DX test ... WYVF-1010, Baltimore, MD is conducting a DX test for the NRC on Monday, November 6, 1989 from 0330 to 0400 ERT, at 1000 watts non-directional. Send reports and return postage, to Mr. Dan O'Neill, Program Director, WYVF-AM, 1111 Park Ave., "The Penthouse", Baltimore, MD 21201. Test arranged by Bob Harrison and the Colorado CFC Machine.

From the Editor ... Your editor has egg on his face. I announced that I had a certain station on tape a couple of weeks ago, remember? Well, not only do I not have that station, I seem to have lost several others as well. Seems that the venerable Sony TC-355 has finally given up the ghost after seeing me and my brother and me well for 20 years. Even though it still transports tapes, it no longer records or plays. Although I have an equally ancient Wolfe sox (and other semi-junkers) as backup, I'll miss the Sony (not to mention the DX that I thought I taped)!

John Malicky did I let any grass grow under him after leaving Topknot last month. John has confirmed the Green Tree Marriott in Pittsburgh as the 1990 convention hotel. Although the deadline for reservations is August 10, you may want to reserve now by calling (412) 922-8400, mentioning the NRC for special rates, which include a single for $48. The Marriott features tennis courts, pool, whirlpool, two clubs, etc.

DECALEDOMANIA ... All requests for club sample bulletins and all other inquiries should now go to Mark Strickert - 5857 N. Oronto, Chicago, IL 60654. The club has just published two hobby reference materials: Aircheck Arcade (covering the tape-trading and collecting hobby) for $3.75 in the U.S., $4.00 to Canada/Mexico, and Crane and Feeding of Prom Collection (tips on starting and building a collection) for $3.25 U.S., $3.50 to Canada/Mexico.

Catalog ... Universal Radio's Book Donanza is on through December 15, featuring free "bonus books" with your order. Fred Osterman's Shortwave Receivers, Past and Present, is reduced to $9.50 from $9.95, for example. For more information, write to 1240 Alda Drive, Reynoldsburg, OH 43068.

For Editors ... Don't forget to indicate what computer hardware/software you are currently using as you send in your columns. If you're using a typewriter, indicate so. I'm attempting to gather enough data so that I can make some comparability decisions in the near future.

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

DX News
The magazine of the National Radio Club
SINCE 1932
Volume 57, No. 5 - Monday, Nov. 6, 1989 (ISSN 0737-1059)
CALL LETTER CHANGES

Old call:     New call:     Now call:
810 KKWS CO Rifle    KKGB    1460 KKCS CO Colorado Springs KWES
1080 KLRS CA Santa Cruz    KSOD    1530 KZDR CA Apple Valley KLLN
1130 WWHO NC Eden    WMEF    1560 KZSS NV Reno KZTP
1290 WYIG SC Charlotte    WQGC    1570 WBEB IL Harvey WANN
1300 WSSG NC Goldsboro    WFTN    1580 WTTX IL Urbana WQCF
1330 KSUN MN Minneapolis    KMMP    1580 WSXJ IL Urbana WQCF
1360 KFPI MI Mountain Grove KONG    1580 KFSX SW Albuquerque KZTL
1600 WSME NC Raleigh    WHIL    Notes on calls: Here we go again, the FCC Call Bureau continues to
1450 WPIT NY Rome    WFRG    commit wholesale errors. This time
550 WICE RI Pawtucket: powers to 5000/3400, antenna to UA
888 KUTS CA Desert Hot Springs: powers to 3000/900, antenna to UA
1200 WOVA WV Wheeling: station still appears to be on the air but full
1230 KESS WA Spokane: station is SILENT

APPLIED FOR GRANTS FOR NEW STATIONS

None

APPLIED FROM EXISTING FACILITIES

-CP- VA Cloverdale: reduce day power to 500 watts (no call assigned yet)

GRANTS TO EXISTING FACILITIES

550 WICE RI Pawtucket: powers to 5000/3400, antenna to UA
888 KUTS CA Desert Hot Springs: powers to 3000/900, antenna to UA

OTHERWISE

830 WEDE NC Eden: although station is still on 1130 kHz, they have been
broadcasting on the new 850 kHz facility on SUNDAY NIGHTS
1200 WOVA WV Wheeling: station still appears to be on the air but regular
programming has not yet begun, yes we got some sort of record for
the longest testing period

THANKS for contributions go to: EUGENE HINTON, ED KREJNY and ED ROBINSON!

73 and Good DX, Jerry BKF: Jerry Starr & Buffalo R. Poorman

CITY QUIZ

John S. Bowler. Valparaiso, IN
QUIZ # 37

Only one city in the United States has stations operating at the five signal
positions shown below. Of course, there may be other stations in this
city too! Can you spot the city?

620  270  830  380  1130

Here is a hint: it is one of these: New York, Albuquerque, Minneapolis-St. Paul
(The answer will appear at the end of the next City Quiz in DX News.)

The Answer to City Quiz #36: Sacramento
The Answer Man

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

---

**MAGiC 61 AM Radio**

Wayne Heinen

1431 S. Andes Way
Aurora, CO 80014

**Domestic DX Digest - West**

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

**Special: 900 KAAQ WA Spokane**

**310 KWSW CO Rich**

10/8/1990 0-401 Fair good w/KGQ w/new oldies format and frequent use of KGQ calls (note legal ID wasn't heard, hence call change is presumed). Slogans "89K-Gold" and "continuous oldies" noted. Tremendous signal for what should have been 9-Watt PS4 power (TRX-CO)

**880 KJAC NM Tse Bonito**

10/23/1959 good w/KRVM. "The New 880 KJAC, Tse Bonito/Window Rock". Per tip from John Williams, New, NM #6 (TT-CO)

**980 KJAC NM Tse Bonito**

10/23/1959 09-095 Kel prg, 0959 IMS Nc. 0959 ID "Your Voice of Inspiration, KJAC Tse Bonito 880 on your dial" (Tse is pronounced "So"") 1000 into local Nc (Ex-1110, Ex-Windows Rock, Az) NM #6 (94W-CO)

**1200 KOFK NM Tse Bonito**

10/2/1954 good w/others and USIN. Ad for Corley's Linc/Merc. New, NM #50 & Total #75Q. (TT-CO)

**1300 KFOM NM Milan**

10/4/1954 0E/SS so w/Vx, School lunch menu, local spots & a-ordinal Mx thru 0930. All announcements and spots were Bi-lateral Add 83, Grants NM 87020 New 849. Ep per JT-CO (9W-CO)

**1380 KUTR UT Salt Lake City**

10/9/1950 AC mx, legal ID was 3 minutes late. (EX-KRLUG (TRX-CO))

**1480 KRU0 CO Pueblo**

Per Swain PSSA 107w used on 945 and SAT only (TH-CO)

---

**MIDNIGHT TO NOON**

**440 CBK SK Watrous**

10/10 09/00 Good signal, alone w/CBC nx and SK wx. Used to be an easy catch before XEW got so good. Odd to hear them this late--no KNAR or KUPU this morning. (TRX-CA)

**690 KFET TX Lubbock**

10/9 09/35 fair w/KSW. "The sports authority for (county) KFET.. New, TX 797. (TT-CO)

**870 KFIZ TX Fort Worth**

10/23 1004 Ep w/KSW. "Another local spot" (New Group New X Vx 988 (9W-CO)

**870 KROL NV Laughlin**

19/9 0100 fair in slow from KOA w/L.A. Kings Hockey Net. (TT-CO)

**960 KCTY MT East Missoula**

10/9/1951 ID. Classy 930 is KCTY, East Missoula"; then back to synd pgm "Super Gold". Fair in WYK w11/9 w/QRM dr KSDN, CICA others. New, MT #14. (0W-CO)

**1010 KFBR OR LaPorte**

10/9/0211 This is KBFR "With the World at Dawn." New, ON #8. (TT-CO)

**1040 KLHT HI Honolulu**

10/10/1037 Fair, mixing w/WHO. "Manus for Today" program followed by IDs. Lost to XHEF WM 107. Finally made a report. (TRX-CA)

**1230 KJUN MN Las Vegas**

10/10/07 FAIR 0930 from amr "Michelene", no SSB. Fair w/QRM. Unsecured. (0W-CO)

**1340 KROC MN Rochester**

10/9/0950 fair w/ID. "This is AM 1340, KROC in Rochester", then into LK show @ 0406. New, MN #15. (TT-CO)

**1570 CFOX AB Westlock**

10/9/0465 fair w/KGQ. "This is Central Alberta Nightwatch", then into "Goodtime Charlie". New, AB #19. (TT-CO)

**1450 KFIZ WA Fond du Lac**

10/9/0259 Barely thru QRM w/"a message from the Ad Council", then ID: "This is Fond du
Firstly, pull out your 10/9 DXM and flip to DXW. I misinterpreted Russell Scott’s 670 log - "...occasional radio novella, ID as WFEW" is what he sent and I should have typed.

549 ALGERIA Les Trembles/Grac 10/5 2344 poor to fair w/AA chant by man. (Connolly)
564 SPAIN Sevilla 10/5 2342 bits of SS talk tramshored by WROK. (Connolly)
693 AZORES Terceira 10/5 2340 FP talk o/UID MB(GCT). (Connolly)
738 SPAIN Barcelona/unid 10/5 2330 SS pgm o/AA sounding str. (Conn)
756 PORTUGAL Lisboa and unid 10/5 2320 FP talk. (Conn)
806 GB pgsa mixed w/some kind of ID in a 3-way dogfight. (Connolly)
675 SENEGAL Dakar 10/5 2325 chanting, strong o/AA. (Connolly)
748 SPAIN Barcelona/AA 10/5 2325 talk by man and woman. (Conn)
783 EAST GERMANY Burg 10/5 2324 dominate w/AA male pop vocal. (Conn)
810 USOCOMA Bogota/KCTY 10/5 0132 SS talk by man w/frag mentions of Bogota, Xint. No sign of WGT. (Townshend)
828 UNID Libya or Morocco 10/5 2321 bits of AA audio. looked for /on 619, but that channel was a pipesvay-like jumble. (Connolly)
837 SPAIN or Canary Islands 10/5 2320 SS o/other. (Connolly)
846 ITALY Roma 10/5 2322 open in WMD sloop. (Connolly)
850 SPAIN Murcia 10/5 2332 SS talk by man, loud. (Connolly)
862 CANARY ISLANDS La Laguna 10/5 2332 SS talk o/et grpw. slopped by WCBS. (Connolly)
906 ENGLAND/UNID 10/5 2320 EE talk o/AA or SS pgm. (Connolly)
919 ARGENTINA Alegre 10/5 2317 AA pgm in WRK a/slop. (Connolly)
929 PORTUGAL Madrid 10/5 2316 SS talk, fair to good. (Connolly)
1017 TURKEY Istanbul 10/5 2318 plaintive male vocal, a blend of AA and Greyhawk styles. (Connolly) Remember how strong this was when it first came on? What happened to this guy? HK
1035 PORTUGAL Lisboa 10/5 2313 bits of FP talk in heavy W62 sloop. (Connolly)
1044 MOROCCO/EAST GERMANY 10/5 2311 man in AA o/aa pgm on. (Connolly)
1053 SPAIN 10/5 2310 3 stns, one of which was AA. (Connolly)
1070 PORTUGAL Norte 10/5 2309 FP talk. (Connolly)
1071 EGYPT/SPAIN 10/5 2301 AA and SS pgsms, m/440X. (Connolly)
1110 HIBS Rolgew CMXG 10/15 0137 festive mx fair o/WSP. (Townshend)
1134 UNIDS 10/5 2300 jumble of several stns. (Connolly)
1127 YUGOSLAVIA 10/15 2304 cl mx. (Connolly)
1134 SPAIN 10/5 2301 SS talk o/other. (Connolly)
1143 UBSR Kallingrad 10/5 2300 great signal! Woman in EE gave list of MN and followed, 8, 8 note klms, unid in EE pgm, near PR ID "Goverit Radiotistnaya Rodina." (Connolly)
1156 SWEDEN Solvaborg 10/5 2308 talk by man and woman - possibly Polish - in mest w/others. Slight W6XW sloop. (Connolly)
1161 UNID 10/5 2255 big carrier, little audio (maybe OC o/other). (Connolly)
1179 SWEDEN Solvaborg 10/5 2254 R. Sweden external service pgm in FF, int. (Connolly)
1181 HUNGARY Székes (o/t) 10/5 2305 folk balled by man, in a gypsy style. (Connolly)
1197 UNIDS 10/5 2306 multi-stn jumble, one possibly 1188. (Connolly)
1212 SPAIN 10/5 2301 SS pgm o/other. (Connolly)
1251 LIBYA/HUNGARY 10/5 2300 AA talk o/other including opera / 1341 Budapest, Hungary (Connolly)
1269 CROATIA/BOHUMIN synchro 10/5 2288 good to xlt w/cl mx then chaotic talk by woman. (Connolly)
1314 NORWAY Vintasoy 10/5 2274 xlt w/Jazz. (Connolly)
1323 UNID 10/5 2246 fast talk by man, possibly SS. (Connolly)
1324 HUNGARY Lakhoogy 10/5 2249 female w/weak signal. // to brp on 1251 u/the Libya. (Connolly)
1339 HUNGARY Noskshott 10/5 2245 to good peaks w/chanting. (Connolly)
1395 ALBANIA Lushnje 10/5 2228 SS male vocal. SS talk, then a note of Pannonian J. Radioactive signal. (Connolly) Awestruck for sure - CH
1398 SPAIN 10/5 2244 bits of SS talk in grayhenesy type jumble. (Connolly)
1402 SPAIN Cristina 10/5 2241 cl mx rising up o/FSPN. (Connolly)
1421 WEST GERMANY Heusselwer 10/5 2233 pop mx (Gloria Estefan) then OG talk. (Good signal. (Connolly)

In short, pull out your 10/9 DXM and flip to DXW. I misinterpreted Russell Scott’s 670 log - "...occasional radio novella, ID as WFEW" is what he sent and I should have typed.
Going to great lengths to patrol airwaves

By Bill Coates
Phoenix Gazette

Our call Arizona's their beat, but the radio cop stationed in\nDenver or go wherever their interests will permit.\nWorking out of the Federal Communications Commission's Arizona\nField office their search of the airwaves doesn't stop at the state line.

Jeff Norman, an FCC technician, arrives at his desk just a few minutes \ahead of his workday. "We're picking up signals from all over the country,"\nNorman says. "We're monitoring the airwaves for any illegal or \noncompliant transmissions.""It's a 24-hour job, and we're always \looking for new methods to improve our monitoring capabilities,"\nNorman adds.

Electronic technician Jeff Norman tracks down signals from the monitoring room.

Mark Heida, Phoenix Gazette

In the past year, Norman has added a new dimension to his work. He's \began using a computer to analyze the signals he receives. With the \computer's help, he can identify the source of the signal and \determine its characteristics. This has allowed him to be more \efficient in his work and to pinpoint problems more quickly.

"It used to take hours to locate a signal," Norman says. "Now it's just a \matter of minutes. And with the computer's help, I can pinpoint the \exact location of the source.""It's a great tool, and I'm grateful to have \it," he adds.

Norman's work is important because it helps to ensure that the airwaves \are free from interference. By monitoring the airwaves, he helps to \prevent interference that could disrupt radio and television service to \consumers. This is a crucial role to play, and Norman takes it very \seriously.

Electronic technician Jeff Norman tracks down signals from the monitoring room.

Mark Heida, Phoenix Gazette

Tracking signals can be a mystery

The next morning, however, it became clear that something was \amiss. The electronic equipment that had been monitoring the \airwaves had failed. Without this equipment, it was impossible to \predict what had caused the problem.

Despite the setback, Norman and his colleagues were determined to \get to the bottom of the mystery. They spent the next few hours \analyzing the data and trying to piece together what had happened.

"It was a wake-up call," Norman says. "We realized that we need to \be prepared for anything. We can't take anything for granted.""It was a \good lesson to learn," he adds.

Through his dedication and hard work, Norman has shown that he \is a valuable asset to the FCC. His work is essential to the smooth\noperation of the airwaves and to the well-being of the public.

"I'm proud of what I do," Norman says. "I'm glad I chose this career, and \I'm committed to doing my best in it.""It's a rewarding job," he adds.
“Dedicated to the strategy, patience, and luck of DX.”

After having received many excellent DX tips through the various columns of DX News over the years, I was honored and delighted to be invited to edit one myself. Thank you, my editors, for the opportunity and for your confidence.

The purpose of “Target DX” is to share the strategies that DXers have developed in the pursuit of tough DX targets in recent years. While DXing has always involved certain strategies to get the tough ones, new regional stations on formerly clear-channel frequencies, the almost universal phenomenon of NPIs, and the introduction of new kinds of equipment and clear channel frequencies has made for a greater amount of interference to cut through. What I am trying to do here is to expose the reader to a propagation report heard 10 minutes past the hour on MW and VHF (8700, 5600, 10000, 15000, 20000) and 4 minutes past the hour on VHF (25000, 50000, 100000, 150000). Other articles available through the AM/NM give a complete understanding of this hourly report, but stated most simply, an A-index higher than 15 will send you to the dial looking for Spanish language broadcasters on the.

The words in the title describe the reality of DXing in my own experience. For many years I have been trying to find DX 3600-4000 without any success. My strategy is clear enough: monitor 5400 on the 600-15 and 600-40 shortwave on the Sony 10600 at 5400 AM ELT for sign-on (shortwave paralyzeds are always full). My patience is legendary (my wife might call it sustained stupidity), so for 15 years I only ever tuned in AM to Spanish language broadcasters on the.

In columns to follow we will be relying on your experiences. DXing is how you actually go about hearing those rare ones, like the Washington and Oregon, New England, New York, or whatever. Whether it was strategy or luck, I’d be interested in hearing how it happened. Or perhaps you are like me, with a long wish list. What are the ones that you’ve been trying for without success? We’d like to know as some readers may have a tip for you.

So as not to limit the definition of what constitutes Target DX, you might have another angle to bring into the matter, such as foreign DX targets, “leasing DX indicators” that serve to notify you of temporarily good reception to a certain region of the world, station clear-channel, sunset skip strategies, etc. Feel free to be creative.

I’d like to get this column to Paul once per month during the month, but for now it depends upon your contributions. Thank you for your support of this and other columns in DX News.

It is very gratifying to have mail appearing in the box in response to my request for material for this column. Thank you for your support.

Paul Swoeringen writes that Caribbean stations “hop” into the Midwest from early morning till 10 minutes past the hour, and that 100 minutes past the hour. This is a good indicator of reception to the south, and easy to identify with a locate.

Another indicator of good conditions to Central America that Paul watches for is 199-565 El Salvador, which is easy to spot with a hot against 6M0-450.

My own initial indicator of good Caribbean conditions is to listen to various Cuban stations, to hear how well they are doing against the US/Canadian clear-channel stations. A second indicator of good reception is the degree to which Venezuela 670 rises above Cuba with no nulls. I use shortwave parallels whenever possible so that I can match a known shortwave target against the faint signal I’m hearing on medium wave. This allows me to quickly move, if I’ve already tested it, or stay if I haven’t. This kind of information is easily found in the World Radio TV Handbook, but I provide a short list of examples for those who need it:

- 6100 CMBL, Halifax // CMBL-6100 (Mornings best)
- 6140 CNW, Newfoundland // CNW-6140 (Mornings best)
- 3205 R. Belize // 930 (both AM, SW irregular)
- 4800 R. Media, Costa Rica // 730 (SW)
- 5000 R. Puntarenas, Costa Rica // 730 (SW)
- 5025 R. San Pedro, Costa Rica // (SW, AM)
- 4950 R. Carmen, Bo. Raya // 840 (AM)
- 5000 R. Chiriqui, Costa Rica // 730 (SW, AM)
- 6185 R. Republica, Mexico // 1060 (SW)
- 4950 R. Colombo, Nicaragua // 730 (AM)
- 4725/5075 Caracas // Big 8500 (SW)
- 4970/4950 R. Buenos Aires // 730 (SW)
- 4950 R. Capital // 730 (SW)
- 5160 Eco Caribe // 780 (SW)

Please note that some Latin American shortwave stations are somewhat more irregular in their operations than their medium wave counterparts.

A final note on important indicators for auroral conditions favoring Central and South America receptions on December 16, 1993. This report heard 10 minutes past the hour on MW (8700, 5600, 10000, 15000, 20000) and 4 minutes past the hour on VHF (25000, 50000, 100000, 150000). Other articles available through the AM/NM give a complete understanding of this hourly report, but stated most simply, an A-index higher than 15 will send you to the dial looking for Spanish language broadcasters on the.
Antipodean DX Odyssey - by Neil Wolfish

This past summer, I had the opportunity to visit Australia, New Zealand and Fiji. I took along my ICW-10 in order to attempt some DX listening. Some comments on my travels follow:

AUSTRALIA

MELBOURNE, VICTORIA: My first stop on the trip was Melbourne, in the first week of July. Using the ICW-10, it was audible here in the evening. South Australia, New South Wales, Tasmania, Queensland, Victoria and Australian Capital Territory. The west coast of Australia stretching from Adelaide in the south up to Brisbane in the north east could be heard without much difficulty.

Without looking for them, I stumbled upon 3JO/3AR, part of the Australian Broadcasting Corporation, WYV/2AM in the city, and 3JO/3IX in the suburbs of William and Grandville streets downtown. As well, 1278-3AM was audible on the corner at the corner of William and Latrobe streets. At 3JO/3AR, I was able to arrange a special tour of Radio Australia. Radio Australia's studios are a few minutes north of the Flinders Street Train Station. I was given an interesting tour by a member of the Radio Australia staff. Radio Australia had a large room full of promotional paraphernalia. However, I was not interested in logging stickers and letterhead around in my back pack for two months!

As for the commercial stations in Melbourne, the formats appeared to be as follows: 533-9AM CHY, 855-9CHC, 822-99V Oldies, 927-92X Talk, 1026-9T9 AM, 1179-92Q Oldies, 1278-9GM Talk, 1377-9GP Melbourne, 1422-9XY Adult Rock, and 1503-9AR Talk/Sports. 3XY and 3XY billboards may be seen all over 'The Hot' (Melbourne)'s transit system.

ALICE SPRINGS, NORTHERN TERRITORY: Quite a difference going from Melbourne (population 3 million) to Alice Springs (population 22,000). If you want to visit the one commercial station in Alice Springs, the studios of 966-BBA and 966-9ECC are easily found on the west side of The Stuart Highway (Highway 87) between the airport and downtown. BBA's format is Pop Music.

The A.C.C. station, 783-9AM (and short wave bands) are found on 2110 and 4835 KHz.

DXing in Alice Springs was quite different. Most of the 50 kW A.B.C. stations from the eastern Australian states, such as 790-RFC in Sydney, were audible. A few of the lower powered privately-owned and public broadcasting stations, mostly from South Australia, were heard as well. One station that got out well was 585-2WES in Bourke, New South Wales, with Rock music and carted pigeons, such as 'Rocking the Outback, 2-WASE.'

ADELAIDE, SOUTH AUSTRALIA: From a DXer's standpoint, Adelaide was quite similar to Melbourne. Western Australia and Northern Territory could not be heard, but the rest of the country, particularly along the east coast, could be heard. It was remarkable how well some of the 2kW stations from Queensland and New South Wales carried!

The local Adelaide radio dial was as follows: 533-9UV Educational, 765-9SO Oldies, 927-95Q News/Talk, 1125-9CHR, 1125-9ECC "Greatest Hits", 1323-9GM Oldies, 1422-9GM Talk/Sports, and 1503-9AR Talk/Sports. The station, 783-9AM (and short wave bands) are found on 2110 and 4835 KHz.

Perth, Western Australia: From Perth, some of the 50 kW eastern Australian A.B.C. outlets were audible at night, but not much for the rest of the day, and none of the South Australian stations I would imagine this would be akin to a DXer in Vancouver being able to hear 940-CRM (Montreal) and 1580-CBQ (Chicoutimi), but very little between the Rockies and the Great Lakes. A few of the lower powered private stations were heard, including 1342-9OS (Geelong, Victoria) and 1574-9BQ (Wollongong, New South Wales). Although 200 had to contend with the Voice of Free Asia/Voice of America radio in Thailand. Incidentally, the Voice of America was heard loud and clear with an English newscast at 1500 UTC and retransmitting 3AR in English at 1530 just as per the schedule in the DXW. Perth seemed like a much more interesting place to attempt Short Wave DXing. I noted 15 Radio Repablik Indonesia call letters on the 60 and 90 meter bands during the lone evening hours.

For the radio station promotional item collectors, the A.B.C. (720-9KN and 810-9SK) was located on Hay Street a couple of blocks from the Sheraton Hotel next to a bowling alley just east of downtown.

BRISBANE, QUEENSLAND: The Brisbane radio dial, at least as much as I noticed: 693-9GR Oldies, 884-9OS Oldies, 1008-9AR Oldies, 1052-9GM Talk/Radio, 1278-9GM Talk, 1377-9GM Talk, 1422-9XY Adult Rock, and 1503-9AR Talk/Sports. 3XY and 3XY billboards may be seen all over 'The Hot', Brisbane's transit system.

Cairns, Queensland: The local radio dial consisted of 533-9KZ (A.C.C.) and 846-94C, "(Hits and Memories)" as well as the usual Rock A.B.C. relays. The bulk of the station came from Queensland, but 1278-9AR (Melbourne), 1386-9AR (Adelaide, South Australia) and 1503-9AR (Moorab, South Wales) were among the few that kept in from farther afield. I suppose hearing a 2kW Adelaide station from Cairns would probably be the equivalent (distance wise) of hearing a 2kW Houston station if such a thing existed from Maine.

AUSTRALIA, IN GENERAL: After you got by the A.B.C., which often meant hearing the same Australia-England cricket match every 9kW up the band, the majority of the Australian commercial stations appeared to play a variation of popular music, contemporary music, Hits, Rock, Adult Contemporary, and a variety of their own.

In other words, Paul McCartney's My Brave Face and Don Henley's End Of The Innocence were fair game on just about everyone, including the A.B.C. outlets when there wasn't a cricket going on. Sports Talk is also very popular in the cities, although instead of baseball, the topics discussed are usually Australian Rules Football and Rugby.

NEW ZEALAND

Unfortunately, I only had 10 days in New Zealand and I didn't spend too much time using the ICW-10. As a generalisation, it appeared that from New Zealand you could count on hearing New Zealand stations 868 as well as some of the east coast Australian 5kW A.B.C. outlets, such as Sydney (796-9PC) and Grafton, New South Wales (738-9MR).

Aside from the Radio New Zealand outlets, the remainder of the stations in New Zealand appear to be Contemporary (e.g. Auckland's 1476-9AR "Radio Hausaki") or religious (e.g. Auckland's 1502-9AR "Radio Ryema"), but no Christian stations were heard to be quite a few Christmas books, shops, usually right next door to the Adult cinema and book stores!

I had no intention of visiting any radio stations in New Zealand, but I did notice a few in my travels. If you have the time to visit the country I strongly recommend you skip the...
visits unless you have exhausted every other possible cultural activity. Nevertheless, I will mention few that I passed by:

WELLINGTON, NORTH ISLAND: Radio New Zealand, Radio Rhema and Radio Windy (891-2XW) are all located in the downtown core in the area between the Parliament Buildings (known locally as 'The Bee Hive') and The Cuba Street Mall. If you are walking along Lambton Quay, you should have no trouble finding these three stations.

AUCKLAND, NORTH ISLAND: If you take the bus out to the Zoo or the Museum of Technology, you will pass by 1332-IXI ('Radio 1'). Auckland's Radio Rhema studios were on Queen Street up the hill south of Town Hall. I'm sure that I saw Radio New Zealand's studios as well, but I didn't really care enough to note the address.

Fiji

I didn't listen very much to the local radio in Fiji aside from the commercial 'FM 96' in Suva, the capital city. FM 96 sounded fairly current and professional, although the Rick Dew's Top 40 program that aired on a Sunday evening was at least 3 weeks behind the rest of the world. And 4 hours of the same 'Judy Fruit' commercial every break can be irritating after a while.

Fiji is an interesting place to DX from. Several Australian and New Zealand stations are heard each night, ranging from the strong A.B.C. and Radio New Zealand stations (e.g. 577-2FC in Wellington; 846-2JC in Canberra, Australian Capital Territory) to the weaker private commercial stations (e.g. 1071-1JCV in Maryborough, Victoria and the aforementioned Radio Nauru in Auckland on 1476 kHz). Tuvalu on 624 (signing off at 0900 UTC); Tonga on 1017 (signing off at 1000 UTC) and American Samoa on 645 (signing off on 0000 UTC) on 448 are also easily heard. Probably the best signal on the island, however, comes from New Caledonia. Incidentally, R.F.O. Nouvelle-Caledonie is supposed to have an English newscast at 0700 UTC (7 p.m. in Fiji & New Zealand) if you believe the WRTH. I never heard anything but French programming.

Tahiti on 736 was attempted, but not heard because of Australian 29W in Grafton, New South Wales. I also spent some time listening for Western Samoa on 747, Kiribati on 845, Hawaii on 870 (KAIM-Honolulu), and Vanuatu on 1125 without any success. I did hear traces of religious music on 870, which I would like to think was KAIN, but never any IDs. The difficult-to-hear Short Wave outlets of Tonga (5030 kHz) and apparently radio repair and Kiribati (14802 or 15818 kHz, also heard me). On the other hand, New Caledonia, Vanuatu and the Solomon Islands are all easily logged on their Short Wave frequencies.

So there you have it. Obviously with a little more time and better locations I would have heard more. Nevertheless the South Pacific radio dial makes for a nice change from Larry King or Gna n' Roses every 10 kilohertz.

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R5000 Modifications — by Eric Roskos (via Pete Kemp)

The following describes some option jumpers and other features I have found in the Kenwood R-5000 receiver.

The R5000 is fairly delicate internally, so you should not undertake these modifications if you are not fairly confident of your ability to work with delicate electronics (or to repair it if necessary). In particular, the receiver's numerous circuit boards are connected together with wire harnesses made of relatively fine and delicate wires. Also, some of the boards (particularly the IF boards) have small "daughter boards" containing small surface mount parts vertically attached to the main board. These are also fairly fragile, and caution is required in handling them.

EXPANSION FEATURES

The R5000 has six "Expansion Feature" options which are not documented in the user manuals. These are controlled by jumpers (actually diodes) on the CPU board, which is attached to the back of the receiver's front control panel, and underneath a metal RF shield. Unfortunately, the jumper simply completely remove the receiver's covers, and unfasten the front panel, in order to access these.

Gaining Access to the Jumpers

To access the jumpers, remove the top and bottom covers of the receiver by removing the eight silver screws which hold each cover in place. Use caution at this point, since the radio will be sitting only on its internal chassis, and delicate parts will be exposed.

Next, remove the two flat silver screws which are underneath the covers (not the black screws that are visible with the covers on) which hold the CPU board to the board underneath the board. Be sure the receiver is sitting on a solid table so that the front panel will not fall off when you do the next step. There are a large number of wire harnesses connecting to the CPU board. Very carefully pull the front panel forward and rotate it so that you can get access to the back of the front panel.

Loosen the five small metal screws (two at the top, three at the bottom) which hold the RF shield in place over the CPU board. The holes in the shield and the screws go into slots, which allow you to slide the shield off without removing the screws completely. This is fortunate since the screws are fairly small. Remove the RF shield.

Changing The Options

Locate the row of approximately eight small, vertically-mounted option diodes on the CPU board. They are labeled D65 through D74, and located near and perpendicular to six-pin inline connectors 54 and 55, and parallel (and directly adjacent to) eight-pin connector 53. Be warned, however, you may see another row of option jumpers on the R5000. Most of the diodes in this row were not installed. They are numbered D75 through D85. Note that the diodes D65-D72, D73-D79, and connector 53 (which goes to the front panel keyboard matrix) are all read by IC53, an 8255 P80. Strobe the oneths of one of the three rows of diodes and then read the anode code of each diode in the row in parallel; it is pulled up by a resistor pack R850 unless the diode is connected, in which case it is pulled down by the (negative-going) strobe.

You enable one of the options by cutting the top loop of the wire coming out of the diode to the end of the diode (remember that these are vertical mounted diodes, so the end which is sticking up forms a loop). It is recommended that you just cut through the wire carefully, and bend it slightly to one side; then if you want to disable the option in the future, you can carefully re-solder the connection without having to solder a new diode onto the board.

The jumpers we are concerned with are D65-D72. Note that the other row of diodes (D73-D79) are also option jumpers, but they are not documented in the R5000's technical manual; the manual's parts list simply says that D73 is installed in Australia, and D74-D76 are installed in Europe. One or more of these (I think D79) was installed in my receiver; and the parts list doesn't say what it is for. I'm interested in hearing from anyone who may know what these undocumented jumpers do.
The meaning of each jumper is as follows:

D65: Selects whether the display will show in 10 Hz increments (diode present) or in 100 Hz increments (diode absent). As shipped, the diode is present, which is probably what you'll want since it gives a higher resolution to the display. I don't know if it affects tuning; the radio uses 10 Hz increments with the diode installed.

D68: Controls whether the mode buttons will generate a morse-code letter through the speaker when depressed (diode present) or will simply beep when depressed (diode absent). As shipped, the diode is present, and morse-code letters are generated through the speaker.

D67: Controls whether FM mode will step in 2.5 KHz increments (present) or 500 Hz increments (absent), when you have the front-panel step switch on "LAT". The step mode is preset on the display. The FM display has already stepped in 500 Hz increments. As shipped, the diode is present, and steps are in 2.5 KHz increments.

D68: Controls the "BUSY STOP" feature. With the diode present, scanning will stop when the BUSY light comes on only in AM and FM modes. With the diode absent, scanning will stop when the BUSY light comes on in all modes. Note that this is an optional item. The mode section has an extra feature, by connecting the "dumber" switch to the option diode so that you can turn this on or off from the front panel.

D69: "Memory search" feature. This is (in my opinion) the best of the extended options. The diode is shipped present; as shipped, the memory search feature is disabled. If you remove the diode, you enable the feature. With the feature enabled, when you press the orange M.IN key for the first time (to allow you to select which memory you want to store a frequency in), the silver "MCol Down/Up" buttons on the front panel allow you to step through the set of known memory positions. This lets you select a memory in store in having to scan through all the ones you've already stored in your enable this feature. Also, when you return to the memory mode (i.e., the mode in which the M.IN is on the display) and not storing into memory (normal operating mode), the mode buttons step through the set of unused memories, skipping any unused ones.

D70-71: These jumpers are currently unused (according to the manual).

D72: I have not tried this option. According to the manual, if you remove the jumper, you are prevented from storing into a memory channel which has a frequency stored in it. I don't know whether this completely disables all M.IN operations, or just makes it easy to modify the IC programming, or whether there is a way to get around this (e.g., whether the CLEAR button still works).

That's all the options that are documented. I've tried all except D65 and I don't currently have the radio apart multiple times to try those, since they wouldn't sound like particularly desirable features. If anybody tries them (particularly D72) and finds out how they work, please let me know (IC54 socket on the CPU board will be the socket to which D72 is connected). The 4040 plug in to the IC55 socket next to it. Another IC to know about in connection with this option is IC56, a 7404 QDI, which is what drives the serial port socket in back of the radio. According to the manual, the pin assignment on this socket is as follows:

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<tr>
<td>3</td>
<td>CTS (in)</td>
</tr>
<tr>
<td>4</td>
<td>RTS (out)</td>
</tr>
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</table>

I haven't actually tried these to verify them. Also, there is a CMOS 8251 available, and an NMOS 8251. According to the manual, the 8251 is used; although most of the parts on the board are CMOS. I don't know whether the IC kits they provide actually supply the CMOS or NMOS version.

In add 8V light oks like maybe the person who designed the receiver intended for these to be external controls, and then there put it inside when they packaged the receiver.

What's interesting about these controls is that they, and the IF shift control (and another control used in aligning the receiver through an A/D converter. They actually serve as digital inputs to the microprocessor. It's unfortunate that they didn't use different channels on the A/D converter to read the signal strength meter (as you could set the signal strength meter (as you could find the signal strength meter (ACC level) through the serial port) instead of using them for these relatively minor functions. IBB in Vienna sells a modification for the 8500 which allows their CR1S computer interface to read the ACC level, but I don't know how it works.

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One other thing to note involves installing the optional filters. First, I found that the AM filter which came with the radio introduced a whine into AM reception. I replaced it with the optional 44 styl filter, and it eliminated the whine (and gave a "fuller" sound to the AM.

Also, note that if you install other filters, you have to install them in order; otherwise, the Narrowest in the N2 position, the next narrowest in the M1 position. Note that the N2 position is already occupied by a high-quality SS filter. This means that they have to be in order in that as you select narrower and narrower filters, the wider filters remain in the circuit, so if you put a narrower filter in M1 than you have in M, it will stay enabled even when you select the wider filter, causing the wider filter to have no effect.

It's a little unfortunate that it works that way, since the M1 filter is only enabled by the switch (not in AUTO mode), which would be ideal for the very-narrow VOR/LOC filter. I have identified a modification to make M1 be selected only when the switch is in the M1 position; it involves disconnecting 1/2 of a dual diode and soldering a diode in between.

Kenwood Telephone DBB

Computerized radio addicts should note that Kenwood now operates a telephone DDS service. It accepts 300 and 700 baud rates and operates from 1700-0800 daily and Friday 1700 to 0800 Monday - Friday. All times are P.S.T. They have a number of files containing equipment modifications and related items.

Call 1-213-761-8284.

Radio Roundup ... by Pete Kemp

NYC's WWLL is airing the Morning Show with Mark Riley with a live audience from the Apollo Theater.

The syndicated Comedy Show with host Dick Cavett is getting a new name and is now known as "The Richard Lewis Show," and will be featured on the Adult Comedy Network, with host Roy Firestone of ESBN fame.

WCCU's Joyce LaMont is leaving after 43 years of service to join up with KRKO.

The Ohio Associated Press has presented WWVA with its third award for outstanding news operations.

The American Radio Company of the Air, Garrison Keillor's vehicle for his on-air signature has been part of the American Public Radio Network. The show will air over National Public Radio stations. In related matters, some markets are debating whether or not this is reality a new show or a revised version of the live show. The show is known as the National Public Radio Companion. Due to legal obligations regarding the first refusal rights for airing this show, stations are engaged in negotiations to see who will air it within their respective coverage areas.

The Radio Game Show has now expanded from KENO into syndication, it is hosted by Mark Richards. The first station to get on the list was WRLH.

After ten years of entertainment reporting at Boston's WEEI, Frank Dolan was given his walking papers in what the station described as a budget cutting move.
Radio Roundup ... by Pete Kemp

WOOD's Howard Vlaken has announced his retirement from the station November 1st, after a 39 year association.

Bill Bransome is pulling the plug at KYW after a 24 year run. Long associated with the news and sports areas, he was also the off-air announcer for the popular Mike Nolan Daily TV Show which broadcast from KYW-TV in the City of Brotherly Love for many years.

**LUTHERAN VESPERS BROADCASTS**

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NATIONAL RADIO CLUB Inc.

**VISA/MASTERCARD CREDIT CARD ORDERS**

Due to popular demand, the National Radio Club is proud to announce that with the cooperation of a local business the NRC can now accept Visa/Mastercard credit card orders. You may use your credit card for:

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By Mail: When ordering NRC Products or Subscriptions send your credit card order to NRC HQ, Box 24, Cambridge, WI 53523-0024 and NOT thru the normal channels. This will ensure timely processing of your credit card order.

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We need your card type (Visa/Mastercard), card number, expiration date, name as it appears on the card, and evening telephone number (in case we have a question or two).

**Wisconsin Residents MUST add the appropriate state/county sales taxes.**

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**CREDIT CARD SUPPLEMENT FORM TO THE ORDER/SUBSCRIPTION FORM**

- MasterCard
- Visa

**CARD ACCOUNT NUMBER ________________________________**

**EXPIRATION DATE ______________ EVENING PHONE NUMBER __________________________**

**NAME AS IT APPEARS ON CARD __________________________**

**YOUR SIGNATURE _____________________________________**

Send this along with your order/subscription to:

National Radio Club
P.O. Box 24
Cambridge, WI 53523-0024

This information remains confidential and will be used only for the purpose of processing your order/subscription.

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