



DX Monitor

Devoted Exclusively to
Broadcast Band DXing

March 19, 1983

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Issue Number 647

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No WDXF this week because everybody decided to wait for the anniversary issue. Ric says he has a monstrous pile of forums for next week but none for this issue. Still no DXWWE---rumour has it Neil got onto a plane for Mars instead of one for Mass.

We are nearing the end of this season's weekly publishing schedule. Here is the schedule for the next few DX Monitors:

<u>Issue</u>	<u>Masthead Date</u>	<u>HQ Deadline</u>	<u>Issue</u>	<u>Masthead Date</u>	<u>HQ Deadline</u>
27	March 26	March 18	31	May 28	May 20
28	April 2	March 25	32	June 25	June 17
29	April 16	April 8	33	July 23	July 15
30	May 7	April 29	34	August 20	August 12

Note that, although the official deadline for mail is the Friday, eight days before publication, last minute information can be phoned in as late as Sunday night. In some cases, information phoned in as late as Monday night will also make it into the bulletin.

The IRCA Almanac has now been printed and, by the time you read this, will be in the mail. If you ordered a copy you should be getting it soon. And if you haven't ordered a copy yet, you should. The Almanac is packed with all sorts of useful information on DXing and radio stations. It includes lists of network affiliates, syndicated programs, station slogans, sports networks, recent station changes (calls frequencies, etc), utility stations, and much more. Price is \$5.50 for IRCA/NRC members in the U.S. and Canada, \$6.50 for non-members. Foreign orders, add \$2 extra. Send your check or money order to IRCA Goodie Factory, PO Bx 17088, Seattle, WA 98107.

Congratulations to Karl Zuk, winner of the Almanac cover design contest. (If you want to find out what his entry looked like, order an Almanac!)

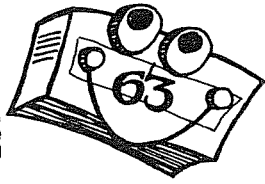
For those of you who like to follow Seattle area radio, we have these two gems of information. KKNW-1510 in Mountlake Terrace has returned to the air after being off for about 6 months. Current format is "dance music", which some might call r&b or disco, aimed at the (almost) all-white residents of Seattle's northern suburbs. Meanwhile, the owners of KXA-770 have filed for bankruptcy. Apparently they've had a hard time paying things like employee salaries, federal taxes, etc., in recent months and a lot of people (including the IRS) are starting to get nasty. In the meantime, KXA & sister station KYYX FM are still on the air, but watch for some changes (rumors of format changes are starting to surface). Both stations are currently for sale, but at an asking price of \$12 million, they haven't been deluged with offers.

"Top End" fans may be interested an item noted in the March QST: beacon-like signals emanating from Cuba have been heard in the 1800-1825 kHz range in recent months. The FCC has sent a telegram to its Cuban counterpart asking them to cease and desist. As of this writing, it's not known if they have.

Next week---the anniversary issue! See you then. 73, bp.

AM STEREO IS HERE

On July 30, 1982, WMAL AM 63 made radio history by becoming Washington, D.C.'s first radio station to convert its regular program service to AM stereo. You may wonder why AM stereo has just now come about when FM stereo has been around for years, so we've prepared a brief history lesson to help answer some of your questions.



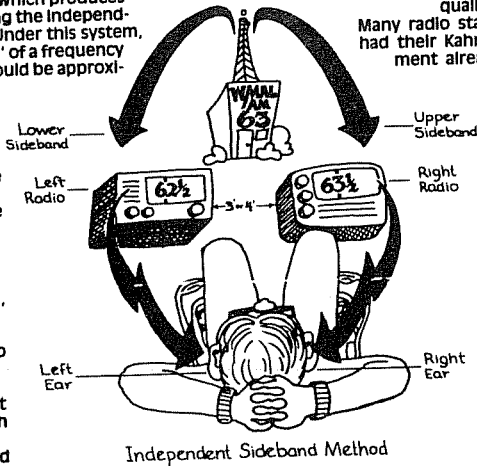
THE AM STEREO STORY

The technology needed to produce and receive the AM stereo signal has existed for more than 20 years. However, unlike FM stereo, which has one universally approved system for transmission, several different AM stereo systems have been developed. And, after two decades of delay, the Federal Communications Commission (FCC) finally chose not to endorse one particular AM stereo system, but to allow the "marketplace" to choose a system.

That means that members of the broadcast industry could test all the different AM stereo systems available and choose whatever system they thought would best suit their needs. While all AM stereo systems must remain compatible with the present monophonic system, the various AM stereo systems are not compatible among themselves. This means that an AM stereo receiver equipped to receive one system's signal, would not necessarily be capable of receiving any of the other system's signals. In any event, your present AM radio will continue to play in mono regardless of which stereo system may be employed by the broadcaster.

WMAL has installed the FCC-approved Kahn-Hazeltine system, which produces the stereo effect by using the Independent Sideband method. Under this system, the existing "sidebands" of a frequency (in WMAL's case, they would be approximately at 62½ and 63½ on your radio dial), are used to separately transmit the left hand and right hand signals that make up stereo broadcasting. This Kahn-Hazeltine method allows monaural listeners to continue receiving a station's signal with no loss in quality. And, it also allows you to experience AM stereo broadcasting with two regular AM receivers. You really don't need any special equipment to hear AM stereo with the Kahn-Hazeltine system — all you need are two AM radios. Of course, when Kahn-

Hazeltine equipped AM stereo receivers are available, the broadcast reception quality will be even better! Many radio stations, including WMAL, had their Kahn System stereo equipment already installed, and were ready to go on the air when the FCC approved Kahn on July 23, 1982. It will take receiver manufacturers a little longer to catch up and begin producing AM stereo receivers, but when they become available, you'll witness a revolution in AM radio. Until then, you may wish to experiment with two regular AM radios and begin listening to WMAL in full AM stereo right away. The following instructions and two similar AM radios will help you become one of the nation's first AM stereo listeners!



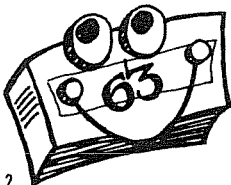
BE A PIONEER — HEAR WMAL IN AM STEREO TODAY

Because of the Independent Sideband System described earlier, you can hear WMAL's stereo signal without a new AM stereo receiver. All you need are two regular AM radios. The more alike these two AM radios are, the better your stereo reproduction will be, and of course, it would be ideal to use two identical radios. But you need not purchase identical radios for this method to work; any two AM radios may produce good results.

Begin by placing your two AM radios about 3 to 4 feet apart on the same vertical plane. Tune the radio to your right to WMAL at 63 on the dial as you normally would. Then, tune it slightly off to about 63½, so that you still hear WMAL loud and clear. Now, temporarily turn down the volume of this radio. Move to the radio on your left and tune it to WMAL at 63, and then tune it slightly lower to about 62½, but to a point where WMAL's signal is still clear. Return to your right hand radio, turn up the volume again, and you'll hear WMAL in full AM stereo sound!

Remember, currently available FM stereo receivers are not in any way equipped to receive an AM stereo signal. An entirely new element would have to be added to your present AM/FM stereo receiver for it to be able to decode an AM stereo signal.

Another important thing to remember — even though WMAL is now broadcasting in AM stereo, our signal will continue to come through as before on your regular AM radio. You'll always be able to hear WMAL AM monaurally by tuning your radio directly to the 63 frequency as you have in the past. Because of the Independent Sideband System, you'll experience no change in the reception quality of WMAL's regular monaural broadcasts.



via Greg Monti

Who's the biggest and the best in Seattle

by Victor Stredlcke
Times radio columnist

After you learn who is No. 1, what else can you do with Arbitron radio ratings? Salesmen and time buyers study a 160-page book for results of audience surveys taken in fall of 1982 in the Seattle-Everett-Tacoma market. They want to know where the 18-to-34 female listener is; how to reach men 25 to 54; what the "cost per thousand" will be to air a commercial.

Arbitron's copyrighted statistics answer these questions, and more.

At KVI, Judy Fountain, promotion director,

RADIO DIAL

adapted some Arbitron information in a more graphic fashion, for casual comprehension rather than as part of a sales package.

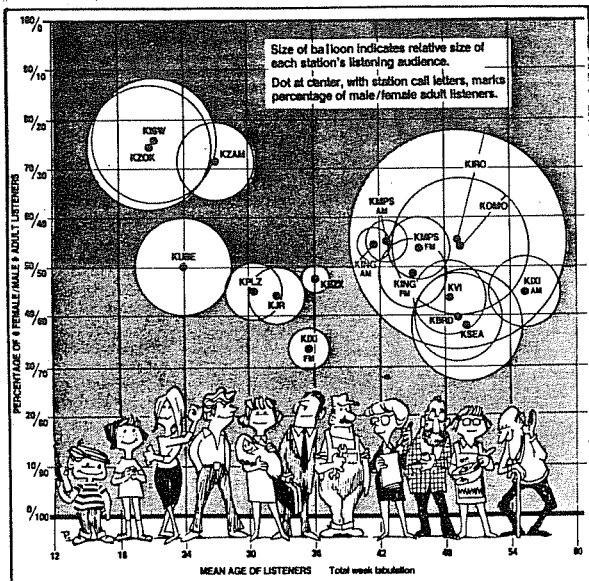
We have adapted the chart, which shows demographic information about the top 18 area stations. According to Arbitron, there were 33 stations with measurable audiences. Arbitron doesn't tabulate noncommercial stations.

Horizontally, the chart shows mean age of listeners; the stations attract, here based on Monday-through-Sunday listening. Stations on the left have the youngest listeners; the dots for KISW and KZOK show rock-music listeners have a mean age of 21. And KIXI-AM's dot, at the right, affirms that big-band music and nostalgia garner the oldest mean in town.

After you find the dot marking a favorite radio station, you can compare its audience size with others. Balloons indicate relative size of total-week audiences.

KISW and KZOK audiences are 75 percent male; KIXI-FM has 66 percent female listeners. Note that KUBE, at the left, with contemporary hit music, perches right on the 50/50 line.

Other extrapolations, selected from Arbitron's measurements, which were taken from Sept. 23 to Dec. 15 and supplied to stations in January: The favorite morning station, 6-10 a.m. weekdays, is KIRO, with a 16.8 share. Next is KOMO, with an 8.9 share. Other stations in the running in morning hours are



Alan Pratt / Seattle Times

Who's the favorite afternoon station? Counting total audience, 12 and older, it's KIRO with a 10.1 share. KISW with 6.6, KSEA with 6.2, KOMO with 5.9. Counting only teens, 12-17, however, it's KZOK by a two-to-one margin over KISW, followed by KNBQ, KUBE, KYYX and KKFJ.

From 7 p.m. to midnight, KIRO leads the again, followed closely by KZOK; two or more percentage points away are KNBQ, KING-FM, KUBE, KSEA, KOMO, KZAM and KBRD. Seattle Times 2-27-83

SUMMARY OF UNREPORTED STATIONS thru Volume 20 #21 dated February 12, 1983

by Don Kaskey

The following chart lists the total number of stations in the USA and Canada and the volume they were last reported as being heard.

COUNTRY	V20	v19	V18	V17	V16	V15	V14	V13	V12	Prior	Total
CANADA	163	93	54	20	15	5	7	0	2	53	412
U.S.A.	1692	1127	639	313	253	111	70	42	65	332	4644
TOTAL	1855	1220	693	333	268	116	77	42	67	385	5056

New stations reported as having taken to the air during the period between V20 #15 through #21:

820-KCBF-AK (x-900)	1270-WVES-VA	1430-WDEX-NC
850-WBLP-TN	1330-WSWL-PL	1500-WRDS-MS
870-KORD-WA (x-910)	1350-WANC-NC	1510-WYNI-AL
1170-WDTB-MI	1410-WJED-TN	

Previously unreported stations noted by IRCA Reporters in DXM since the last update (V20 #17)...Covers V20 #15 through #21.

- AL--24--WYNI-1510 (Jeter-GA)
- AK---5--KCBF--820 (Martin-OR)
- AR--11--KJEM-1190 & KACJ-1510 (Albrecht-WI)
- IA---0--KLBA-1370 (Skaine-IA)
- KY---6--WGRK-1540 (Higgins-IL)
- CT---0--WRTT-1170 (Musco-CT)
- MI---3--WDTB-1170 (Yocis-MI)
- MS--17--WLRG--850 (Butas-TN), WRDS-1500 (Butas-TN)
- NC---33--WGMA-1520 (Jeter-GA), WJQI-1450 & WANC-1350 (Townshend-DC)
- VA--10--WVES-1270 (Noonan-WI), WSBV-1560 (Connelly-from MD)

EASTERN DX FORUM

(215) 368-8067
RICHARD EVANS
P.O. Box 1204
NORTH WALES, PA 10454

Reports from members living east of the Mississippi River
Deadlines: 3/19, 3/30 (a change), 4/23, 5/14, 6/11, 7/9, 8/6.

C. M. Stanbury II, RR #1, Ridgeway, Ontario LOS 1N0

On 2/24 R. Nederlands' "Media Network" program reported that under a new Reagan plan, which he presented personally to some prominent congressmen, R. Marti will now operate from Voice of America's Marathon Key site. If this comes off it would be historically ironic because, although not conclusive, we have evidence in our files suggesting that during the 1962 Cuban missile crisis VOA Marathon may have switched freqs and IDs with the original R. Marti - R. Swan/Americas. John H. Mullaney, a consulting engineer responsible for setting up VOA's Dry Tortugas facility during the crisis stated that Marathon definitely used two frequencies. The exact period during which Marathon used a second freq is unknown and its use was supposedly due to a conflict with the FCC. However it would have been a cinch for Marathon on 1180 (its only publicized freq) and Radio Americas on 1165 kHz to switch IDs and R. Americas was involved in such ID/freq interchanges on shortwave. Marathon has always been a peculiar operation in that it was put on the air using a highly touted portable unit which some 20 years later has supposedly never left the site. Anyway, and this is the bottom line, the R. Marti proposal could open the door to all sorts of fun and games. Best.

Richard E. Wood, College of Education, P. O. Box 959, Abha, Saudi Arabia

Two out of three Monitors reach me in airmail delivery time, although I subscribe at surface rate. But, wouldn't you know it, one of the most interesting recent issues, and one containing a deadlined Membership Survey, 24-8 dated 11/13, really came surface mail and arrived 2-15. I'd like to express my opinion, but it's too late. (Go ahead anyway-rce) Elsewhere in that issue, Don Kaskey's "An Icelandic DX Season", featuring his DX from Keflavik in 1955-56, brought back fond memories of my first MW DX from the north of England, a somewhat similar location, just two years later. I have always loved the North Atlantic area, and that's where I plan to head right after the ANARC convention. On ANARC, let me remind prospective attendees to write to ANARC 1983, c/o WADXA, 606 Forest Glen, Silver Spring, Maryland 20901, enclosing an SASE. It's a fairly short weekend convention with most seminars on Sat. 7/16, so those within commuting distance of Rosslyn, Va. (Wash., D.C. area) could just drive there for the day. Registration fee of \$30 includes the banquet that night, and hotel room prepayment is a fairly steep \$45, which will however be prorated for those assigned roommates. Getting back to the North Atlantic, my plans for after Rosslyn include driving north to N.B., N.S., P.E.I., and, I hope, Nfld. and Saint-Pierre, where I understand exactly the same French is spoken as in France; I'd like to check this and perhaps make some recordings. Since I'll be taking many of my varies along, including the oldest ones from England which are strong on Atlantic Canada, maybe I'll surprise the stn personnel. Idhaat ul Qur'an Karim, Holy Qur'an Radio, on 567, is a great success with the traditional, religious people of Abha, and many car radios are tuned to it. I would say that listenership to BBC and other foreign stations in Abha has gone down, now that two different local pgms are available at good strength. There is now a call in the local papers for Qur'an TV, too, that is, full-time Qur'an only on a TV channel. As it is, many programs on the single xhannel are religious. As I travel in taxis, or in cars where I easily get rides because people want to practice their English, it is more restful to listen to Qur'an recitation than to Arab pop music, which often combines the worst elements of East and West. And congratulations to Mark Connelly on another superb article, on 30 countries in English including 20 from the Western Hemisphere. I can hear about 20 in English from here. 73.

Mark Connelly, 30 William Road, Billerica, Massachusetts 01821

Greetings. During late January, I was sent on a business trip to the Baltimore, Md. area. As I was travelling alone & staying alone, DXing was a major source of entertainment when I wasn't in class. I attended about 10 hours a day of intensive courses on a PC board test system at Hewlett-Packard in Baltimore; during several evenings I did some serious DXing from my hotel room in Dorsey, Md. The results of the DX shall appear in DXWw, IDXD, a feature article, and daytime bandscans. The weekend in the

(Connelly, cont...) middle of the 2-week trip was spend out on the Delmarva eastern shore; this included an overnight stay at Rehoboth Beach, Del. and, of course, DXing. The most obvious thing about MW DX in Md. and Del. was the oppressive presence of Cubans at night. I'm not saying that the Cubans aren't a nuisance in Mass. too, but at least in Mass., during the early evening, Cubans don't bother the eastern Caribbean & South American DX all that much. It was great to drive around Delmarva: the views of seashore, farms, & woods helped me unwind after a week of high-pressure studying. The local fried oysters & crab cakes were excellent. I listened to WJWL-900 and really got into the C&W mx. as I drove in the country on a rainy Sunday afternoon. I went through Ocean City, Md.: it looked too glittery & honky-tonk for my tastes, so I kept on going. During weeknights in Dorsey, I became impressed by the variety of music on Baltimore/Washington area FM radio. Progressive WHPS Bethesda was outstanding. Jazz, Black hits, C&W, AoR, T-40, BFL, classical, religion, oldies, MYL/BBB, and AdCon/MoR formats could all be found on area FM: most formats were each on 2 or more stations. AM also had variety: AoR WWDC-1260 was a drivetime regular for me on the AM-only radio in the rented car. Rush, Kansas, Yes, EL&P, etc. sure beat the heck out of the offerings on AM back home. WWDC's rock is well suited to bombing along I-95. The trip was successful from both professional & DX standpoints, but I was glad to get back home: I got back just in time for a party for my son Michael's first birthday. 73/good DX to all.

A high Fidel-ity attack

NY Daily News 3-5-83

via Matt Stutterheim

BACK IN my little hometown, La Salud, in Cuba's Havana Province, it was a pharmacist named Joaquin who had the most powerful short-wave radio.

That made him a very popular person among the people who supported Fidel Castro's guerrillas, who were then fighting in the mountains of Oriente Province.

The lucky ones, including my family, were secretly invited to Joaquin's home to listen to Radio Rebelde, the guerrilla radio station which served as the only source of information about the fighting in the hills and gave the Cuban people hope that someday they would be free of the Fulgencio Batista regime.

It was 1958 and I was only an 8-year-old boy, but listening to Radio Rebelde I learned that my country was living under a dictatorship, that people were not free to express themselves, that many were being tortured and killed in Batista's jails.

I could never understand why the guerrillas spoke in code language. They would say they needed more brooms and walnuts—meaning rifles and bullets—but my parents took the time to translate that lingo.

They taught me that the guerrillas were risking their lives for my future, so that someday I could live in a free and democratic nation. They also warned me that if I told anyone about the secret gatherings at Joaquin's house, which were forbidden by the government, they could go to jail.

I learned the meaning of democracy, although I was not to experience it there. For when they came down from the mountains, the guerrillas forgot all their promises of freedom and introduced to Cuba another form of repression, a Communist dictatorship.

THE MEMORIES OF JOAQUIN'S radio and the lessons I learned from Radio Rebelde come back to me often nowadays when I read about Radio Marti, the radio station that the Reagan administration wants to build in the Florida Keys to provide the Cuban people the kind of news and commentary they don't get from the Castro government, which turned out to be even more oppressive than the Batista dictatorship and which censors the news even more than the previous government.

Again, the Cuban people need to know the truth about what's going on in the rest of the world. And Radio Marti, like Radio Free Europe and Radio Liberty, which broadcast to Eastern Europe and the Soviet Union, would restore for the Cuban people the right to hope for a better future.

The Cuban people need to be reminded that their country, which their government calls "the only free territory in the Americas," is really a colony of the Soviet Union and that their soldiers are being sent all over the world as surrogates of the Russians. They need to be taught about the benefits of a free society.



MIGUEL PEREZ

The controversial \$7.5 million station, which was approved by the House of Representatives last summer and by the Senate Foreign Relations Committee last fall, ran into heavy opposition on the Senate floor from midwestern senators who fear that the station's signals would disrupt the reception of a farm-news station in Des Moines, Iowa, which is on the same frequency, and that the Castro regime would disrupt and jam the broadcasts of American commercial stations in retaliation.

LAST AUGUST, IN AN apparent attempt to show the Senate that its fears are well-founded, the Cuban government transmitted four hours of news and music programs on five AM frequencies and disrupted the programming on at least two U.S. commercial stations.

Last December, during the lame-duck session of Congress, the Senate leadership, unable to break an opposition filibuster against the Radio Marti bill, deferred judgment on the bill.

But last week, new legislation was introduced by Sen. Paula Hawkins of Florida which restricts Radio Marti from broadcasting on commercial bands that would interfere with American stations. The new bill, which now has to go through the House and Senate Foreign Relations committees, is expected to appease the opposition from the U.S. broadcasting industry.

The modified legislation gives the board that will operate Radio Marti the option of broadcasting on short-wave bands, or on AM frequencies that are not used commercially in the United States or by sharing the same frequency with Voice of America, which currently broadcasts news and features to 19 Latin American countries from the United States.

The Voice of America, although not specifically aimed at countering Cuba's Communist propaganda, already serves as a source of some information for the Cuban people.

TWO YEARS AFTER the triumph of Castro's revolution, my family again turned to forbidden radio broadcasts for information about Cuba's struggle to be free. Now it was the Voice of America that gave us news about the Bay of Pigs invasion. I was then a frightened 11-year-old boy listening to the invaders' bombardments and crouched with my whole family under the dining room table in case the ceiling caved in. It was a strange situation—cheering for the invaders but being at the mercy of their bombs.

Radio Marti is named after Jose Marti, the Cuban War of Independence hero who lived in New York City 100 years ago before returning to his homeland to fight against Spanish domination. The station could serve as the most powerful weapon in the U.S. arsenal against the threat of communism 90 miles from our shores. It could produce better results for democracy than a sophisticated missile system or diplomatic negotiations, just like Radio Free Europe provided an important link between the free world and the Polish people when Solidarity challenged the Communist system.

Through Radio Marti, the Cuban people could learn to use the weapons of democratic ideals to rise against the system that oppresses them, like Radio Rebelde did when I was a boy in Cuba.

WESTERN

Nancy Hardy
2301 Pacific Avenue
Aberdeen, WA 98520

DX ROUNDUP

All times are
Eastern Local

Phone for hot WDXR tips: (206)532-6827 till 10pm(PT)--no collect calls

DEADLINES: Tuesdays 3/22, 4/5, 4/26, 5/17, 6/14, 7/12

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Kenwood R-1000, Radio West loop
- (PW) Patrick Martin-P.O. Box 843-Seaside, OR 97138
Hammarlund SP-600JX, E.H. Scott (RBO-2), 1500' east Beverage,
200' terminated NE--ground system
- (MaS) Mark Strickert-706 25th Ave.-San Francisco, CA 94121
RF-2200
- (RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
GE Superadio, GE long-range portable, SM-2

***** OF SPECIAL INTEREST:

- 1460 KENO NV, Las Vegas will go adult contemporary w/satellite feed
sometime in March or April. They're not going C&W per a
circulating rumor. (RW-CA)
- *****
- 670 KDLG AK, Dillingham 2/28 0340 like a local w/incredible signal, no
other Alaskans even in at time! Ment. of "Dillingham Info.
Service of Alaska," rr mx. KNBR-680 off. Only 3rd time hrd. (RW)
- (KBOI) ID, Boise 2/28 0234 noted totally off. (RW-CA)
- 680 (KNBR) CA, San Francisco 2/27 0440 noted completely off. (MaS-CA)
+2/28 0320-??, 2/27 0707 totally off. (RW-CA)
- CHFA AB, Edmonton 1/24 0203 FF talk in KNBR null; at 0213 acoustic
guitar mx, followed by "Ici Radio Canada". No call letters
could be dug out, but apparent s/off w/"O Canada" at 0215.
Signal nil to fair. (NHP-BC)
- 740 KCBS CA, San Francisco 2/27 normal SM "SP" after 0400, but OC was
still on after 0500. (MaS-CA)
- ?CBL? ON, Toronto 2/27 0640-0707 tent. w/hymns to 0700, tent. ID as
"CBC Toronto," into CBC nx. Don't think CBX is on this hour,
are they? Poor-fair, T-storm QRN, bad het from JOIB-747. (RW)
- 910 KALL UT, Salt Lake City 2/26 1028 fair w/some QRN during rainstorm
here. "Call" ID, local ads, old songs. (JH-CA)
- +2/28 0951 strong in KNEW null w/talk on cable TV in Utah. (RW)
- 930 KFLG AZ, Flagstaff ex-KAFF 1000-1010 good way o/KHJ w/phone-in
program, rr mx prior to that. (RW-CA) (Date??--NH)
- 1120 (KPNW) OR, Eugene-Springfield 2/28 0241 off w/OC. Knocked off due to a
storm? Shouldn't have been off this early, unless earlier s/off.
- 1220 WGAR OH, Cleveland 2/27 0450-0506 strong at first w/Sun. (RW-CA)
morning public service/relig.-type program. Faded badly at 0500,
missed legal ID, only fair at end of nx, but got ID during wx
by male "....24^o here in Cleveland at your weather station,
12-20, G-A-R." New. (JH-CA)
- 1330 KFH KS, Wichita 3/1 0150 ID & TC o/KUPL. (PM-OR)
- 1340 ?KATA? CA, Arcata 2/27 0529 tent., briefly on top w/wx, "47^o at
K-A-T-?," poor, then on top later was KATY, so it may have been
KATY all along. (JH-CA)
- 1380 KQMS CA, Sacramento 2/26 0606 noted w/CBS nx, ID, into wx for
Sacramento area. (JH-CA)
- 1410 KRML CA, Carmel 2/27 0924 faded up above the KERN/KVEG mess w/quick
ID & left just as quickly. "K-R-M-L, 14-10 on your AM dial."
This surprised me so much, & I didn't have my recorder going.
This will teach me. New. (JH-CA)
- 1430 KJAY CA, Sacramento 2/20 1619 weak u/KNTA w/live church broadcast...
about time I get this in San Francisco. (MaS-CA)
- KLO UT, Ogden 2/26 0510 good in KALI null w/NYL, IDs. (JH-CA)
- 1520 KYXI OR, Oregon City 2/27 0542 strong o/KOWA/KACY w/CNN nx...first
time hrd outside SRS/SSS. (MaS-CA)
- 1560 KKAA SD, Aberdeen 2/27 0630-0700 poor at first, ID by male "15-60,
K-K-double A," into C&W mx. Stronger later, ad for cars, SID,
later male w/"Your brand of country, K-K-double A." Wx, more
C&W mx. Was poor again 0700 w/ID, faded into nx. Very happy for
this, looking for it for 4 mo. New, state #28. (JH-CA)

1590 KLIV CA, San Jose 2/14 0553 weak u/KJET w/WOR songs, contest
 promo, IDs. (EH-WA)
 1600 K1AK CO, Lakewood 2/27 0530 fair u/KWOW w/"Radio 16, The New K1AK,"
 request for comments to what sounded like Wilson Ave. in
 Lakewood, oldies mx. (MaS-CA)

February f/c's not heard:

3MM 0100-0110 KQNK-1530 KS (RW-CA)
 0100-0115 KGTO-1050 OK (RW-CA)
 KEED-1550 KS (RW-CA)
 0200-0215 KYCN-1340 WY (RW-CA)
 3rd Th 0200-0210 WHII-1570 WS (RW)

UNIDS:

830 2/17 0546 unID OC strong on 830, I hope it's not who I think it is...
 960 2/21 0938 unID in KABL null mentioning 245-prefix, Highway (RW)
 15 and "Cajon Pass." KAVR near Hwy. 15, probably the. (RW-CA)
 1420 2/24 0508 approx. mixing w/KUJ, then by itself. OM giving temps,
 record temps, "sunrise is at 7:05 this morning, that's about 3 hours
 from now." Make it CST. Could it be WOC? Pair. (JH-CA)
 1530 2/28 0750-0800 two unIDs here w/KFBK off. Both C&W, both fading up at
 0747. One w/deep southern-accented OM lost by 0750. KFBK s/on killed
 the other before an ID! Who's in 0745 zone last day in Feb.? WTTI?
 WRPM? (RW-CA)

It looks like everyone is saving their DX tips for next week, the
 Anniversary Issue. Bill & I are, hi! ☺

CENTRAL DX ROUNDUP

Robert Kramer
 6416 N. Richmond
 Chicago, IL 60645

UNIDED, SPECIAL, CHANGES, et. al.

1110 WHIM RI EAST PROVIDENCE, 2/20 0202 fair on DX Test W/CW IDs, time tones & Voice
 IDs. CR-IL
 1140 WLNT TN LOUDON, 2/26 1815 good S/O/Off, new station. RK-IL
 1440 UnIDed 2/19 0015 poor W/Source News, spot & Beatles mx. CR-IL
 All da Rest
 580 KALB IA ALEXANDRIA, 2/10 1833 fair W/contest promo. CR-IL
 590 KLEBJ TX AUSTIN, 2/10 1835 fair W/wx, nx & ID. CR-IL
 690 WVOK AL BIRMINGHAM, 2/7 1815 fair W/nx, spots & S/Off. CR-IL
 KSTL MO ST. LOUIS, 2/15 1845 fair W/S/Off. CR-IL
 740 KFMG OK TULSA, 2/6 1815 fair W/spots & ID, O/U KTRH. CR-IL
 1000 KTKO OK OKLAHOMA CITY, 2/19 1948 poor U/WCFL w/tlk show. SMCK-IL
 1050 WTSJ OH CINCINNATI, 2/27 0600 fair-good W/S/On. RK-IL
 1130 WNEW NY NEW YORK, 2/20 1950 fair w/"Homefront" show, no KWIK. SMCK-IL
 1190 KJEM AR BENTONVILLE, 2/1 1900 poor-fair U/WOWO W/ID, poss. S/Off. KDF-IL
 1210 WKNX MI SAGINAW, 2/26 0905 YL DJ W/rck mx mixing w/WILY/WCAU. SMCK-IL
 1260 WWJQ MI ZEELAND, 2/15 1059 poor thru noise w/"1260 WWJQ Zeeland" ID & UPI nx. CR-IL
 (I guess this means that the night CP is on, ed.)
 1290 WLZZ WI GREENFIELD, 2/4 0559 poor U/WIRL/WHIO W/S/On, thought this was 24h. KDF-IL
 1330 WXTA IL ROCKFORD, 2/17 1830 good W/S/Off right afterWEAW S/Off. CR-IL
 WFBC SC GREENVILLE, 3/1 2230 "Sportsline" YL W/nx, fair. SMCK-IL
 1360 WGEE WI GREEN BAY, 2/19 2111 "Swinging Radio WGEE" ID, mx O/WSAI, fair. SMCK-IL
 1390 WTJS TN JACKSON, 2/22 2230 Tenn-Auburn ballgame mixing w/WVON. SMCK-IL
 1430 WYMC KY MAYFIELD, 3/3 0008 fair W/C&W mx & wx O/everything, but fady. RK-IL
 1440 MHIS WV BLUEFIELD, 2/20 0305 fair W/SID & MOYL type mx. CR-IL
 1450 WXVW IN JEFFERSONVILLE, 2/20 2220 popped in O/WTAX (do you mean WCVS ? ed.) W/ID
 "All New WXVW serving Greater Louisville". SMCK-IL
 1600 WJNJ FL ATLANTIC BEACH, 2/10 0600 good W/S/On then SSB. KDF-IL
 WSLK KY HYDEN, 2/12 0600½ briefly on top W/S/On. KDF-IL

DOSE GUYS:

KDF... Karl Forth 2714 N. LeClaire Chicago, IL 60639
 (HQ-160, spiral loop)
 RK... Name deleted in the name of public decency
 (R-1000, HQ-140X, HQ-129X, Radio West Loop, Kowalski Loop, spiral loop)
 SMCK.. Sam McKee 12 Southern Dr. Decatur, IL 62521
 (RF-2200, Superadio)
 CR,... Christos Rigas 4832 N. Drake Chicago, IL 60625
 (Superadio)

CADY SPRING GET TOGETHER

The 13th edition of the annual CADX Spring Get Together will be held the first weekend of
 June (June 3-5). During this period, the annual CADX whiffle ball game will be played &
 other assorted activities will take place. There also will be a Monty Python Film festival.
 It will take place at the home of the CADX editor. Watch these pages for further details. For
 more info phone 1-(312)-262-6299.

EASTERN DX ROUNDUP

Bob Lazar

1711 Wainwright Dr.

Reston, VA 22090

Deadlines: 3/19, 4/2, 4/23, 5/14

Eastern Highlights

- 770 KOB NM Albuquerque, 2/18 1935 very weak, hrd Paul Harvey's "Rest of the Story", also a commercial for KGSW-TV 14, ID as 77 KOB. No sign of KJCB, WABC was very weak. (JP-GA)
- 1130*WHHQ*SC*Hilton Head Island, 0105 2/20 ET, fair, o/ WNEW, WSJP. ID as "WHHQ Hilton Head Island, SC on the air for test purposes only". TT. New stn? (JP-GA) (At least fairly new, I'm not sure how long they've been on.--ed)
- 1260 WWDC DC Washington, 3/2 made sudden format change from album rock to big band! (WPT-DC) Has RKO nx on the hour. This means that there are four big band/MYL AM stns in the Washington area: WRMR-730, WWDC-1260, WEAM-1390 & WINX-1600. Plus, WMAL-630 has big band shows on weekends. (RAL-VA)
- 516 YWA ON Petawawa, 2/27 2030 aviation beacon on mcw (modulated continuous wave, i.e. morse code--ed). Fair. (BC-VT)
- 521 GF ON Cleveland, 2/27 2308 aviation beacon on mcw. Fair. (BC-VT)
- 524 HEH OH Columbus, 2/27 2310 aviation beacon mcw. (Newark airport). Fair. (BC-VT)
- 534 YCH NB Chatham, 2/27 2320 aviation beacon mcw. Good. (BC-VT)
- 530 NB ON North Bay, 2/27 2321 aviation beacon mcw. Good. (BC-VT)
- 540 WDAK GA Columbus, 2/19 2230 good sig, hrd ad for a rodeo, frequent ID's as "K-Country", also hrd a promo for St. Patrick's Day. C&W mx. (JP-GA)
- 600 WICC CT Bridgeport, 2/23 0105 fair w/ ID, wx, C&W mx. (RSR-ON)
- 730 CHYR? ON Leamington, 2/10 0302 good w/ ID's as CHYR-Radio 7 Canada. (RSR)
- 840 WWAS AL Mobile, 2/20 1845 o/u WHAS, very weak. EZL mx, s/off said to write the FCC to let WWAS stay on 24 hrs, no SSB. (JP-GA)
- 870 WKAR MI East Lansing, 2/7 0755 fair w/ sports, business nx, ID. Finally, stn # 550. QSL already received. (RSR-ON)
- 980 KMBZ MO Kansas City, 2/23 0130 fair w/ ID, wx, MoR/rock mx, ID as stereo. Local CPPL off, hurray! (RSR-ON)
- WONE OH Dayton, 2/23 0134 fair w/ ID by m DJ. CPPL off. (RSR-ON)
- (WRC)DC Washington, 3/3 1335 noted off air. (WPT-DC)
- WMEK VA Chase City, 3/3 1335 C&W mx, ID by m. WRC off. (WPT-DC)
- 1090 CKKW ON Kitchener, 2/20 0304 fair w/ dual ID "CKKW-CFCA (FM)". (KVJ-GA)
- 1240 WPAX GA Thomasville, 2/22 0000 weak, GY noise, hrd ID as "Your Mx Stn, WPAX, Thomasville", CBS nx, s/off at 0007. No SSB. (JP-GA)
- 1290 GJBK ON London, 2/20 briefly 0253 w/ R&R, wx and Honda ad. (KVJ-GA)
- 1300*WIMO*GA*Winder, 2/19 0040 ET, strong sig, ID as "WIMO in Winder on the air for testing purposes." o/ WOOD, WLUY, WIBR, WTKC. C&W mx by Charley Pride. (Hope y'all hrd it!) (JP-GA)
- 1370 ???? NC? unid, 2/1 1752 fair w/ TC, ID, wx for NC & SC. Call sounded like WKSL or WKS0?? (RSR-ON) (I can't find anything similar to these calls in NC.--ed)
- 1390 KRFO MN Owatonna, 2/7 0702 good w/ promo, ID, UPI nx, wx, C&W mx. 500 watt daytimer. (RSR-ON)
- WROA MS Gulfport, 2/23 0200 very weak in WCSC null, ID as "WROA Gulfport", NBC nx, EZL mx. New. (JP-GA)
- WCSC SC Charleston, 2/7 1732 fair w/ nx, ads, wx, ID's, rock mx. (RSR)
- 1440 WROK IL Rockford, 2/5 0640 good w/ mx, ID, wx, (RSR-ON)
- KCHE IA Cherokee, 2/7 0721 poor w/ spot for B ball game (basketball?-ed) in Cherokee, stn will cover the game. 500 watt daytimer. (RSR)
- 1450 WXVW IN Jefferson, 2/21 0130 poor w/ ID w/ city only. In mess. 50th graveyarder, 400th U.S. stn. (RSR-ON)
- WKLA MI Ludington, 2/22 0110 poor w/ s/off, ID, power, NA. Above mess. (RSR-ON)
- WDLB WI Marshfield, 2/1 1900 poor w/ ID by m, "AM 1450 WDLB Marshfield". ID only hrd in mess. (RSR-ON)
- 1470 KWAY IA Waverly, 2/7 0715 fair w/ local ads, ID & addr. Promo. (RSR-ON)
- 1490 KEBR IA Burlington, 2/5 0716 fair w/ mx, ID, ads. (RSR-ON)
- WABJ MI Adrian, 2/27 a pleasant, but unn, surprise 0125 w/ AM-FM ID. (KVJ-GA)
- WTIQ MI Manistique, (tentative) 2/5 0706 poor w/ Budweiser ad, ski rpt for Newberry, Cheyboygan, Escanaba, Marquette, etc. No ID hrd. (RSR-ON)

- 1490 WMPX MI Midland, 2/2 0655 fair w/ f w/ nx & ID. (RSR-ON)
 1500 KDFN MO Doniphan, 2/23 0709 "Current Country" slogan, ads, wx and "Voice of Victory" rlgc BC. (KVJ-GA)
 1520 KOMA OK Oklahoma City, 2/1 1858 good w/ nx, wx, ID. (RSR-ON)
 1530 WDEY MI Lapeer, 2/1 1720 fair w/ MoR mx, ID's, wx, talk, nx. (RSR-ON)
 1540 WSMI IL Litchfield, 2/1 1805 poor w/ ID, nx, ads, u/ KXEL. (RSR-ON)
 CHIN ON Toronto, 2/9 1702 fair w/ nx in Italian. (RSR-ON)
 1550 KKJO MO St. Joseph, 2/1 1854 Fair w/ m w/ nx, ID, wx. (RSR-ON)
 *WHYH*PA*Braddock, 2/22 0125-0153 ET's, tone, mx, ID @ 0151. (RSR-ON)
 WMIR WI Lake Geneva, 2/1 1710 fair w/ MoR mx, ID, m DJ. (RSR-ON)
 1570 KBJT AR Fordyce, 2/26 s/off 1900 ment that they "...comply w/ FCC rules..." and a 7 a.m. s/on time. (KVJ-GA)
 WTRB TN Ripley, 2/17 1845 s/off w/ NA, said to write your senator so that daytime stns could stay on late. Pair. (JP-GA)
 1590 WONX IL Evanston, 2/22 0101 fair w/ sports, wx, ID, rock mx. O/ WAKR. (RSR-ON)
 1600 WJNJ FL Atlantic Beach, 2/24 1800-1814 w/ BBD, MOR & s/off before the barriers of WEUP/WXVI went up, hi. (KVJ-GA)
 WKWF FL Key West, 2/19 2200 put in a rare appearance w/ ID & UPI world nx thru the "wall" put up by WEUP/WXVI! (KVJ-GA)
 WHVL NC Hendersonville, 2/20 quickie s/off 1816 thru another "hole" in the aforementioned wall. (KVJ-GA)
 1300 WOOD MI Grand Rapids, 2/19 0029 Talknet, PSA for non-smoking, ID as W-0-O-D, very poor, u/ WLJY, WTKC, WIBR. WIMO had its carrier on. (JP-GA) (Almost missed this one. Sorry. --ed)

DX tests

- 900 WLMD MD Laurel, 2/25 0000 not heard. (BC-VT)
 1110 WHIM RI East Providence, 2/20 xlnt 0200-0233 w/ voice ID & code ID's, Christmas mx and TT's after 0230. WBT off, no QRM. (KVJ-GA)

Eastern DXers

- BC - Bob Curtis, 17 Cobbleview Dr., Colchester, VT 05446
 KVJ - Karl V. Jeter, 3590-C Clubhouse Circle East, Decatur, GA 30032
 JP - Jim Paige, 219 Alexander, Winder, GA 30680
 RSR - Robert S. Ross, Box 4373, Stn. C, London, ON N5W 5J2
 WPT - Bill Townshend, 4500 Connecticut Ave. NW #901, Washington, DC 20008

All-news KEZY stumbles through RADIO WAVES first days of new format

By Gary Lyon
 Register staff writer

KEZY may have picked the wrong week to introduce NewsCenter 12. There was no one big, breaking story in Orange County that could demonstrate the station's news-gathering capabilities. The station stumbled through the first two days when the news was slow, and in mornings one had to wonder if the proposed new call letters were K-SNOOZ instead of KNWZ.

The Anaheim AM station — a rocker since Aug. 12, 1982 — closed out its musical career with John Lennon's "Starting Over" and Journey's "Open Arms." As the clock ticked off the final minutes before 7 a.m. last Tuesday, news director Dave Forman told listeners, "This is the end of KEZY's musical career for now and the beginning of NewsCenter 12. And we welcome you with 'open arms,' the number one song from 1982. It is time to say goodbye and time to say hello."

Segue to the clickety-clack sounds of wire machines, typewriters and ringing telephones. Typical all-news: local anchor with headlines, UPI News at the top of the hour, more briefs read by the local anchor, with pauses for weather, traffic and sports. A story on a new Newport hotel got a lot of air time, if you count the several teases and recaps in between the story itself.

Problem is — and admittedly the format is still going through a shakedown period — NewsCenter 12 was dull when it should have been dynamic. Some anchors were listless and spoke in a monotone, in

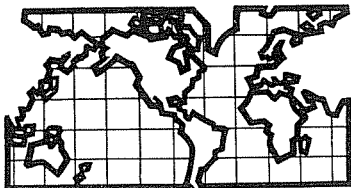
Santa Ana Register 2-18-83 via Jim Hilliker

daytime particularly (one notable exception: Barbara Whitesides, formerly of KFVB). Other newscasters sounded as if they were on an easy listening station. Transitions from Washington to Buena Park datelines blurred as if the two cities were neighbors. Stories on a Costa Mesa and OC coroner's office probe into two deaths were as interesting to the ear as teases of the emergency broadcast system.

To fulfill its aim as the all-news station for Orange County, KEZY needs to get the attention of listeners. It should start with local news at the hour and follow with UPI instead of the other way around. And tell Bob Harvey to headline KDOC's plans to televise live Cal State Fullerton's game against No. 1 ranked Nevada-Las Vegas next week instead of recapping the Lakers game in Inglewood.

"I feel like I have given birth," said Forman. "We had some technical difficulties we did not have in the trial runs, and our CNN (Cable Network News) transmission problem is not cleared up yet, so we went with live anchors all night instead and I feel good about that."

"Yes, we were understaffed in the daytime as a result and there are still some bumpy potholes, but we're working them out. Starting next week, we will have our own airplane — Angel 12 — monitoring traffic, and very soon we will have mobile units cruising the county," he said. Forman's fine tuning is evident. Anchors were more up tempo in their delivery Thursday. But someone should really answer that telephone.



DX WORLDWIDE - WEST

Pat Martin - Editor

P.O. Box 843, Seaside, Oregon 97138

(503) 738-3198 - deadline Tuesday

Well I finally broke down and bought myself a new Electric Typewriter. That old thing I was using has been on its' last legs for quite a while. This one is a Sears Model, self correcting, with exchanging type balls. This should add some to the column. DX still is on the slow side here. Not too much to report this time around. It sure would be nice to get at least one morning of Good DX. In time the conditions have to improve! Some station news from Chris Martin: American Samoa's new Pacific Beacon station on 585 KHZ has been held up, to July 1st, 1983. D. Durringham is no longer with Quality Media Corporation. Reports now go to Bill Kitchen. Also Chris Martin has this news from Australia: 4VL's translator at Cunnumilla will be on by the end of March 1584 KHZ with 200 watts! The delay has been due to administrative problems. From the New Zealand Broadcasting Tribunal/New Zealand DX Times: 1269 KHZ-2XM Massey Radio is on with 200 watts. Operation began 13th February and will end 7th of May. Hours are 7:00 AM to 1:00 AM next morning, but restricted to 4:00 AM to 1:00 AM from 13th of March to 23rd April. 1422-3XB Canterbury University is on with 100 watts! Operation began 14th Feb. and will end 13th Aug. Hours are from 7:00 AM to Midnight except the periods 14th Mar to 17th of April and 16th May to 17th of July, when hours are 5:00 PM to Midnight. This also from the Broadcasting Tribunal-New Zealand. All times are New Zealand. Now on with reports:

PAN-AMERICAN DX ROUNDUP

- 730 TRINIDAD AND TOBAGO, Hrd with talk by man with info on a local pagent discriptions, of various dresses, from 0910-0915 on 2/14. Several ments. of Trinidad and Tobago. (AB-Texas) (Welcome to the column. Hope you report often. PM)
- 820 MEXICO, Santa Barbara-XESB hrd 2/15 1355 w/SS talk, ID "XESB, Santa Barbara, Chihuahua". New (GK-Ca)
- 1035 UNID, SS rel. talk and organ mc 1/27, 1001.4VEC poss. (GK-Ca)

TRANS-PACIFIC DX ROUNDUP

- 531 AUSTRALIA, Kempsey-2MC, fair o/4XA with Pop music, Coast Radio ment., at 0845 on 3/3. (PM-Or)
- 558 FIJI, Radio Fiji here with talk in Fijian, Island and US Pop music at 0640 on 3/5, vy strong! (PM-Or)
- 567 NEW ZEALAND, Wellington-2YA, with NZBC nx at 0900 on 3/5, hrd better than in a while. (PM-Or)
- 621 TUVALU?, presumed the source of weak Island music, next to bad KIPA/KGW slop on 620 at 0730 on 3/9 (PM-Or)
- 738 TAHITI, vy strong here as early as 0515 on 3/9, w/OM in Tahitian, later in FF, holding its own next to KCBS well! (PM-Or)
- 756 UNID, 2 stations EE on DU heading prob. 1YA. YL operatic singer in CC on TP antenna on 2/27-1103 GMT. (GK-Ca)
- 819 NEW ZEALAND, Rotorua-1YZ 2/15 1400 ID and Nx (GK-Ca)
- 846 KIRIBATI, Bairiki-2/27 0945 vy strong carrier, but weak mod. much KOA Splat. Can we take up a collection and buy them a Volumax? (GK-Ca) (About the only problem we might have then, is the replacement of the transmitter. Some of those Islands out there use old equipment and the transmitter may not take the extra push. PM)
- 873 UNID, Mystery station strikes again 2/27 at 0959 w/harp bridge. short annt. and harp again same as on 11/14. Vy rough copy w/Thunderstorm QRN. (GK-Ca)
- 891 JAPAN, Sendai JOHK hrd w/HHK pips 2/11-1300 (GK-Ca)
- 1206 CHINA, Yanji-hrd strong 2/27 0951 in KK (GK-Ca)

VERIES:

- 1480 PUERTO RICO, Fajardo-WHDD, sent nice black and white vq in 2 weeks for tent. Taped report, also sent coverage map/folder. Signed: E.R. Rodriguez-Assitant Engineer. (C. Soto Perez-Chief Engineer) New Country #58. (PM-Or)

THANKS TO THESE REPORTERS:

AB-Texas Antie Bigley-17600 Huebner #3502-San Antonio, Texas
FRG-7700/G.C. Super Radio
GK-Ca Glen Kippel-612 West Avenue-Merced, California 95340
SP-600=JX17, two 8-foot loops and assorted junk
PM-On Patrick Martin-Yer Editor
SP-600 JX, E.H. Scott, two 1500 foot Beverages-East
200 foot Terminated LW, Ground system

Book Review: Setting Up and Using Your Own Ham Shack
by L.B. Cebik, W4RNL
Published by Tab Books, 1981

A common problem among radio hobbyists is how to arrange their equipment for optimum operation. As we accumulate more and more radio gear, we want it to fit into the available space, be easy to operate, and offer maximum performance. This book offers many suggestions and ideas which can help us solve these dilemmas.

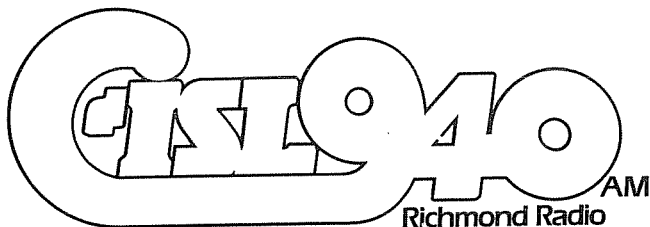
Although intended for amateur radio operators, this book is also useful for broadcast band DXers and SWLs. It covers a number of topics, including room layout, basic operating needs, equipment features, commercial transmitter & receiver design, homebrew equipment, antennas, accessories, the operating position, and test equipment.

The non-technical chapters contain a mixture of common sense and basic human factors engineering. There are discussions on constructing a console, arranging equipment, power and lighting, selecting a chair, and related subjects. Some of these topics many seem trivial at first glance, but they are often overlooked by both beginners and experienced DXers. (Try sitting in the same chair all night, if you don't believe me.) Each chapter has a checklist to aid in DX shack planning. The information is presented in general terms with a few specific examples (and lots of drawings).

The chapters on equipment are not highly technical and seem to be aimed at the beginner's level (i.e. Novice class hams). They appear to be intended to help purchasers and users of amateur gear to interpret specifications and equipment features. I would have liked to have seen some information on equipment interfacing, such as patching or switching any of several antennas to any of several receivers or any of several receivers to any of several audio accessories (RTTY decoders, audio filters, recorders, etc). The topic certainly would have been within the scope of this book, and is probably more relevant than some of the subjects that were covered (i.e. how to design your own transmitter or receiver).

This would be a good book to consult if you are planning to move your equipment into a new DX shack or if you're planning to remodel the old one. If for no other reason than to make sure you have't overlooked something.

---- Bruce Portzer



A GREAT CIRCLE PROGRAM by Mark Connelly

The following is a computer program which calculates the great circle bearing and distance between a given DX location and DX target(s). This program is written in "HPL", a language used by Hewlett-Packard desktop computers. However, it can be adapted to BASIC (write to Mark if you need help). If nothing else, the last half of the program is mostly a list of latitudes and longitudes, which some may find useful when computing GCB&D on other machines.

```
0: "FILE NAME: GCCT.H";
1: gsb "SCHCLP"
2: wrt 10, " GREAT CIRCLE BEARING & DISTANCE PROGRAM"
3: wrt 10, " BUILT-IN DATA TABLE VERSION"
4: wrt 10, " Refer to IIT book 'Reference Data for Radio Engineers',"
5: wrt 10, " pages 28-9, 28-10, & 28-11. "
6: wrt 10
7: wrt 10
8: wrt 10, "Simple variables used: ABCDEFGHIJKLMNOPQVW"
9: wait 3000
10: gsb "SCHCLP"
11: dim L[50],L[50],S[4],M[4],K[55],Z[55]
12: dim A[55,25],B[3],I[55,1],L[55,1],F[2],O[2],T[7,50]
13: "A":
14: ent "GC distance unit?KI,MI,orNM";Df
15: "Hitting CONTINUE without entry retains previous distance unit.":
16: if Df="MI" and Df="MI" and Df="NM";gto "A"
17: if Df="MI";60:S[4]
18: if Df="MI";69.05:S[4]
19: if Df="NM";111.12:S[4]
20: ent "Name of operator's QTH?";A[1]
21: "K":
22: ent "Is operator latitude N or S?";K[1];if K[1]#"N" and K[1]#"S";jmp 0
23: ent "operator's latitude, degrees?";K[1]
24: if int(K[1])/K[1];gto "KK"
25: 0:S[2];0:S[3]
26: ent "Minutes of operator's latitude?";S[2]
27: ent "Seconds of operator's latitude?";S[3]
28: K[1];S[1];gsb "DECDEG"
29: S[1];K[1]
30: "KK":
31: if K[1]#"S";-K[1];K[1]
32: "L":
33: ent "Is op. longitude E or W?";L[1];if L[1]#"E" and L[1]#"W";jmp 0
34: ent "operator's longitude, degrees?";L[1]
35: if int(L[1])/L[1];gto "LL"
36: 0:S[2];0:S[3]
37: ent "Minutes of operator's longitude?";S[2]
38: ent "Seconds of operator's longitude?";S[3]
39: L[1];S[1];gsb "DECDEG"
40: S[1];L[1]
41: "LL":
42: if L[1]#"E";-L[1];L[1]
43: "B":
44: gsb "SCHCLP"
45: wrt 10, "Select data-table output from the following menu:"
46: wrt 10
47: "Metro-Boston";T[1]
48: "East Coast North America";T[2]
49: "Trans-Atlantic";T[3]
50: "Latin America & the Caribbean";T[4]
51: "Western North America, Pacific, & East Asia";T[5]
52: "ALL TABLES";T[6]
53: for Z=1 to 6
54: for B=1 to 5
55: wrt 10,B,Z,"=",T[Z]
56: next Z
57: ent "Table # (use CRT)";B
58: gsb "SCHCLP"
59: if int(B)/B or B > 6;gto "B"
60: "0";T[7]
61: if B=6;"B";T[7]
62: if T[7]#"B";gto "BB"
63: for B=1 to 5
64: "BB":
65: if B=1;gsb "TABLE1"
66: if B=2;gsb "TABLE2"
67: if B=3;gsb "TABLE3"
68: if B=4;gsb "TABLE4"
69: if B=5;gsb "TABLE5"
70: for N=2 to 55
71: if K[N]#"S";-K[N];K[N]
72: if L[N]#"E";-L[N];L[N]
73: next N
```

```

74: gsb "CALC"
75: gsb "OUTPUT"
76: if T{7}#"B6";gto "BBB"
77: next B
78: "BBB":
79: "Y")0$
80: ent "More tables(same op.OTH?(N0=no)",0$
81: if 0#"N0";gto "B"
82: "Y")P$
83: ent "New operator OTH?(N0=no)",P$
84: if P#"N0";gto "END"
85: gto "A"
86: "END":
87: end
88: "CALC":
89: for J=2 to 55
90: if L{J}=L{1} and K{J}=K{1};0:K{J};0:Z{J};gto "XZOUT"
91: if L{J}=L{1};L{J}+.00001;L{J}
92: if K{J}=K{1};K{J}+.00001;K{J}
93: 1)M{4};% initialize-latitude-mode-to-1(D0-more-easterly-than-op)
94: if L{J}>L{1};2)M{4};% latitude-mode-2(D0-more-westerly-than-op)
95: if K{1}>K{J};gto "OPLATH"
96: "DXLATH":% DX-OTH-latitude=higher
97: K{J};M{1};% greater-latitude:DOOTH(LBofBook)
98: K{1};M{2};% lesser-latitude:opOTH(LRoofBook)
99: 1)M{3};% longitude-mode-1(D0-more-northerly-than-op)
100: gto "MATH"
101: "OPLATH":% operator-OTH-latitude=higher
102: K{1};M{1};% greater-latitude:opOTH(LBofBook)
103: K{J};M{2};% lesser-latitude:DOOTH(LRoofBook)
104: 2)M{3};% longitude-mode-2(D0-more-southerly-than-op)
105: "MATH":
106: if M{4}=1;L{1}-L{J};C;% latitude-difference
107: if M{4}=2;L{J}-L{1};C;% latitude-difference
108: if C<0;360+C;C
109: if C/180=int(C/180);C+.0001;C
110: M{1}+M{2};U;% LB+LRofBook
111: M{1}-M{2};V;% LB-LRoofBook
112: if U/180=int(U/180);U+.0001;U
113: 1/tan(C/2)*(cos(V/2)/sin(U/2));G;% tan(Y-X)/2
114: atn(G);R;% (Y+X)/2
115: 1/tan(C/2)*(sin(V/2)/cos(U/2));H;% tan(Y-X)/2
116: atn(H);S;% (Y-X)/2
117: if S/180=int(S/180);S+.0001;S
118: R+S;Y;% angle-between-II-0-pt.-of-greater-long.-fr.-pt.-of-lesser-long.
119: R-S;X;% angle-between-II-0-pt.-of-lesser-long.-fr.-pt.-of-greater-long.
120: tan(Y/2)*(sin(R)/sin(S));F;% tan(Z/2)
121: abs(2*atn(F));Z{J};% degrees-of-arc-along-earth's-surface
122: if M{3}=1 and M{4}=1;0;K{J}
123: if M{3}=1 and M{4}=2;360-X;K{J}
124: if M{3}=2 and M{4}=1;Y;K{J}
125: if M{3}=2 and M{4}=2;360-Y;K{J}
126: if K{1}+K{J}<0;K{J}-180;K{J}
127: if K{J}<0;360+K{J};K{J}
128: "XZOUT":
129: if K{J}>359.9;0;K{J}
130: "X{J}: great-circle bearing from operator to DX.":
131: next J
132: ret
133: "DECEG":% degree-decimalizer
134: S{1}+S{2}/60+S{3}/3600;S{1}
135: ret
136: "OUTPUT":
137: if B>1 and T{7}#"B6";gto "P"
138: 0;0
139: ent "Print to paper?(1=yes)",0
140: if 0=1;6;0;gto "0";% LPselected
141: 10;0;% CRTselected
142: "0":
143: if 0=10;gsb "SCHCLR"
144: 1;T
145: if 0=6;ent "Number of copies?",T
146: "P":
147: for P=1 to T
148: if 0=6;beep;dsp "Hit PAGE button on printer.;"wait 5000;dsp ""
149: fmt 7,72;"+"
150: wrt 0+.7
151: fmt 1,3c,f7.3,2c,f7.3,2c
152: 56;R;abs(K{1});Y{156};abs(L{1});L{56}
153: wrt 0+.1,"Operator OTH : ",R{11}, " < ",L{R},K{11}, " < ",L{R},L{11}, " >"
154: wrt 0

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155: fnt 9,c,x,f1.0,x,c,x,c
156: wrt 0+.9,"Table",B,":",T#E]
157: wrt 0
158: fnt 2,3x,c,22x,c,8x,c,7x,3c
159: wrt 0+.2," D% BTH ", "coordinates", "GCB", "GCD(",D#,")"
160: fnt 3,72"-
161: wrt 0+.3
162: for M=2 to 55
163: 27-len(A#(M))D
164: fnt 4,c,z
165: wrt 0+.4,A#(M]
166: for K=1 to D
167: fnt 5,x,z
168: wrt 0+.5
169: next K
170: fnt 6,f7.3,2c,f7.3,c,5x,f5.1,5x,f8.2
171: wrt 0+.6,abs(L[M]),L#(M), " / ",abs(KCM),K#(M),KCM,SC4]+2CM]
172: next M
173: next P
174: ret
175: "SCHCLR":% clearCRTscreen
176: for E=1 to 25
177: wrt 10
178: next E
179: ret
180: % DATA-TABLE-CONSTRUCTION-SUBROUTINES
181: "TABLE1":% Metro-Boston
182: for Z=2 to 55
183: "N"K#(Z);"W"LC[Z]
184: next Z
185: "NEE1-590 (Bedford)":A#(2);71.088;L[2];42.41;K[2]
186: "NRI0-680 (Burlington)":A#(3);71.217;L[3];42.49;K[3]
187: "NCRS-740 (Cambridge)":A#(4);71.145;L[4];42.383;K[4]
188: "NHDH-850 (Needham)":A#(5);71.265;L[5];42.25;K[5]
189: "NR0L-950 (Saugus)":A#(6);70.988;L[6];42.44;K[6]
190: "NBE2-1030 (Hull)":A#(7);70.875;L[7];42.278;K[7]
191: "WILD-1090 (Bedford)":A#(8);71.083;L[8];42.413;K[8]
192: "NHUE-1150 (Lexington)":A#(9);71.213;L[9];42.41;K[9]
193: "NBSK-1230 (Marblehead)":A#(10);70.867;L[10];42.517;K[10]
194: "NEZE-1260 (E.Milton)":A#(11);71.038;L[11];42.27;K[11]
195: "NJDH-1300 (Quincy)":A#(12);70.983;L[12];42.263;K[12]
196: "NIDL-1330 (Haltham)":A#(13);71.26;L[13];42.358;K[13]
197: "NLYH-1360 (Lynn)":A#(14);70.975;L[14];42.45;K[14]
198: "NPKS-1430 (Bedford)":A#(15);71.082;L[15];42.41;K[15]
199: "NMR-1510 (Haltham)":A#(16);71.2;L[16];42.385;K[16]
200: "NMTN-1550 (Newton)":A#(17);71.25;L[17];42.35;K[17]
201: "NMUR-1600 (Newton)":A#(18);71.19;L[18];42.288;K[18]
202: "TV Towers(Needham/Newton)":A#(19);71.22;L[19];42.305;K[19]
203: "CT - Hartford":A#(20);72.6833;L[20];41.7667;K[20]
204: "CT - Putnam":A#(21);71.9167;L[21];41.9167;K[21]
205: "MA - Acton":A#(22);71.4333;L[22];42.4833;K[22]
206: "MA - Arlington Belmont":A#(23);71.17;L[23];42.411;K[23]
207: "MA - Billerica":A#(24);71.223;L[24];42.538;K[24]
208: "MA - Boston":A#(25);71.063;L[25];42.36;K[25]
209: "MA - Bourne(Sagamore Br.)":A#(26);70.55;L[26];41.775;K[26]
210: "MA - Brockton":A#(27);71.0167;L[27];42.0833;K[27]
211: "MA - Chatham":A#(28);69.95;L[28];41.67;K[28]
212: "MA - Dennisport":A#(29);70.13;L[29];41.66;K[29]
213: "MA - Fall River":A#(30);71.1333;L[30];41.7167;K[30]
214: "MA - Falmouth":A#(31);70.6333;L[31];41.5667;K[31]
215: "MA - Fitchburg":A#(32);71.8;L[32];42.5833;K[32]
216: "MA - Foxborough":A#(33);71.2667;L[33];42.0667;K[33]
217: "MA - Framingham":A#(34);71.4167;L[34];42.2833;K[34]
218: "MA - Great Blue Hill":A#(35);71.1;L[35];42.225;K[35]
219: "MA - Haverhill":A#(36);71.0833;L[36];42.7833;K[36]
220: "MA - Lawrence":A#(37);71.15;L[37];42.7;K[37]
221: "MA - Lowell":A#(38);71.3;L[38];42.65;K[38]
222: "MA - Marshfield":A#(39);70.72;L[39];42.1;K[39]
223: "MA-Bartha's Vineyard(SM)":A#(40);70.8617;L[40];41.35;K[40]
224: "MA - Milford":A#(41);71.5333;L[41];42.1333;K[41]
225: "MA - New Bedford":A#(42);70.9333;L[42];41.6333;K[42]
226: "MA - Newburyport":A#(43);70.8833;L[43];42.8167;K[43]
227: "MA - Plymouth":A#(44);70.6667;L[44];41.9667;K[44]
228: "MA - Provincetown":A#(45);70.13;L[45];42.07;K[45]
229: "MA - Rockport":A#(46);70.6;L[46];42.665;K[46]
230: "MA - Springfield":A#(47);72.6;L[47];42.1167;K[47]
231: "MA - Sudbury":A#(48);71.455;L[48];42.395;K[48]
232: "MA - Taunton":A#(49);71.1;L[49];41.9;K[49]
233: "MA - Worcester":A#(50);71.8;L[50];42.2667;K[50]
234: "NH - Keene":A#(51);72.2833;L[51];42.9333;K[51]
235: "NH - Manchester":A#(52);71.4667;L[52];42.9833;K[52]
236: "NH - Portsmouth":A#(53);70.7667;L[53];43.0667;K[53]
237: "RI - Narragansett":A#(54);71.45;L[54];41.43;K[54]
238: "RI - Providence":A#(55);71.4167;L[55];41.8333;K[55]

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239: ret
240: "TABLE2":% EastCoastNorthAmerica
241: for Z=2 to 55
242: "H")K{Z};"H")L{Z}
243: next Z
244: "St. Pierre/Miquelon")A{[2];56.1667;L[2];46.9167;K[2]
245: "LABRADOR - Hebron")A{[3];63.5;L[3];59.1667;K[3]
246: "NF - St. Anthony")A{[4];55.5833;L[4];51.3667;K[4]
247: "NF - St. John's")A{[5];52.68;L[5];47.57;K[5]
248: "NS - Halifax")A{[6];63.58;L[6];44.63;K[6]
249: "NS - Sydney")A{[7];60.1833;L[7];46.15;K[7]
250: "NS - Yarmouth")A{[8];66.13;L[8];43.83;K[8]
251: "ON - Toronto")A{[9];79.42;L[9];43.7;K[9]
252: "OU - Gaspe")A{[10];64.4833;L[10];48.8333;K[10]
253: "OU - Montreal")A{[11];73.6;L[11];45.5;K[11]
254: "OU - Quebec City")A{[12];71.2167;L[12];46.8167;K[12]
255: "CT - New London")A{[13];72.1;L[13];41.35;K[13]
256: "DC - Washington")A{[14];77;L[14];38.92;K[14]
257: "FL - Daytona Beach")A{[15];81;L[15];29.2;K[15]
258: "FL - Miami")A{[16];80.2;L[16];25.75;K[16]
259: "FL - Pensacola")A{[17];87.25;L[17];30.4;K[17]
260: "GA - Atlanta")A{[18];84.38;L[18];33.75;K[18]
261: "GA - Brunswick")A{[19];81.4833;L[19];31.1667;K[19]
262: "IL - Chicago")A{[20];87.75;L[20];41.83;K[20]
263: "KY - Louisville")A{[21];85.75;L[21];38.2667;K[21]
264: "LA - New Orleans")A{[22];90.05;L[22];30;K[22]
265: "MA - Billerica")A{[23];71.223;L[23];42.538;K[23]
266: "MA - Boston")A{[24];71.063;L[24];42.36;K[24]
267: "MA - Rockport")A{[25];70.6;L[25];42.665;K[25]
268: "MA - Scituate")A{[26];70.72;L[26];42.2;K[26]
269: "MA - Siasconset")A{[27];69.97;L[27];41.25;K[27]
270: "MA - West Yarmouth")A{[28];70.22;L[28];41.68;K[28]
271: "MD - Baltimore")A{[29];76.6167;L[29];39.2833;K[29]
272: "MD - Ocean City")A{[30];75.1;L[30];38.35;K[30]
273: "ME - Bar Harbour")A{[31];68.23;L[31];44.3;K[31]
274: "ME - Portland")A{[32];70.2833;L[32];43.65;K[32]
275: "MI - Detroit")A{[33];83.08;L[33];42.38;K[33]
276: "MN - Duluth")A{[34];92.1;L[34];46.7833;K[34]
277: "NC - Buxton(C. Hatteras)")A{[35];75.53;L[35];35.27;K[35]
278: "NC - Cape Fear")A{[36];78;L[36];33.8833;K[36]
279: "NH - Mt. Washington")A{[37];71.31;L[37];44.275;K[37]
280: "NJ - Cape May")A{[38];74.95;L[38];38.93;K[38]
281: "NJ - Tom's River")A{[39];74.2;L[39];39.9667;K[39]
282: "NY - Albany")A{[40];73.75;L[40];42.65;K[40]
283: "NY - Buffalo")A{[41];78.82;L[41];42.9;K[41]
284: "NY - Montauk, LI")A{[42];71.85;L[42];41.07;K[42]
285: "NY - New York City")A{[43];73.83;L[43];40.67;K[43]
286: "NY - Syracuse")A{[44];76.15;L[44];43.05;K[44]
287: "OH - Cincinnati")A{[45];84.5;L[45];39.17;K[45]
288: "OH - Cleveland")A{[46];81.7;L[46];41.5;K[46]
289: "PA - Philadelphia")A{[47];75.2;L[47];40;K[47]
290: "PA - Pittsburgh")A{[48];80;L[48];40.45;K[48]
291: "RI - Newport")A{[49];71.31;L[49];41.47;K[49]
292: "SC - Charleston")A{[50];79.95;L[50];32.8;K[50]
293: "SC - Hilton Head Is.")A{[51];80.75;L[51];32.2;K[51]
294: "TN - Nashville")A{[52];86.8;L[52];36.15;K[52]
295: "TX - Brownsville")A{[53];97.5;L[53];25.9;K[53]
296: "TX - Houston")A{[54];95.4;L[54];29.75;K[54]
297: "VA - Norfolk")A{[55];76.3;L[55];36.9;K[55]
298: ret
299: "TABLE3":% Trans-Atlantic
300: for Z=2 to 55
301: "E")L{Z};"H")K{Z}
302: next Z
303: "AF-Eastham")A{[2];69.9667;L[2];"W");L{2};41.8167;K[2]
304: "AF-Cape Race")A{[3];53;L[3];"W");L{3};46.7;K[3]
305: "ALBANIA-Tirana")A{[4];19.82;L[4];41.33;K[4]
306: "ALGERIA-Algiers")A{[5];3;L[5];36.83;K[5]
307: "ANGOLA-Luanda")A{[6];13.25;L[6];8.83;K[6];"S");K{[6]
308: "ASCENSION IS.")A{[7];14.37;L[7];"W");L{7};7.95;K[7];"S");K{[7]
309: "AUSTRIA-Vienna")A{[8];16.37;L[8];48.22;K[8]
310: "AZORES-Flores")A{[9];31.2;L[9];"W");L{9};39.4;K[9]
311: "BELGIUM-Brussels")A{[10];4.35;L[10];50.83;K[10]
312: "BULGARIA-Sofia")A{[11];23.3;L[11];42.67;K[11]
313: "CANARY IS.-S.C.deTenerife")A{[12];16.25;L[12];"W");L{12}
314: "CANARY IS.-S.C.deTenerife")A{[12];28.47;K[12]
315: "CHINA-Urumqi")A{[13];87.63;L[13];43.72;K[13]
316: "CZECHOSLOVAKIA-Prague")A{[14];14.42;L[14];50.08;K[14]
317: "DENMARK-Esbjerg")A{[15];8.47;L[15];55.47;K[15]
318: "EGYPT-Cairo")A{[16];31.25;L[16];30.05;K[16]
319: "ENGLAND-London")A{[17];-17;L[17];"W");L{17};51.5;K[17]
320: "ENGLAND-Penzance")A{[18];5.55;L[18];"W");L{18};50.12;K[18]

321: "FINLAND-Helsinki")Af[19];24.9667)L[19];60.1667)K[19]
322: "FRANCE-Paris")Af[20];2.33)L[20];48.87)K[20]
323: "GERMANY(N)-Langenberg")Af[21];7.12)L[21];51.37)K[21]
324: "GREECE-Athens")Af[22];23.73)L[22];38)K[22]
325: "GREENLAND-C. Faneuil")Af[23];43.67)L[23];"W":L[23];59.83)K[23]
326: "HOLLAND-Hilversum")Af[24];5.17)L[24];52.23)K[24]
327: "HUNGARY-Budapest")Af[25];19.05)L[25];47.5)K[25]
328: "ICELAND-Reykjavik")Af[26];21.97)L[26];"W":L[26];64.15)K[26]
329: "INDIA-New Delhi")Af[27];77.22)L[27];28.62)K[27]
330: "IRAN-Teheran")Af[28];51.43)L[28];35.67)K[28]
331: "IRELAND-Brandon Mt.")Af[29];10.25)L[29];"W":L[29];52.23)K[29]
332: "ISRAEL-Tel Aviv")Af[30];34.77)L[30];32.08)K[30]
333: "ITALY-Rome")Af[31];12.5)L[31];41.88)K[31]
334: "KENYA-Nairobi")Af[32];36.83)L[32];1.28)K[32];"S":K[32]
335: "KUNAI")Af[33];47.88)L[33];29.26)K[33]
336: "MONACO-Monte Carlo")Af[34];7.43)L[34];43.73)K[34]
337: "MOROCCO-Rabat")Af[35];6.85)L[35];"W":L[35];34.03)K[35]
338: "NIGERIA-Lagos")Af[36];3.47)L[36];6.45)K[36]
339: "NORWAY-Hammerfest")Af[37];23.7)L[37];70.6667)K[37]
340: "NORWAY-Kottsoy")Af[38];5.43)L[38];59.07)K[38]
341: "OMAH")Af[39];56.75)L[39];18.83)K[39]
342: "POLAND-Warsaw")Af[40];21)L[40];52.25)K[40]
343: "PORTUGAL-Lisbon")Af[41];9.13)L[41];"W":L[41];38.73)K[41]
344: "ROMANIA-Bucharest")Af[42];26.12)L[42];44.42)K[42]
345: "SAUDI ARABIA-Duba")Af[43];35.77)L[43];27.32)K[43]
346: "SCOTLAND-John O'Groats")Af[44];3.03)L[44];"W":L[44];58.65)K[44]
347: "SENEGAL-Dakar")Af[45];17.45)L[45];"W":L[45];14.63)K[45]
348: "SOUTH AFRICA-Cape Town")Af[46];18.47)L[46];33.93)K[46];"S":K[46]
349: "SPAIN-Madrid")Af[47];3.72)L[47];"W":L[47];40.42)K[47]
350: "SWEDEN-Stockholm")Af[48];18.05)L[48];59.3333)K[48]
351: "SWITZERLAND-Zurich")Af[49];8.55)L[49];47.38)K[49]
352: "TAIWAN-D. CUHAI")Af[50];12.5)L[50];"W":L[50];37.25)K[50];"S":K[50]
353: "TURKEY-Istanbul")Af[51];28.95)L[51];41.03)K[51]
354: "USSR-Moscow")Af[52];37.7)L[52];55.75)K[52]
355: "USSR-Riga")Af[53];24.1)L[53];56.95)K[53]
356: "USSR-Yerevan")Af[54];44.52)L[54];40.17)K[54]
357: "YUGOSLAVIA-Zagreb")Af[55];15.9667)L[55];45.8)K[55]
358: net
359: "TABLE4":% LatinAmerica/Caribbean
360: for 2=2 to 55
361: "W":L[2];"H":K[2]
362: next 2
363: "ANTIGUA-St. John's")Af[2];61.85)L[2];17.12)K[2]
364: "ARGENTINA-Buenos Aires")Af[3];58.5)L[3];34.67)K[3];"S":K[3]
365: "ARGENTINA-Ushuaia")Af[4];68.32)L[4];54.8)K[4];"S":K[4]
366: "BAHAMAS-Nassau")Af[5];77.35)L[5];25.0833)K[5]
367: "BARBADOS-Bridgetown")Af[6];59.62)L[6];13.1)K[6]
368: "BELIZE-Belize City")Af[7];88.17)L[7];17.48)K[7]
369: "BERMUDA-Hamilton")Af[8];64.8)L[8];32.3)K[8]
370: "BOLIVIA-La Paz")Af[9];68.05)L[9];16.51)K[9];"S":K[9]
371: "BRAZIL-Belem")Af[10];48)L[10];2)K[10];"S":K[10]
372: "BRAZIL-Brasilia")Af[11];47.9167)L[11];15.7833)K[11];"S":K[11]
373: "BRAZIL-Manaus")Af[12];60)L[12];3.13)K[12];"S":K[12]
374: "BRAZIL-Ratã")Af[13];35.25)L[13];5.77)K[13];"S":K[13]
375: "BRAZIL-Parnaiba")Af[14];41.7833)L[14];2.9)K[14];"S":K[14]
376: "BRAZIL-Rio de Janeiro")Af[15];43.28)L[15];22.88)K[15];"S":K[15]
377: "CAYMAN Is.")Af[16];81.25)L[16];19.3333)K[16]
378: "CHILE-Valparaiso")Af[17];71.67)L[17];33.08)K[17];"S":K[17]
379: "COLOMBIA-Barranquilla")Af[18];74.83)L[18];11)K[18]
380: "COLOMBIA-Bogota")Af[19];74.08)L[19];4.63)K[19]
381: "COSTA RICA-San Jose")Af[20];84.07)L[20];9.98)K[20]
382: "CUBA-Havana")Af[21];82.42)L[21];23.12)K[21]
383: "DOMINICA")Af[22];61.08)L[22];15.4)K[22]
384: "DOMINICAN REP.")Af[23];69.91)L[23];18.5)K[23]
385: "ECUADOR-Quito")Af[24];78.5)L[24];-23)K[24];"S":K[24]
386: "EL SALVADOR")Af[25];89.18)L[25];13.75)K[25]
387: "FALALANDS Is.-Stanley")Af[26];57.93)L[26];61.75)K[26];"S":K[26]
388: "GALAPAGOS Is.")Af[27];90.5)L[27];-5)K[27];"S":K[27]
389: "GRENADA")Af[28];61.76)L[28];12.01)K[28]
390: "GUADELOUPE")Af[29];61.31)L[29];16.11)K[29]
391: "GUATEMALA")Af[30];90.53)L[30];14.61)K[30]
392: "GUYANA")Af[31];58.08)L[31];6.81)K[31]
393: "HAITI")Af[32];72.33)L[32];18.58)K[32]
394: "HONDURAS")Af[33];87.25)L[33];14.13)K[33]
395: "JAMAICA")Af[34];77.51)L[34];18.35)K[34]
396: "MEXICO-Acapulco")Af[35];99.9167)L[35];16.85)K[35]
397: "MEXICO-Cabo San Lucas")Af[36];110)L[36];22.8)K[36]
398: "MEXICO-Mexico City")Af[37];99.17)L[37];19.42)K[37]
399: "MEXICO-Puerto Juarez(Yuc.)")Af[38];86.83)L[38];21.17)K[38]
400: "MEXICO-Tijuana")Af[39];117.0167)L[39];32.5333)K[39]
401: "NETH. ANTILLES-Bonaire")Af[40];68.25)L[40];12.1667)K[40]
402: "NICARAGUA-Managua")Af[41];86.3)L[41];12.1)K[41]
403: "PANAMA-Panama City")Af[42];79.5)L[42];8.95)K[42]

404: "PARAGUAY-Asuncion")Af[43];57.6667;LL[43];25.2667;K[43];"S")Kf[43]
405: "PERU-Lima")Af[44];77.05;LL[44];12.1;K[44];"S")Kf[44]
406: "PUERTO RICO-San Juan")Af[45];66.13;LL[45];18.48;K[45]
407: "SAINT KITTS")Af[46];62.41;LL[46];17.4;K[46]
408: "SOUTH POLE")Af[47];0;LL[47];90;K[47];"S")Kf[47]
409: "SURINAM-Paramaribo")Af[48];55.23;LL[48];5.87;K[48]
410: "SMAN IS.")Af[49];83.9167;LL[49];17.4167;K[49]
411: "TRIPLINDAB-Port of Spain")Af[50];61.52;LL[50];10.63;K[50]
412: "URUGUAY")Af[51];56.16;LL[51];34.83;K[51];"S")Kf[51]
413: "VENEZUELA-Caracas")Af[52];66.93;LL[52];10.58;K[52]
414: "VENEZUELA-La Asuncion")Af[53];63.8833;LL[53];11.0333;K[53]
415: "VENEZUELA-Maracaibo")Af[54];71.6167;LL[54];10.6667;K[54]
416: "VIRGIN IS.-Roadtown")Af[55];64.65;LL[55];18.47;K[55]
417: ret
418: "TABLE5":% westernN.America/Pacific/E.Asia/Down-Under
419: for Z=2 to 27
420: "W")Lf[2];"N")Kf[2]
421: next Z
422: "AB - Calgary")Af[2];114.8833;LL[2];51.05;K[2]
423: "BC - Vancouver")Af[3];123.12;LL[3];49.27;K[3]
424: "SK - Regina")Af[4];104.63;LL[4];50.5;K[4]
425: "YT - Elsa")Af[5];135.48;LL[5];63.92;K[5]
426: "AK - Anchorage")Af[6];150;LL[6];61.17;K[6]
427: "AK - Juneau")Af[7];134.25;LL[7];58.5;K[7]
428: "AK - Nome")Af[8];165.5;LL[8];63.67;K[8]
429: "AZ - Phoenix")Af[9];112.05;LL[9];33.5;K[9]
430: "CA - Crescent City")Af[10];124.22;LL[10];41.77;K[10]
431: "CA - Los Angeles")Af[11];118.25;LL[11];34;K[11]
432: "CA - San Francisco")Af[12];122.45;LL[12];37.75;K[12]
433: "CO - Denver")Af[13];105;LL[13];39.75;K[13]
434: "HI - Honolulu")Af[14];157.83;LL[14];21.32;K[14]
435: "ID - Boise")Af[15];116.2167;LL[15];43.6167;K[15]
436: "MN - Minneapolis")Af[16];93.2167;LL[16];44.9833;K[16]
437: "MO - St. Louis")Af[17];90.1833;LL[17];38.6333;K[17]
438: "MT - Billings")Af[18];118.45;LL[18];45.7833;K[18]
439: "ND - Fargo")Af[19];96.8;LL[19];46.8667;K[19]
440: "NE - Omaha")Af[20];95.95;LL[20];41.2667;K[20]
441: "NM - Albuquerque")Af[21];106.6667;LL[21];35.0833;K[21]
442: "NV - Las Vegas")Af[22];115.2;LL[22];36.2;K[22]
443: "OR - Seaside")Af[23];123.9;LL[23];46;K[23]
444: "TX - Dallas")Af[24];96.8;LL[24];32.78;K[24]
445: "UT - Salt Lake City")Af[25];111.92;LL[25];40.75;K[25]
446: "WA - La Push")Af[26];124.6333;LL[26];47.9167;K[26]
447: "WA - Seattle")Af[27];122.33;LL[27];47.58;K[27]
448: for Z=28 to 55
449: "E")Lf[2];"N")Kf[2]
450: next Z
451: "AUSTRALIA-Melbourne")Af[28];144.9667;LL[28];37.8167;K[28];"S")Kf[28]
452: "AUSTRALIA-Perth")Af[29];115.82;LL[29];31.97;K[29];"S")Kf[29]
453: "AUSTRALIA-Rochampton")Af[30];150.517;LL[30];23.383;K[30];"S")Kf[30]
454: "CHINA-Beijing")Af[31];116.42;LL[31];39.92;K[31]
455: "CHINA-Shanghai")Af[32];121.4667;LL[32];31.2333;K[32]
456: "N. MAGNETIC POLE")Af[33];101.5;LL[33];"W")Lf[33];76.25;K[33]
457: "EASTER ISLAND")Af[34];109.33;LL[34];"W")Lf[34];27.08;K[34];"S")Kf[34]
458: "FIJI")Af[35];178.66;LL[35];18.16;K[35];"S")Kf[35]
459: "GUAM")Af[36];143.33;LL[36];14;K[36]
460: "HONG KONG")Af[37];114.26;LL[37];22.25;K[37]
461: "INDIA - Calcutta")Af[38];88.5;LL[38];22.5;K[38]
462: "INDONESIA-Jakarta")Af[39];106.75;LL[39];6.13;K[39];"S")Kf[39]
463: "JAPAN-Sapporo")Af[40];141.35;LL[40];43.05;K[40]
464: "JAPAN-Tokyo")Af[41];139.75;LL[41];35.67;K[41]
465: "KIRIBATI")Af[42];173;LL[42];1.5;K[42];"S")Kf[42]
466: "KOREA(S)-Seoul")Af[43];126.9667;LL[43];37.55;K[43]
467: "MONGOLIA-Ulan Bator")Af[44];106.8833;LL[44];47.9167;K[44]
468: "NEW ZEALAND-Te Anara")Af[45];178.42;LL[45];37.63;K[45];"S")Kf[45]
469: "NORTH POLE")Af[46];0;LL[46];90;K[46]
470: "PAPUA N.G.-Port Moresby")Af[47];147.1667;LL[47];9.5;K[47];"S")Kf[47]
471: "PHILIPPINES-Manila")Af[48];120.98;LL[48];14.6;K[48]
472: "PITCAIRN IS.")Af[49];130.0833;LL[49];"W")Lf[49]
473: "PITCAIRN IS.")Af[49];25.0667;K[49];"S")Kf[49]
474: "TAHITI-Papeete")Af[50];149.57;LL[50];"W")Lf[50];17.53;K[50];"S")Kf[50]
475: "TAIWAN")Af[51];121.4;LL[51];25.15;K[51]
476: "THAILAND")Af[52];100.48;LL[52];13.83;K[52]
477: "TIBET-Lhasa")Af[53];91.17;LL[53];29.68;K[53]
478: "USSR-Khabarovsk")Af[54];135.1;LL[54];48.45;K[54]
479: "USSR-Petropavlovsk")Af[55];158.65;LL[55];53.02;K[55]
480: ret
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CONSTITUTION
OF
THE INTERNATIONAL RADIO CLUB OF AMERICA, INC.

ARTICLE I- NAME

The name of the organization shall be the International Radio Club of America, Inc.

ARTICLE II- PURPOSE

The purpose of the International Radio Club of America shall be to promote the hobby of radio listening on the AM broadcast band.

ARTICLE III- MEMBERSHIP

Membership in the International Radio Club of America shall be open to anyone in any nation interested in the hobby of broadcast-band DXing.

ARTICLE IV- DUES

Dues in the International Radio Club of America shall be enacted on an annual basis, the amount to be determined by the appropriate governing body, to be known as the Board of Directors.

ARTICLE V- OFFICERS

The government of the International Radio Club of America shall be comprised of the following officers:

1. President
2. Secretary-Treasurer
3. Board of Directors (seven members)

ARTICLE VI- ELECTIONS

Elections for President, Secretary-Treasurer, and Directors will be held every two years.

ARTICLE VII- CONVENTIONS

The one official international meeting of the International Radio Club of America shall be the annual convention.

ARTICLE VIII- AMENDMENTS

Amendments may be made to this Constitution by submitting a proposal in written form to the President of the International Radio Club of America at least 60 days prior to the beginning of the annual convention. To become enacted as an amendment, the proposal must receive a full hearing before the members assembled at the business meeting at the annual convention, and announcement must be made at that time to express the intent to have the full club membership vote on the proposal. In addition, to become enacted, a proposal must receive a two-thirds majority of the total club membership.

BYLAWS

OF

THE INTERNATIONAL RADIO CLUB OF AMERICA, INC.

ARTICLE I- NAME

The name of this organization shall be the International Radio Club of America, Inc., and the official abbreviation IRCA may be used in referring to this organization.

ARTICLE II- PURPOSE

The purpose of the IRCA shall be to promote the hobby of radio listening on the AM Broadcast Band, 510 to 1630 kilohertz, and to a lesser extent, on the longwave broadcast band.

ARTICLE III- ELECTION OF OFFICERS

1. Frequency of Elections; Term of Office
Regular elections shall be held in odd-numbered years to elect the officers listed in Article V of these Bylaws, including the Chairman of the Board. All terms of elective office shall begin at 0001 Mountain Local Time, on September 15 of odd-numbered years (or, in case of replacements, at 0001, Mountain Local Time, on the date of the DX Monitor in which the results of elections are announced) and shall expire at 2400, Mountain Local Time, on September 14 of odd-numbered years.
2. By Whom Elected
 1. The President and Secretary-Treasurer shall be elected by the membership at large. Each member in good standing shall have one vote for each office.

2. The seven members of the Board of Directors shall also be elected by the membership at large. Each member in good standing may vote for seven of the candidates seeking Directorships.
3. The Chairman of the Board of Directors shall be elected by the Directors of the Board in accordance with III,6.
3. Eligibility to Hold Office.

Any member in good standing, regardless of where he lives, shall be eligible for regular election to any office provided he has held one year's continuous membership in the IRCA as of April 15 of the election year. For purposes of special elections, the requirement shall be one year's continuous membership as of the effective date of the vacancy of the office in question, such date to be determined by the President. It is not necessary for an eligible member's name to be printed on a ballot for him to be elected.
4. Authority for Elections

The Election Committee Chairman (ECC), appointed by the President and confirmed by the Board, shall handle all aspects of all elections of officers, whether regular or special, with complete authority.
5. Regular Elections: Procedures and Dates
 1. The President shall be responsible for announcing in the DX Monitor full details concerning the upcoming elections approximately February 15 of election year.
 2. Nominations shall be open for President, Secretary-Treasurer, and the seven members of the Board of Directors from March 1 through April 15. Only one nomination each for President, Secretary-Treasurer, and only seven nominations for the Board, shall be allowed each IRCA member. All nominations must be submitted in written form to the ECC by April 15.
 3. As soon as possible after April 15, the ECC shall send to the Secretary-Treasurer a list of all nominees. The Secretary-Treasurer will return the list to the ECC as soon as possible, indicating which nominees have been members in good standing for the required one-year period.
 4. The ECC shall notify by letter all eligible candidates concerning their nomination by May 1. Each letter of nomination shall contain the names of all eligible members who have been nominated for the particular office in question. Such letters must stress that the nominee must reply in writing if he accepts the nomination, and each such letter must request from each nominee a campaign statement not to exceed 20 bulletin lines to appear in a June issue of DXMonitor. However, a nominee is not required to submit a campaign statement provided he has duly notified the ECC of his intention to run for office. An IRCA member may be nominated for more than one office, but he must decide for which he prefers to run and so notify the ECC. A nominee who has indicated his intention to run for an office may not be considered as a write-in candidate for another office in the same election.
 5. All letters of acceptance of the nomination, and all campaign statements, must reach the ECC by May 20. The ECC shall prepare the ballot and the campaign statements and submit them to the Publisher by June 1. Ballots shall contain spaces for write-in candidates. The ECC is solely responsible for any editing necessary to bring campaign statements down to 20 bulletin lines or to conform campaign statements to any officially adopted IRCA policies regarding bulletin content. The Publishing Committee may not make further changes in campaign statements without the consent of the ECC.
 6. Ballots must be received by the Election Committee Chairman no later than 0001, Mountain Local Time, on August 1.
6. Election of the Chairman of the Board

The ECC shall ballot the Board of Directors soon after each regular election to determine the Chairman of the Board, who will be the spokesman for the Board and will be responsible for assuming the President's office in case it is vacated during the current term. In the event the Chairman of the Board becomes Club President, he shall be required to resign his Board position. The ECC shall then ballot the Board of Directors again to determine the new Chairman of the Board.
7. Special Elections of Officers

In the event the Secretary-Treasurer, the Chairman of the Board, or a regular Director on the Board resigns, or in any other circumstances requiring a special election of officers, a special election shall be conducted as soon as possible by the ECC, in accordance with the relevant

procedures outlined above. If advisable, the various deadline dates fixed in III,5 shall be altered by the ECC, but the relative timing of the various procedures shall be retained.

8. Determining Winners

The seven eligible members who receive the most votes cast shall be deemed winners during a regular election of the Board of Directors. In all other elections, whether regular or special, the eligible member who receives the most votes cast shall be declared the winner.

9. Ties in the Balloting: Insufficient Nominees

1. In the case of a tie in the balloting for President or Secretary-Treasurer, the Board of Directors (to be polled by the ECC) shall break the deadlock. In the case of regular elections, such deadlock shall be broken by the newly elected Board members.
2. In the case of a tie in the balloting for the Board of Directors, a run-off election among the persons who tied will be executed immediately by the ECC. In the event there is a tie in the run-off election, the elected members of the Board shall determine the winner. A deadlock in the Board voting shall be broken by the President, in the event his office is vacant, by the Secretary-Treasurer.
3. In the case of a tie in the balloting for the Chairman of the Board, the President (or in the event his office is vacant, the Secretary-Treasurer) shall cast the deciding vote.
4. In case no persons are nominated to fill the office of President or Secretary-Treasurer, or in case fewer than seven eligible members are nominated to the Board of Directors, and no eligible write-in candidate(s) is(are) declared the winner(s), the Board shall select the officer(s) in the best manner they see fit.

10. Announcement of Results of Elections

The results of all regular and special elections shall in all cases be announced by the ECC in the DX Monitor within 30 days after the deadline for receipt of ballots. If it may be done in a timely manner, the election results shall first be announced by the ECC or his appointee at the annual business meeting.

ARTICLE IV- DUES

Dues will be collected on an annual basis; the amount will be subject to change by the action of the Board of Directors. The Secretary-Treasurer will be in charge of collecting dues.

ARTICLE V- OFFICES AND DUTIES

1. Officers

The government of the IRCA shall be comprised of the following officers: President, Secretary-Treasurer, and seven members of a Board of Directors.

2. Duties of Officers

1. President

- a. Shall preside at all official club functions, including the annual business meeting, when in attendance. If he is not able to be present at an official club function, he will, whenever possible, appoint a member who does plan to be present to preside at the official club function; this appointment is not subject to Board approval.
- b. Shall be responsible for protecting the reputation and dignity of the IRCA, and to promote and administer the affairs of the club to the best of his ability.
- c. Shall, with the approval of the Board, have the power to bring reprimand and revocation proceedings against any member who he deems is not adhering to the rules of the organization; he must submit in written form any findings to the Board for their actions.
- d. Shall have the power to appoint the chairman of any committee, with the advice and consent of the Board of Directors.
- e. Shall have the power to remove a chairman of any committee for neglect of duty; this action must in turn be approved by the Board.
- f. Shall have the authority to act on any suggestions or proposals, making any recommendations if he so desires, but also submitting the primary proposal to the Board of Directors; any action on a suggestion or proposal is subject to the final approval of the Board.
- g. Shall have the power to vote on any proposal that does not receive a majority decision of the Board of Directors during the contemporary administration so as to break any deadlock that would occur.
- h. Shall not have veto action over the board.

- i. Shall update the Constitution and Bylaws whenever amendments are enacted and make printed copies available to the membership.
 - j. Shall be responsible for reporting the results of voting by the Board of Directors in the DX Monitor as soon as possible after the votes have been counted.
 - k. Shall request the Board of Directors to reconfirm the appointment of each Editor and Committee Chairman currently serving the club during September of the first year of his term. Such requests shall be accompanied by the President's recommendation concerning each individual, based on a review of the past two years. The Contest Manager and Courtesy Program Committee Chairman, however, are to be reconfirmed in May of each odd-numbered year.
2. Secretary-Treasurer
- a. Will be in charge of collecting all dues for membership and membership renewal.
 - b. Shall keep an up-to-date list of all members.
 - c. Shall keep a complete financial record of all monies received and spent.
 - d. Shall submit every six months a condensed financial statement to the Board for their examination, and at the time of said submission, shall present the statement to the membership through the official club publication. The financial statement of the club must be approved by the Board before publication in the DX Monitor.
 - e. May, with the consent of the Board, appoint members to assist him in some of the bookkeeping work.
 - f. Shall be responsible for recording and filing minutes of the annual business meeting. In his absence at the business meeting, he shall appoint another member to record said minutes.
3. Board of Directors
- a. Shall be responsible for protecting the reputation and dignity of the IRCA, and to promote the affairs of the club to the best of their ability.
 - b. Shall have the final power in ruling on any club affairs, suggestions, proposals, recommendations, or findings submitted by the President; the Board shall have the power to present legislation and findings as well as to make rulings.
 - c. Shall not have the power to appoint chairmen of the various committees, publishers or editors, but shall have the power to confirm their appointment.
 - d. Can conduct most of their business by mail, but if five are present during an annual convention, a quorum for business shall be said to exist.
 - e. Shall have the power, if they deem it necessary, to call for a special election to submit a major issue to the membership-at-large; the Election Committee than will handle all aspects of the special election.
 - f. Shall have the power to submit a question to the vote of those present at the annual business meeting with a simple majority of those voting prevailing.
 - g. All decisions of the Board of Directors, including the name of the Directors voting for and against each proposal, must be published in the DX Monitor as soon as possible after the decision is made. No member shall be held responsible for such decisions until they are made public through the DX Monitor.
 - h. All members of the Board shall submit to the President their votes on all proposals no later than 3 weeks after the mailing of the proposals to them by the President. All votes not received within the three week period will be considered abstentions from voting by the member(s) in question.
3. Replacements
- 1. If an IRCA officer's membership in the IRCA expires during the current term and he fails to renew it within two weeks, he will be deemed to have resigned his position.
 - 2. Should a Director on the Board fail on two successive occasions to communicate to the President his vote on club business within the time prescribed in V,2,3 of these Bylaws, he will be deemed to have resigned his position.
 - 3. Should the President resign, or the office become vacant for any reason, the Chairman of the Board will immediately assume the Presidency for the remainder of the current term.

4. Should the Secretary-Treasurer or any Director on the Board resign, or if the office become vacant for any reason, a special election shall be conducted as soon as possible in accordance with the procedures outlined in III of these Bylaws, provided at least six months remain in the current term. In the event the Secretary-Treasurer resigns, or the office becomes vacant for any reason, the Chairman of the Board shall assume his duties on a temporary basis until the new officer is elected by regular or special election.
5. Should the Chairman of the Board resign, or the office become vacant for any reason, a special election among the Board of Directors shall be conducted immediately in accordance with the procedures outlined in Article III of these Bylaws.

ARTICLE VI- PUBLICATIONS

The official publication of the IRCA shall be known as DX Monitor. It shall be issued 34 times a year, except in cases of emergency. With the permission of the Board, the number of issues may be changed. DX Monitor will normally be published weekly beginning with the first Saturday in October, up to and including the last Saturday in March, twice in April and September, once in May, July, July, and August.

ARTICLE VII- COMMITTEES

The Board of Directors may, from time to time, establish various committees to carry on the activities of the IRCA. The Board shall have the power to establish guidelines and policies relative to the functions, operations, and authorities of any committee, but, in all other respects, committee chairmen have complete authority over the operations of their committees. For purposes of these Bylaws, the editor and publishers of the DX Monitor and any official agents of the IRCA are considered to be committee chairmen.

ARTICLE VIII- CONVENTIONS

1. Annual Meeting

The annual meeting of the IRCA shall be held in conjunction with the annual convention for purposes of presenting the reports of officers, committees and boards, and such other business as may lawfully come before the meeting.

2. Special Meetings

Special meetings of the IRCA may be called at any time by the Board of Directors on its own motion and must be called by the Board of Directors on petition of at least 10% of the membership. Such meetings shall be held at such time and places either within or outside the state of Colorado, as the Board of Directors or petition herein specified shall determine.

3. Convention Location

The President shall solicit during August of each year bids submitted by those wishing to host next year's annual convention. Bids must be received by the President by October 15 to be considered, except that if none are received by October 15, the President shall announce an extended deadline. Any and all bids received by the deadline shall then be submitted to the Board of Directors, which may determine if any bid is unqualified, and shall submit all accepted bids to a special election among the members to select the convention site and date. If only one bid is accepted by the Board, that bid shall be approved as the convention site without an election. Ballots shall be sent with an issue of DX Monitor at the earliest possible date but in no event later than 60 days beyond the deadline for submission of bids. Each site accepted by the Board shall be allowed to print a statement promoting its bid of up to 35 lines in the DX Monitor containing the ballots. Such statements shall be submitted to the ECC within 14 days of notification of Board acceptance of the bid. Ballots shall be returned to the ECC by a specified date, which shall not be less than 30 days nor more than 45 days beyond the date the ballots are mailed.

4. Voting

Each member shall have one vote on each and every matter submitted to the members. At all meetings, except as otherwise provided by law, the members entitled to vote who present shall constitute a quorum. All action except as otherwise provided by law, by the IRCA's Constitution or Bylaws, shall be by majority of those members present and voting. Presence and voting by proxy may be allowed at the discretion of and in accordance with rules prescribed by the Board of Directors.

ARTICLE IX- SUGGESTIONS AND PROPOSALS

All suggestions and proposals shall be submitted to the President in written form. He will then submit them to the Board of Directors for action (along with any specific recommendations he may care to make). The final decision as to any action to be taken rests with the Board of Directors. A proposal that receives more "yes" votes than "no" votes will be considered passed.

A proposal which is related to the activities of an IRCA committee or the club treasury will first be submitted to the respective Committee Chairman or the Secretary-Treasurer for his recommendations. These will be subsequently submitted to the Board along with the primary proposal.

ARTICLE X - IRREGULARITIES, REPRIMANDS, DISMISSALS

1. Irregularities

Any irregularity of club policy must be brought to the attention of the Board of Directors and the President. A statement of the irregularity and the member or members charged must be made in written form and must bear the signature or signatures of the member(s) making such charges. It must be submitted directly to each Director and the President; all shall determine any action which shall be taken.

2. Reprimands

In case of irregularities, the IRCA President must, with the approval of the Board, issue a letter of reprimand, to be sent via certified mail, to any officer or member of the IRCA, clearly stating the nature of the offense and the proper means of rectifying said offense.

3. Dismissals

If the nature of the offense is serious enough to cause further action than a reprimand, the President must, with the final approval of the Board, issue a letter or letters clearly stating the nature of the offense, and that dismissal proceedings are being taken. The aforementioned letter(s) shall be sent by certified mail, return receipt requested. A sufficient amount of time must be allowed for the accused to answer the serious charges. If the reply is not forthcoming or if it does not meet with the satisfaction of the President, a letter or letters of dismissal may be sent with the final approval of the Board of Directors, removing the membership of the accused.

ARTICLE XI- REFERENDUM/INITIATIVE

If a member cannot get action on a proposal in the prescribed manner, he can submit a petition bearing the signatures of 20% of the club membership to the Election Committee to effect a special election on the matter. This pertains to matters other than those concerning the contents of these documents.

ARTICLE XII- RECALL

If a petition is presented to the Election Committee bearing the signatures of 20% of the club membership asking for the removal from office of the President, Secretary-Treasurer, or a member of the Board of Directors, the Committee shall call a special election in which the membership will be asked to vote for or against such removal. If the removal of the officer is approved by 75% of the members voting, the office shall be declared vacant.

ARTICLE XIII- AMENDMENTS AND CHANGES

These Bylaws may be amended by the submission of a Bylaw amendment in written form to the President. He, in turn, must submit the proposal to the Board for consideration. With the approval of the Board, the proposal is then submitted to the Election Committee who shall arrange a special election. A proposed Bylaw amendment petition containing the signatures of 20% or more of the membership must be presented by the Election Committee to a vote before the entire membership. To be enacted as an amendment, the proposal must receive a simple majority of those members voting. An amendment to the Bylaws goes into effect immediately after its adoption, unless the proposal specifies a date for its going into effect.

ARTICLE XIV- RATIFICATION

The ratification of a 2/3 majority of those members voting; shall be sufficient to establish these Bylaws and Constitution as the official documents of the International Radio Club of America, Inc.

Certified correct with all amendments to January 31, 1981.

chtm
RADIO 610-MANITOBA



cesm
TELEVISION

THOMPSON, MANITOBA
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TELEPHONE 677-2441

THE INTERNATIONAL RADIO CLUB OF AMERICA

CLUB ADDRESSES

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P.O. Box 26254, San Francisco, CA 94126

Bulletin Material, Sample Requests:

P.O. Box 21074, Seattle, WA 98111

The IRCA Goodie Factory (Publications and Reprints)
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MEMBERSHIP DUES

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