9/29 1132 in well w/JJ talk. Mentions of "Beijing"
 by ancr. Pat, am I hearing things, or is China playing Western mx ?
 Thought I hrd American 50s pop era tune w/JJ anmts a little later.
 (RT-Ca) (I haven't hrd anything like that as yet, but it is possible
 broadcasting to Japan, as there is alot of JJ stations playing
 JJ and US Pops.PH)

- 1080 NEW ZEALAND, Auckland-1ZB-9/29 at 0654 sounded like // 1035, 1044 but way under KWJJ. (RT-Ca)
+Also noted 9/29 at 0734 under domestics //1044 (DN-Ca)
- 1098 NEW ZEALAND, Christchurch-3ZB 9/29 vy good signals 0754 w/pops, tcs and anmts. Best I've ever hrd them. (DN-Ca)
- 1188 WALLIS ISLANDS, Mata Utu-Hrd w/FF vy poor signals at 0646 9/29 (DN)
- 1206 FIJI, Sigatoka-9/29 0707 Island mx good mx (RT-Ca)
AUSTRALIA, Grafton-2GF 9/29 at 1134 w/C&W mx Prob. the usual Country Countdown Show I've hrd lots of times. (RT-Ca)
+Also hrd good at 0905 9/29 (AWP-Ca)
NEW ZEALAND/AUSTRALIA/FIJI, All noted well here at one time during night 9/29. (DN-Ca)
- 1251 WESTERN SAHOA, Auuala-2AP hrd 9/29 at 0801 w/nx in Samoan, vy good signals. (DN-Ca)
- 1413 UNID, probably the Aussie 2K0 9/29 0930, rough slop made it impossible to ID (RT-Ca)
- 1467 FIJI, Rakiraki-9/29 - 0915 in strongly w/talk in local language, het from 1470 on channel. (RT-Ca)
+Also noted 9/29 at 0705 w/good signals and //891 and 774. Now the only Fiji not hrd by me 639 KHZ. (DN-Ca) (They have two new ones, both low power on 1089 (now 1KW I believe, or soon to be and the other on 990 KHZ-those should be something to hear.PM)
+Also noted fair w/Hindi singing 1045 9/29 (AWP-Ca)
- 1476 NEW ZEALAND, Auckland-1XA 9/29 0717 song "Summer of 69" Hauraki jingle, more pops, Great signal. (RT-Ca)
+Also noted vy good signals, at 0636 w/pops. Later hrd with very weak station underneath at 0849 w/DU sounding ancr, suspect 4ZR. Have you hrd anything else here? (DN-Ca) (4ZR has popped through a couple times here. The last time netted me a QSL card, thanks to a taped report, since the Manager could tell it was them. PM)
- 1485 UNID, strong het hrd here with bits of audio. I would suspect 3Z0. What do you think? (DN-Ca) (Yes 3Z0 is possible, also the low powered Aussies also. PM)
- 1530 UNID, weak sig. here, DU sounding program was way under KFBK, maybe 2VH (not W PM) will make it through someday. This was 9/29 0857. (DN-Ca) (Both the Aussie and HZ have made it in here a few times.PM)
- 1548 AUSTRALIA, Emerald-4QD, 9/29 1017 bombing in w/orch. mx, het from 1550 interfering. (RT-Ca)
+Also noted fair in what sounded like rel pgm? 0638 on 9/29(AWP-Ca)
- 1557 AUSTRALIA, Taree-2RE 9/29 0752 ads mentions of Taree "2RE" jingle hrd (RT-Ca)
+Also noted on top of HZ 9/29 at 0900 w/pips and ID. For some reason I didn't expect to hear pops on this. (DN-Ca)
- 1566 AUSTRALIA, Wangaretta-3NE 9/29 0810 talk by male, into mx.Good (RT-Ca)
+Also noted 9/29 0820 w/ good signals. (DN-Ca)
REPUBLIC OF KOREA, Cheju-HLAZ 9/29 1136 in like gangbusters w/Oriental language that sounded like CC. Mx underneath 3NE? (RT-Ca)
- 1593 NEW ZEALAND, Manukau-1XP hrd first 9/29 at 0634 then vy good later w/ tele talk, best ever. (DN-Ca)
- 1620 AUSTRALIA, Canberra-1PHR 9/29 at 1233 hrd 1PHR call, then weather and a 10:39 tc, followed by mentions of programs the next day, following the anthem. Great signal, was in when most other Aussies fizzled! (RT-Ca)
+Also noted mixing with other RPHs at 0703 and AH until s/off 9/29(DH)
AUSTRALIA, Brisbane-4RPH-9/29 0800 wx for Brisbane area, afterwards and man and woman alternating reading articles. Great signal, even on car radio, fortunately it tunes to 1620. (RT-Ca)
AUSTRALIA, Canberra-1PHR-good w/iews with alternating woman and man ancrs at 1029 on 10/3. Best ever with several IDs. Taped report sent. (PH-Or)
AUSTRALIA, Hobart-7RPH-9/29 1245 los of mentions of Hobart area, but no call hrd. At one point of the evening I had all 3 RPHs here. Nice to hear. (RT-Ca)
- 1629 AUSTRALIA, Melbourne-3RPH-9/29 1056 clear ID hrd said by woman w/2RPH clearly underneath. (RT-Ca)
+Also noted both fighting it out AH on 9/29 (DH-Ca)
- 1692 AUSTRALIA, Kensington University-VL2UV-good w/talks at 1040 on 10/4 weakly than usual. (PH-Or)
- 1720 t AUSTRALIA, possible VL2UV translator, weak talk, but couldn't tell if it was // at 1042 10/4. (PH-Or)

VERIFICATIONS:

- 1314 NORWAY, Kvitsoy-rec. a nice QSL card w/all info and sticker from Radio Norway, also magazine on Norway radio (in Norwegian).
Country #69 QSLd. (PH-Or)

THANKS TO THESE REPORTERS:

DN-CA DOUG NYHOLM-2071 Cedar Street-San Carlos, California 94070
DXing at beverage site 22 miles South of Half Moon Bay with
ICOM R70, FRG-7000, Twin 1240 foot beverages and phasing unit.
AWP-CA ART PETERSON-851 31st Street-Richmond, California 94804
DXing with DN/KAZ/RT as above
RT-CA RICH TOEBE-2388 American Avenue-Hayward, California 94545
DXing with Grundig 3400, Delco Car Radio (digital readout) with
antennas mentioned above with AWP/KAZ/DH.
RHM-WA ROY H. HILLAR-13714 30th Avenue, Northwest-Marysville, Wa. 98270
ICF2010/Longwire DAK3/longwire, FRG7/longwire
PM-OR YER EDITOR-
DXing with SP-600JX, R80-2, 2-1500 East Beverages, 700 foot NW
mini beverage, and terminated 200 HNE wire, Ground system.

EXTRA TIP:

1629 AUSTRALIA, either 2RPH or 3RPH 10/3 with lots of talking, both
man and woman 1000-1300. Barely readable, but peaked in 1057-1114
segment. Tent. tape off to 2RPH. (RHM-Wa) (Could be either, but
2RPH is much more common here. PH)

EASTERN DX FORUM

RICHARD EVANS

~~██████████~~
NORTH WALES, PA 19454

English Village Apartments
Building 23 Apartment B-6
North Wales, Penn. 19454

Deadlines: Saturdays
This column typed: 10/5/85

Ernest Cooper, 5 Anthony Street, Provincetown, Massachusetts 02657
617-487-9337. Very little AM DXing has been done, due to an active
and exciting FM season. Four new AM veries have trickled in: WWLS-640,
WCHP-760, WKHT-1230, and WSRR-1580. One of these years, I'll get around
to recounting the AM veries! The latest here is that 820 and 830 are now
occupied by fulltime Canadians. CHAM, ex-1280, is on 820, NSP, but is
very weak to nil here, happily. But CFJR-830, ex-1450, is strong at sun-
set, and will make it tough to log other new 830's in the U.S.A. I
haven't tried them at night yet to see how they do against WCCO/Venezuela.
Newly on is 25kw REL station WCHP-760, Champlain, N.Y., very weak here in
the daytime, but a cinch at twilight. On 1370, Wickford, R.I. has gone
back to its original call letters, WKFD. Local WKPE-1170 is only an AM
relay now for the FM station, a waste of one of the only two AM channels
for Cape Cod. WKOX, Framingham, is now on 1200, ex-1190, but seems to be
running daytime only as yet, and sounds like no more than its old 1 kw.
This at least frees them from the interferenfe from the 10kw WLIB. Local
WOCB-1240 is running NSP; relays the FM from 0200-0900, otherwise is TLK.
They're now easily listenable here nights with the 1 kw power, but can
still be nulled almost 100%. On 1470, both former nearby daytimers WSRO-
MA and WMWV-CT are now ANing; making logging WKKW, Allentown, Penn.,
difficult, but a (second) report is off to them; they're now C&W. Also
reported was nearby WDER-1320 in Derry, N.H., in WARA's null, in midday
reception. I was sorry to have to pass up the IRCA Convention in Portland,
but it came only one week ahead of the nearby NRC shindig, which I did
attend. The first day was marred by a tremendous downpour with much dunder
und blitzen. There were about 48 there. Several hoped-for old friends
didn't make it, but those who did, made it a fine time, as usual. Next
year's NRC will be in New Castle, Delaware, hosted by David Schmidt. So,
in closing, I want to thank those of you who voted me back onto the Board
of Directors: it's a nice feeling to appreciate! So, here's to a bang-
up season for both the IRCA and DX, and I hope more of you, particularly
in the East, will support this column this season! It's always nice to
read your words in the Forum, and let's keep Richard's fingers nimble by
sending in lots of Fora! Forward - March!

S. D. Warren, Rt. 3, Box 569, Nettletown, Mississippi 38858

Since we have been invited to express our views on the publication of
long computer programs and the time zones to be used in DX Monitor, I
guess it's my turn to speak for Mississippi. One reason I hesitated to
join a DX club was that I felt the club would be made up of electronic
"geniuses" who were listening to "DX" I would never be able to receive on
the best equipment money could buy. Now after two years in IRCA, I have

an entirely different opinion. Of course, we have some first rate foreign DXers such as Dr. Richard E. Wood, Neil Kazaross and Pat Martin who regularly tune stations most of us will never hear. But we also have a few who just enjoy listening to certain stations. IRCA is made up of people who have many occupations, own various types of receivers and are in many stages of DXing. I don't think we should publish a lot of material that will separate the "men" from the "boys". I don't even understand most of the technical material already published in DXM but I know others find it useful. We are all interested in doing better in the hobby and if we have the ability to build our own equipment that saves us some money, but unfortunately I have to order mine already built. Even some DXers who own computers have doubts about a computer's usefulness in DXing, and I don't even own one. As far as time zones are concerned, IRCA is an "international" radio club with members in other countries besides the US and Canada. I know members in these countries wonder why a club with headquarters in Washington has loggings in Eastern Local Time. Richard Evans pointed out one problem in using GMT/UTC was that s/offers, ETs, etc. would not change during the summer months. Many of us don't DX that much during the summer months anyway. I soon remember to tune in "DX Party Line" on HCJB, which is broadcast at 0230 GMT at 2130 after DST goes in effect instead of 2030. I think we will find it isn't that much of a problem to use UTC. The main problem in changing to UTC could be that many members of the club aren't familiar with it through shortwave listening. So few people send in forums it is sometimes difficult to tell what the majority of IRCA is interested in. 73 from Mississippi.

John H. Demmitt, Box A K0848, Bellefonte, Pennsylvania 16823

Following the hurricane on my map with the assistance of CNN and checking through the North American Radio-TV Station Guide, I was able to monitor the stations serving their communities with the latest news and emergency instructions. To my surprise, WBT had a normal format and would mention the hurricane only in the news and weather. While the hurricane was off NC, WBAL & WBZ were providing their areas with excellent coverage and taking phone calls discussing hurricane Gloria. On Sept. 28th I discovered to my surprise a lot of stations from Canada rolling in like gangbusters in the early afternoon. Hope this is a sign of good things to come this winter.

Cast a Vote on Silent Night!

Radio Doings
January 30, 1926
via Jim Hilliker

SILENT NIGHT—YES

Los Angeles, Calif., January 10, 1926.

Listeners-In Club,
Radio Doings,

Dear Sir:

Just a few words in behalf of Mr. Elmer Jones' little article in the "Radio Doings" of November 29th in regards to some of the more powerful stations, such as KFI, KNX, KHJ and a few others having a silent night so we poor DX fans could at least get a chance to try for distance.

I say "Atta boy, Elmer," he has the right idea and I hope he has started something that will bring the topic up for discussion through your great little "Red Book."

I have listened in over a number of large and small sets since reading his article and they all have fore or less trouble with interference.

Now what chance have we local bugs got trying to tune in KSL, KOA, KDKA or any station between 300 and 450 meters with all these locals broadcasting in full blast.

I am also in favor of the voting blank he mentioned.

Come on, you DX fans, now is your chance to speak up for your rights, for I know our reliable "Red Book" will be kind enough to give the topic discussion room in their great book.

That's all. More power to the "Red Book of Radio," a dollar's worth for a nickel.

CHARLES J. MALKUS,

501 So. Fickett St., Los Angeles, Calif.

FOR the first time since any of us on the Pacific Coast got to be radio fans the question of a silent night is to have public discussion. On Thursday, February 11, the Radio Traders Associations of Southern California are to have their monthly banquet and the sole topic of discussion will be "A Silent Night." The banquet is to be held at the Alexandria Hotel and everybody interested in the radio industry is going to try to be there. It will probably be the biggest turnout radio in the west has yet known. Dealers from every part of the state will be on hand to air their views.

Of the many hundreds of letters received by Radio Doings every week, covering every variety of radio topic, full seventy per cent. are devoted to the question of a silent night. It is the burning question of the hour in radio and the opinion of the public will for the first time have an opportunity to make itself known and to a certain extent felt.

The Radio Traders deserve a lot of credit for their courage in publicly tackling this ticklish question. You know, radio is to a large extent in very much dependent upon the broadcaster and his willingness to furnish the programs that are sent over the air. Well, when he shuts down for just an hour his expenses keep on just the same and whatever little source of income he may have ceases. It takes plenty of gumption to take a chance of earning the ill-will of those you are dependent upon. That's why every fan should get busy and fill out a ballot. Last week they came in by the mailbag full, but we want just a many opinions by the morning of February 11 as we can possibly get.

Until February 11, Radio Doings is going to publish the coupon that is printed below. Every radio owner and every radio dealer should fill out one of these blanks and make his opinion felt. The whole proposition is a question of "The Greatest Good for the Greatest Number." Radio Doings has no right to take sides. We are for what all the folks want, or rather most of the folks, and that includes the radio owner, dealer, wholesaler and manufacturer, and, last but by no means least, the broadcaster, who has furnished us with ten thousand and one nights of every variety of entertainment and without whom a radio set would be like a yacht on the Sahara Desert. Get that last idea, and when you vote don't forget to consider the other fellow has a side as well as yourself—but by all means vote the way you think you should.

If you fail to vote, "hold your peace forever afterwards," as the lawyers say, and don't write us any more complaints.

Everybody vote! And be sure that your ballot reaches here by the morning of February 11.

SILENT NIGHT BALLOT

Put a Cross in the Square For or Against

FOR A SILENT NIGHT

OPOSED TO A SILENT NIGHT

Name.....

Address.....

Business.....

Send Your Ballot To: SILENT NIGHT EDITOR
Radio Doings, 527 Van Nuys Building Los Angeles, Calif.

INTRODUCTION OF THE STATIONS IN THE RANGE 1600-1800kHz

<u>kHz</u>	<u>Station Information</u>
1644	Hachinohe JFS, 50w
1660	Otaru JHO, Hakodate JHD, Nemuro JHU, Hidaka, Ogi JFD, Tohata JFN, Karatsu JHS, Fukuoka JFO, all 500w
1670.5	Kushirokou, Erimomisaki (Erimo), Esanmisaki (Esan), Matsumae (Matsumae), Yagishirijima (Yagishiri), Shakotanmisaki (Shakotan), Tappizaki (Tappi), Ohmazaki (Ohma), Shiriyazaki (Shiriyu), Todogasaki (Todogasaki), Kinkazan (Kinka), Inubouzaki (Inoubou), Nojimasaki (Nojimasaki), Hachijojima (Hachijojima), Irouzaki (Irou), Hegurajima (Hegura), Hagimishima (Hagimishima), Takobana, (Takobana), Wakamiya (Wakamiya), Mishima (Kamitsushima) all 50w
1675	Nemuro JHU, 50w
1693	Niigata JHF, Ogi JFD, Obama, all 50w
1697.5	Choshi JHC, Nakaminato JHA, Misaki JFC, all 500w
1699	Nemuro JHU, Atsugishi, Kushiuro JFZ, Hiroo, Hidaka, Muroran, Esashi, Iwanai, Yoichi, Otaru JHO, Rumoi, Wakkanai JFY, Esashi (different station from former), Monbetsu JHZ, Abashiri JHW, Hakodate JHD, all 50w
1702	Kasumi JFI, Tanabe, Nachikatsuura JHI, Miyatsu, all 50w
1722	Aburazu JFP, Shimanoura, Ushibuka, Usuki JHG, Kagoshima, all 50w
1725	Ajigasawa, Miyako JHT, both 50w
1728.5	Kuji, Katsuura, Misaki JFC, Odawara, Chikura, all 50w
1738.5	Sakata, Ajigasawa, Aomori JHM, Hachinohe JFS, Oga, Ishinomaki JFU, Shiogama JHQ, Iwaki JFW, Ohhata, all 50w
1746	Kamaishi JFT, Ohfunato JHP, both 50w
1768.5	Shimonoseki JFK, Senzaki, Karo, Hamada, all 50w
1772	Iwanai, Esashi, both 50w
1775	Tachiura, Karatsu JHS, Fukuoka JFO, Narao, all 50w
1778.5	Muki JFB, Tsuda, Fukaura, Tosashimizu JHL, Hassai JHE, all 50w
1782	Hamada, Karo, Senzaki, all 50w
1785	Aomori JHM, Ohhata, both 50w
1788.5	Fukuoka JFO, Karatsu JHS, Tachiura, Nomo, Kamoise, all 50w

- NB: 1. Stations on 1670.5kHz are shipping weather ones, and others are coastal stations.
 2. Coastal stations are for the telecommunication with the fishery ships.
 3. Three alphabets stand for the call sign. Stations which do not have call sign are called with "place name" plus "gyogyo". The word "gyogyo" means "fishery".
 4. Words in parentheses are call designations.
 5. Verifications are cards or letters.

Court Orders Radio Station To Stop Blasting Fire Tower

Compiled by Yoshinori Kato
 Typed by Toshihiko Oka

THE FAR EAST RADIO CLUB

Garberville,
 Humboldt County

In an unusual ruling, a radio station has been ordered to cut power drastically because its transmission tower bombards occupants of a nearby fire lookout tower.

The fire lookouts were being exposed to unsafe levels of radio frequency radiation from the antenna of station KERG, 67 feet away on Pratt Mountain in southern Humboldt County, state officials said.

The Federal Communications Commission initially ordered the 100,000-watt station to cut power in half, then ordered it to go down to 2000 watts until the fire season ends October 1, officials said.

The station had erected a copper screen shield, which substantially reduced radio waves — but not enough to meet state occupational health and safety standards, said Jim Miranda of the state Department of Forestry.

Above; via Pat Martin
 Left: San Francisco Chronicle
 September 27, 1985
 via Robert Wien

NOISE AND SIGNAL LEVELS ON THE BCB

Noise and Signal Levels on the BCB

Marc Bergman

One of the mysteries of DXing on the BCB is how much sensitivity is needed in a receiver. Several articles have been published discussing this subject as it relates to the level of noise found on the BCB. These articles show a considerable divergence of opinion not only concerning the level of noise but as to the type of noise that causes the most problems.

The area of signal strength has been covered by various authors. They have discussed this subject in terms of Input Intercept, IMD, and the performance of various mixer types.

I wanted to look at these subjects from a practical viewpoint. I felt we needed an accurate determination of the level of signals vs. noise on the BCB. These levels determine the sensitivity vs. strong signal handling needs in a receiver. Once these levels have been established, we can look at the receiver choices available. I set out to run a series of experiments to determine the levels of signal and noise on the BCB.

Test Equipment

Controller : HP-85 Computer

Receiver : HP-3586C Selective Level Voltmeter

Bandwidth - 3.1KHz at -6dB - 3.7KHz at -60dB

Input Impedance - 50 ohms

Scan Frequencies - 400KHz to 1600KHz

Antenna : 100' longwire laid due north

I chose the equipment settings and antenna to closely approximate the average DX'ers reception condition. The HP-3586C is actually a dual conversion receiver. It tunes from 50Hz to 32.5MHz. It's microprocessor controlled. It measures the signal strength at the input jack, in this case from the antenna and displays this value on it's digital level display. It's accurate to +/- .2 dBm. I chose a long wire antenna. This type of antenna should give a worse case condition in determining noise levels but should be close in value to the average pickup from a loop antenna. I made no attempt to match the input impedance or tune the antenna.

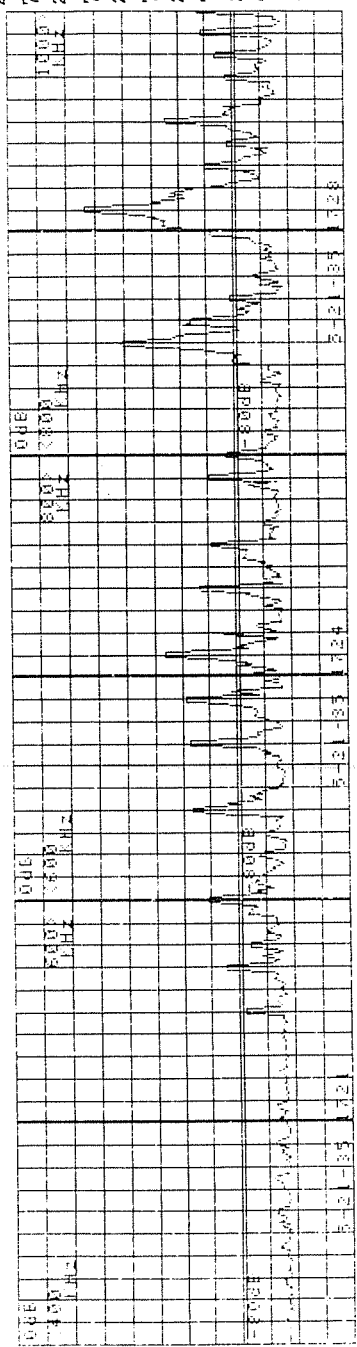
I ran two tests. The first was run in the late afternoon. The second was run just after sundown. The date was May 21, 1985.

The graphs show us a picture of the actual reception conditions. The graphs are divided horizontally in 10KHz divisions. They are divided vertically in 10dBm steps. The measurement range is from 0dBm to -120dBm. The first graph runs from 400KHz to 1000KHz. The second graph runs from 1000KHz to 1600KHz.

The first test shows the noise level consistently at about -95dBm to -97dBm. This corresponds to 4uV to 3.1uV. The noise level didn't vary much. Stations below -80dBm were still readable. 7 to 12uV is the minimum usable sensitivity needed. The strong signals measured:

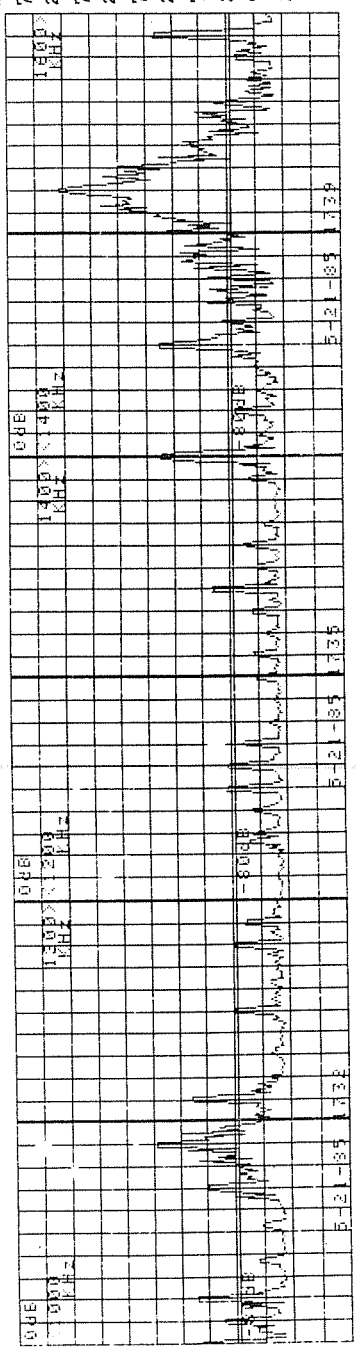
Freq	Station	Power	Distance	Signal Level	
710KHz	KMPC	5000W	60Miles	-53dBm	501uV
850KHz	KMDY	5000W	20Miles	-39dBm	2509uV
910KHz	KOXR	5000W	8Miles	-26dBm	11207uV
950KHz	XEGM	5000W	150Miles	-55dBm	398uV
1090KHz	XEPRS	50000W	167Miles	-51dBm	630uV
1400KHz	KAAP	1000W	12Miles	-56dBm	354uV
1450KHz	KVEN	1000W	12Miles	-55dBm	398uV
1520KHz	KTRO	50000W	6Miles	-18dBm	28150uV
1590KHz	KOGO	5000W	12Miles	-53dBm	501uV

223600uV
70711uV
22360uV
7071uV
2236uV
707uV
223uV
71uV
22uV
7uV
2uV
.7uV



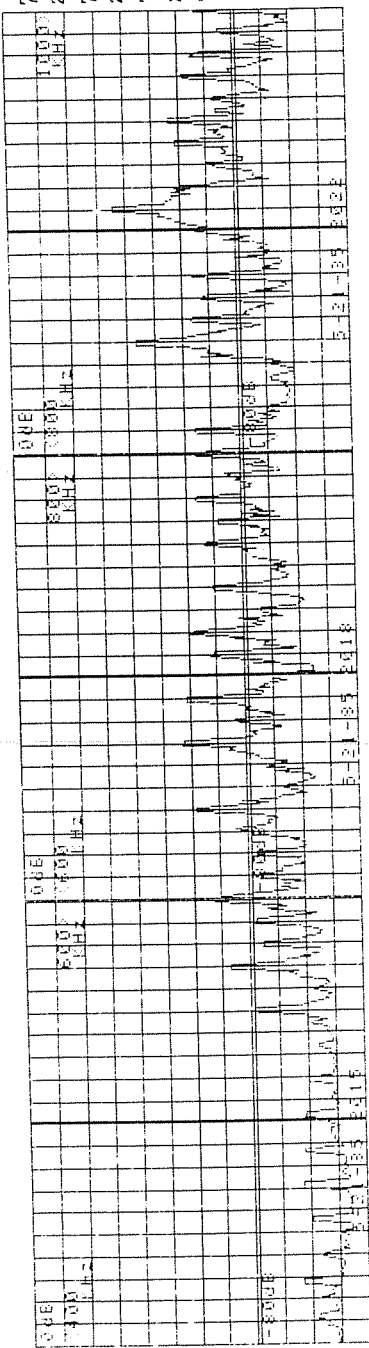
223600uV
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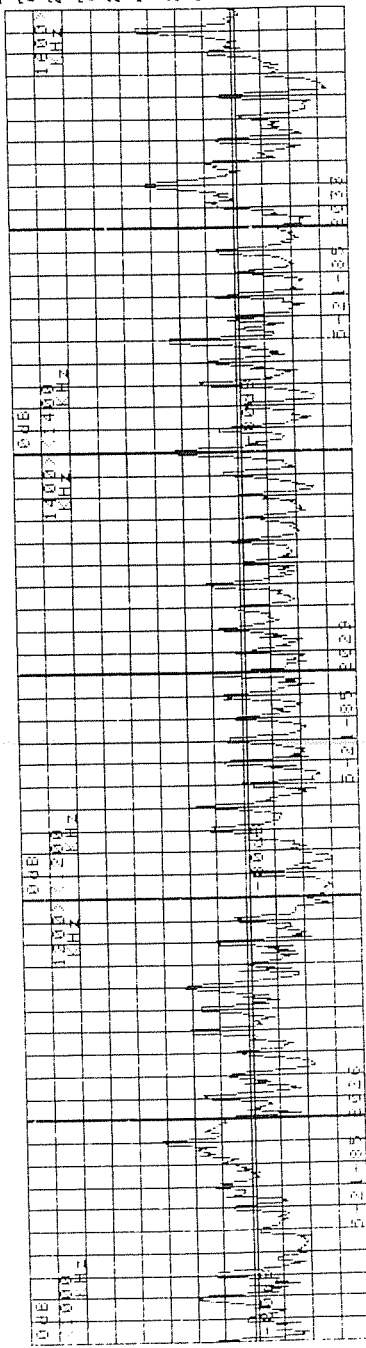
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7071uV
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2uV
.7uV

The second test, done just after sundown, shows the noise level at about -108dBm to -113dBm. The noise level had dropped suddenly as the sun was going down. This noise level corresponds to .89uV to .5uV. Several microvolts of sensitivity is the minimum needed and can only be used on several frequencies. The graphs show a very crowded spectrum. The strong signals measured:

Freq	Station	Power	Distance	Signal Level	
670KHz	KWNK	1000W	20Miles	-57dBm	316uV
690KHz	XETRA	50000W	150Miles	-59dBm	251uV
850KHz	KMDY	5000W	20Miles	-43dBm	1583uV
910KHz	KOXR	5000W	8Miles	-36dBm	3544uV
940KHz	KPRE	50000W	186Miles	-58dBm	282uV
950KHz	XEGM	5000W	150Miles	-56dBm	354uV
1090KHz	XEPRS	50000W	167Miles	-48KHz	890uV
1160KHz	KSL	50000W	600Miles	-57dBm	316uV
1400KHz	KAAP	1000W	12Miles	-57dBm	316uV
1450KHz	KVEN	1000W	12Miles	-56dBm	354uV
1520KHz	KTRO	1000W	6Miles	-48dBm	890uV
1590KHz	KOGO	5000W	12Miles	-45dBm	1257uV

The results of these tests show a lower noise level than what has generally been thought. I believe further tests will show both higher and lower levels of noise than what I measured. I believe a figure of just under 1 microvolt sensitivity will be the minimum needed for a receiver on the BCB. But more tests will be needed to determine this figure. The measurements I made also show us the level of signal strength we can expect from local stations. Note that the difference in levels is nearly 80dBm. Now we can use these values to determine how this will affect our choice of receivers.

I have included a list of receivers tested by QST Magazine. You can see that the Noise Floor for all receivers is better than what we need. What we need to determine is how much of this sensitivity we can use. We need to define several terms:

Noise Floor - The minimum discernable signal that can be detected in a receiver. To test for the noise floor adjust an input signal, from a signal generator to the receiver, until the level is reached where the audio output level increases by 3dB above the point measured with no input signal.

Sensitivity - Generally this is the level in microvolts required for a signal to noise ratio of 10dB.

Two Tone IMD - The measure of the range of signals which produce no spurious responses within the receiver. This is found using the following formula.

$$2\text{Tone IMD} = 2/3(\text{Input Intercept} - \text{Noise Floor})$$

The spurious responses that we are concerned with are the third-order IMD products.

Third-Order IMD - If we input two frequencies into a receiver, say 1070KHz and 1090KHz, the third-order IMD products will appear at 1050KHz and 1110KHz. The figure of merit for this test is called Input Intercept.

Input Intercept - This is the theoretical point where the third-order IMD level equals the level of input signal. The higher this figure the better.

It should be noted that these tests were run on the 80meter band. The noise floor on the BCB is generally less due to the fact that the preamp is generally not in circuit and a wider filter is used. But sensitivity is not our problem on the BCB. Strong signal handling is the specification that most affects our ability to use all the sensitivity we have available.

This list was derived from tests run by QST Magazine.

Company	Model #	Noise Fig	IMD	Input Int
Collins	KWM-380	-131dBm	NL	NL
Drake	TR-7	-133dBm	84dBm	-7dBm
Heath	SS-9000	-138dBm	89dBm	-4.5dBm
Heath	SW-7800	-131dBm	74dBm	-20dBm
ICOM	IC-720A	-132dBm	97dBm	+13.5dBm
ICOM	IC-730	-140dBm -134dBm	NL 95dBm	NL +6.5dBm ?
ICOM	IC-740	-141dBm -133dBm	94dBm 95dBm	-5.5dBm +9.5dBm
ICOM	IC-751	-142dBm -134dBm	91dBm 93dBm	-5.5dBm +5.5dBm
ICOM	IC-R70	-130dBm	94dBm	+11dBm
J R C	NRD-515	-136dBm	90dBm	-1dBm *
Kenwood	R-1000	-133dBm	76dBm	-19dBm *
Kenwood	TS-120S	-139dBm	75dBm	-26.5dBm
Kenwood	TS-130S	-138dBm	79dBm	-19.5dBm
Kenwood	TS-180S	-139dBm	82dBm	-16dBm
Kenwood	TS-430S	-138dBm	94.5dBm	+2.25dBm ?
Kenwood	TS-530S	-135dBm	88dBm	-3dBm*
Kenwood	TS-830S	-136dBm	83dBm	-11.5dBm
McKay Dymek	DR 33C	-137dBm	90dBm	-2dBm
Swan	Astro150	-127dBm	84dBm	-1dBm
TenTec	Argosy	-133dBm	64dBm	-37dBm *
TenTec	Omni D	-128dBm	94dBm	+13dBm
Yaesu	FRG-7700	-126dBm	75dBm	-13.5dBm
Yaesu	FT ONE	-133dBm	NL	NL
Yaesu	FT-77	-139.5dBm	92dBm	-1.5dBm
Yaesu	FT-102	-127dBm	96.5dBm	+18dBm
Yaesu	FT-707	-126dBm	76dBm	-12dBm
Yaesu	FT-757GX	-140dBm -121dBm	90dBm 91dBm	-5dBm +15.5dBm
Yaesu	FT-980	-137dBm	NL	NL

? Measured figure. This does not correspond to mathematical figure.

* Not measure. This is derived from formula.

What I would like to do now is to conduct an imaginary test of two receivers using the same values of Noise Floor but different values of Input Intercept. I used values that are representative of typical receivers in use by BCB DX'ers. I want to use a figure of -120dBm as our low noise point. I think tests later this year will show this to be true. I've tried to present this example in a form that you can relate with your own experiences.

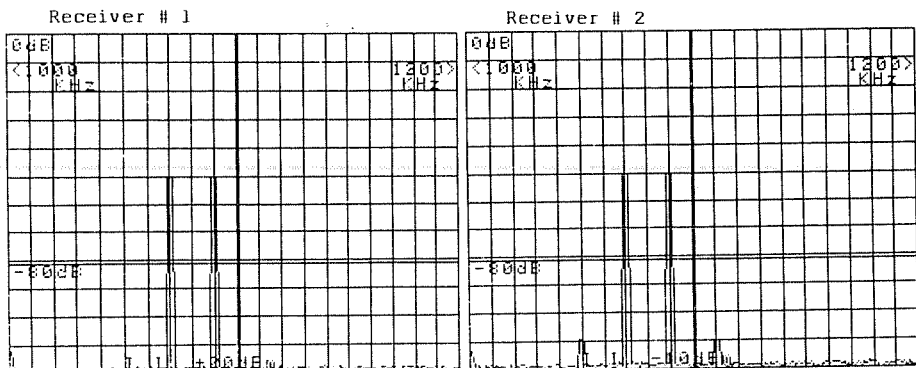
Let's take two imaginary receivers and see how these terms relate to performance.

	Noise Floor	2Tone IMD	Input Intercept
Receiver #1	-130dBm	93dBm	+10dBm
Receiver #2	-130dBm	73dBm	-20dBm

The measured noise floors of these receivers is the same. The first receiver has by far the better strong signal handling capabilities. Let's see how this affects reception.

It's early Monday morning. You have both receivers tuned to 1110KHz. KRLL is off the air. There's a weak station from Columbia HJEW at -110dBm. Receiver #2 is sensitive enough to pick it up. But Receiver #2 will also have third-order IMD products from 1070KHz and 1090KHz on 1050KHz and 1110KHz. If XEPRS is at -50dBm then the distortion products will also be -110dBm. On Receiver #1 the signal at 1110KHz will also be picked up but the distortion products will be well below the noise level. Guess which receiver has more usable sensitivity?

This graph shows the internal distortion products in two receivers with input signals on 1070KHz and 1090KHz at -50dBm.



Distortion products below noise.

Distortion products on 1050KHz and 1110KHz at -110dBm.

To determine what is the signal level that will cause IMD we will use the figures for NF + Two Tone IMD, Receiver #1 -130dBm + 93dBm = -37dBm. This means that this receiver will be free of these spurious distortion products with an input signal of up to -37dBm. There are only several signals received that exceed this figure.

Receiver #2 NF + IMD, this gives us -130dBm + 73dBm = -57dBm. Receiver #2 is free of these distortion products with an input signal of up to -57dBm. There are a number of stations that exceed this level.

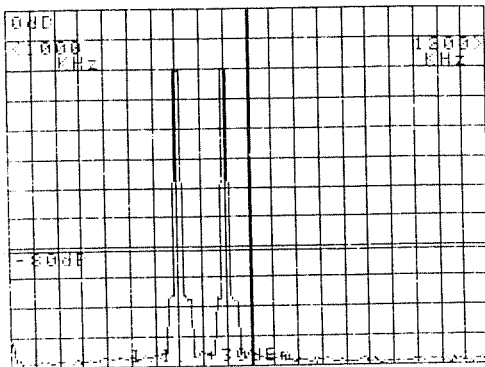
One way to help Receiver #2 is to use 10dB of attenuation. This changes the NF to -120dBm, which is still sensitive enough to pick up the station on 1110KHz, and changes the Input Intercept to -10dBm. This means our IMD is still -120dBm - (-10dBm) = 73dBm. -120dBm + 73dBm = -47dBm. This means our third-order IMD products will be -130dBm down or in the noise. We should just barely be able to receive the signal from Columbia. This is some help but still does not match the performance of Receiver #1.

The following is a list showing the relative merits of receivers having different Input Intercepts. Included is the level of the 3rd Order IMD developed inside the receiver at different input signal levels. Also included are graphs that show signals at 1070KHz and 1090KHz. These signals are -20dBm in level. They represent two 50000W local stations. The graphs show a representation of the resulting distortion products developed in receivers with different Input Intercepts. The IMD Products will be at 1050KHz and 1110KHz.

Input Intercept +30dBm

Input signal	3rd Order IMD
+30dBm	+30dBm
+20dBm	+ 0dBm
+10dBm	-30dBm
+ 0dBm	-60dBm
-10dBm	-90dBm
-20dBm	-120dBm
-30dBm	-150dBm

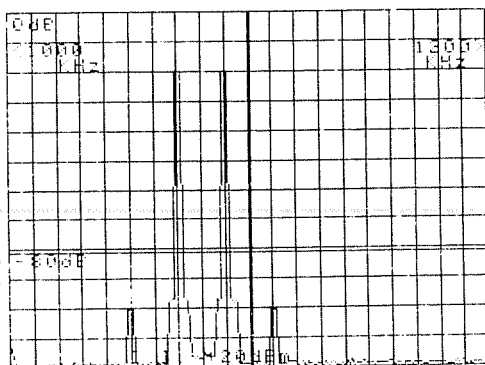
The graph shows the input signals at 1070KHz and 1090KHz. The distortion products are -120dBm down. This is right at the minimum noise level. This Input Intercept is State of the Art.



Input Intercept +20dBm

Input Signal	3rd Order IMD
+20dBm	+20dBm
+10dBm	-10dBm
0dBm	-40dBm
-10dBm	-70dBm
-20dBm	-100dBm
-30dBm	-130dBm

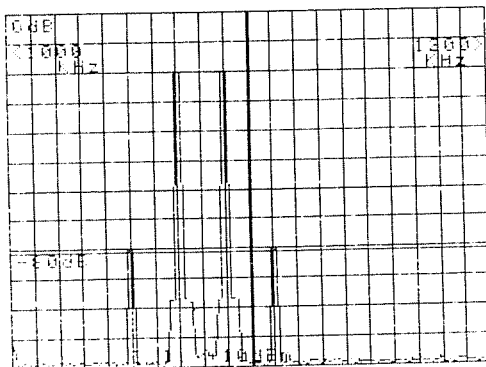
This graph shows the results with an Input Intercept of +20dBm. The distortion products are -100dBm down. The ICOM R-71A is specified at this value.



Input Intercept +10dBm

Input Signal	3rd Order IMD
+10dBm	+10dBm
0dBm	-20dBm
-10dBm	-50dBm
-20dBm	-80dBm
-30dBm	-110dBm
-40dBm	-140dBm

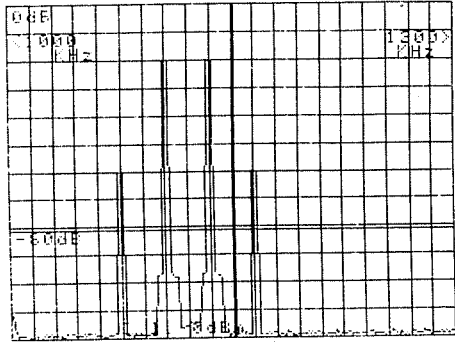
This graph shows the results with an Input Intercept of +10dBm. The distortion products are -80dBm down. The ICOM R-70 measures near this value.



This is a continuation of the list. Receivers with these values of Input Intercepts would not be known for their strong signal handling. However good DX is still possible with these receivers.

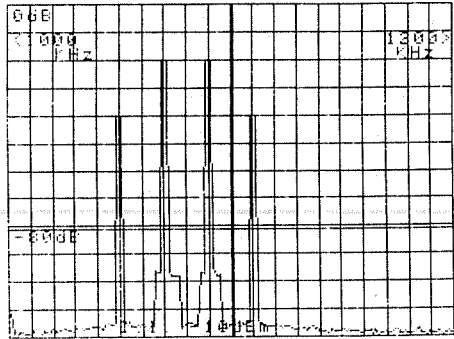
Input Intercept	0dBm
Input signal	3rd Order IMD
0dBm	0dBm
-10dBm	-30dBm
-20dBm	-60dBm
-30dBm	-90dBm
-40dBm	-120dBm
-50dBm	-150dBm

This graph shows the results with an Input Intercept of 0dBm. The JRC NRD-515 and the R-390A measure close to this value.



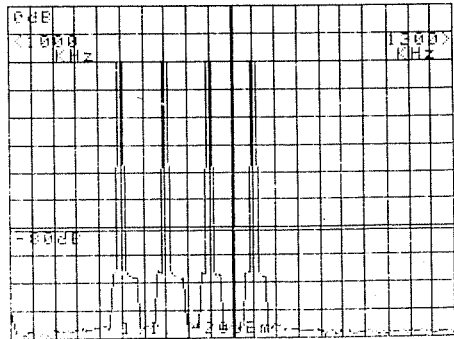
Input Intercept	-10dBm
Input signal	3rd Order IMD
-10dBm	-10dBm
-20dBm	-40dBm
-30dBm	-70dBm
-40dBm	-100dBm
-50dBm	-130dBm

This graph shows the results with an Input Intercept of -10dBm. The Yaesu FRG-7700 measures near this value.



Input Intercept	-20dBm
Input signal	3rd Order IMD
-20dBm	-20dBm
-30dBm	-50dBm
-40dBm	-80dBm
-50dBm	-110dBm
-60dBm	-140dBm

This graph shows the results with an Input Intercept of -20dBm. The Kenwood R-1000 measures near this value.



I've tried to show how important strong signal handling is for DX'ing on the BCB. It is possible for you to determine what reception conditions are in your area. You can draw yourself a graph of your local stations. You can use your signal strength meter on your receiver, if it's been calibrated, to provide the levels for your graph. I've calibrated the meter on my ICOM R-71A. I measured the input levels for different "S" readings at 550KHz, 1000KHz, and 1600KHz. I can then get a fairly good idea of conditions when DX'ing from different locations. You can also estimate the values by using the levels from my measured figures. Say you have a 5000W station that is about 12 miles away. Your received signal strength, given a good antenna, should be about -45dBm. This will help you determine conditions in your area and your needs in a receiver.

The following is a list of what I consider important points.

1. Most of the better receivers have enough sensitivity for the BCB.
2. A number of less expensive receivers may appear to be deficient in sensitivity as compared to the better receivers.
3. But any receiver that lacks enough sensitivity could probably not take best advantage of a preamp due to poor mixer design.
4. Most receivers need a gain control, such as a stepped attenuator, between the antenna and the RF input jack.
5. The 20dB step of most gain controls is too broad. 5 and 10dB steps would allow finer control of the RF input.
6. Most receivers could use a complete alignment even when new. Quality control is lacking in some under \$1000 receivers.

Most modern receivers have two interrelated design techniques that can cause problems. Most modern receivers don't use preselectors. They use discreet bandpass filters that don't eliminate interference from nearby stations. The use of a preselector will tune the frequency of interest and reduce the level of nearby stations. This helps prevent problems in the mixer caused by these interfering stations. Looking at the BCB spectrum I've provided shows how important front end selectivity is for receivers on the BCB.

Most modern receivers use some type of Frequency Synthesis. The main advantage in this system is frequency stability. One of the main problems in this system is phase noise of the local oscillator. This phase noise appears as random noise nearby in frequency to the oscillator. Poor synthesiser design results in excessive phase noise which can cause reciprocal mixing. This hurts the ability of the receiver to resolve between two nearby stations. This shows up in the receiver tests from QST magazine. The notation, NL, mean they were unable to accurately determine the measurement because of noise limiting.

The choice of a receiver for the BCB is still a compromise. There isn't any receiver that is designed for DX'ing on the BCB. The majority of receivers used by club members were designed for use as short-wave receivers. The emphasis was on sensitivity and very wide and/or very narrow IF filtering. That elusive combination of good signal handling, front end selectivity, proper IF filtering, and a reasonable price is just not presently available. ICOM seems to be at the forefront with regards to dynamic range. It's possible to buy a ICOM R-71A for \$630 and a used ICOM R-70 for about \$400. I think the addition of an antenna tuner or preselector and some kind of filter mod can make these among the best receivers available.

For those of you that plan to keep the receiver you have, I have just one word for you, selectivity. Front end selectivity in the form of an antenna tuner or preselector and IF selectivity in the form of a cost effective filter modification. I recommend using the various club publications to find the best choices for your application and needs.

I think there is more information to be gleaned from the graphs. You can see the band is very crowded and how it's important to have good IP filtering. It looks like even less than 10KHz wide at -60dB is needed even for domestic DX'ing. The differences in the signal levels of different stations point to the need of a good AGC circuit.

I am going to continue running this type of bandscan. I plan one test in the middle of summer and a series of tests during the next DX season. I also plan some special tests using preselectors and tuned antennas. Just remember that the best receiver/antenna combination won't bring in that rare DX without perseverance and a good understanding of the proper methods of DX'ing. There have been reports of rare finds using inexpensive portables. I welcome any questions or comments concerning this article.

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DBM to UV Chart

0 dBm = 223600 uV

-120 dBm = .22360uV	- 80 dBm = 22.360uV	- 40 dBm = 2236.0uV
-119 dBm = .25089uV	- 79 dBm = 25.089uV	- 39 dBm = 2508.9uV
-118 dBm = .28150uV	- 78 dBm = 28.150uV	- 38 dBm = 2815.0uV
-117 dBm = .31585uV	- 77 dBm = 31.585uV	- 37 dBm = 3158.5uV
-116 dBm = .35439uV	- 76 dBm = 35.439uV	- 36 dBm = 3543.9uV
-115 dBm = .39764uV	- 75 dBm = 39.764uV	- 35 dBm = 3976.4uV
-114 dBm = .44615uV	- 74 dBm = 44.615uV	- 34 dBm = 4461.5uV
-113 dBm = .50059uV	- 73 dBm = 50.059uV	- 33 dBm = 5005.9uV
-112 dBm = .56167uV	- 72 dBm = 56.167uV	- 32 dBm = 5616.7uV
-111 dBm = .63021uV	- 71 dBm = 63.021uV	- 31 dBm = 6302.1uV
-110 dBm = .70711uV	- 70 dBm = 70.711uV	- 30 dBm = 7071.1uV
-109 dBm = .79340uV	- 69 dBm = 79.340uV	- 29 dBm = 7934.0uV
-108 dBm = .89020uV	- 68 dBm = 89.020uV	- 28 dBm = 8902.0uV
-107 dBm = .99880uV	- 67 dBm = 99.880uV	- 27 dBm = 9988.0uV
-106 dBm = 1.1207uV	- 66 dBm = 112.07uV	- 26 dBm = 11207 uV
-105 dBm = 1.2574uV	- 65 dBm = 125.74uV	- 25 dBm = 12574 uV
-104 dBm = 1.4109uV	- 64 dBm = 141.09uV	- 24 dBm = 14109 uV
-103 dBm = 1.5830uV	- 63 dBm = 158.30uV	- 23 dBm = 15830 uV
-102 dBm = 1.7762uV	- 62 dBm = 177.62uV	- 22 dBm = 17762 uV
-101 dBm = 1.9929uV	- 61 dBm = 199.29uV	- 21 dBm = 19929 uV
-100 dBm = 2.2360uV	- 60 dBm = 223.60uV	- 20 dBm = 22360 uV
- 99 dBm = 2.5089uV	- 59 dBm = 250.89uV	- 19 dBm = 25089 uV
- 98 dBm = 2.8150uV	- 58 dBm = 281.50uV	- 18 dBm = 28150 uV
- 97 dBm = 3.1585uV	- 57 dBm = 315.85uV	- 17 dBm = 31585 uV
- 96 dBm = 3.5439uV	- 56 dBm = 354.39uV	- 16 dBm = 35439 uV
- 95 dBm = 3.9764uV	- 55 dBm = 397.64uV	- 15 dBm = 39764 uV
- 94 dBm = 4.4615uV	- 54 dBm = 446.15uV	- 14 dBm = 44615 uV
- 93 dBm = 5.0059uV	- 53 dBm = 500.59uV	- 13 dBm = 50059 uV
- 92 dBm = 5.6167uV	- 52 dBm = 561.67uV	- 12 dBm = 56167 uV
- 91 dBm = 6.3021uV	- 51 dBm = 630.21uV	- 11 dBm = 63021 uV
- 90 dBm = 7.0711uV	- 50 dBm = 707.11uV	- 10 dBm = 70711 uV
- 89 dBm = 7.9340uV	- 49 dBm = 793.40uV	- 9 dBm = 79340 uV
- 88 dBm = 8.9020uV	- 48 dBm = 890.20uV	- 8 dBm = 89020 uV
- 87 dBm = 9.9880uV	- 47 dBm = 998.80uV	- 7 dBm = 99880 uV
- 86 dBm = 11.207uV	- 46 dBm = 1120.7uV	- 6 dBm = 112070 uV
- 85 dBm = 12.574uV	- 45 dBm = 1257.4uV	- 5 dBm = 125740 uV
- 84 dBm = 14.109uV	- 44 dBm = 1410.9uV	- 4 dBm = 141090 uV
- 83 dBm = 15.830uV	- 43 dBm = 1583.0uV	- 3 dBm = 158300 uV
- 82 dBm = 17.762uV	- 42 dBm = 1776.2uV	- 2 dBm = 177620 uV
- 81 dBm = 19.929uV	- 41 dBm = 1992.9uV	- 1 dBm = 199290 uV

