



# DX Monitor

# Devoted Exclusively to Broadcast Band DXing

March 9, 1985

Volume 22, Number 25

Issue No. 714

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# What's Happening?

### NEW REPRINT LIST

The long awaited IRCA reprint list is included in this issue. It includes reprints of articles which have appeared in DX Monitor up until a few issues back. This list has several dozen articles which were not on the previous reprint list. So if you've joined within the last few years, there are probably many articles on the list which appeared in DXM after the last list was printed and before you joined IRCA. In any case, look through it. You'll probably find lots of articles you'd love to have in your library.

### NEW IRCA ALMANAC COMING SOON!

Bill Hardy writes that the new 4th Edition of our club's IRCA Almanac will be published this summer. Tentative deadline for Almanac material in Aberdeen is June 15, 1985. Bill has started obtaining station lists from national networks, talk shows like Larry King, music shows like American Top 40, and others. As usual, he will need help from IRCA members in compiling and typing the Almanac. Bill says some of the lists that need to be arranged by frequency are especially long, such as ABC Radio which has more than 1000 stations, and he would really like to hear from anyone who has access to a computer that could sort such a list. More details on the new Almanac project will appear in DXM as soon as space permits. Meantime, if you'd like to help, please write to Bill Hardy, 2301 Pacific Ave., Aberdeen, Wash., 98520, or call him weeknights between 6pm and 9pm Pacific Time at (206) 532-6827 (no collect calls please). Thank you!

# Flash Tips

Tom Jasinski has discovered a Tuesday Morning silent period for WCFTL-1000. He's noted them off until 0600 ELT for three weeks in a row. They had been NSP since last fall.....WFAI-1230 will apparently not be moving to 1200. They told Jack Parks that their application for a CP (made 3 years ago) was not granted. So any record you may find of a CP for them is, at best, premature.....Jack also says WDRV-550, Statesville, NC, is still using those calls as of February 28.....From USA Today, via Robert Wien, comes news that KUAM in Agana, Guam, has filed for protection under the U.S. Bankruptcy laws. The radio/TV station owes \$919,000 to 14 creditors, but plans to continue normal operations. (It's interesting to note that KUAM was the only station in Guam until a few years ago; now there are a half dozen radio stations (AM & FM) on the Island).

Time flies when you're having fun. We only have a few more issues before we go off our weekly schedule. The next few issues of DXM are as follows: March 16, 23, and 30; April 13 and 27; May 18; June 15; July 13; and August 10. HQ deadline is a week before those dates. Editors' deadlines are typically 10-14 days before the masthead dates. Consult future columns to tell for sure.

# EASTERN DX FORUM

RICHARD EVANS 2.0. Box 1204 NORTH WALES, PA 19454

Deadlines: 3/9 3/16 3/30 4/13 5/4 6/1 6/29 7/27 Anniversary Issue Deadline: 3/9

Niel J. Wolfish, 706-3900 Yonge Street, Toronto, Ontario E4N 3N6

Almost completely settled here at new address. DX possibilities are not quite as bad as I expected. The dial sounds really quiet (noise-free) at 0200 when televisions and light dimmers are not in use. However, it's not so quiet at sunset. Have managed to hear a few stations, but nothing terribly exciting. My first verie since last March arrived recently from RFO-Guadeloupe on 640. Now to verify Grenada!! One other thing to mention: CHIN-1540 isn't on at nights yet, but is running an open carrier most of the time. I wonder how a new NSP will end up affecting DX on 1540 or 1550 where a lot of Sunset Skip DX has been heard? We shall see.

Bill Harms, 8327 Perri Drive, Savage, Maryland 20763

(concluded from last week...) Kangnu'ng should really get out as their tower is located in the middle of a salt marsh near a place called Kyo'ngp'odae on the East Coast. They were very easy in Seoul and had great coverage up and down the East Coast. Most of these towers were seen while I was riding by on a bus. All of them were well marked so there is no mistaking them. I saw a large antenna complex on Kinghwa Island. There is no outlet listed for there, so this could likely be a jammer. I almost forget one other tower that I saw. In a visit to P'anmuncho'm, I saw a very tall tower on the north Korean side (P'anmuncho'm is the site of negotiations between the North and South/US). It was near the city of Kaeso'ng. I don't know what they used it for, but it was very visible. I hope my travelogue hasn't been boring. I had fun learning a little about broadcasting in South Korea first hand. I've gotta go. Ch'il-ship-sahm. Ahn-nyoung!!

Richard E. Berg-Andersson, 47-11 48th Ave., #1, Woodside, New York 11377

Hello, fellow "radio hobbyists" (an awkward but generic term —
unlike SWL or DX'er). This is my first Forum, so I had better introduce
myself: I'm 28 (29 this March), married, no kids, living in a 1-bedroom
apartment in New York City's Borough of Queens. So much for personal
details. I've been a "radio hobbyist" (whatever that means) since 1968
(although I was introduced to SW a few years earlier) and a BCB DXer since
1971. I joined the IRCA a little less than a year ago (in fact, I've just
mailed my check to renew within the past week) and I'm also a member of
the NRC, the WTFDA, and various SWL clubs. My DX Monitoring call sign is
WDX2RSG. I am not only writing to introduce myself, but also to comment
on Karl Zuk's comments on the state of AM today. I agree, the "yuks" on
AM have gotten out of hand. I think Don Imus can be funny — but I am
convinced that the reason I think so is that I listen to his show on WNBC
an average of once a week for perhaps a half hour-45 minutes at a time.
I'm sure that if I listened more than that, the novelty, such as it is,
would wear off. I get most of my entertainment on FM. The mindless,
nearly obscene (humorous" banter Karl speaks of is moving here as well.
So, most of the time my FM dial is set below "92" — the variety provided
by the college/non-commercial FM stations. I venture above "92" only for
NPR or music I can have on in the background. I don't need DJs to make
me laugh. Any "entertainment" I get on AM is either the news (on one of
the two New York all-news stations: WCBS or WINS) or sports (I am an avid
baseball and hockey fann). I, of course, listen to AM more than I normally
would; if I didn't, I wouldn't be an IRCA member! But my BCB-DX'ing is
not for programming content, in most cases. 73's. (Good to hear from
You, Richard. Please report often—rce)

Jim Hall, 240 Byron Road, Pittsburgh, Pennsylvania 15237
Received a great letter from NRC'er John Malicky who is the only other Pittsburgh DXer that's active at this time. It's good to know I'm not alone! John was mysteriously sent a current IRCA DX bulletin and he thinks he's being enticed to join IRCA. Not to worry, Phil Bytheway, we will hopefully be getting together soon and I will tell him just what he's missing out on. I'm still wondering how he got credited for WUCO-1270 in 11/10/84 issue's summary of unreported stations - guess that's where we got his address. (Jim, DKK uses both IRCA and NRC for the unreported stations deal--rce) DX here has been super but rare due to my current sked,

but I keep repeating the old adage "It's quality, not quantity", and feel somewhat better. So, all you eastern worldwide DXers, if you wonder why I can't even get some tips of my own into DXWW-E, that's why. I know when I read all the other columns it pleases me to see the editor's name in the credits. Speaking of credits for columns, not to offend anyone in the least, I'm getting sick and tired of seeing the same old namesover and over and over...some of you who are active and not reporting are unknowingly drpriving us others of tips that could very well be new additions to our totals heard. So please report!! I think I'm speaking for the other editors also. For those of you who do, more power (so, shall we say, DX?) to you! In otherness, I recently turned down an internship at WDUQ-FM here in Pittsburgh, after a trial...I took a government sponsored (FAA) technical and air traffic control program instead because they will at no cost further your education if you do well initially...so maybe I'll be with Uncle Samuel someday! If I go air traffic and do well, my next stop (DX stop!) would be the training center in Oklahoma City. (If so, Jim, be sure to say hello to John Zondlo for me--rce) In the DX I've heard ltely, I bagged 6 new Missourians--KNIM, KTGR, KLTI, KQYX, KFAL, and KWRE, almost ever; one I had given up on hearing in the past. I've also gotten a few from Georgia and Louisiana I've been wanting, so I can't call this season my worst. Matter of fact, conditions have been so odd I'd call it my best in a long time. To Gregg Monti, I was recently desperately trying to ID an unID when I happenedupon a listing for WIXZ-1040 (now granted WKZF), Hazel Green, Al. Was WIXZ actually their call Greg? I am a regular listener to C&W station WIXZ-1360 ("wik-Z") here in Pgh. What gives? Rich Toebe, your Slogan List Updater in the 1/19 DXM was indeed supurb and a great help! I want to thank Robert McKinney again for the letter helping me try to ID my WSHY (Shelbyville, III) unID/tentative. It's folks like you who make



# Western DX Forum

\* \* \* \*

IRCA—Serving the Broadcast Band DA'er Since 1964

Editor: Ric Heald, 1632 J St., #4, Eureka, CA 95501

1984/5 DEADLINES - WEEKLY ON TUESDAY, 12 DAYS PRIOR TO PUBLICATION DATE

RICHARD E. WOOD, P.O. BOX 5074, HILO, HI 96720

The Hawaiian DX'ers double dream achieved. . .a deep South America Beverage up in time for Carnival in Rio, and a ground rod in place even though living in a lava field. Such is my progress report by Valentine's Day. About the azimuth of the South America Beverage there was no question. Pete Taylor spent a week on Kauai and logged four Argentines. For all my other catches, the Silver Republic had eluded me. So the new 1,500-foot Beverage went up at 122 degrees true, the bearing of Buenas Aires. Result: Six Brazilians the first night and two Argentines the second, plus two Chileans so far and a possible Uruguay, three Peruvians, three Ecuadorians plus Colombians too numerous to count. It's a long haul to South America from here and conditions are audibly different from night to night. Some night favor Brazil with powerhouses on 1220, 1280, 1000, 1100 and 1040 roughly in that order of strength and consistency, but many unIDs, some on lower-power channels such as 1130, 1440 and 1510. When I began DX'ing from Newcastle-on-Tyne in the north of England in 1957, I specialized in Brazil on MW and heard over 100. I plan to get right back into this specialty now that I'm in an equally good location (a better one today as the UK has been overrum with local stations). And my next Beverage will aim at north-central Brazil, passing through Ecuador. I'm doing quite well with Ecuador even off my existing Beverages which are too far north or south, respectively, in their beams. R. Superior has been logged by Bruce Portzer and others, and I've logged a second Machalan, C.R.O. (apparently a new name for what is listed as Ondas Orensas, 915) on new 920. . a possible move to avois powerhouse R. Superior 25 kHz away. R. Superior announces 30 kw on 890 and certainly sounds at least that much. Machala is on the coast, which really seems to help. But not only coastal !IC land is heard. . II also had La Voz del Rio Tarqui from inland Cuenca on 1295. Back to the coast for some Lima stations, notably 880 and 1010, and I might add that big

The second dream. . . a groundrod. While hacking through my backyard jungle, I found a natural hole. . . a puka, in Hawaiian. . . in the lava, leaving a cavity with mud in the bottom. Room to cement a six-foot copper rod into. . .not the ten-foot which is recommended, but not bad for here. The groundwire goes from there along a fence, over my water tank and along my lanai. I used the same copper/steel wire as for my Beverages, not really heavy enough, but will do for now. Aloha.

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

DX seems to be picking up around here. DU's are coming back with new strength. Many are heard nightly anyhow, but lately they've been stronger. 1470 and 1480 kHz are sure nice to DX with everyone off after 0100 PST. First, K-RED s/off at 0100 followed by KAAR on 1480. KYOS is so weak here they cause no problem.

MM, 11 February too a log on WMBD 1470 Peoria, Illinois, mixing with KTQX Abilene. CJUB has been going off by 0100 or 0200 PST. Also, got a tentative log on WLAM Lewiston, Maine, but uncertain.

John Johnson, OK on KUUS, ex-KBMY. Apparently the QRM made a mess out of the ID. It must have been KUUS, as there was a New Year's Eve spot for a

hotel in Billings. Thanks for the information on that.

Reports out to WMBD 1470, KTQX 1470, KZZR 1230 (f/up), CFFR 660, CHED 630

KDYL 1280, KPRK 1340, Grenada 535, Vietnam 1010, DXRP 666 and KBAE 1380.

QSL's in from: KLSN 590 (ex-KHQ), KLZZ (ex-KOGO), CKTA 1570, North Korea CFFR 660, CHED 630,

657 and 875, KVGB 1590. Good DX and 73.

### GEORGE SHERMAN, P.O. BOX 2284, MINNEAPOLIS, MN 55402

Many of you undoubtedly have old receivers sitting around that could use some repairs. Perhaps you don't have the necessary technical experience to fix them. Maybe you don't have a local "ham" store, don't trust the quality their work or found the repair bill would be more than the set was worth. Before donating the set to the local sanitation service, I would suggest you contact Carl Rayman, 208 37th Avenue SW, Austin, MN 55912. You'll be pleased, if not actually amazed, by the quality of his work and very reasonable

prices. Hope this helps some one save and old receiver from the junkyard.

In otherness, DX continues to be quite good, at times. However, like last year, I've reached a point in the NRC contest where I seem to be stuck. And year, I've reached a point in the NNC contest where I seem to symmetry with 2,167 MW stations heard, new ones aren't too frequent. So, five been with 2,167 MW stations heard, new ones aren't too frequent. Now the only 575 heard. New tools are the contest was the contest of th spending only a little time DX ing, mostly on LW with only 575 heard. New ones there still come with some regularity. All of these are beacons, no TAS, al-

though I did have a fady carrier, hi.

I have a problem with my R-1000 and need some advice. Wide selectivity provides readable AM signals starting at s/5 and narrow selectivity seems OK on SSB and CW. However, when using narrow selectivity on AM, signals are unreadable up to s/9 plus. Why is this? Do I need the AM detector modified or some other modification or acessory? Please, if you know something, I need your help. Thanks. 73 and good DX. (Thanks for your contribution. To my knowledge, yours is the first forum I've typed from the Twin Cities-RtH.)

### FRANK ADEN JR., 5147 MORRIS HILL, #133, BOISE, ID 83706

In reference to RW's comments in the 09 February WDXR on my previous report on KTOX, I didn't say they had applied for 10 kw, but that they wanted it. When they first showed interest in moving to 730 they mentioned going 10 kw day at a later date. For the time being, they've applied for 1 kw day and the local paper reports they want 1 kw fulltime.

When the word got out that KTOX was interested in moving to 730 (about two years ago), several DX ers called them and were tols by the station they knew nothing about it. Unfortunately, some stations don't like to give out information over the phone and have a habit of not telling all the details (especially to DX'ers, unfortunately). (Natch. They don't know if you're a DX'er or the competition tyring to get the information-RtH.)

KTOX has been leaving their transmitter on at night so if anyone hears an

OC on 730 looping toward Boise it's probably them. Story here is their staff hasn't been able to figure out how to turn it off. (That's bull. They should be fined by the FCC. I know how to turn off/on two stations-RtH.)

The 1985 Idaho Broadcasting Guise should be out in May. Many changes and

I'm presently contacting all of the stations for up-dates. 73.

### RIC HEALD, 1632 J ST., #3, EUREKA, CA 95501

Frank, I find your remarks on KTOX somewhat amusing. We all have to know how to do an EBS test; otherwise, it's a \$1,500 fine. And as to shuting down the transmitter at night. . . if they don't know, they should all be fired. KTOX's explanation that "they don't know how" is inexcusable, unless, of course, they're testing, but, after midnight, local time.
I'd sure like to make the Portland convention. It's only eight hours away,

but employment situation and green stamps will be the determining factor Pat, good catch with WMBD. I heard 'em and verified years ago, but, alas, when the band was clear (reasonably) on a MM. Turned out to be the same CE as the one I visited with at KSOM (now KNSE) 1510 Ontario, California. Now that I think about it, that was 20 years ago. My, how time goes by fast when

you're having fun, hi.

By the way, look for the guy I'm temporarily replacing, Huggy Hart, on the overnight at KFMB 760. Remember when they were on 540 kHz and the Canadians

finally convinced the FCC that they should move?

Eastern DX Roundup has CHASTITY BELTS!

Karl J. Zuk, 154 Old Post Road North, Croton-on-Hudson, New York 10520

REPORTERS IN THIS ISSUE:

Jim Hall, 240 Byron Road, Pittsburgh, PA 15237 (JH-PA)

Drake R-7A, Loops, longwires, 950 foot Beveridge. Robert C. Ritchey, R.D.#1, Box 738, East Freedom, PA 16637 Realistic DX-160, 200 foot longwire (no SSB) (RCR-PA)

540 WGTO FL. Cypress Gardens. 2-18 1810 Best ever with C&W music and "Continuous Country" slogan. Surprisingly, this was a poor night for Latin America. (JH-PA)

550 KUSA MO, St. Louis. 2-19 1834 Way on top, in WGR, Buffalo, NY null. IDs as "55 K-USA" and "K-USA". Last heard as KSD. (JH-PA)

570 WWNC NC, Asheville. 2-19 1809 Very good in tight null of semi-local WKBN, Youngstown, Ohio. Slogan "Radio Ranch" and contest promo where the phrase "WWNC, the best sound for miles around" can bag you \$500!! (JH-PA)

640 WMSO TN, Collierville. 2-19 1826 Heard briefly under WHLO, Akron, Ohio, in sunset skip shuffle. Seldom heard. (JH-PA)

680 WKDJ TN. Memphis. 2-19 1828 Singing ID by women into top 40 music. Fair. (JH-PA)

740 KRMG OK, Tulsa. 2-18 0206 ID "KRMG", weather, into Talknet program with Dr. Harry Rubin. Good. (RCR-PA)

 ${
m NY}$ , Schenectady. 2-18 0145 Monday morning silent period:off air. Channel held by the 120 kW Colombian. Nulling the Colombian there 810 WGY was nothing, nada, zero, zilch. The sound of one flipper flapping.

Is there a brick wall at the Mississislopy River? (GS-DC) (Yes-kz)

820 WAIT IL, Chicago. 2-18 0145 Alternating with WBAP, Fort Worth-Dallas, TX, in dominating channel this Monday morning. Methinks WAIT is all night now. Latin Anericans usually dominate here, so I rarely even catch WBAP. (GS-DC)(An allnight pest here, for several months,

Smitty. They got a fulltime authorization awhile back-kz) 820 WOSU OH, Columbus. 2-17 1915 Sign off by man, invite to tune to WOSU-FM. mention of Ohio State University, no SSB, fair to good. (RCR-PA)

860 WDMG GA, Douglas. 2-17 2045 Teletalk sports show state-wide. Local ID

at 2100. New catch here. (GS-DC)

900 WLSI KY, Pikeville. 2-11 1810 with weather, ID by YL "WLSI Pikeville"
into C&W music, fair to good. (RCR-PA)

950 WCTN MD, Potomac-Cabin John. 2-12 1800 Sign off by man, no SSB, very good. (RCR-PA)

MB, Winnipeg. 2-18 0107 Very good on loops, ID "This is CBC Manitoba, now the weather for the city of Winnipeg..." after CBC news at 0100, then back to program "Radio Active." (JH-PA) 990 CBW

1080 UNID 2-17 2050 with "Face The Nation" after CBS news, over/under WTIC,

Hartford, CT and a Spanish Speaker. Who has this at this time?(JH-PA) (My guess: KRLD, Dallas, TX 50kW DA-N-kz)

1130 WCXI MI, Detroit. 2-15 2000-2300 Riding up over WNEW, New York, NY for three hours, most unusual. Someone forgot to change pattern. Well, the FCC doesn't care! Even Karl should have got this one. C&W music format. (GS-DC)

1140 WASG AL, Atmore. 2-17 0305 Gospel music, ID by YL "WASG 1210, South Main Street, Atmore, AL 36502. Testing on 50,000 watt transmitter. This is WASC 1140 AM testing on 50,000 watt transmitter." Good

to very good. (RCR-PA) 1280 WADO NY, New York. 2-17 2200 Sunday night. Black gospel program in English. Usually station is in Spanish. (GS-DC)

1280 UNID 2-11 2050 Two French speaking Canadians. One IDed as Radio Metropole, playing what sounds like Spanish Speaking Latin American music, but lyrics in French, with fast drums and shouting, etc; with another French station underneath. Faded to WADO, New York, NY before hearing ID or QTH. (GS-DC)(CJMS, Montreal, most likely is R. Met ropole, with probably CKCV, Quebec, PQ beneath-kz) 1420 WKCW VA, Warrenton. 2-12 1743 Sign off by man, "Dixie", very good.(RCR-PA)

1500 KSTP MN, St.Paul. 2-17 0240 Fair under WTOP, Washington, DC, with ads, mention of White Bear Lake (outside of St.Paul) and another city that sounded like Lexington. Also noted a het here that disappeared at 0256. (JH-PA)(Lexington?How about Lake Wobegon?-Kz)

1520 KOMA OK, Oklahoma City. 2-16 0140 Weather, C&W music, fair under WKEW, Buffalo, NY. (RCR-PA)

1530 WCTR MD, Chestertown. 2-13 1745 Sign off by man, SSB, fair in grave-

yard like mess.(RCR-PA) 1570 UNID 2-16 1645 Arabic language domestic in on pre-sunset skip, over under semi-local WTOW, Towson, MD. I'd say it's an early skip from New England.(GS-DC)(But who?-kz) CONTINUED!!!!

Robert C. Ritchey hears another sign off. Will he hear the SSB? Stay tuned for The Rest Of The Story....on EasternDX Roundup.....

1570 WLBQ KY, Morgantown. 2-16 1900 Sign off with SSB. Announced power as

1570 WPGM PA, Danville. 2-16 1800 Sign off, no SSB. (GS-DC)

1 kW. (GS-DC)

1570 XERF CO, Ciudad Acuna (Del Rio, TX) 2-18 0215 Heard nightly with gospel music, and one single commercial, over and over. They were selling a color picture of Martin Luther King for two bucks. Say, folks, I have this picture of my penguin, Fred...(GS-DC)

1570 WCRL AL, Oneonta. 2-11 1831 Sign off by man, no SSB, Good, (RCR-PA)

1570 WKYR KY, Burkesville. 2-12 1900 Sign off by man, SSB, good. (RCR-PA) 1580 WEYY AL, Talladega. 2-11 1830 Sign off by man, no SSB, Fair.(RCR-PA) 1590 WQQW CT, Waterbury. 2-16 0100 Sign off. Listening to Langenburg. Germany, on 1593, and heard a whole bunch of folks sign off who are authorized to go all night. The times they are a changin'. (GS-DC) 1590 WJRO MD, Glen Burnie. 2-16 0100 Sign off. (GS-DC) 1590 WJSO TN, Jonesboro. 2-16 0122 Sign off, smothered by the German on 1593.

Again on 2-18 at 0215 with another Monday Morning audio jamming session. Really now! (GS-DC)(Langenburg, Germany, one of my pests, too. I wish!hi!-kz) +2=18 0147 Equipment testing in accordance with section 73.72 of FCC regs., with alternating tones and rock music. Very good over WAKR, Akron, OH. (RCR-PA) WV, Chastity Belt. 2-18 0000-0035 "Experimental Radio Station WWW, the station of The Home For Wayward Girls, in Chastity Belt, West Virginia." Incredibly funny pirate broadcast with preaching from the Rev. Ernest Angry, music (Girl With Faraway Eyes, Susie Q., etc.) and erotic sexual references. QTH unknown, but very strong signal. I'd say it's coming from the Harpers Ferry area. Gave address as P.O. Box 40554, Washington, DC, 20016. (No, I am not kidding) Keep your ears peeled to this channel at midnight. I hope they will be on again. Signed off with the tune "Heart Of Saturday Night" at 0035. (Except it's Monday Morning.) On only a half hour, they're obviously hip to the goons at the FCC. The Firesign Thetare at its very best. (GS-DC) +2-18 0015-0033 One of the strongest and certainly strangest pirates I've ever heard, with rock music and conversation. ID and a lime of ""The is a received experimental actions that the strongest and conversation of the strongest and conversation.

Where is Porgy Tirebiter when you need him? This stuff is great. My apologies to Mr. Ritchey for the headline. You really pull down the sunset skip, and most are 1 kW or less. Anyone who is into SSS knows that all you hear every hour is a bedlam of sign offs and very little program material. Please keep sending in your tips, Robert! I've gotten several goodies from your tips! 73s to all and keep that mail coming!!!!-KZ

sign off, "This is special experimental station www, the station of the home of wayward girls, transmitting from Chastity Belt, WV, signing off. WWW is an experiment. WWW is sending out to you from the home of wayward girls and reaching out into the ether to bring back the wayward girls of the world that you don't help; that need to be reached; that need our charished concern. This is WWW signing off. Our address is P.O. Box 40554, Washington, DC 20036" Verygood

# **CENTRAL** DX ROUNDUP

to excellent. (RCR-PA)

Robert Kramer 6416 N. Richmond Chicago, IL 60645

```
UNID, SPECIAL, CHANGES, et. al.
              testing w/mx, same bearing as WSB 2/18 0203. IMJ-IL
750
              unid TTer 2/18 0151 TMJ-IL
610
     UNTD
              in WWL testing w/mx. TMJ-IL
TTer 2/18 0118. TMJ-IL
870
     UNID
1080
     UNID
                             TMJ-IL
              TTer 2/18 0119.
1130
     UNID
              TTer looping NW/SE. 2/18 0145. TMJ-IL
1290
     UNTD
              TTER 2/18 0140. TMJ-IL
     UNID
1360
              TTer & someone else u/KXEL. TMJ-IL
1540
     UNID
              TTER 2/18 0122. TMJ-IL
TTer 2/18 0122. TMJ-IL
1590
     UNTD
1600
      UNID
```

All da Rest KUUY WY ORCHARD VALLEY, 2/20 1923, blasting in w/lcl spot & many IDs, no doubt 870 about it this time. RK-IL 6

```
1040 WHBO FL PINELIAS PARK, 2/2 1814 s/off, clear but weak u/WHO. TMJ-IL
1130 WCXI MI DETROIT, 2/15 1905 noted v/strong w/remote broadcast, must have forgotten
to change pattern & power. TMJ-IL

1440 WRPZ KY PARIS, 2/12 1800 to 1906 s/off on late w/severe wx info, good signal. TMJ-IL

1500 WBZI OH XENTA, 2/13 1830 on late, in w/KSTP, w/severe wx info. TMJ-IL
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### FREQUENCY CHECK INFO

Tom Jasinski reports the following info, all from the 3rd Mon.

1530 WVFC good u/WCKY w/voice ID & TT

1590 WFIH possible but tone instead of mx

1050 KGTO nothing heard

1400 WOND nothing heard 1530 WMBT nothing heard

That's It:

TMJ... Tom Jasinski 503 Jensen Shorewood, IL

(FRG-7, 2½° loop)

RK.... I actually heard something this week

(R-1000, HQ-129X, Radio West Loop, Kowalski Loop)

No CDXR last issue because I didn't get any reports.

### Nancy Hardy 2301 Pacific Avenue Aberdeen. WA 98520

# WESTERN DX ROUNDUP

All times are Eastern Local

```
Phone for hot WDXR tips: (206)532-6827 till 10pm(PLT)
DEADLINES: Tuesdays March 19, April 2, April 16, May 7, June 4, July 2
REPORTERS FOR THIS ISSUE:
(PT) Pete Taylor-2614 Jackson St.-San Francisco, CA 94115
                    Car radio
(RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
                    GE Superadio, GE long-range portable,
(REW) Richard E. Wood-P.O. Box 5074-Hilo, HI 96720
R-1000, 3 Beverages
                   LA, Monroe-West Monroe 2/18 0300 noted w/ID as "Monroe-West
 540 KNOE
                   Monroe" during break in MCN, into AP nx. (RW-CA)
HI, Wailuku 2/15 0540 completely dominant o/KAFY-KOY w/local
 550 KMVI
                   spots. Uncommon here. (RW-CA)
OR, Winston 2/13 1115 horribly outdated relig. transcription
"December is our letter month. I haven't heard from you yet.
  700
         KGRV
                   I'm looking forward to the new year of 1985." 1115 foghorn, ID as "KGRV." In clear. (REW-HI)

CA, Thousand Oaks 2/5 1045 noted w/traffic report for Moorpark area. First time hrd, usually KTAC or KOA here. (PT-CA) (Note
  850
         KMDY
                    call letters, Pete. They changed from KGOE in the past year.-NH)
                   BC, Windemere-Invermere per call to CKIR (via CKGR-1400) power is 1kw days, 250 watts nights, directional to north to protect KORD. No wonder they haven't made it here! (RW-CA) OR, Albany 2/13 ID as "K-Gal," also KGAL, live DJ show, ads
  870
         CKTR
  920
          KGAL
                    mostly for Corvallis. (REW-HI)
                    CA, Los Angeles 2/18 0308 w/OC, TT later on. (RW-CA)
CA, Vista 2/13 1053 easy-listening oldies, Big Band, mostly
  930 *KHJ*
1000
          KMLO
                    instrumentals. Thru KOMO. (REW-HI)
                   CA, Palm Springs per call to KCMJ, still "a while yet" before they'll move to 1140. (RW-CA)

CA, Los Angeles 2/17 Su morn. SP is from approx. 0300, not as per NRC Log. Uses slogan "Thank you" in SS-accented EE, also "SuperQ." (REW-HI)
1010
          KCMJ
1020
          KTNQ
                    \underline{\text{CA}}, Folsom-Sacramento 2/12 UPI Radio nx 1125, ad for Folsom
1030 KHWY
                    Gaslite Flowers, 1130 slogan "at KHWY we've got the right
                    feeling." Clear. (REW-HI)
                    IA. Des Moines 2/18 0526 noted w/TT. (RW-CA)
1040 *WHO*
1050 KSPO WA, Dishman per call to KSPO, they are non-directional, 5kw.(RW)
1200 *WOAI* TX, San Antonio 2/18 0455 on w/OC, 0458 recorded ID twice, 0459

s/on. This is one hour earlier than end of MM SP per NRC Log.
                    Spoiled my attempt to ID a probable Bolivian. (REW-HI) CA, Bishop per follow-up call to KIBS, will definitely change calls to KBOV on 3/1 & format to EZL, FM will remain C&W. (RW) CA, Stockton 2/12 1135 wx, ski conditions, into MOR mx.
1230 KIBS
          KWG
                    Dominant. (REW-HI)
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OR, Newport 2/5 2343 clothing store ad. o/u KFYI. (REW-HI) MT, Missoula per call to KYLT, 3rd MM f/c 0240-0250 now defunct, they only use a "counter" to test, no tone. (RW-CA) KNPT 1310 1340 KYLT

1380 1570 KBAE CKTA

they only use a "counter" to test, no tone. (RW-CA) WA, Everett per call to KBAE, are now 24 hours, NSP. (RW-CA) AE, Taber 2/18 0400 temp. -100, low to be -140C; clear, XERF apparently on SP. Can't seem to get any more easterly Canadian than this. Are others had on the West Coast? (REW-HI) CA, Ventura-Oxnard 2/14 0230 "The ones you want to remember, KOGO, 1590, K-O-G-O," nostalgia mx. 0300 ID "KOGO, K-O-G-O, Vantura-Canad." Into Satellite News Network nx. Dominant. 1590 KOGO Ex-KBBQ. These calls recently used by San Diego on 600, now

KLZZ. (REW-HI) DX TEST: 1540 WZAL GA, McDonough 2/18 0105 tried, but not heard. (RW-CA)

F/C tentatively heard: 3rd MM 0100-0115 KGTO-1050 OK (RW-CA)

UNIDs: 2/18 0755-0806 unID noted w/relig. hymns way u/WLS, then faded o/WLS 890

890 2/18 0755-0806 unil noted whelle, hymned at 0800, then faded out fairly rapidly, didn't catch ID. KBYE is 890 relig., but shouldn't s/on in Feb. until about 0815 (they don't have cont'd a listed PSA), and neither does any other 890 stn. Now WLS as they were u/WLS, doubt Adak as I don't think they carry this type of programming, too late for North Carolina. I have 2 CP's listed as grants, WYAI & WQIS in Miss. However, no listing for WYAI yet, so doubt CP is on, WQIS (ex-1260) is a grant, but only recently. Also too early for KQLX-ND, they wouldn't s/on until about 0830 or so. Will call KBYE to find out if they s/on earlier now. 0800 fadeup coincides nicely w/Mississippi stns in Feb. SR zone, & loop bearing was correct. Definitely 890, not 891. Have never hrd Adak here, anyway. (RW-CA)

2/18 0240-0245 unID TT noted at 0240 tune-in, ended promptly at 0245. New f/c? (RW-CA) 1340

1390 Same selections (3 in a row) a la MYL hrd here 2/15 0055 //KLIV & KDON. KLIV purports to be MYL; KOMY-1340 is MYL for the Monterey area, not KDON. Is this Turlock w/format change? No country mx noted on freq. In/out w/KGER. (PT-CA)

1580 2/18 0454 what sounded like C&W (though not sure) way u/KNIX, in

KRIV-1590 null. Never faded up strong enough thru KNIX during two hours of monitoring! I think KLOU is rr, WIZY is relig. What is KRZI's format? WLS bombing in at time, good cx to midwest. (RW-CA)

Pete Taylor came through with a report on deadline day. I was beginning to wonder if Bob Wien was going to head the list of reporters this week! Everyone must be saving their reports for the anniversary issue, hi.

### '50s rock again

MEDIA RARE: WHUE-AM, now off the air, is to return at 5 p.m. March 15 with new call letters, new format and new manage-ment. The letters: WMEX, as in the station that was a Boston smash with '50s rock 'n' roll. The format: '50s rock 'n' roll. What a coincidence!

The station is sister to WMJX-FM, which plays adult contemporary and the formula toldies, porary and the formula (oldies, AM; ac, FM) simulates other city stations also owned by Greater Media. The program director is Don Daniels, newly arrived from KRZN-AM, Denver; the music director is Quentin Migliori, Ayka Oldie Jock Jim Grant of WCGY-FM. Lawrence who owns 30,000 oldie records. How distressing!

Left: Boston Herald 2-28-85 via Paul Chorosky

Right: Oxnard Press-Courier 2-16-85 via William McMahon

Name,

Country-western radio stations has hing up its cowboy hat in favor of a new format and new call letters.

KBBQ-AM at 1590 on the dial is now KOGO, and the programming is now kOGO, and the programming is now apopular music and jazz from the past lour decades. Forrest Radio Co. Inc. acquired the KOGO call letters after a San Diego station stopped using them. Forrest Radio Co. Inc. has made the format change after 16 years of country music broadcasting from their

format change after 16 years of country music broadcasting from their Ventura facilities.

The new KOGO will draw its music from the most popular of the past four decades through round-the-clock live satellite transmissions originating in Chicago. Sout Brooty station graperal scatellite transmissions originating in Chicago. Scott Brody, station general manager, indicated that the declining popularity of country music and the age of the AM radio listeners influenced the decision.

Forrest Radio Co. Inc., which also owns KBBY-FM, spent several months assessing the Ventura County market and reviewing format changes that would be received well by both listeners and advertisers. The easy listening music known as "middle of the road," or "MOR," was selected because locally produced radio programming did not offer a quality MOR listening opportunity. Brody said.

Brody said



### EDITOR: Jim Hall, 240 Byron Rd., Pgh., PA 15237

Although conditions to LA have not been so good lately, I've noted many high-band TA's in. Most appear only as hets, but I've heard West Germany-1593 and Spain-1584 in at readable levels. The German has a considerably better signal strength, but what can be expected from 600 kW?! Gardner Smith mentioned that the 1521 Saudi can be expected around 2300, but unless you live near the Atlantic I'd guess that there's not much of a chance on this one. Of course, we may not hear the stuff the Kaz/Connelly/Hakiel trio can, but at least we can still hear something. My R7A is certainly an asset in receiving them - along with a 1000' Bev. - so I hope this is not all I can hear! Hope to add a //wire to the Bev. soon......All times are GMT/UTC.

#### TRANS-PACIFIC DX

1566\*\*\*\*unID, presumed Korea. Het first appeared 0800 2/15, 1 hour after TA's faded out. Guarded until 1030 GMT but no audio. DFs approx. N 3000 W, just right for GC to Korea. Harms says this station is undermodulated but uses low angle ant. for skip-prop. (Smith-DC) ('84 WRTH lists hours of transmission as 2000-2300 and 1000-1800, but hours may have been changed. Does anyone have an '85 WRTH yet? The latest report of this outlet comes from REW-Hi in the 2/23/85 DXWW-W, hrd at 1620 which is well within the specified sked. Nick Hall-Patch reports them in the 1/5/85 issue with great sigs, his tip also within the sked. In looking back over about a year's worth of DXWW-W's I find it to be heard all over the West Coast and as far inland as Colorado by Knight. Every other tip I read was within the 1000-1800 range except for the 12/31/83 issue where Roy Millar notes 1540 as being past listed s/off, but it's evident he was using at least an '83 WRTH.ed.)

### TRANS-ATLANTIC DX

unID-0441 2/26: Good strong het and bits of audio popping through -1557

a man talking but I could'nt make out lang. (Hall-PA) SPAIN-0440 2/14: Strong, easy copy //1602/1575 (but 1584 much stronger). SS talk, and very flat audio. This is a different stn 1584 than usually hrd (with boomy audio). Again 0630 2/15. (Smith-DC) +0615-0645 2/26: Tough to pull out - used 2.3 kHz filter and tuned slowly on LSB. SS talk, maybe SER nx. Many other high-band hets noted but most w/o audio. (Hall-PA)

WEST GERMANY, Langenberg-0555-0630 2/26: GG talk, prob. nx, by male. 5 short pips and 1 long at 0600. 1590 notched but notching 1593 was unnecessary by 0620 - they were better than semi-local WAKR! All splashed up again by 0700. (Hall-PA) +0630 2/15: Incredible sig on my F-11, easy copy. GG talk show -

a lady interviewing the cast of a Broadway type musical, with musical exerpts from the show. Strongest ever hrd! (Smith-DC)

#### PAN-AMERICAN DX

COSTA RICA, Cartago-0400 2/24: Radio Rumbo still drifting around 529 a

530. Fair tonite w/beacon QRM. (Hall-PA) GRENADA-0050-0130 2/8: In EE w/pop and reggae mx, male DJ giving 535 frequent TCs (ELT + 1), 0108 Message From the Ministry of Sport and the Organization of Eastern Caribbean States, urging Grenadians to get active in sports for 1985, the International Youth Year -- said "remember...sports aide productivity... and provides a valuable outlet for the unemployed. Let's make 1985 a great year for sport in the OECS". In at good level, easily overcoming WGR slop. (Brooker-ON)

CUBA, Santa Clara-0238 1/27: Reloj w/time pips, musical tone 570 followed by second ticks. Loud rumbling of mixed-stations - lots of them! (Demmitt-PA)

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CUBA, La Julia-0228 1/27: R. Rebelde w/instr. song w/lots of bass horns/flutes. Male w/female in loud mx group. (Demmitt) CUBA, Urbano Noris-0219 1/27: R. Rebelde w/lively song by women.
590
600
            0222 male w/talk, 0224 ID by woman, followed by long taped RR ID.
            (Demmitt-PA)
            COLOMBIA, Barranquilla-HJHC-0530 2/11: Several "Radio Libertad"
            IDs, strong o/CMKA w/local wCAO silent. A pleasant surprise. (Smith-DC) (Rare HJ here, last logged 12/18/83.ed.)
            CUBA, Guanabacoa-0212 1/27: R. Progreso in SS w/male singing, then male introducing next song, a slow love song. (Demmitt-PA) HONDURAS, La Ceiba-HRNN18-1130 2/2: Suspected to be the one (since
640
660
            "85 WRTH no longer shows HRN) w/many "HRN" IDs. Gd. signal. (Hughes) CUBA, Arroyo Arenas-0204 1/27: "R. Liberacion" ID 0206 after mx. 0209 another ID by man. (Demmitt-PA) (Are you sure of this.
670
             John? Liberacion merged w/Rebelde in mid-84. I'm not doubting you
             as one never knows what to expect from Cuba.ed.)
             CUBA. Santa Clara-0154 1/27: R. Libaracion w/lively LA mx. 0202
             ID (What was ID?ed.) QRM from CRF FF nx. (Demmitt-PA) (Ditto 670) GUATEMALA, Guatemala City-TGN-1132 2/19: "R. Cultural" ID
690
730
                                                  (Hughes-FL)
             noted with good signal.
             CUBA, Guanabacoa-0145 1/27: SS R. Reloj w/time pips and nx.
760
             Another SSer in here along w/WJR. (Demmitt-PA)
MEXICO, Mexico City-XEABC-1105 1/21: R. International noted with
             ment. of North America. Fair signal. (Hughes-FL)
             PANAMA, Chitre-HOL47-1125 1/20: "R. Nac. de Panama" ID noted u/
 770
             Colombian this morn. Poor/fair signal. (Hughes-FL)
             COLOMBIA, Bogota-HJKH-1215 1/20: Several ment of Bogota and
             Colombia from this regular. (Hughes-FL)
             ST. KITTS, Basseterre-0030 1/20; R. Paradise in EE w/ID. Intro for Prime Minister who made speech, summing up w/"We are going to do everything we did last year but better. (Demmitt-PA)
 825
             BELIZE-0300-0315 nx 2/14: Featuring the latest dope arrests.
           Strong but u/HIJB. No sign of the channel bully 7(WCCO). (Smith) +0457 1/22: R. Belize w/song "Just BecauseI'm A Woman" and talk by male ancr. QRM from WCCO. (Demmitt-PA)
 830
             COLOMBIA, Barranquilla-HJSB-0320 2/14: Mar Caribe 20db over S-9. I wonder if they're using a flat-top. The sig is always stronger
 870
             than any other HJ, even the 700/810 powerhouses. (Smith-DC)
             unID-0452 2/21: Poor LA cx but noted 2 SSers, 1 the HJ, the unID noted w/possible "Metripolitano" ID. (Hall-PA)
             unID-0500 2/21: SSer s/off at 0500 but I could'nt get an ID despite
             readily readable quality. (Hall-PA)
             unID-Not the HJ in Sta. Marta (but Sta. Marta present due to 400 Hz het). V. strong, easy to copy for 15 mins, then fade. ID as "R. Contalemo" (Sta. Marta is R. Galeon). Mx doesn't sd Colombian to
 895.4
             me. Suppose this is some Nicaraguan pirate?? (Smith-DC) COLOMBIA, Barranquilla-HJAT-0235 2/12: Multiple IDs: "En Radio Reloj la hora official nueve triente cinqo minutos". Also ID as
 1100
              "Attencion! R. Reloj Informa...desde Barranquilla". And a SID w/
              brass & drums, rather nice. Wish they were all this easy! 20db o/S-9, very fine signal. No sign of WWWE. (Smith-DC)
              CUBA, Artemisa-CMCM-0230 2/12: "En Cuba, territorio libre en America, transmitte R. Cadena de Habana". Brass fanfare for IS,
 1120
              then 3 pips. The other Cuban on this chan, R. Angulo, has also
              been hrd here recently. (Smith-DC)
              DOMINICAN REPUBLIC, Santiago-HIRL-0345 2/14: Regular here now.
  1130
              (Smith-DC)
              COLOMBIA, Cartagena-HJKO-1058 1/15: IDs as "La Voz de la Victoria"
  1140
              w/many ments (Mombia, as usual. (Hughes-FL)
              GUATEMALA, Quezaltenango-TGHL-1111 2/13: S/on at 1100 w/ment.
  1170
              of Quezaltenango and Guatemala. (Hughes-FL)
              COLOMBIA, Cartagena-HJNW-1156 2/18: Plenty of "CARACOL" IDs and
              finally IDed w/the help of new WRTH. (Hughes-FL)
GUATEMALA, Guatemala City-TGT-1104 2/7: "R. Sonora" ID noted w/
  1180
              good signal. (Hughes-FL)
              CUBA, Palma Soriano-0400 2/14: IS music box chimes, followed by Tull ID: "Desde Santiago de Cube (?elwe?) de LA Republica de
  1200
              Cuba, Transmitte CMKC, Radio Revolucion, Emisora Matriz de la
Revolucion Provincial de Radio El Poblar Popular". Good audio
               tonite, sometimes it's really bad. Another Cuban u/, different
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MEXICO, Mexico City-XEB-1102 2/6: Several "XEB" IDs and ment of

1220

(Smith-DC)

"R. Mexico". Weak signal. (Hughes-FL)

- VENEZUELA, Maracaibo-YVMS-0130 2/12: Full stn ID "R. Reloj desde Maracaibo". Many local ments in nx. V. strong u/local WFRR. New 1300 Maracablo." Many local ments in nx. V. strong u/local WFBR. New catch, YV 35. (Smith-DC) unID-0140 2/12: Very weak, most likely HC listed 250 watts. Many
- 1315
- The property weak, most likely to fire 230 wasts. Many H.ed) COBA, Moron-CMIN-0115 2/12: R. Surcos, romantic ballads. Dom. Chan. Strongest of the high-band Cubans tonite. They're everywhere 1540/1530/1480/1470/1420/1370/1360/1310. Many of them in // with 1430
- Cadena Agramonte net. (Smith-DC)
  ANTIGUA-0020-0035 2/8: In fr-gd over CBJ w/"Caribbean Report" news-1580 cast, financial news, sports, and Caribbean wx. 0030 into "Now Music USA" program spotlighting Frince. In EE of course. (Brooker) +0208 1/20: News: The Greek/Turk dispute. 0215 2/3 "Talk to Amer."
- promo w/phone # by male. Also literary arts. (Demmtt-PA) ANGUILLA-0159 1/20: Caribbean Beacon in EE w/background mx as male 1610 ancr gave ID and frequency sked. Rlgs pgm. (Demmitt-PA)

#### one more:

COLOMBIA, Barranquilla-HJAN-0255 2/14: ID as "R. Barranquilla, La  $\overline{\tt Emisora}$  Unidas", into strange African sounding mx w/reed horn solo. (Smith-DC) 720

### **VERIFICATION**

GUADELOUPE, Radio-Television Francaise D'Outre Mer ; Pointe-a-Fitre. Letter on RFO letterhead in 3 monthes for FF report and 2 640 IRCs. v/s L. Adam-Le Chef d'Etablissement. Letter was in FF, and also enclosed was the week's program sked. Address is B.P. 402, 97163 Pointe-A-Pitre Cedex, Guadeloupe. (Niel Wolfish-ONTARIO) (A beautiful catch Niel! Please write me and give info on when, where, how, etc. you heard them! I want them!ed.)

### REPORTERS FOR THIS ISSUE

(Hughes-FL) J.B. Hughes, Madeira Beach, FL R-1000/Radio West Loop

(Smith-DC)

Gardner Smith, W9ALZ, 1000 Perry St. Washington, DC 20017 Toshiba F-11/HQ 145-X

(Brooker-ON) Mike Brooker, 245 Old Forest Hill Rd. Toronto, ON M6C 2H5 RF-2200

(Demmitt-PA) John Demmitt, KO848, Box A. Bellefonte, PA 16823 ICF-55W

Jim Hall, 240 Byron Rd. Pittsburgh, PA 15237 (Hall-PA)

Drake R7A, Palomar/homebuilt loops, lw's of 100'-425', 1000'

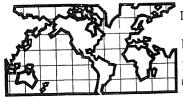
Bev. unterm. at approx. 50

EDITOR'S NOTE: You may have noticed that this column includes print from 2 different typewriters....Well, expect tosee this type you are reading from now on. I already hadthe column typed when I acquired this typewriter and started redoing it. Well, as my luck has it I am unable to finish in this print, so

you'll just have to rough it until next column.

# **CONVENTION NEWS**

THE 1985 IRCA ANNUAL CONVENTION WILL BE HELD IN PORTLAND, OREGON THE WEEKEND OF JULY 26, 27, AND 28, AT THE COSMOPOLITAN MOTOR HOTEL. WE WERE GOING TO HOST THE CONVENTION IN SEASIDE, BUT THE ROOM RATES DURING THE TOURIST SEASON (JUNE-JULY-AUGUST) WERE \$55.00 TO \$125.00 PER NIGHT. MORE INFORMATION LATER. START MAKING YOUR PLANS NOW TO ATTEND THE 1985 IRCA CONVENTION IN THE CITY OF ROSES, PORTLAND OREGON. YOUR CONVENTION HOSTS, PATRICK MARTIN AND BILL BLOCK.



### DX WORLDWIDE - WEST

### Pat Martin - Editor

P.O. Box 843, Seaside, Oregon 97138

PHONE: (503) 861-3185

### REPORT FROM RICHARD WOOD-HAWAII

545	UNID, 2/18 0507 to 0515 U.S. Network nx, sounded like an all-news
	station, best on Deep SA Beverage (but could come from elsewhere
	as the 3 beverages are not so directional at the Low Frequency end).
	Possible Grenada from 535, St. Kitts from 555 (but they are not sked
	to be on then), spur or mixing product (but not a Hilo Station,check)
	A U.S. Station drifting or ?? (REW-Hi) (Possible Pirate as several
	have been hrd up and down the U.S. WC in the last couple of years.
	I get one with non-stop mx on 530, sounds like a good controlled
	transmitter. Grenada was on 535 last time I checked on 2/18. Anyone
	else hear this? PM)

- FIJI, Suva-2/18 at 0910 Fijian rel choir, Fijian talk, Native relg. 558 choirs are probably the most frequently hrd format on Pacific stations. (REW-Hi)
- AMERICAN SAMOA, Leone-WVUV 2/18 at 0915 Samoan relg. choir, Country #61 and not as easy as W. Samoa. According to Rod O'Connor, Leone 648 is a village 12 miles outside Paga Pago. (REW-Hi)
- NAMIBIA, SWABC Radio Herero, Gobabis-2/18 at 0428 man talking in Herero (A Bantu language sounding quite different from Swahili, Zulu, etc.) 0430 fade, 0432 up again,good and clear on peaks. Country #60, unexpected hrd on my new Deep SA Beverage only, so propagation is apparently across the South Atlantic and South America. Africa #2 and first black African (previous was Tunisia-1566). At 12,000 miles, my longest haul catch in my DX Lifetime. An example of the antipodean affect (Namibia is the approximate antipode of the Big Island) and the Grayline effect (dawn at Gobabis to SS in Hilo). Is 100KW. Haven't seen this one reported from outside South Africa. (REW-Hi) (Good going, Richard, PM)
- BRAZIL, Rio de Janeiro, Radio Ministerio da Educacao e Cultura,ZYJ457 800 DATALL, RIO DE Jaheiro, Radio Ministerio da Educação e Cultura, 21347/
  2/18 0448 Classical symphony, probably Mozart, over/under PJB (REW-Hi)
  COLOMBIA, Bogota-Caracol HJKC 2/18 0840 telephone advice show by YL
  mentions "Surcp Bogota". Easily topping KOA on my Southerly Beverage(REW)
  URUGUAY, Montevideo Radio Monte Carlo CX20 2/18 0409 ID "Aqui en Radio
  Monte Carlo" Mostly SS. versions of U.S. hits. Country #59 (REW-Hi)
  CHILE, Santiago Radio Portales CB118 2/18 frequent mentions of the 850
- 930 1180
- "Quinta Brigada" which had a confusingly Cuban ring to it, but 0610 ID "portales de Santiago", apparently running AN at least during Carnival, but in December was noted s/off 0410V (REW-Hi)
- UNID, 2/18 0953 TC an Indian-accented SS for UTC-4 hrs, i.e. "5 de la manana con 53 minutos, 7 minutos para las 6". Bonito carnaval" Andean 1200 folk mx, ads, Clear till 0955 WOAI put on carrier, 0958 WOAI IDs, s/on 0959 (not 1100 as per NRC Domestic Log) Strongly suspect Bolivia, Paraguay also listed but now on DST, i.e. UTC-3, and would have already been in daylight by then, also mx sounded Bolivian, Guess what freq. I'll be sitting on next MM? (REW-Hi)
- BRAZIL, Rio de Janeiro Radio Tupi ZYH455 2/18 0240 fade-in, carnaval 1280 First Latin to fade in (an hour after U.S. Mainland fades in) (REW-Hi)
- ARGENTINA, Buenos Aires-LS6 In my pervious report, correct station name 1350 to Radio Buenos Aires (REW-Hi)
- BRAZIL, Rio de Janeiro-Radio Bandeirantes ZYJ466 2/18 0300 live car-1360 nival coverage ads for Brazil Roupas, com jeans, camisas..." In the clear. Many other Brazilians, mostly with carnival coverage, not yet IDed on freq.s between 820-1560 (REW-Hi)
- MEXICO, Cd. Guzman,Jal. XELW 2/6 0418 TCs in CST, ads for "Muebleria De la Torre, Gd. Guzman." Ids as "la Estrella, LW" "LW,la Estrella 1510 del Cuadrante, en el 1510 de su radio." Dominant, little KGA. (REW-Hi)

#### THANKS TO THIS REPORTER:

Richard E. Wood PHD-Post Office Box 5074-Hilo, Hawaii 96720 REW-Hi 3 Beverages Using R-1000, R-71A.

#### Christian Broadcasting System-CBS (Kiddokkyo Bangsong-guk)

	Station	Call	Freq	Power	Schodule
Station Name	Location	Letters	KHz	KW	UTC
1. CBS Seoul	Seoul	HLKV	837	50	2000-1700
2. CBS Kwangju	Kwangju	HLCL	999	10	2000-1600
3. CBS Taegu	Taegu	HLKT	1251	10	2000-1505
4. CBS Iri	Iri	HLCM	1314	10	2000-1500
<ol> <li>CBS Pusan</li> </ol>	Pusan	HLKP	1404	10	2000-1600

Address and other information.

- CBS Seoul, C.P.O. Box 2653, Seoul (Mailing Address), 136-46, Yo'nji-dong, Chongno-gu, Seoul. President: Reverend Kim Kwan-Suk. Director of Engineering: Noh Ik-Joong. Announcement: "Yo'ginu'n Kidokkyo Bangsong Imnida, HLKY" or "Kidokkyo Bangsong."
- 2. CBS Kwangju, 3-5, Ku'mnam-ro, 3-ga, Kwangju-shi, Cho'llu-namdo, 500. Director: Yoon Yong-Sang. Announcement: "Yo'gingu'n Kwangju Kidokkyo Bangsong Iminda, HLCL."
- 3. CBS Taegu, 307, Ch'imsan-dong, Puk-ku, Taegu 635. Director: Han Sang-Yong. Announcement: "Yo'ginu'n Taegu Kidokkyo Bangsong Imnida, HLKT."
- 4. CBS Iri, 128-3, Namjung-dong, Iri-shi, Cho'lla-bukdo, 510. Director: Choi Hee-Sup. Anncounement: "Yo'ginu'n Iri Kidokkyo Bangsong Imnida, HLCM."
- CBS Pusan, 608-1, Cho'mp'o-dong, Pusanjin-gu, Pusan
   Cho Byung-Hae. Announcement: "Yo'ginu'n Pusan Kiddokyo Bangsong Imnida, HLKP."

Verification Policy.

CBS Seoul is the Headquarter station. However, all reports to the regional stations should be sent directly to the individual stations. All stations verify by QSL card.

Spelling.

The spelling for the place names is the Modified McCune-Reischauer System. Spelling of personal names is based on individual preference and is not necessarily the Modified Mc-Cune-Reischauer System. The Modified McCune-Reischauer System was officially adopted by the Republic of Korea, Minister of Education in January 1984.

List compiled by Bill Harms.

Information current as of November 17, 1984.

Name:	
Address:	
	Date 15 OCT 1984
Dear Sir;	
	for your report on the reception of station

HL ky on 837 KHz at GMT/KST 18:45-19:00 (date) 14 OCT 19:0.

We take pleasure in advising you that your report is confirmed. Your further reports as well as comments on our

programs will be much appreciated.

Yours truly The Journey



A monthly column of loggings, discussions & information for the 1600 - 1800 kHz range.

Deadline: The last Saturday of the month

```
Craig Healy ...... 66 Cove St ...... Pawtucket, RI ...... 02861.....
oMarch 1985...Loggings:
         NEW HAMPSHIRE Conway 2227 5/1 White Mountain N.F. TIS (Foss) ??? 1/28 unid TIS w/ bits of audio by woman. (Hardester)
1605
1610
1610t ANGUILLA The Valley 0156-0230 2/10 Caribbean Beacon poor w/rel., tent. ID and "Radio A...." ment. (Garcia)
1613 GUATEMALA Rabinal 0610 1/26 RAB good. (Waggoner)
          ??? 0218 11/6 KA83348 (Foss)
1614
         ??? 0103 11/25 0447 (Foss)
1614
          ??? 0220 11/6 KA84028 (Foss)
??? 0504,0508 2/4 KA83771 fair. (Healy)
1615
1618
          ??? 0607 1/26 UBT weak. (Waggoner)
1619
         ??? 0512 2/4 KAB3774 poor. (Healy)
??? 0225 12/10 KAB3776 (Foss)
??? 0146 11/5 KAB3777 (Foss)
1621
1623
1623
          ??? 1/28 Random dots/dashes, nothing understandable. (Hardester)
1624
1628
         ??? 0205 1/23 HSN weak. (Waggoner)
          ??? 1/28 "Pinging" sounds w/o order or pattern. Fair. (Hardester) ??? 0247-0248 2/10 Unid station w/ University of Kentucky basketball
1630
1630
         network stuff. Probably a spur or harmonic. (Garcia)
1630
         ??? 0222 11/6 KA83326 (Foss)
1632
         ??? 0201 11/17 KA83785 (Foss)
??? 0243 11/6 KA83786 (Foss)
1633
1633
          ??? 0218 11/5 P446 (Foss)
         ??? 0240 11/6 0285 (Foss)
1633
          ??? 2238 11/13 M472 (Foss)
??? 2240 11/13 D445 (Foss)
1633
1633
         ??? 0245 12/2 L313 (Foss)
1634
         ??? 0243 12/2 R110 (Foss)
1634
         ??? 0240 11/16 0221 (Foss)
??? 2230 11/13 V382 (Foss)
??? 0238 11/16 K290 (Foss)
1634
1634
1634
         ??? 0238 11/16 G59 (Foss)
1634
          ??? 2207 11/10 F59 (Foss)
1634
          ??? 2210 11/10 I384 (Foss)
??? 0239 10/22 KA80051 (Foss)
1634
1634
        ??? 2215 11/10 B445 (Foss)
1634
1635
          ??? 0521 2/4 L313 and dash. (Healy)
          ??? 2209 11/10 R447 (Foss)
??? 2219 11/10 0183 (Foss)
1635
1635
         ??? 2137 12/19 L447 (Foss)
1635
                                                              THIS SPACE FOR RENT
          ??? 2137 12/19 W182 (Foss)
??? 2137 12/19 L373 (Foss)
1635
1635
          ??? 0214 12/29 B444 (Foss)
1635
         ??? 0214 12/29 F383 (Foss)
1635
          ??? 0234 11/5 KA81192 (Foss)
??? 0231 11/5 KA81184 (Foss)
1636
1636
          ??? 0101 11/25 J314 (Foss)
??? 2218 11/10 V441 (Foss)
1636
1636
          ??? 2221 11/10 R258 (Foss)
??? 2223 11/10 W182 (Foss)
1636
1636
          ??? 0220 12/10 C311 (Foss)
1636
          ??? 0115 1/14 A449 (Foss)
1636
          ??? 0252 11/6 KA81194 (Foss)
??? 2229 12/15 U446 (Foss)
1637
1637
         ??? 2148 11/10 F288 (Foss)
1637
1637
          ??? 2148 11/10 L373 (Foss)
          ??? 2148 11/10 U449 (Foss)
??? 2149 11/10 Z442 (Foss)
1637
1637
          ??? 2150 11/10 F287 (Foss)
1637
          ??? 2151 11/10 N443 (Foss)
1637
          ??? 2154 11/10 0181 (Foss)
??? 2155 11/10 G447 (Foss)
??? 2233 11/13 E284 (Foss)
1637
1637
1637
          ??? 0251 11/6 KA81185 (Foss)
1638
1638
          ??? 0253 11/6 KA83333 (Foss)
          ??? 0153 11/25 S340 (Foss)
1638
1638
          ??? 2241 11/13 I448 (Foss)
         ??? 2241 11/13 L446 (Foss)
1638
         ??? 2240 11/13 0290 (Foss)
1638
```

```
??? 0305 11/6 V311 (Foss)
1638
         ??? 2206 11/10 I55 (Foss)
1638
         ??? 0304 11/6 KA83334 (Foss)
1639
         ??? 2158 11/10 P372 (Foss)
1641
         ??? 2159 11/10 U450 (Foss)
??? 0229 11/6 KA83794 (Foss)
1641
1641
         ??? 0233 12/2 0384 (Foss)
1641
         ??? 0236 12/2 Q450 (Foss)
1641
         ??? 0247 11/16 0448 (Foss)
??? 0248 11/16 Z190 (Foss)
1641
1641
         ??? 0112 1/14 N322 (Foss)
1641
         ??? 0113 1/14 0450 (Foss)
1641
         ??? 0513,0517 1/31 H386 fair (Healy)
??? 0515,0519 1/31 0384 and dash, fair. (oh 384, not zero 384) (Healy)
1642
1642
1642
         ??? 0520 1/31 R372 and dash, fair. (Healy)
         ??? 0142 11/5 NV43 (Foss)
1642
         ??? 0145 11/13 L450 (Foss)
1642
         ??? 2202 11/10 0445 (Foss)
??? 2230 11/10 R280 (Foss)
1642
1642
1642
         ??? 2232 11/10 S190 (Foss)
         ??? 2233 11/10 0316 (Foss)
??? 2237 11/10 D57 (Foss)
1642
1642
         ??? 0123 11/20 J451 (Foss)
1642
         ??? 0039 12/5 U448 (Foss)
??? 0039 12/5 A432 (Foss)
??? 0055 12/16 N56 (Foss)
1642
1642
1642
         ??? 0227 11/6 H374 (Foss)
1642
         ??? 0153 11/5 B383 (Foss)
1642
         ??? 0151 11/5 C321 (Foss)
??? 2203 11/10 Q17 (Foss)
??? 2204 11/10 0442 (Foss)
1643
1643
1643
         ??? 0500,0504 1/31 KA83797 good (Healy)
1644
          ??? 1/28 "Pinging" (like 1630) fair. (Hardester)
??? 1/28 Geiger counter-like sound, no pattern. Poor. (Hardester)
1645
1648
1648
          ??? 0209 11/5 KA83343 (Foss)
          ??? 0207 11/5 KA81193 (Foss)
1648
          ??? 0203 11/5 KA83800 (Foss)
1648
          ??? 0218 12/10 KA81164 (Foss)
 1649
          ??? 2214 11/10 I373 (Foss)
 1650
          ??? 0116 11/20 E448 (Foss)
??? 0117 11/20 D448 (Foss)
??? 0117 11/20 S441 (Foss)
 1650
 1650
 1650
1650 ??? 0118 11/20 R447 (Foss)
          ??? 0120 11/20 M185 (Foss)
 1650
          ??? 2229 12/15 I186 (Foss)
??? 2231 12/15 B381 (Foss)
??? 2232 12/15 X448 (Foss)
 1650
 1650
 1650
 1650
          ??? 0044 11/18 I320 (Foss)
          ??? 2228 12/15 C187 (Foss)
 1652
          ??? 0212 12/6 P446 (Foss)
 1653
          ??? 1/28 KA84075 mixing w/ Loran-type station. (Hardester) ECUADOR Lago Agrio 0646 1/26 LAG weak. (Waggoner)
 1662
 1665
          ??? 0208 11/17 12 (Foss)
??? 1/28 "Pinging" (like 1630) fair. (Hardester)
COLOMBIA Mercaderes 1056 1/7 MER weak. Also 1055 1/21 (Peterson)
COLOMBIA Mercaderes 0600 1/26 MER very good. (Waggoner)
 1679
 1680
 1685
 1685
           ??? 1/28 "Pinging" (like 1630) fair. (Hardester)
 1700
 1714
           ??? 0900 1/26 Cubic Argo (Cowart)
??? 0900 1/26 ET or Cubic Argo (Cowart)
 1716
           ??? 1/28 Loran-A type sound, like 1662. (Hardester)
 1740
           ??? 0900 1/26 Decca HiFix (Cowart)
 1746
           ??? 1/28 Modulated pulses of 1 tone/second. (Hardester) ??? 0900 1/26 Decca HiFix (Cowart)
 1746
 1747
 1748
           ??? 0900 1/26 Decca HiFix (Cowart)
           ??? 1/28 Random modulated pulses. (Hardester)
 1760
 1764.8 ??? 0900 1/26 Cubic Argo (Cowart)
          ??? 1/28 Random modulated pulses. (Hardester)
??? 0900 1/26 Cubic Argo (Cowart)
 1768
 1771
 Credits:
 Russ Foss
                Hiram, ME FRG7700, 650' LW
 Art Peterson Richmond, CA FRG-7, R. West Loop, 300' LW
 Joey Garcia Key West, FL CR-2021, 30' LW
 Daryl Waggoner Harrison, AR R4A, LW
Mike Hardester Modesto, CA R-1000, R. West Loop
 Jack Cowart Jacksonville, FL NRD-515A, Sony AN-1 antenna
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# THE MINI MWDX-3

A Simple, Effective Phasing Unit

Mark Connelly - WALION DX Labs - 05 DEC 1984

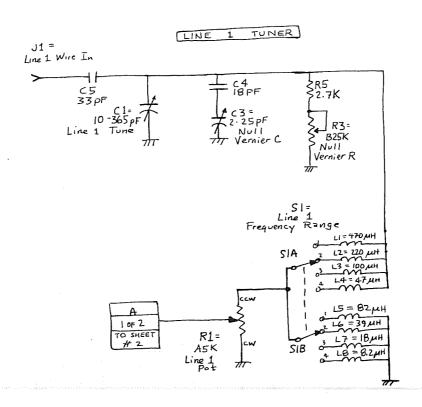
### Introduction

This article describes the construction and use of a one-box antenna phasing unit far superior (in ease of construction and ease of operation) to any of  $m_{\!Y}$  previous MWDX designs published in the DX press.

Although this article may best be appreciated by those who've used phasing units and who've read previous articles on phasing by me and by Hutton, DeFrancesco, Hall-Patch, Herkimer, and others; the article should be of use to anyone who wants to log new DX, possibly better than (or at least, different from) what they've been getting on their loops and simple longwires. The concept of phasing is that signals from two aerials are electrically manipulated (by tuning capacitor adjustment and by selectable transformer-produced phase reversal) so that the dominant-station component of the Wire 1 Tuner output is set to be equal in amplitude and opposite in phase (+/- 180 deg.) from that component on the Wire 2 Tuner output. When the two outputs are combined (usually by means of an RF transformer), cancellation of the dominant station results, thereby permitting reception of co-channel subdominants having a different (nonopposite) phase relationship. Clean reception of formerly-slopped adjacent channels is another benefit. The dominant "station" to be nulled can be a man-made noise source instead of an actual broadcast signal, if such noise is the principal object in the way of desired-signal reception. Phasing systems have been popular with MW BCB international-DX enthusiasts since the '60s; 160-meter hams and longwave DXers have found uses for them, as well. Broadcast-station directional arrays employ a specialised, single-frequency variety of phasing. A loop may also be employed in phasing systems, either against a wire or against another loop. (This is somewhat the concept of commercial radio direction-finders and of Ron Schatz's Loop-Sense-Cardioid-Array scheme.)

A design approach embodied in the Mini-MWDX-3 is a one-box system with available options. The types of options are outlined at the end of this article: most deal with coverage of frequencies such as longwave and tropical-band shortwave. The inductive-coupling option is designed to provide better coupling to some aerials, notably long ones.

It should be noted that phasing of very short (e. g. less than 50'/15 m. at 1 MHz) wires is best left to a modular (3 box) phasing system consisting of two Q-spoiled FET-input active wire tuners driving a phaser output module (POM) box having an amplifier (broadband, or (preferably) tunable) at the output of its balun transformer. For most applications where sufficiently-long wires WILL be available, the one-box approach to phasing is hard to beat. The Mini-MWDX-3 may easily be packed into a suitcase along with a Palomar loop, a couple of 100' rolls of wire, and one of the new synthesised portable receivers for an airline-portable DXpedition setup with maximum "bounce to the ounce". (Operation with portable receivers should be done with the Mini-MWDX-3 amplifier on, so that the unit's output will override stray pickup from the receiver's rod or whip antenna).

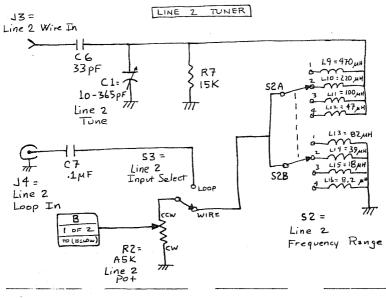


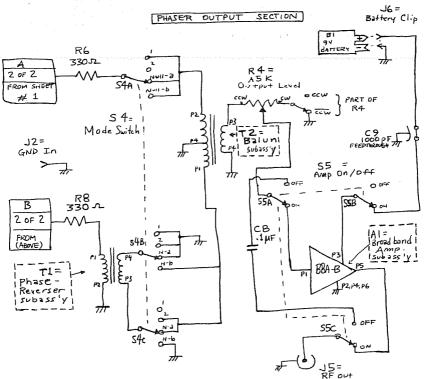
APPROX	CIMATE FI	REQU	ENCY	RANGES
SI (SHEET 1)				
SE (SHEET 2)				
POSITION #	FREQ.	RAN	GE /	KHZ
	480	_	650	
l	700		650	
2	620	-	900	
3	880	-	1300	)
4	1250	_	1700	)

RANGES SHOULD BE SOMEWHAT WIDER THAN THE ABOVE IF SHORT TO MEDIUM LENGTH (UNDER 100M/328 FT) WIRES ARE USED. BEVERAGE USERS MAY FIND THE INDUCTIVE - COUPLING OPTION (OPTION #1) BENEFICIAL IN ENSURING A REASONABLE AMOUNT OF RANGE OVERLAP.

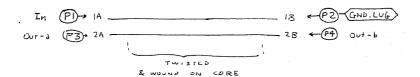
MAIN SCHEMATIC SHEET 2 OF 2

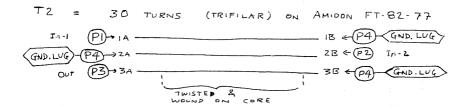
(5 DEC 1984)





TI = 30 TURNS (BIFILAR) ON AMIDON FT-62-77.

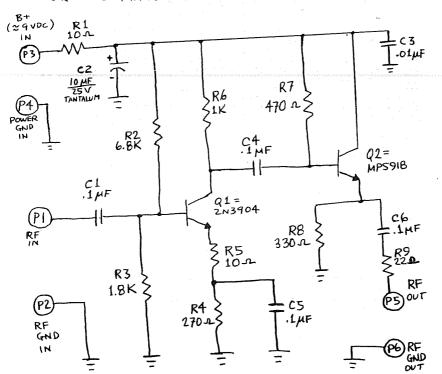




AI = BBA-B BROADBAND AMPLIFIER CARD

NOTE: COMPONENT DESIGNATIONS ON AI ARE A

COMPLETELY SEPARATE ENTITY FROM COMPONENT DESIGNATIONS
ON THE MAIN MINI-MWDX-3 SCHEMATICS.



### The MWDX-3 family of phasing units

The Mini-MWDX-3 is the latest model to evolve from the overall MWDX-3 design philosophy. This design has done away with the cumbersome ungrounded tuning-capacitor subassemblies of the MWDX-1, 2, and 2A. The use of rotor-grounded tuni capacitors in parallel LC tanks eliminates the problem of hand capacitance once and for all. Loose coupling of wire The use of rotor-grounded tuning aerials to the input tuners provides tuning that is predictable and less influenced by wire length. Inductive voltage division is used as a simple means of converting impedance from high (at tank) to medium (coming out of the input tuner). Q-spoiling is incorporated to provide manageable changes in phase angle-per-pF of tuning capacitance shift away from resonance; phase shift-per-kHz frequency change from resonance resonance; phase shirt-per-KHZ frequency change from resonance is reduced by this scheme in such a fashion that, on moderately strong AM signals, both sidebands (on the dominant station) as well as its carrier are adequately suppressed to permit subdominant DX station reception. The loose coupling, inductive division, and Q-spoiling all help to provide ease of construction and use. The other side of the coin, however, is that maximum achievable output level (as a passive phaser) is loss than what can be achieved by tipht-coupling of serial is less than what can be achieved by tight-coupling of aerial to tank and transformer-type tuner-output-impedance transformation. Luckily, gain at the frequencies of interest is cheap. The Mini-MWDX-3 has incorporated a built-in 20 dB broadband amplifier which can be kicked in when wanted stations (left after nulling the "pest" dominant station) are down at the receiver noise floor. The amplifier module can recover all of the gain lost by design simplification and then some. The classic tightly-Coupled approach, on the other hand, costs a lot more when you realise that molded inductors would have to be replaced by a multitude of bulky hand-wound tapped coils on toroids or rods (not to mention the "klugey" ungrounded tuning capacitors).

Neil Kazaross has been using a MWDX-3 family tuner dubbed the "proto(type) MWDX-3"; George Hakiel and Marc DeLorenzo have MWDX-3 units, and Robert LaMorgese has an MWDX-3P (passive; used in conjunction with external APT-style tunable output amplifier). The main difference between these units and the Mini-MWDX-3 is that the non-Mini units are housed in a 18"X6"X3.5" chassis box instead of the 7"X5"X3" box used by the subject of this article. Electrical differences are minimal (slight differences in pot scheme, inductive coupling option to Mini-MWDX-3 is standard on MWDX-3, component nomenclatures may differ, etc.). The DXers involved seem to be satisfied with their units; Neil Kazaross has gotten MWDX on his phased Beverages that could not be heard with a loop or with the Beverages used without phasing.

# Mini-MWDX-3 Assembly

### Outline

- Read article thoroughly. Make an extra copy to be kept at the workbench (to be marked-up, checked-off, etc.)
- 2. Ensure that you have necessary tools: drill bits (per hole list), drill or drill press, diagonal cutters (large & small), wire stripper, needle-nose pliers, slip-joint pliers, screwdriver sets (slotted & Phillips), nutdriver set, soldering pencil (~25 W), ohmmeter (to check switches & pots), jeweller's screwdriver set (for knob setscrews), metal file, accurate ruler (preferably steel) or micrometer/caliper, sharply-pointed scriber/awl or centrepunch, and bench vise.

- Purchase all necessary parts (per Level 1 & 2 parts lists).
   When all parts are acquired, organise parts & tools in a spacious, well-lighted work area.
- 4. If substitute mountable components are used, adjust hole list as required. Accurately mark chassis box hole locations (per hole list) with scriber. Drill each hole initially with a .113" bit; then drill holes listed as larger with the actual specified size bit. Holes larger than .25" should be drilled to .25" as an interim step to prevent jumping of the subsequently-used larger bit.
- Assemble ground hardware to the chassis as follows: (Locations per hole list)

G2 = head of 4-40x.25 screw, 4-40 nut on screw shaft
\$4 solder lug

- 6. Mount battery holder J6 at right side holes 5 & 6. The holder is mounted on the outside of the box so that its terminals point downward. At each hole, a 4-40X.25" screw is inserted through the battery holder a the chassis so that its head is outside and its threads are inside the box. On the inside threads, place a \$4 split lockwasher (against the chassis); then secure the washer with a 4-40 nut. Torque tight.
- 7. Mount Cl inside the box so that its shaft protrudes out through top side hole 2. Mounting hardware (consisting of 6-32X.25" screw, a #6 split lockwasher between screw head & flat washer, and a #6 flat washer between split washer & chassis external surface) should be installed at top side holes 1, 3, & 4 once the capacitors threaded holes have been aligned to mate with these three holes.
- Mount C2 inside the box so that its shaft protrudes out through top side hole 21 and its threaded holes line up with top side holes 20, 22, & 23. Use hardware (of the same type used to mount C1) to mount C2 to the chassis at top side holes 20, 22, & 23.
- 9. Mount the following components with the hardware supplied with the components: A1, C3, C9, J1, J2, J3, J4, J5, R1, R2, R3, R4, S1, S2, S3, S4, S5, T1, T2. It's probably a good idea to apply a few drops of Loctite to C3's threads as it is only mounted at one location and might slip after repeated adjustment. "Loctiting" the threads of J1 through J5 is also recommended. Orient A1, T1, and T2 by consulting the drawings supplied with these subassemblies in conjunction with the Mini-WWDX-3 hole list. These subassemblies are, of course, mounted inside the chassis box: spacers should contact inside chassis surface; mounting screw heads & lockwashers are on the outside of the box.
- 10. Assemble molded inductors onto S1 & S2 in accordance with schematic and wiring/component connection list. Keep leads as short as possible.
- Perform all operations on wiring/component connection list (other than those of assembly step 10). The schematic and the parts list should be kept handy for reference.
   Use of an ohmmeter is suggested to establish pin orientation on pots and switches.
- 12. Blow all solder splash and loose wire fragments out of the chassis box with high-pressure air, if available. Clean flux from solder joints with alcohol or another suitable solvent.
- Inspect finished unit for proper connections, correct component values, and quality of workmanship.

14. Install knobs (refer to Level 1 parts list). Suggested orientations:

Knob pointer line position (control fully CCW)	Numbered knobs (on S1, S2, S4)
	should be set to
Cl 9 o'clock	approx. 1.3 with
C2 9 o'clock	control fully CCW.
C3 9 o'clock = fully meshed	Numbered knob on
Rl 8 o'clock	S5 should be set
R2 8 o'clock	to 1.1 with S5 set
R3 8 o'clock	fully CCW (off).
PA 9 of ollock	

- 15. Label controls & jacks.
- 16. Proceed to Operation Instructions and, hopefully,
   to some good DX!

Parts List for Mini-MWDX-3 phasing unit

NOTES: Prices (current DEC 1984) are subject to change. Fixed resistor prices are per pack of 5 pieces.

Level 1 list = electrical & major mechanical components

Level 2 list = small hardware (total estimated price
given instead of item-by-item listings)

RS = Radio Shack me = Mark Connelly - 30 William Road - Billerica, MA 01866

For addresses of other suppliers, consult recent Supplier List in DX News & DX Monitor and consult the Electronic Design Gold Book (at most technical college libraries).

Level 1

Component Designation	Description	Vendor	Stock #	Approx. Price \$
Al	broadband amp. subass'y	me	BBA-B	12.00
Bl	9V battery	RS	23-553	1.99
Cl	10-365 pF var. capacitor	Mouser	524-A1-227	12.00
C2	10-365 pF var. capacitor	Mouser	524-A1-227	12.00
C3	2-25 pF var. capacitor	Mouser	530-189-0569-1	
C4	18 pF mica capacitor	Mouser	586-DMØ18	0.40
C5	33 pF mica capacitor	Mouser		0.40
C6	33 pF mica capacitor	Mouser	586-DMØ33	0.40
C7	.1 uF monolithic cap.	Digi-Key	P4525	Ø.18
C8	.1 uF monolithic cap.	Digi-Key	P4525	Ø.18
C9	1000 pF feedthrough cap.	Newark	19F2861	3.18
Jl	banana jack (red)	RS	274-662	1.39
J2	banana jack (black)	RS	274-662	1.39
J3	banana jack (red)	RS	274-662	1.39
J4	BNC jack	RS	278-105	1.69
J5	BNC jack	RS	278-105	1.69
J6	battery holder	Acme (NJ)		1.50
Ll	470 uH molded inductor	Mouser	43LS474	Ø.39
L2	220 uH molded inductor	Mouser	43LS224	Ø.39
L3	100 uH molded inductor	Mouser	43LS1Ø4	Ø.39
L4	47 uH molded inductor	Mouser	43LS475	Ø.39
L5	82 uH molded inductor	Mouser	43LS825	Ø.39
L6	39 uH molded inductor	Mouser	43LS395	Ø.39
L7	18 uH molded inductor	Mouser	43 LS1 85	Ø.39
L8	8.2 uH molded inductor	Mouser	43LQ826	Ø.38

# Parts List for Mini-MWDX-3 phasing unit -- continued

Level 1 -- continued

Component Designation	Description	Vendor	Stock #	Approx. Price \$
	470 uH molded inductor 220 uH molded inductor 100 uH molded inductor 47 uH molded inductor 82 uH molded inductor 82 uH molded inductor 83 uH molded inductor 18 uH molded inductor 18 uH molded inductor 5K audio-taper pot 5K audio-taper pot 5K audio-taper pot 25K linear-taper pot 25K linear-taper pot 27K resistor 330 ohm resistor 15K resistor 330 ohm resistor 15K resistor 3-pole, 4-pos. switch 3-pole, 4-pos. switch 3-pole, 4-pos. switch 5PDT on/on toggle switch 5PDT on/on toggle switch 6-pole, 2-pos. switch 6-pole, 2-pos. switch bhase-reversing xfmr. balun xfmr. subass'y knob for C2 knobs for S1,S2 knobs for S4,S5 knob for C3 knob for C1	Mouser RS	271-1315 271-1337 271-1315 10WW034 10WW034 275-326 10WW034 275-1386 T1 T2 45KN017 45KN017 274-413 (pk 45KN013	0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.99 0.9
	knob for R2	Mouser	45KNØ13	Ø.42 Ø.42
	knob for R3	Mouser	45KNØ13 45KNØ13	0.42 0.42
	knob for R4	Mouser Mouser	537-TF-782	4.33
	chassis box (7"X5"X3")	nouser	221-765	4.33

### Level 2 -- Small Hardware

NOTE: Mounting hardware is supplied with the following Level 1 components: A1, C3, C9, J1, J2, J3, J4, J5, R1, R2, R3, R4, S1, S2, S3, S4, S5, T1, T2, knobs, and chassis box.

The builder must provide hardware as follows:

Components(Qty.) where used	Total Qty.	Description	Vendor	Stock #
C1(3), C2(3)	6	6-32X.25" screw	Mouser	572-01888
C1(3), C2(3)	6	#6 flat washer	Mouser	565-1150
C1(3), C2(3)	6	#6 split lockwasher	Mouser	572-00650
J6 (2)	2	#4 split lockwasher	Mouser	572-00649
J6(2),G1(1),G2(1)	4	4-40x.25" screw	Mouser	572-01880
J6(2),G1(1),G2(1)	4	4-40 nut	Mouser	572-00484
G1(1),G2(1)	2	#4 solder lug	Mouser	565-1416-4
throughout box as	req'd .	wire, #22 insulated	RS	278-1294
throughout box as	req'd	wire, #24 bare buss	RS	278-1341
throughout box as	reg'd	solder	RS	64-006

Mechanical hardware stock numbers sometimes represent packs with a greater number of pieces than required. Cost of Level 2 items actually used to construct one Mini-MWDX-3 is approximately \$ 6.

Based upon the foregoing Level 1 & Level 2 parts listings, the estimated total cost of components required to build the Mini-MWDX-3 phasing unit is in the vicinity of \$ 110 (US) as of DEC '84.

# Hole List for Mini-MWDX-3 Phasing Unit

BOX USED = 7" X 5" X 3" aluminium (Mouser 537-TF-782, or equiv.)

- X = horizontal distance in inches from the vertical centreline (VCL) on the side observed. Negative values of X are left of VCL; positive values of X are right of VCL.
- ${\tt Y} = {\tt vertical}$  distance in inches from the bottom horizontal edge of the side observed.
- D = hole diameter, inches.

# \*\*\*\*\*\*\*\*\*\*

### LEFT SIDE

Hole	Comp. Desig.	Description X	Y 	D
1 2 3 4 5 6 7	J1 J2 J3 G1 S3 S3	Wire 1 In, banana jack -0.75 Earth GND In, ban. jack 0.0 Wire 2 In, banana jack 0.75 GND hardware (int. lug) 0.0 Line 2 Input Select, shaft 1.125 Line 2 Input Select, tab 1.375 Loop In, BNC 1.5	0.5 0.5 0.5 1.125 1.125 1.125	0.3125 0.3125 9.3125 9.113 0.25 0.113 0.375

### TOP SIDE

Hole	Comp. Desig.	Description	<b>X</b>	¥ •	D
1 2 3 4 5 6 7 8	C1 C1 C1 C1 S1 S1 R1 R1	Mode Switch - shaft	-2.78125 -2.25 -2.25 -1.71875 -0.5 -0.5 0.625 0.9375 2.25		0.14 0.5 0.14 0.14 0.375 0.14 0.14 0.3125 0.375
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	S4 C3 R3 R4 R4 A1 A1 A1 C2 C2 C2 S2	Output Pot - shart BBA-B Amp hardware 2 BBA-B Amp hardware 1 BBA-B Amp hardware 4 BBA-B Amp hardware 3 Line 2 Tune - screw 1 Line 2 Tune - screw 2 Line 2 Tune - screw 2 Line 2 Tune - screw 3 Line 2 Freq.Range - shaft Line 2 Freq.Range - shaft	-1.0 -0.1875 0.125 0.6875 1.0 2.0 3.0 2.0 3.0 -2.78125 -2.78125 -2.25 -1.71875 -0.5	2.5 2.5 2.5 2.5 3.0 3.0 2.0 2.0 1.5 0.96 87 5	0.28 0.14 0.25 0.14 0.14 0.113 0.113 0.113 0.113 0.114
26 27 28 29	R2 R2 S5 S5		0.625 0.9375 2.25 2.25	1.125 1.125 1.0 0.5	0.14 0.3125 0.375 0.14

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### RIGHT SIDE

Hole	Comp. Desig.	Description X	Y	D
1	Tl	priase-rev. Maranare a	1.875 1.875	Ø.113 Ø.113
2	Tl	phase iev. haranaro	0.375	0.113
3	Tl	Diidae Lev. Haranare .	0.375	0.113
4	Tl	phase-rev hardware 3 -1.0		
5	J6	battery holder - screw 1 -0.48438	2.75	0.113
6	J6	battery holder - screw 2 0.48438	1.875	0.113
7	C9	B+ in feedthrough cap. 0.0	1.1875	0.188
8	G2	GND hardware (ext. lug) 0.75	1.1875	0.113
9	J5	RF out to RX., BNC 0.0	Ø.5	Ø.375
10	T2	balun - hardware 2 1.0	1.875	0.113
		balun - hardware 1 2.0	1.875	0.113
11	T2	Darui - Maraware -	0.375	0.113
12	T2	Darum Mardware:	0.375	0.113
13	T2	balun - hardware 3 2.0	Đ.3/3	D. T.T.

# Wiring / Component Connections for standard Mini-MWDX-3 phasing unit

\*\*\*\*\*\*\*\*\*\*\*

NOTES: W = insulated wire (approx. #22 AWG)

BW = bare solid (buss) wire
TP = twisted-pair of insulated wires

Cl stator pins closest to J1 will be referred to as side A. C2 stator pins closest to J3 will be referred to as side A.

\*\*\*\*\*\*\*\*\*\*\*

Use "spaghetti" (plastic insulation) on all component leads longer than 0.5".

#### OUTSIDE BOX:

From	To white which is the residence of the contract of the contrac	Description
	C9 external pin G2 external lug	1" W 1.5" W

#### INSIDE BOX:

From	То	Description
J4 J3 C2 side A stator 1 C2 side B stator 1 C2 side B stator 1 S2A pin 1 S2A pin 2 S2A pin 3 S2A pin 4 jct. L13/L14/L15/L16 jct. L13/L14/L15/L16 S2B pin 1 S2B pin 2 S2B pin 3 S2B pin 4 S2A arm S2A arm J2 J2 J2 S3 arm	S3 "Loop" pin C2 side A stator 1 C2 side A stator 2 C2 side B stator 2 jct. L9/L10/L11/L12 jct. L13/L14/L15/L16 jct. L13/C14/L15/L16 jct. C13/C14/L15/L16 jct. C13/C14/C14/L15/L16 jct. C13/C14/C14/L15/L16 jct. C13/C14/C14/L15/L16 jct. C13/C14/L15/C14/L15/L16 jct. C13/C14/C14/L15/C14	C7 C6 1" BW 1" BW 3" W L9 L10 L11 L12 R7 3" W L13 L14 L15 L16 0.5" BW 4" W 1.5" BW 6" W (TP) 6" W (TP)
DJ GLM	-	

From	TO  R3 CCW pin C3 rotor R1 CW pin R3 CW pin S1A arm S1B arm R3 arm jct. L1/L2/L3/L4 jct. L1/L2/L3/L4 jct. L1/L2/L3/L4 jct. L5/L6/L7/L8 jct. L5	Description
R2 CW pin	R3 CCW pin	4 " W
R3 CCW nin	C3 rotor	1.5" BW
R3 CCW pin	R1 CW pin	4" W
R3 arm	R3 CW pin	0.5" BW
RI CCW pin	SlA arm	3" W
SlA arm	SlB arm	Ø.5" BW
ict. L5/L6/L7/L8	R3 arm	R5 + 2" W
SlA pin l	jct. L1/L2/L3/L4	Ll
SlA pin 2	jct. L1/L2/L3/L4	L2
SlA pin 3	jct. L1/L2/L3/L4	L3
SlA pin 4	jct. L1/L2/L3/L4	L4
SlB pin l	jct. L5/L6/L7/L8	L5
SlB pin 2	jct. L5/L6/L7/L8	L6
SlB pin 3	jct. L5/L6/L7/L8	L7
SlB pin 4	jct. L5/L6/L7/L8	L8
Cl side A stator l	Cl side A stator 2	1" BW
Cl side B stator l	Cl side B stator 2	I BW
Jl	Cl side A stator I	C5
Cl side B stator l	C3 stator	C4
Cl side B stator l	jct. L1/L2/L3/L4	3.5" W
R2 arm	Tl "In" pin (P1)	R8 + 3" W
Rl arm	S4A arm	R6 + 3" W
Tl "Out a" pin (P3)	S4C arm	4" W
Tl "Out b" pin (P4)	S4B arm	5" W
S4B "1" pin	S4B "2" pin	9.5" BW
S4B "2" pin	S4B "Null-a" pin	0.5 BW
S4B "l" pin	S4C "Null-b" pin	2.5 W
S4C "Null-b" pin	T2 ground 1ug	2 m
T2 "In 2" pin (P2)	S4A "NULL-D" pin	0 E8 DW
SAA "Null-a" pin	S4A "Null-D" pin	אם כ.ש זו או
SAA "1" pin	S4A "NULL-a" pin	1 m
SAB "Null-b" pin	S4C "Z" D1n	0 64 55
S4C "2" pin	mo wr le min (D1)	1 5 W
S4C "Null-a" pin	TZ "IN I pin (Pi)	A <sup>H</sup> W
T2 "Out" pin (P3)	R4 COW pin	1 5" W
R4 CW pin	R4 SWITCH Side HI COM pin	1 * RW
Al pin P2	CEN arm	3" W
K4 alm	SSC "off" nin	C8
CEX "on" pin	Al nin Pl	3" W
CED SYM	ล้า ก็เก๋ คิวิ	2* W
CSB #on# nin	C9 internal lead	3 " W
CEC arm	J5	3 " W
SSC Wong nin	Al pin P5	2" W
DOC ON PAN	£	
****	******	****

"Mini-MWDX-3" Phasing Unit Operation

# Case 1: Two-Wire Phasing

# 1.0 Initialise Controls

- 1.1 Set Cl, C2, C3, & R3 to midrange (pointers at 12 o'clock).
- 1.2 Set R1, R2, R4 to fully CCW (pointers at approx. 8 o'clock).
- 1.3 S1, S2, & S4 will be set in sections 2.0 & 3.0.
- 1.4 Set S3 to Wire and set S5 to Amplifier Off.
- 1.5 Connect wire antenna #1 to J1, earth ground to J2, wire antenna #2 to J3, receiver to J5, and a 9-volt battery to J6. (No connection to J4) Wires used should be of similar length; minimum suggested length = 50 ft./15 m.

- 2.0 Line 1 Tune
- 2.1 Set S4 to 1.
- 2.2 Set S1 to position with strongest wanted-frequency signal, or set S1 according to "look-up table".
- 2.3 Adjust Cl for maximum signal at frequency of operation. If the peak is near the CCW (fully meshed) position of the Cl knob, set Sl to the next CCW position; then repeak Cl. If the peak is near the CW (fully open) position of the Cl knob, set Sl to the next CW position; then repeak Cl.
- 3.0 Line 2 Tune
- 3.1 Set S4 to 2.
- 3.2 Set S2 to position with strongest wanted-frequency signal, or set S2 according to "look-up table".
- 3.3 Adjust C2 for maximum signal at frequency of operation. If the peak is near the CCW (fully meshed) position of the C2 knob, set S2 to the next CCW position; then repeak C2. If the peak is near the CW (fully open) position of the C2 knob, set S2 to the next CW position; then repeak C2.

### 4.0 Equalise Levels

- 4.1 Switch S4 between 1 and 2; note (on S-meter or audibly) which S4 position yields the stronger signal from the STATION TO BE NULLED (hereafter to be defined as the "pest" station).
- 4.2 If S4 position 1 yielded a stronger pest level, adjust R1 until the S4 position 1 & position 2 pest station strengths are approximately equal.
- 4.3 If S4 position 2 yielded a stronger pest level, adjust R2 until the S4 position 1 & position 2 pest station strengths are approximately equal.

# 5.0 Initiate Nulling

- 5.1 Switch S4 between Null-a & Null-b positions. Leave S4 on the position which offers the lower level of pest signal / greater evidence of subdominant stations.
- 5.2 If you had used R2 (step 4.3) or had used neither R1 or R2 in section 4.0, tweak C1 to get a "dip" (null of pest).

  Leave C1 at dip point & fine-tune dip further by successive adjustments of R2 & C1. Then tweak C2 for any additional further nulling.
- 5.3 If you had used Rl (step 4.2), tweak C2 to get a dip.
  Leave C2 at dip point & fine-tune dip further by successive
  adjustments of Rl & C2. Then tweak Cl for any additional
  further nulling.

# 6.0 Finalise Nulling

6.1 Use Null Vernier controls C3 & R3 to obtain as complete a pest-null as possible.

# 7.0 Amplification

- 7.1 Adjust R4 to fully CW (minimum output).
- 7.2 Set S5 to Amplifier On.
- 7.3 Turn R4 gradually CCW to obtain maximum signal at operating frequency, consistent with no spurious signal products from strong off-channel stations. In most areas, R4 may be set to fully CCW (maximum output).
- 7.4 If null is partially lost when amplification is applied (an unlikely occurence with a shielded receiver), re-iteration of steps 5.2, 5.3, and 6.1 should re-establish the null.

\*\*\*\*\*\*\*\*\*\*

## Case 2: Wire vs. Loop Phasing

### 1.0 Initialise Controls

- 1.1 Set Cl, C3, & R3 to midrange (pointers at 12 o'clock).
- 1.2 Set R1, R2, R4 to fully COW (pointers at approx. 8 o'clock).
- 1.3 Sl & S4 will be set in subsequent sections.
- 1.4 Set S3 to Loop and set S5 to Amplifier Off.
- 1.5 C2 and S2 are not used; their positions are irrelevant.
- 1.6 Connect wire antenna (50 ft. / 15 m. minimum length) to J1, earth ground to J2, loop amp. output (coax. cable) to J4, receiver to J5, and a 9-volt battery to J6. (No connection to J3)
- 1.7 NOTE: Loop to be used should have a "Q-spoiling" resistor (suggested value = 15K) across its main L-C tank. This resistor should be in series with a toggle switch so that the loop may be used in its normal high-Q state during non-phasing applications.
- 2.0 Line 1 Tune
- 2.1 Set S4 to 1.
- 2.2 Set S1 to position with strongest wanted-frequency signal, or set S1 according to "look-up table".
- 2.3 Adjust C1 for maximum signal at operating frequency.
  If the peak is near the CCW (fully meshed) position of
  the C1 knob, set S1 to the next CCW position; then repeak C1.
  If the peak is near the CW (fully open) position of
  the C1 knob, set S1 to the next CW position; then repeak C1.
- 3.0 Line 2 Tune
- 3.1 Set S4 to 2.
- 3.2 Turn loop power on; position loop for direction of desired DX stations. Switch Loop "Q-switch" (see section 1.7) to High Q (e. g. open).
- 3.3 Adjust the loop tuning capacitor for maximum signal at the frequency of operation.
- 3.4 Set loop Q-switch to Low-Q (15K loop tank shunt).

### 4.0 Equalise Levels

- 4.1 Switch S4 between 1 and 2; note (on S-meter or audibly) which
  S4 position yields the stronger signal from the STATION TO BE
  NULLED ("pest" station).
- 4.2 If S4 position 1 yielded a stronger pest level, adjust R1 until the S4 position 1 & position 2 pest station strengths are approximately equal.
- 4.3 If S4 position 2 yielded a stronger pest level, adjust R2 until the S4 position 1 & position 2 pest station strengths are approximately equal.

### 5.0 Initiate Nulling

- 5.1 Switch S4 between Null-a & Null-b positions. Leave S4 on the position which offers the lower level of pest signal / greater evidence of subdominant stations.
- 5.2 If you had used R2 (step 4.3) or had used neither R1 or R2 in section 4.0, tweak C1 to get a "dip" (null of pest).

  Leave C1 at dip point & fine-tune dip further by successive adjustments of R2 & C1. Then tweak the loop tuning capacitor for any additional further nulling.
- 5.3 If you had used Rl (step 4.2), tweak the loop tuning capacitor to get a dip.

  Leave the loop cap. at dip point & fine-tune dip further by successive adjustments of Rl & the loop tuning cap.

  Then tweak Cl for any additional further nulling.
- 6.0 Finalise Nulling
- 6.1 Use Null Vernier controls C3 & R3 to obtain as complete a pest-null as possible.
- 6.2 Slight physical re-positioning of the loop may assist in establishing the final null.

# 7.0 Amplification

- 7.1 Adjust R4 to fully CW (minimum output).
- 7.2 Set S5 to Amplifier On.
- 7.3 Turn R4 gradually CCW to obtain maximum signal at operating frequency, consistent with no spurious signal products from strong off-channel stations. In most areas, R4 may be set to fully CCW (maximum output).
- 7.4 If null is partially lost when amplification is applied (an unlikely occurence with a shielded receiver), re-iteration of steps 5.2, 5.3, 6.1, and 6.2 should re-establish the null.

# Model "Mini-MWDX-3P" Passive Phaser

This is a simplified version of the Mini-MWDX-3 having no amplifier. It is intended to be used with an external tunable or broadband amplifier, or (with no external amplification) directly to the input of a sensitive receiver.

The following Mini-MWDX-3 components are deleted: Al, C9, J6, R4, S5, and associated hardware.

C8 is then routed from the T2 balun output to RF-out jack J5.

Top side holes 14 through 19, 28, & 29 need not be drilled; similarly, delete right side holes 5, 6, & 7. Adjust all other documentation in similar fashion.

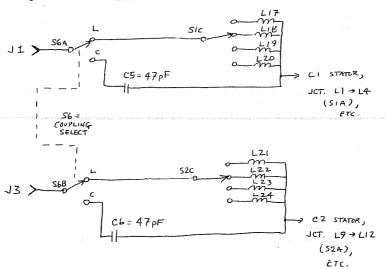
### Options for Mini-MWDX-3 Phasing Unit

### 1. Inductive Coupling

This option is intended to improve tuner operation with longer aerials whose reactance may be inductive. It entails the addition of a switch S6 (DPDT on/on toggle) at left side loci (-1.5, 1.0,  $\emptyset$ .25 = shaft; -1.5, 1.25,  $\emptyset$ .113 = tab); the addition of 4 inductors to S1 (designated L17 through L20) and 4 inductors to S2 (designated L21 through L24); and increasing C5 & C6 to 47 pF. Coil values are as follows:

	Longwave	Medium Wave	Tropical Bands
	(Opt. 2)	(Standard)	(Opt. 3)
L17, L21	18000	1800	120
L18, L22	8200	829	56
L19, L23 L20, L24	3900 1800 (INDU	390 180 CTANCE i	27 12 n u H )

Option 1 schematic:



### 2. Longwave coverage instead of MW

A phasing unit capable of 140-600 kHz operation is the result of this modification. J. W. Miller F-87-1 cores are used instead of the Amidon FT-82-77 cores on T1 & T2. Coils on S1 & S2 are changed to the following values (uH):

Ll,	L9	4700	L5, L13	82Ø
L2,	Llø	2200	L6, L14	3 90
L3,	Lll	1000	L7, L15	180
L4,	L12	470	L8, L16	82

### 3. Tropical-Band coverage instead of MW

A phasing unit capable of 1600-6400 kHz operation is the result of this modification. Coils on S1 & S2 are changed

to the following values (uH):

Ll,	L9	33	L5,	L13	5.6
L2,	LlØ	15	L6,	Ll 4	2.7
L3,	Lll	6.8	L7,	L15	1.2
L4,	L12	3.3	L8,	L16	0.68

### 4. Extended Range coverage (6-position S1 & S2)

S1 & S2 are changed to 6-position 2-pole rotary switches. This cannot be combined with options 1, 2, or 3. Coils are changed in accordance with the following tables:

Option 4A: 140-300; 480-1700 kHz

Sl	S2	uН	S1	<b>52</b>	uН
Ll	L13	4700	L7	L1 9	820
L2	Ll 4	2200	L8	L2Ø	3 90
L3	L1 5	470	L9	L21	82
L4	L16	220	L10	L22	39
L5	L17	100	L11	L23	18
L6	L18	47	L12	L24	8.2

Option 4B: 140-1800 kHz

Sl	S2	uН	Sl	S2	uН
_					
L1	L13	4700	L7	L1 9	820
L2	Ll 4	1800	L8	L20	330
L3	L15	680	L9	L21	120
L4	L16	270	LlØ	L22	47
L5	L17	100	L11	L23	18
L6	L18	39	L12	L24	6.8

There is a slightly greater chance that ranges may not meet when long aerials are used if option 4B is used instead of option 4A.

Option 4C: 500-6400 kHz

(Use external 33 pF capacitor in series with each antenna wire if frequency ranges do not meet.)

sl	S2	uН		S1	S2	uН
		*******				
L1 L2 L3 L4 L5 L6	L13 L14 L15 L16 L17 L18	390 150 56 22 8.2 3.3		L7 L8 L9 L10 L11 L12	L19 L20 L21 L22 L23 L24	68 27 10 3.9 1.5 0.56
Option 4	schemat	tic:	<u>L</u>			L7
JI >-		SIA STAIDR , ETC.		TO R	51B	
J3 >-		SZA O STATOK 2, ETC.	L13 0-M L14 W-M L15 0-M L16 0-M L17 0-M L17 0-M L18	S TD S	2B -0	L19 0 - m L21 0 - m L21 0 - m L22 0 - m L23 0 - m L24 0 - m

### 5. Alternative Potentiometer Configuration

In this option, the main pots R1 & R2 "skew the Q" as well as the level. Smoother null adjustments, in some circumstances, may result. This option is included here for the experimentally-inclined. In reading the following description, refer to the standard Mini-MWDX-3 schematic. The term "B25K" will be used hereinafter to mean "0 to 25 kilohm linear taper potentiometer".

- (a) Change R6 to 270 ohm.
- (b) Remove existing Rl pot.
- (c) Connect side of R6 (that had gone to former R1 arm) to S1B arm.
- (d) Remove connection between other side of R6 and S4A arm.
- (e) Remove existing R2 pot.
- (f) Connect side of R8 (that had gone to former R2 arm) to S3 arm.
- (g) Remove R3 pot and R5 (2.7K).
- (h) Remove R7 (15K).
- (i) Install B25K (to be designated Rl) in former Rl mechanical chassis location.
- (j) Install B25K (to be designated R2) in former R2 mechanical chassis location.
- (k) Install 100 ohm linear pot (to be designated R3) in former R3 mechanical chassis location.
- (1) Connect arm & CCW pin of new R1 to S1A arm.
- (m) Connect Ow pin of new Rl to chassis ground (e. g. C3 rotor lug).
- (n) Connect arm & CCW pin of new R2 to S2A arm.
- (o) Connect CW pin of new R2 to chassis ground (e. g. C3 rotor lug).
- (p) Connect arm & CCW pin of new R3 to free end of R6 (from step d).
- (g) Connect CW pin of new R3 to S4A arm.
- (r) Replace 15K fixed Q-spoiling resistor on loop antenna with a B25K pot. You'll still want to be able to switch the pot out for non-phasing, high-Q loop applications.

Procedurally, the only change to the operation notes is that in loop vs. wire phasing, the pot installed on the loop is to be used instead of R2.

END

#### IRCA REPRINT LIST (No. PB-2)

Quite a few articles have appeared in <u>DX Monitor</u> since the club started in 1964. They offer a wide variety of information on broadcast band DXing. This is the list of reprints and other items which are currently available. Numbers in parenthesis are the total number of pages contained in the reprint. Designations in parenthesis to the descriptions are other IRCA publications in which the reprint appears (or was taken from). Descriptions of these other IRCA publications appear at the end of the list.

#### ANTENNAS

- Al <u>Construction of a Directional Spiral Loop Antenna</u> (1) Dallas John/Keith Birlingmair.

  Construction details for a simple inexpensive loop antenna. 9/73 (NMP/T2)
- A2 Construction of a "Box" Loop Antenna (2). Plans for a large unamplified four foot box loop. 3/69
- A3 <u>DCL Construction Plans</u> (1) Dave Fischer. Schematic for a Direct Coupled Loop Antenna. Some receiver modification required. 1/70
- A4 <u>Roll Your Own</u> (1) Dave Fischer. Hints on the construction of a simple two-foot box loop antenna. 12/69
- A5 The Loop-Sensor Cardioid Array (LSCA) (1) Ron Schatz. Introductory thoughts about combining signals from a loop and a longwire or vertical, which can produce a heart-shaped pattern. See A6, A7 and A18. 5/71
- A6 Some Comments on the Loop-Sensor Cardioid Array (2) Gordon Nelson. Discusses some shortcomings of the theory described in A5. 8/71
- A7 The Loop-Sensor Cardioid Array (7) Ron Schatz. In depth description of the LSCA, with construction hints and examples of reception. See A5. 9/73
- A8 Two-Foot DCL Plans (3) Ralph Sanserino/Nick Hall-Patch. Updated construction plans for a two-foot box loop and pre-amplifier, the "Sanserino Loop". Very well done. 10/80
- A9 The Shielded Ferrite Loop: Principles and Practice (4) Joe Worcester. Theoretical description of a Ferrite rod loop antenna, used by many DXers because of its small size. See A10 for construction details, also A31. 2/70
- AlO <u>How to Build the SPACE MAGNET Shielded Ferrite Loop</u> (6) Joe Worcester. Very thorough plans for constructing the antenna described in A9 (SM-1/2). Includes photo. 1/71
- All <u>The Super Signal Snatcher</u> (4) Dave Fischer. Theory on the set up and operation of a Beverage antenna (a very long wire), with tables and graphs. See Al5, Al6, Al9, A23, A42 and A46. 12/72
- Al2 <u>Using Two Loop Antennas to Generate Asymetrical Receiving Patterns</u> (1) Mike Levintow.

  Describes how the simultaneous use of two loop antennas can distort the pattern of a single antenna, possibly nulling out some stations otherwise unnullable. 12/73
- Al3 The Wedge (3) Charles Wolff. Detailed plans on a space saving wedge-shaped air-core loop. Includes tuning instructions and base construction. 11/75
- A15 NEBE (3) Dave Fischer. Describes the construction and results of a Beverage antenna DXpedition in the middle of Nebraska. 3/75
- Al6 Report on the Beverage Antenna DXpedition (1) Don Kenney. Describes a DXpedition to the Mojave Desert using two Beverage antennas, one 2800'/850m, the other 6000'/1830m. Results are discussed. See All. 9/72
- Al7 <u>Loops for the Barlow Wadley, (or anything else)</u> (1) Grant Manning/Ralph Sanserino.

  Directions for modifying a XCR-30 so it can be used with a ferrite rod antenna. Also includes two schematics for single ended FET preamplifiers. 8/75
- Al8 LSCA-2 (4) Ron Schatz. Construction plans for an updated version of the LSCA (described in A7) which is easier to build and use. 3/76
- Al9 Some Thoughts on Beverages (1) H. John Clements. An experienced Beverage user gives some hints to potential Beverage antenna builders. See All. 4/78
- A20 4 Commercially Available Ferrite Loops (1) Michael Sapp. Author compares the performance of the SM-2, MW-1, DA-5/7 and Palomar ferrite core antennas. Several areas of concern to the DXer are addressed, and each antenna is rated. 6/78 (T2)
- A21 Amplifiers/Tuners for Longwires (1) Brian Sherwood. Two circuits for amplifying the signal from a coupled longwire to a receiver. See A27. 1/79
- A22 <u>MW-1 vs SM-2</u> (1) Mark Connelly. Two popular ferrite core loop antennas are compared by an experienced DXer. See A35. 3/79
- A23 The Jordan River Beverage Expedition (1) Nick Hall-Patch. DXers brave the wilds of Vancouver Island in order to hear DUs on a Beverage. See All. 8/79

- A24 DXing with the "DX Flyers" (1) Gerry Thomas/Charlie Barfield. What is it like DXing with an antenna strung out with a kite? Talks about results of 650'/198m wire towed by a flying kite. 10/79
- A25 The KRS All-Band "Active" Antenna (1) Mike Hardester. Review of Radio West's amplified "whip" antenna. 7/80
- A26 Random Length Antennas (1) Bruce Portzer. Discussion of random length antenna, their advantages and disadvantages. 10/80 (T2)
- A27 Random Wire Accessories (2) Nick Hall-Patch/Ralph Sanserino. Attenuators, couplers, traps and amplifiers for use with longwire antennas. See A21. 10/80 (T2)
- A28 Phased Longwire Antennas (1) Mark Connelly. A phasing unit is used to sum the outputs of two longwires to obtain directional patterns. Schematic included. 10/80 (T2)
- A29 Why a Loop? (2) Phil Bytheway. Loop antenna theory, construction and tuning techniques are discussed. 10/80 (T2)
- A30 Using the Loop (1) Grant Manning. Discusses methods for getting the most out of a loop antenna. 10/80 (T2)
- A31 <u>A Ferrite-Core Loop Antenna</u> (1) Nick Hall-Patch. Construction details for a simple ferrite loop antenna using a FET pre-amplifier. See A9. 10/80 (T2)
- A32 <u>A Loop-Longwire Combo</u> (1) Nick Hall-Patch. Talks about a simple way to connect a loop and longwire to obtain unidirectional receiving patterns. Similar to the LSCA. See A5. 10/80 (T2)
- A33 Improve Your DX by Phasing Non-Identical Antennae (1) Mark Connelly. Discusses the effects of using two parallel antennas (one on the ground) and a phasing unit. Includes some examples of DX. 5/81
- A34 The MFJ-1020 Indoor Active Antenna (1) Randy Tomer. Review. 7/81
- A35 <u>Radio West Ferrite Loop Antenna</u> (1) Don Moman. Review of the MW-1 and a comparison to the SM-2. See A22. 7/81
- A36 Phasing Unit Design Modifications (5) Mark Connelly. Introduction to antenna phasing techniques. Discussion of a conventional phasing unit and its use. Some shortcomings and possible corrections are addressed. 10/81
- A37 The Martens MW Loop Antenna (1) Ben Peters/George Hakiel/Don Moman. Several reviews of this compact air-core loop antenna from Germany. 10/81 and 3/84
- A38 Constructing a Phasing Unit (7) Mark Connelly. Complete details for the construction and use of a phasing unit. When finished the unit will phase antennae of longer than 98'/30m or amplified shortwires longer than 16'/5m. Includes parts list, schematic and drawings as well as step by step instructions for its use. 11/81
- A39 Phased Amplified Shortwires (4) Mark Connelly. Discussion of phasing short wires (16'/5m or shorter), using a "Space Magnet" antenna (A10) as a tuner/amplifier. Detailed operation of the system is outlined. 12/81
- A40 A Comparison of the "Shotgun" and "Select-a-Tenna" Loop Antennas (1) Randy Tomer. Introduction to the "Select-a-Tenna" and comparison to Radio West's Shotgun. 1/82 (T2)
- A41 <u>Defeating Atmospheric Interference</u> by <u>Underground Antennae</u> (1). Short introduction with description of two techniques. 1/82
- A42 The <u>Practical Beverage Antenna</u> (1) Don Moman. Author describes time saving techniques used to create "instant" Beverage antennas. See All. 3/82 (T2)
- A43 Large-Area Loops for High-Noise Environments (1) Glen Kippel/Steve McGreevy. Details on the construction and use of a large-area loop antennas. See A52. 3/82 and 6/83 (T2)
- A44 Yaesu FRT-7700, FRA-7700, Grove Signal Match TUN-2 (2) Sheldon Remmington/Randy Tomer/
  Don Moman. Reviews and a comparison of the FRT-7700 Passive Tuner, FRA-7700 Active
  Antenna and SW Horizon's Receiver-Antenna Interface #1 (A45). 7/82 and 2/83 (T2)
- A45 <u>A High Performance Preselector for MW</u> (1) Don Moman. Description, construction details and performance notes. 8/82 (T2)
- A46 A Simple Guide to Beverage DXpeditions (1) Doug Nyholm. An introduction to planning a Beverage DXpedition, including equipment and some theory for the layman. See All. 3/83
- A47 The Hot Rod (3) Gerry Thomas. Complete details for building this small, inexpensive ferrite antenna for use in signal boosting on portable radios. 5/83
- A48 Optimizing an Unamplified Loop Antenna (1) Nick Hall-Patch. Techniques for matching loop antenna output and receiver input to get higher 'Q'. In addition a scheme for determining loop 'Q' is described. 6/83
- A49 Results Using a Random Wire Antenna Phasing Unit (1) James Herkimer. Author experiments with a phasing unit (see A38) and gives examples of the results obtained in comparison with a Radio West ferrite loop. 8/83

- A50 The 'APT-2' Active Antenna Tuner (9) Mark Connelly. Complete details and diagrams for the construction and use of an active parallel tuner with regeneration for use with wires 2'/0.6m to 1000'/305m (150khz 8Mhz). Layout and step-by-step construction are included, as well as instructions for use. See A53. 11/83
- A51 Modular Phasing Systems (4) Mark Connelly. Detailed description of an updated system for longwire phasing (see A38) which utilizes a modular approach. Schematics are given for various tuners (long and short wire Active Series, Passive Parallel and Active Parallel) as well as the phasing unit. 9/83
- A52 Nulling with Two Wall-Mounted Loops (2) Ben Peters. Results of experimentation with two wall mounted loops 90 degrees apart. Includes construction details. See A43. 1/84
- A53 APT2: An Improved Design Active Parallel L-C Tuner (5) Mark Connelly. Design improvements to the APT-2 (A50) yield the APT-3, an easier to use and more adaptable version of the regenerative longwire tuner. Schematics, drawings and description of use. Complete construction details in A54. 2/84
- A54 MWDX-2 Phasing Unit (7) Mark Connelly. Description, use and construction details for an improved phasing system which is a single unit, designed for longer longwires (greater than 82'/25m). See A64. 2/84

  A55 The BBA-1 Broadband Amplifier (5) Mark Connelly. Details for construction and opera-
- ADD THE BBA-1 Broadband Amplifier (5) Mark Connelly. Details for construction and operation of a 15db broadband (100khz to 30Mhz) amplifier for use in systems where knob tweeking is to be kept to a minimum. 3/84
- A56 Seven Passive Tuners (5) Mark Connelly. Author describes and gives schematics for 7 different series/parallel tuner circuits for the LW, MW and tropical bands. 3/84
- A57 Varactor Diode Applications for DXers (5) Mark Connelly. Discussion of how a varactor diode can be used as a voltage controlled variable capacitor. Good and bad points are discussed, and some initial circuits for a remote tuned loop antenna and VFO. 3/84

  A58 The 3 Parallel Loop Adocsk System (2) Ber Paters. Complete description of an antenna
- A58 The 3 Parallel Loop Adcock System (2) Ben Peters. Complete description of an antenna system consisting of three loops mounted on a board. Thorough instructions for use and some construction hints. 5/84
- A59 <u>Ideas on Remote Tuned Antennas</u> (1) Mark Connelly. Short introduction and preliminary schematic. See A66. 5/84

  A60 <u>Some Antenna Experiments</u> (2) W.R. McIntosh. Description of the "Helical Longwire", a
- loop sized 293'/89m coil. Results are presented using different antenna tuners. 6/84
- A61 Four Wall Loops for Better Nulls (2) Ben Peters. Analysis of an antenna system using four wall mounted loops with a fifth in the center. 10/84
- A62 "Easy-to-Build" Loop vs Wire Phaser (1) Mark Connelly. Circuit for phasing loop antenna output with a minimum 100'/30m longwire. Includes instructions for use. 10/84
- A63 An RF Notch Filter (1) Don Moman. Schematic for a tunable RF filter which will provide a 45db notch. 10/84
- A64 The MWDX-2A Phasing Unit (3) Mark Connelly. Description and schematic for an improved version of the MWDX-2 (A54) which allows any wire length antennas to be used. 10/84
- A65 <u>Database Search Loop Antennas</u> (4) DIALOG. List of recent technical and general articles pertaining to loop antennas, as compiled by Mark Connelly from the DIALOG data
- retrievel service. 12/84

  A66 RT-1 Remotely Controlled Antenna Tuner (3) Mark Connelly. Complete description and schematics for a varactor diode remotely tuned antenna (up to 50'/15m). See A59. 1/85
- A67 Notes on Mediumwave Beverage Antennas (3) Nick Hall-Patch/Don Moman. Summary of experiments done on Beverage termination, directional effects, construction and length. Brief description of the effect of two phased Beverages as well. 1/85

#### DOMESTIC

- D2 A History of Bootlegging in Indianapolis: The Rise and Fall of the Ten-Watt Voices (6) Charles Taylor. The story of several pirate radio stations in the 1960's. 3/75
- Dl7 <u>A Few Rural Alaskan Radio Stations</u> (3) Mike Dorner. Commentary on several radio stations in Alaska, their histories and operations. 2/78
- D18 <u>Highway Advisory</u> <u>Radio</u> (1) Bruce Portzer. Describes low-powered radio stations that provide motorists with road condition information. Includes list. See L19. 4/78
- D20 A Look at AM Stereo (2) Greg Monti. Talks about the various plans for introducing stereo to AM. The possible effects of each plan are discussed. 4/80
- D21 How a Radio Network Works (1) Karl Zuk. Explains how a nationwide network gets its programs to its affiliates. 10/81
- D22 America's Newest Way to Run a Station (1) Ed Ryan. Discusses satellite radio programming and how it works. 3/82
- D23 United States Domestic Radio Networking (2) Greg Monti. Complete description of national radio networking in the US. 4/82

#### FOREIGN

- F1 DXing the Latins (2) Bruce Portzer. A listing by country of Central and South American stations which are easiest to pick up, plus tips on Spanish pronunciation. 8/76
- F4 DXing the TA's (2) Richard Eckman. Techniques for hearing Trans-Atlantic stations with what to listen for organized by country. 8/79 (FL8)
- F5 The IRCA Mexican List (7) Bruce Portzer. Compilation of all available data on Mexican stations, including frequencies, slogans, schedules, and powers. 4/81 (FL9)
- F16 Spanish, French, and Portugese Report Forms (6) Larry Godwin/Ron Schatz/Phil Bytheway. Instructions and suggestions for writing reception reports in SS, FF or PP, including definite and tentative reports and follow-ups. Includes an extensive vocabulary of common words and phrases. 6/78 (NMP, FL3)
- F21 Taped Reports to Foreign Countries (1) Larry Godwin. Answers questions raised concerning reception reports to other countries, with suggestions on how to mail them. 1/66
- F26 Time Pips as an Aid to IDing TP's (2) Nick Hall-Patch/Bruce Portzer. Discussion on identifying the time pips used by Pacific, Asian and European stations. 9/77
- F28 A New Era of TP DXing (2) Bruce Portzer. A list by country of easy to hear stations located in Asia and the Pacific with tips on how to hear them. 8/79 (FL8)
- F30 <u>Spotlight on Soviet Far East</u> (3) Randy Seaver. Very informative discussion of Soviet Far East BCB stations including schedules and identifying practices. 10/77
- F31 VOA Thailand/American Forces Radio-Diego Garcia (1) Mike Hardester. Two short articles about Pacific area stations. 8/78
- F32 Trust Territory Stations/Radio Tonga/KMTH Midway (1) Mike Hardester. Three short articles about Pacific area stations. 8/78
- F33 Southern Command Network/Norfolk Island Broadcasting: VL2NI (1) Mike Hardester. An article about a Central American US station and another concerning VL2NI. 8/78
- F34 DXing in Sweden (2) Sigward Andersson. A Swedish DXer describes DXing from Sweden where one tries for stations in the US. 4/79
- F35 How to Pronounce Korean, Chinese and Spanish (1) Bruce Fortzer/Bill Harms. Three short articles to help understand how these languages sound. 10/79 (FL8)
- F36 Trans-Pacific SW Parallels (2) Bruce Portzer. List of SW parallels for BCB stations in the Trans-Pacific and Down Under areas. Useful for identifying stations. 10/79 (FL8)
- F37 <u>Latin American SW Parallels</u> (1) Bruce Portzer. List of SW parallels for BCB stations in the Latin American and Pan American areas. 10/79 (FL8)
- F38 Broadcasting in Bermuda (1) Charles Taylor. Talks about the country, its stations, their locations and formats. 11/79
- F39 DXing Latin America and the Caribbean: Country by Country (3) Mark Connelly/Neil Kazaross/Marc DeLorenso. Tips on hearing Latin American countries on the BCB from the East Coast of the US. Gives programming details, where and when to listen along with a difficulty rating. 12/79
- F40 Hearing Latin American and Caribbean Countries in the Pacific NW (2) Bruce Portzer.

  As above, except from the Pacific North West. 12/79
- F41 DXing in Africa (3) Pete Taylor. A DXer talks about what he heard while in Africa. Includes a list of stations, 1/80
- F42 DXing in Asia (4) Pete Taylor. Pete talks about DXing while he was in Asia. A list of stations is included. 2/80
- F43 A Zonal Analysis Approach to Trans-Atlantic DX (2) Mark Connelly. Divides TAs into zones according to great circle bearing. Discusses conditions responsible for reception and/or non-reception of each zone. A chart showing division for eastern MA also given. 2/80
- F44 <u>A Trans-Atlantic DXers</u> <u>Guide to Sunrise and Sunset Times</u> (2) Mark Connelly. A technique is described for estimating times to listen for TAs based on the sunrise at the station and sunset at the listener. Tables for TA sunrise and US sunset times are included. Also Latin American sunrise chart is included. 2/80 (FL9)
- F45 <u>A Zonal Analysis Approach to Pan-American DXing</u> (2) Mark Connelly. Groups Pan-American signals by loop bearing and discusses conditions allowing/blocking reception of each "zone". Chart for the zonal breakdown in MA is also included. 6/80
- F46 A Zonal Analysis Approach to Trans-Pacific DX (1) Bruce Portzer. TP signals are broken down according to loop bearing and distance. Reception qualities of each zone is discussed, and a chart showing the breakdown for Seattle is included. 9/80
- F47 The DXers Guide to China (5) Bruce Portzer. Everything you wanted to know about broadcasting in China including pronunciation guide, map, list of stations, schedules and formats. 10/80 (FL9)

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- F48 A Guide to DXing Korea (3) Bill Harms. A very complete guide to broadcasting in Korea. Networks, IDs and QSL policies are discussed. Includes a list of stations. 2/81 (FL9)
- F49 <u>A Baja Expedition</u> (2) Pete Taylor. DXing from the southern tip of Baja California Sur. Complete with list of stations heard and program details. 3/81
- F50 Random Remarks on Chinese Broadcasting (3) Pete Taylor. Comments and information on Chinese broadcasting with station lists, maps and program information. 3/81
- F51 An American DXer in Europe (2) Bruce Portzer. Vacation in Europe with a radio. DXing from various locations is discussed. Includes a list of stations heard. 11/81
- F52  $\underline{\text{AFRN}}$  (1). Description of AFRN in Alaska. Outlines types of stations and programming. 12/81
- F53 Latin American Holidays (2). Updated periodically. 4/82
- F54 IDing Japanese Broadcast Stations (1) Charles A. Taylor. Concise explanation of how Japanese NHK and commercial stations identify. Describes what to listen for. 1/82
- F55 China Remonitored (1) FERC (Far East Radio Club). List of Chinese stations, as monitored by the FERC in Japan. 2/82
  F56 TA DX from West Coast North America (4) Nick Hall-Patch/Bruce Portzer. A very complete
- analysis of TA reception from the West Coast. Receptions are tabulated by zones and discussed in detail. 2/82
- F57 <u>Japanese Radio Networks</u> (2) Japan BCL Federation. List of Japanese network affiliates and a map showing locations. NHK station's local addresses are also included. 3/82
- F58 DXing Mexico (3) Bruce Portzer. Tips on hearing and identifying stations in Mexico.

  Information is broken down by 'estado' with suggestions on how to hear each one. 3/82
- F59 <u>Live... From Tequeigalpa, Honduras</u> (1) Don Moore. List of station formats. 4/82
  F60 <u>DXing from Jan Mayen: 1981-82</u> (5) Geir Stokkeland. A Swedish DXer describes DXing on the small Arctic island of Jan Mayen (between Scandanavia and Iceland). A list of MW stations which were heard is included. 9/82
- F61 Your First 40 Trans-Atlantic Countries (5) Mark Connelly. Reception of TA countries are outlined with frequencies, times and analysis of propagation. The NE US and SE Canadian point of view is stressed; however, details are useful to all DXers. 10/82
- F62 Your First 30 Countries in English (3) Mark Connelly. Author gives details on how to hear various English broadcast stations in the world. Each country is listed with pertinent details on hearing English broadcasts. NE US focus but most would be applicable to all DXers. 11/82
- F63 The Odds on the Even TA's (Revisited) (4) Mark Connelly. Discussion of hearing Trans-Atlantic stations located on North American frequencies (i.e. 10kHz). Equipment, technique and linting of frequencies with schedule information is included. 11/82
- nique and listing of frequencies with schedule information is included. 11/82

  F64 A Cross-Index of China (4) Art Peterson. Complete listing of the new Pinyin and the
- older Wade-Giles spelling of Chinese cities with latitude/longitude of each. 12/82
  F65 Private Medium Wave Stations in Indonesia (5). Complete with call, frequency and address. 3/83
- F66 Report from the Virgin Islands (4) Glenn Hauser. DXer tells what it's like to DX from the Virgin Islands. Many loggings included. 1/83
- F67 MW Stations in Australia (3). List. 3/83
- F68 Report from Saudi Arabia (3) Richard Wood. 4/83

heard during mid-day and mid-evening. 9/83

- F69 Report from Paradise (1) Don Moore. Author describes his visit to the 'E1 Paraiso' section of Honduras and the radio stations he found there. 5/83
- F70 The Kiwi Korner (2) Peter Taylor. Listing of New Zealand stations and times of local originated broadcast which can be used to aid in verification. 6/83
- F71 A Jamaican DXing Holiday (3) Gerry Thomas. A DXer visits Jamaica and reports what he
- F72 Report from Guatemala (1) Don Moore. A few impressions of radio in Guatemala. 9/83
- F73 IRCA Central American List (6) Bruce Portzer/Don Moore. One of the most complete and accurate lists of CA stations. Compiled by Bruce and checked by Don (living in Central America). 1/84
- F74 DXing in Alaska (2) Hurley Parkhurst. Summary of station loggings from 9/82 to 10/83 heard in Nenana, Alasks. 12/83
- F75 <u>Australian Radio Slogan List</u> (1) David Headland. List of stations slogans heard between 8/84 and 9/84. 10/84
- F76 A Change in the Romanization System for Korean Place Names (1) Bill Harms. Introduces the new "Modified McCune-Reischauer" system for Korean spellings. 11/84
- F77 The First Fifty Countries from Hawaii (2) Richard Wood. Lists Richard's first 50 countries with tips, grouped by location. 12/84

### GENERAL

- G1 DX While You Sleep (1) Paul Petersky/Tom Sundstrom. Outlines techniques for recording special tests or DXing while asleep. 9/72
- G2 <u>Noise</u> (1) Lawrence Foster/John Kalpus. Discussion of eliminating various types of noise, including fluorescent lamp noise. 12/67
- G3 Sunrise/Sunset Maps (\$2.00) Father Jack Pejza/Ernie Wesolowski. 24 maps showing sunset and sunrise times for North America and the world. Includes explanation of their use and examples of DX made possible by a knowledge of SR/SS times.
- G4 <u>How Do You Rate Your Best Catch</u> (1) Larry Godwin. Gives some criteria DXers might use to rate catches. 4/66 (NMP)
- G5 <u>Computation of Sunrise and Sunset Times</u> (14) Father Jack Pejza. Tables and instructions for computing the exact time of sunrise and sunset for latitudes up to 60 degrees N and S, throughout the year. 12/73
- G6 <u>Information Please</u> (1) Father Jack Pejza. Describes a system used to keep station records, with the ability to retrieve information easily. 5/72
- G8 FCC Rules: Station Identification (1) Bill Hardy. The rules and a short explanation. 9/74
- G9 FCC Rules: Pre-Sunrise Service Authorization (2) Bill Hardy. The rules and a short explanation. 1/75
- G10 Territory-Geometrical BCB DXing (2) Dave Fischer. Several methods of systematically DXing are described. 1/75 (NMP)
- G11 Veries (4) Karl Forth. Several reception reports to a fictitious station done by different DXers. 1/75
- G12 All You Ever Wanted to Know about Running a Radio Club Convention but Didn't Know Who
  to Ask (12) Father Jack Pejza. An experienced convention host gives suggestions, ideas
  and warnings. Includes news release and souvenir examples.
- G13 Average Coverage in Miles (1) Dave Fischer. Chart showing the coverage area of BCB stations by frequency and power. 12/68
- G14 Morse Code Identification (1) Larry Godwin. Techniques for using Morse Code to ID testing stations. Also includes the code alphabet. 2/70 (FL8)
- G15 <u>Veries by Areas of the US</u> (1) Karl Forth. Discusses percentages of verification returns by state and province. 9/74
- G16 GMT Conversion Chart (1). Includes all time zones of North America. (AL3, FLs)
- G17 After 50 years at the Game, One DXer Learns a New Trick (1) Gene Martin. A technique is described for using a BFO to hear stations next to strong domestics. 1/76
- G18 Sunrise, Sunset, and the Shortest Day of the Year (1) Bill Hardy. Explains why the length of the day and the time of sunset don't necessarily jibe directly. Also talks about how a DXer can take advantage of it. 12/75
- G20 World Time Chart (1). World map showing all time zones and the letter designation of each.  $\frac{1}{77}$  (NMP)
- G21 <u>Perceptual Confusions Among Letters of the Alphabet</u> (2) Gerry Thomas. Analyzes the possible confusions resulting in identifying call letters in a background of static and other noises. 8/77
- G23 Sunrise DX in Depth (2) Robert Kramer/Nick Hall-Patch. Three part analysis of sunrise DX with specific examples and techniques outlined. 2/78
- G24 Writing Reception Reports (3) Bob Coomler. Hints and techniques for writing good reception reports. Defines which details are verifyable and other information to include. A sample report is also included. (NMP)
- G25 <u>Mistake DXing</u> (1) Bill Hardy. Talks about the kinds of mistakes radio station personnel can make and how a DXer might hear a station because of them. 10/78
- G26 <u>Allocations</u> (2) Bill Hardy. Discusses how the BCB frequencies are broken down and the types of stations that can operate on each frequency. 10/78
- G27 The Traveling DXer (1) Mark Connelly. Talks about the equipment and techniques for the DXer when DXing away from home. See M21 for some technical details. 2/79
- G28 <u>Home Computers and DXing</u> (1) Mark Connelly. Several suggestions on how a home computer may be used to keep DX records, do DX calculations, etc. 2/80
- G29 DXing the Contests/Graveyard Channels (1) Robert Kramer. Explains how becoming involved in a DX contest can improve your DX skills. List of tips used to win contests is included. Describes the different techniques needed for hearing stations on grave-yard channels. List of times and tips. 9/81 and 10/81

- G30 <u>Some Random Notes on Sunrise Skip</u> (1) Robert Kramer. Discussion of sunrise skip and how it can be used to hear new stations. Good list of guidelines provided. 10/81
- G31 <u>Time Documentation of DX</u> (2) Charles R. Smiley, Jr. Author describes two techniques for recording time information on a stereo recorder. 8/82
- G32 DXing the Cordless Phones (1) Craig Healy. Techniques for listening to local cordless phone conversations. 8/82
- G33 <u>Sunset Skip in Depth</u> (3) Robert Kramer. An experienced DXer gives insight and pointers for getting the most out of sunset DX. 10/82
- G34  $\underline{DX}$   $\underline{Edge}$  (1) Sheldon Remmington. Review of a device used for determining worldwide monthly sunset and sunrise times, as well as the terminator. 11/82
- G35 <u>A Wolfish Approach to Sunset Skip DX</u> (1) Neil Wolfish. Tips on how to hear daytime only stations in 50 states at sunset from the NE US and Eastern Canada. 2/83
- G36 When to DX (2) Bill Hardy. Concise article that touches on times that certain types of DX can be heard. Excellent for the beginner to acquaint him/her with different techniques of the hobby. 3/83 (AL3)
- G37 Sunset Skip: A Midwestern Perspective (2) Karl Forth. Complete explanation of sunset DX with a slight focus on DXing from the Midwest. Many hints included. 3/83 (AL3)
- G38 DXing During Aurora (2) Robert Kramer. All the facts and details about DXing during an aurora what to expect, what to look for, and a list of pointers. 4/83
- G39 A New Look at Daytime DX (2) Bill Harms. Discussion of daytime DX from inland locations. Examples of DX from Utah included. 9/83
- G40 DXing the 1984 Solar Eclipse (2) Gerry Thomas. Good analysis of BCB conditions before, during and after the May 1984 eclipse from Pensacola, Florida. 7/84
- G41 A DXer's Guide to Headphones (1) Dennis Kibbe. Discussion and a list of headphones currently on the market. 11/84
- G42 (Retail) Electronic Parts Suppliers (2) Mark Connelly. Addresses of electronic part suppliers and their specialties, in alphabetical order. 1/85

### HISTORY OF RADIO

- H1 Frequencies Before 1941 (1) Ron Schatz. Describes the broadcast radio spectrum prior to the 1941 NARBA Treaty. See H30.
- H2 A Silent Night (1) Gene Martin. January 24, 1926 was the night almost all US stations went off the air to allow DXers to try for European stations. See H13.
- H3 So You Heard 3XN, or was it Whippany, New Jersey? (2) Gene Martin. Describes the early days of radio. See H26.
- H4 <u>Calls and Slogans</u> (1) Glenn Hauser. The call letters of many stations often reflect the station's origins. See H5 and H18.
- H5 Radio Mistory Often Preserved in Call Letters (1) Gene Martin. Similar to H4.
- H6 Converting khz to Meters (1) Thomas White. In the early years of radio, stations were located by their wavelength, not frequency. This chart makes the conversion.
- H7 The Top Becomes the Bottom (1) Gene Martin. What happened when the US changed from wavelength to frequency.
- H8 KPPC-AM: Not Just Your Average Radio Station (1) Jay Murley. Description and history of one of the few 100 watt stations left in the US. 12/73
- H9 The WRR and KDKA Stories (1) Larry Flegle/Pete Kemp. Describes two early stations, plus some odds and ends on old time radio. 2/75
- HIO The WGL Story (1). The Indiana station tells its story. 3/74
- Hll The FCC "Honor Roll" (1) Bill Hardy. Some stations taken off the air by order of the FCC before 6/72.
- H12 A Little Bit of Anarchy (2) Thomas White. Describes the broadcasting industry in 1926 and 1927 when there was no Federal regulatory agency.
- H13 <u>Half a Century Ago: The International Radio Week Tests</u> (3) Thomas White. Covers the international tests between North America and Europe from 1923 to 1926. See H2.
- H15 <u>Dial-Number Order for Stations</u> (2) Jim Critchett. List of North American radio stations in 1934.
- H17 <u>BCB Radio Stations in Canada in 1929</u> (1) Dan Sys. Listed by province and city.
- H18 Can You Top This? (1) Father Jack Pejza. Some radio station calls that perserve the initials of the owner or a regional feature. From 1938. See H4.
- H19 <u>WLW, and Superpower</u> (1) Mike Worst. Report on WLW's operation of a 500kw transmitter in the 1930's.

- H20 Radio History 1912 to 1937 (5). Reprinted from the 1938 Radio Annual. Short notes on advances in the state of the art.
- H21 Three Letter Call History: Some Were Names of Ships (1) Mike Worst. Most three letter calls were used elsewhere before becoming BCB stations. See H32.
- H22 Mexican and Canadian Radio Stations of 1938 (1). Reprinted from 1938 Radio Annual.
- H23 US Radio in World War Two (2) Gene Martin. Personal reminiscences on what broadcasting was like during WW2.
- H24 "Super-Power" 1925 Style (2). Some theorys about super power from 1925.
- H25 KDKA (1). Article about the station, reprinted from the 8/22 issue of Wireless Age.
- H26 Remembering the Old Days of DXing (3) Gene Martin. More reminiscences of DXing in the 1930's. See H3.
- H27 WHA "The Oldest Station in the Nation" (1) Bob Lazar. A station's history. 10/77
- H28 The Legacy of the Attic Antenna (1) Bruce Portzer. Describes an attic autenna that was built into Bruce's home in the 1920's. 3/78
- H29 Story of the "KOB" Problem (7) Bill Hardy. First part is reprinted from the Federal Register. The remainder are articles that have appeared since. KOB takes WABC to court for clear channel rights and losses. 6/78
- H30 November 1978 Frequency Shifts Similar to 1941 (1) Cary Simpson. Describes the change to the present day radio spectrum that occured in 1941. See H1. 12/78
- H31 Uncrowded Bands (1) Bob Curtis. A DXer recalls the days when the BCB was uncrowded.
- H32 The Mystique of the Three Letter Call Signs (2) Thomas White. Nostalgic discussion of three letter calls with information on the various stations. See H21. 9/79
- H33 Sharing Time (2) Thomas White. Explains the origins of Sharing Time stations, problems associated with them and other historical notes. 12/79
- H34 Looking Back at Radio in 1930 (5) Gene Martin. Talks about radio back in 1930 including information on programs, personalities and schedules. A complete radio listing from the 12/30 Radex is also included. 2/80
- H35 Extraterrestrial DX Circa 1924 (1) Thomas White. Author recalls one night in 8/24 when all stations went off to allow people to try to hear transmissions from Mars. 8/80
- H36 The Early history of Radio Hauraki (1). The story behind the birth of New Zealand's "pirate" Radio Hauraki. 1/81
- H37 Two Stations in One (2) Bill Hardy. Describes the joint operation of KITN-920 Olympia WA (now KQEU) and KITI-1420 Centralia-Chehalis WA. 7/82
- H38 Origin of Call Letters in the Early Days (2) Cary Simpson. Traces the history of call assignments.

### LISTS

A few words are in order here. This section contains various lists of networks, frequency checks, etc. All are dated. Thus, they may not be 100% accurate. Any list will be updated whenever new material appears in <u>DX Monitor</u>, so the given date is the oldest any information will be.

- L2 <u>Frequency Check List</u> (3). List of stations that conduct frequency checks after local midnight. Updated every year. (AL3, NMP)
- L4 IRCA Countries List (2). A list of countries that broadcast on the BCB compiled by the IRCA Countries Committee, for the purpose of record keeping. 3/80 (NMP)
- L17 Best Bet 50 States from the Pacific Northwest (2) Bruce Portzer. States are rated very easy, easy, moderate, difficult, and very difficult, and best bets on stations listed for each. See L25, L27, L34 and L36. 1/83
- L19 Utility Stations (3) Bruce Portzer. A list and some information about beacons, traveler information and other stations around and within the BCB. 6/83 (AL3)
- L20 Canadian Family Life: It's Twins (2) John Oldfield. Describes small networks in Canada. 6/83 (AL3)
- L21 <u>CBC English and French Network List</u> (1). List of the two major networks in Canada, including schedule information. 6/83 (AL3)
- L25 <u>Best Bets for 50 States = from NY-NJ-New England</u> (2) Roger Morby. List of stations for all 50 states as possible from the NY, NJ, and New England area. See L17. 8/78
- L27 <u>Best Bets from Southern California</u> (2) Matthew Shugart. Same as above except from Southern California. 6/79
- L28 <u>Spotlight on Mississippi</u> (1). List of possible Mississippi stations one might receive and some hints, schedules and other useful information to help in hearing them. 11/79

- L29 Spotlight on New Mexico (1). As above, best bets for hearing New Mexico. 12/79
- L30 Spotlight on Colorado (3). As above, best bets for hearing Colorado. 1/80
- L31 Spotlight on West Virginia (1). As above, best bets for hearing West Virginia. 2/80
- L32 Spotlight on Texas (7). As above, a very complete list. 3/80
- L33 Spotlight on New Jersey (1). As above, tips on hearing a difficult state. 2/81
- 1.34 Best Bets from Illinois (1) Robert Kramer. Concise list by state/province of the easiest station to hear (and others) if DXing from Illinois as compiled by an experienced DXer. See 117. 6/81
- L35 Western Spotlight  $\pm \frac{1}{10/81}$  Tips on how to hear each station in the state compiled from IRCA members.  $\frac{10/81}{10/81}$
- L36 <u>Best Bets from Ontario</u> (1) Neil Wolfish. Easiest to hear arranged by state and province as viewed from Ontario. See L17. 11/81
- L37 Spotlight on Nevada (2). Tips and information about stations in the state. 1/82
- L38  $\underline{Kansas}$  Information Network (1) Rob Gerardi. The network is described and a list of stations is included. 3/82
- L39 The Music Country Network (2) Pete Taylor. Description and list of affiliates. 4/82
- L40 <u>Spotlight on Utah (Pt. 1)</u> (2). First part includes information on stations from a DXer living in Utah. 12/83
- L41 AM Stereo Stations by Frequency (2) Greg Monti. List. 6/84

### RECEIVER MODIFICATION AND CONSTRUCTION

- M1 The Curse of the Superhetrodyne, and How to Hex It (4) Joe Worcester. Describes some advantages and disadvantages of the superhetrodyne receiver. Then, suggests a modified TRF circuit as a possible solution. 3/71
- M2 Putting a Recording Outlet on Your Receiver (1) Grant Manning. Describes how and where to attach a recording jack which bypasses the volume control of a receiver: (T2)
- M3 The Worcester Long Distance M.W. Receiver (6) Joe Worcester. Technical description of a BCB receiver designed by Joe Worcester. The problems encountered when designing the receiver are covered in detail. 11/75
- M4 <u>SPR-4 SSB Filter</u> (1) Grant Manning. How to modify a Drake SPR-4 to use the 2.4 kHz sideband filters without turning on the BFO, and speed up the AGC response time. 5/74
- M5 Super Selectivity at & Super Price: The Q-5er (1) Grant Manning. Briefly describes a method to achieve good selectivity by using a longwave receiver that tunes to the IF frequency (455 kHz). 3/72
- M6 <u>Intermediate Frequency Transformer Alignment</u> (2) Jon Perkins. A step-by-step outline for aligning the IF stages of any receiver. 3/70
- M7 <u>Selectivity</u> (1) Philip Sullivan. An introduction to the various methods of getting selectivity out of a receiver.
- M8 A Handy Little Gadget (1) Tim O'Hare. Describes a switching arrangement for receivers and antennas. Includes an antenna tuner as well. 2/76
- M9 R-390A/URR Optimization and Alignment Check (2) Charles Taylor. Explains how to align the RF and IF stages of an R-390A. 5/81
- M10 <u>Modifying the Realistic TRF</u> (6) Gerry Thomas/Mark Connelly. Very detailed and specific instructions for aligning, improving the readout (to 10 kHz), better selectivity, adding antenna connections and installing a S-meter to the TRF. 10/80 (T2)
- Mll An Audio Switching Unit (1) Nick Hall-Patch. Explains how to connect two receivers to a tape recorder in order to listen to either one or playback. 10/80 (T2)
- M12 <u>Tape Interconnection</u>, the <u>Right Way/An Attenuator Patch Cord for Taping DX</u> (1) Don Davis/Gerry Thomas. Install an input jack in a receiver to make use of the its audio stage for playback. Construction of a patch cord for running radio outputs into the microphone input of a tape recorder. 2/78 (T2)
- M13 <u>Direct Digital Readout</u> (1) Grant Manning. Discusses digital readouts and some of the problems that are encountered when designing or using one. 2/78 (T2)
- M14 Mobilizing the SPR-4 Receiver (1) Charles Taylor. Addresses problems associated with mobile operation of the SPR-4. Formulates solutions to antenna and power supply problems, and describes the construction of antenna tuner. 8/78 (T2)
- M15 WWV Converter/100 khz Crystal Calibrator (1) Brian Sherwood. Circuit enables a TRF to tune into WWV. Crystal calibrator for BCB to 6 Mhz with 100 khz markers. 12/78
- M16 Upgrading the Realistic DX-150/160 Receivers (1) Nick Hall-Patch/Ralph Sanserino.

  Coupling to the internal BCB loop, cures for overload problems and selectivity improvements are discussed. See M28. 10/80 (T2)

- M17 Synchronous AM Detectors (2) Nick Hall-Patch. Discussion of AM detection and the use of a phase-locked loop to improve reception of weak BCB signals. Includes schematics for several applications. 2/83 (T2)
- M18 FRG-7 Mods (2) Brian Aase/Ralph Sanserino. Describes modifications to the FRG-7 which improve the S-meter, selectivity, AVC, and parallax. 10/80 (T2)
- M19 An Outboard Ferrite Loop for the Superadio (1) Gerry Thomas. Describes a method for mounting a Radio West "Shotgun" ferrite antenna on a Superadio. 10/80 (T2)
- M20  $\underline{\text{R-390A Operating Procedure}}$  (2) Charles Taylor. Complete description with notes and explanations. 10/80
- M21 More Thoughts on Tape Recording from the TRF and other Portable Radios (2) Mark Connelly. Updates and expands on thoughts in the Traveling DXer article (G27). Several methods are discussed, with diagrams. 12/80
- M22 <u>Aligning the Superadio</u> (1) Gerry Thomas. Diagrams and text on how to take apart and align the RF, IF and oscillator sections of a GE Superadio. 1/81
- M23 R-390A/URR Vacuum-Tube to Solid State Power Supply Conversion (3) Charles Taylor.

  Complete concise description for converting a R-390A power supply to its solid-state equivalent. Many good diagrams. 2/81
- M24 <u>Crudley-Bathbrush 26...A Homebrew MW DX Receiver</u> (3) Nick Hall-Patch. Yes...a solid state homebrew receiver that really works. Design, check out and problems are discussed as the author builds his own. Complete schematic included. 3/81
- M25 A Homebrew Tube BCB Receiver (1) Mike Bittner. Author designed and built a receiver using 1 to 3 volt tubes and parts from junk radios. Includes a block diagram. 3/81
- M26 <u>Antenna/Headphone</u> <u>Switching Units</u> (1) Derek Claridge/Mike Worst/Nick Hall-Patch. Outlines several methods for switching audio and antennas between multiple receivers and headphones. 5/81
- M27 Using Ni-Cad Batteries with the TRF (1) Don Moman. Describes how to connect Ni-Cads in a TRF so they will charge when operating from AC. 5/81
- M28 Another Look at Upgrading the Realistic DX150/160 Receivers (2) Karl Zuk. Expands on the modifications discussed in M16 for antenna coupling, RF gain, selectivity improvement (ceramic filter) and front end diode replacement. Drawings present the details of implementation. 11/81
- M29 Upgrade a Delco Car Radio/Simple SP-600 Modifications (1) Karl Zuk/Glen Kippel. Describes a "tweeking" technique for stock Delco car radios which improves sensitivity. An adjustable noise limiter modification and a technique for broadening the crystal filter on a SP-600. 1/82
- M30 <u>A Crystal Calibrator</u> (1) Bruce Portzer. Circuit and description for a 100 khz crystal calibrator, with a modification for 25 khz markers. 1/82 (T2)
- M31 <u>Digital TRF Readout: The Easy Way</u> (2) Bill Block/Frank Aden/Nick Hall-Patch. Detailed description of the installation a PCIM 177 Digital Frequency readout in a TRF. 5/82
- M32 R-390A 3TF7 Ballast Tube Replacement (1) Steve Bohac and others. Several proven techniques for replacing this hard to find regulator tube. 11/82
- M33 ICF-6500W Selectivity Modification (2) Gerry Thomas/Dennis Kibbe. Complete details and step-by-step construction for installing narrow IF ceramic filter. Steps for improving the audio are also included. 2/83 and 11/84
- M34 <u>Plessy SL 6700 IF/Detector IC</u> (1) Nick Hall-Patch. Description of the IC, schematic for a receiver IF amp/detector and an evaluation of the circuit. 4/83
- M35 <u>R-390A on Longwave Cheaply</u> (1) Craig Healy. Author describes an easy way to use the R-390A for Longwave reception. A LW preselector circuit is included. 5/83
- M36 <u>A LED S-Meter for the TRF 12-656</u> (1) Derek Claridge. Article describes how a row of LED's can be used to indicate signal strength on a TRF. 8/83
- M37 ICOM IC-R70 Modifications (1) Don Moman. Allows the SSB Pass Band Tuning filter to be used in place of the 6 khz AM filter and allow preamp to operate below 1600 khz. 8/83
- M38 Torrestronics TK-1 Digital Display Kit (1) Randy Tomer. Review of kit. Describes how to use the counter on an HQ-180. 8/83
- M39 Designing and Building Your Own MW Receiver (2) Nick Hall-Patch. An experienced experimenter discusses the design of a MW receiver. The design of each section is discussed including pros and cons from the MW DXers point of view. 9/83 (T2)
- M40 Two Sony Modifications (1) Dennis Kibbe. Describes a technique for improving the selectivity of the 7600A by adding a crystal filter. 12/83

### RECEIVERS

- R1 Sony TR-1300/Heath GR-78/Panasonic RF-759 AM-FM Portable (1) Ron Schatz/George Sherman. Three receiver reviews. 12/71 and 7/72
- R3 Hammarlund HQ-200 (1) Tom Garcia. Review. 9/73
- R4 National HRO-500 (1) Paul Daplyn. Review. 12/73
- R5 Drake SPR-4 (2) Robert Fischer. Detailed review. Includes selectivity curves. 11/72
- R6 Barlow-Wadley XCR-30 (3) Mike Hardester/Charlie Keleher/J.A. Worcester/Grant Manning. Reviews and notes on modification. 7/75
- R8 National NC-120/Sony CRF-230/Multiband Portables (1) Bruce Portzer/Grant Manning. Two reviews and some general comments on multiband portables. 3/72
- R9 Not too Technical Report on some Sony Products/The "ARB" for BCB (1) Tom Garcia/Grant Manning. Short reviews on Sony CRF-230, TR-1000, IC-200 and TC-110, and notes on using and modifying an "ARB" for use on BCB. 1/71
- R13 Car Radios for DXing (2) Tom Garcia/Bill Lipis/Grant Hanning. Three short articles about how to use and modify car radios for DXing. 1971
- R15 Collins R-392 (1) Ralph Sanserino/Phil Bytheway. Review. 10/80 (T2)
- R16 Drake SSR-1/Autek QF-1 (1) Grant Manning. Reviews. 11/75
- R17 Yaesu FRG-7 (2) Bruce Portzer. Review. 9/77
- R18 Collins R-390A/URR (5) Charles Taylor. Complete and detailed review. 7/79
- R19 Sony TR-6500 vs Realistic TRF (2) Gerry Thomas/Charlie Barfield. Hands on comparison of the DX capabilities of two fairly inexpensive radios. 4/78
- R20 Panasonic RF-4800 (1) Grant Manning. Review. 4/78
- R21 <u>GE Superadio</u> (2) Gerry Thomas/Charlie Barfield/Ed Satterthwaite/Albert Lobel. Reviews. 10/80 thru 1/82 (T2)
- R22 Panasonic RF-2200/RF-2600/RF-2800/RF-2900 (1) Bruce Portzer. Short reviews. 10/80 (T2)
- R23 Realistic DX-150/160/Kenwood R-300/Layfayette BCR-101/Sony ICF-6700W (1) Pete Taylor. Four short reviews. 10/80
- R24 Yaesu FRG-7000/Kenwood R-1000 (1). FRG-7000 is short, R-1000 is longer. 10/80
- R25 Modified FRG-7/FRG-7000 and FRG-7700/McKay Dymek DR-33C (1). Reviews. 2/83 (T2)
- R26 Hammarlund HQ-180/SP-600 (1) Bruce Portzer/Phil Bytheway. Reviews. 10/80 (T2)
- R27 Radio West Modified SPR-4 (1) Randy Tomer. Discusses the improvement in SPR-4 performance due to Radio West's selectivity and AGC time constant modifications. 12/80 (T2)
- R28 Sony ICF-S5W (7) Gerry Thomas/Armand DiFilippo/Mark Connelly/Bruce Portzer. Several detailed reviews and comparisons with TRFs and Superadios. 3/81
- R29 TRF Model 12-656 (1) Gerry Thomas. Side by side comparison of the Realistic TRF models 12-655 and 12-656. 1/81
- R30 Sony ICF-2001 (2) Pete Taylor/Don Moman. Reviews. 3/81 and 10/81
- R31 Drake R-7 (3) Don Moman/Chuck Hutton/Craig Healy. Reviews. 3/81 and 1/83
- R32 A Comparison of Tube and Transistorized Receivers (1) Bruce Portzer. Discusses the differences between tube radios and the newer solid-state sets. 10/80 (T2)
- R33 <u>Subjective Evaluation of FRG-7 vs FRG-7</u> (1) Louis Goldstein. A look at how the FRG-7 evolved over the years. 5/81
- R34 The Realistic 12-173B/Grundig Autosuper Weltklang 3010A/Sony ICF-D11W/Realistic "Timekube" (1) Randy Tomer/Paul Swearingen. Reviews. 1/82 and 3/82
- R35 Comparing the DX-160 and the GE Superadio (1) Karl Zuk. Compares a modified DX-160 (antenna and transfilter mods) to a stock Superadio. 3/82
- R36 The Panasonic RF-3100 (1) Don Moman. Review. 7/82 (T2)
- R37 The Yaesu FRG-7700 (1) Don Moman. Review. 7/82 (T2)
- R38 Kenwood R-600 (1) Tim O'Hare/Bruce Portzer/Randy Tomer. Reviews. 9/82 and 11/82
- R39 Realistic 12-650/Radio Shack Patrolman SW 60 (1) Nick Hall-Patch/Peter V. Taylor. Reviews. 9/82 and 2/84 (T2)
- R40 Potomac Instruments SMR-11/Kenwood TS-430 Transceiver (1) Karl Zuk/Don Moman. Review of a hi-fidelity BCB receiver with features that might interest a DXer and a review of a Ham transceiver with a general coverage receiver. 10/82 and 1/84
- R41 Panasonic RF-6300/RF-081 (1) Don Moman/Randy Tomer. Reviews. 11/82 (T2)
- R42 NRD-515 vs Drake R-7 MW Performance and Modifications (1) Don Moman. Compares the two receivers and discusses several modifications. 12/82 (T2)

- R43 Sony ICF-6500W The Perfect Portable (2) Gerry Thomas. Review. 2/83 (T2)
- R44 ICOM R-70 (1) Don Moman. Review. 2/83 (T2)
- R45 Kenwood R-2000 (1) Don Moman. Review. 2/83
- R46 GE Superadio Cassette #3-5280B (1) Michael A. Sapp. Review. 4/83
- R47 Sony ICF-2002 (7600D) (1) Dennis Kibbe. Review and first impressions. 12/83
- R48 Receiver Review, Sony SRF-A100 (2) Greg Monti. Review of this AM stereo receiver. 4/84
- R49 The Four AM Stereo Systems and the Sony SRF-Al00 Receiver (2) Karl Zuk. The Al00 is discussed along with the characteristics of different AM Stereo systems. 5/84
- R50 Review of the Sansui CX-990 Stereo AM-FM Car Radio (1) Steve Mittman. Review. 10/84
- R51 <u>Uniden CR-2021 vs</u> the <u>Sony ICF-6500W</u> (2) Gerry Thomas. Review of the CR-2021 and comparison with the ICF-6500W. 11/84
- R52 ICOM R-71A (2) Don Moman. Review. 11/84

### TECHNICAL

- T2 A Beginners Guide to the Ionosphere (4) Father Jack Pejza. A simple explanation, with drawings and graphs, of how the ionosphere reradiates radio waves. 1/73
- T3 Skyline Blockage (4) Father Jack Pejza. Discusses several propagation modes and their expected arrival angles. A technique is outlined for computing the effects of local geography on station reception. See T14. 12/72
- T4 Power Distribution in an Amplitude Modulated Signal (1) Angel Garcia. Method for calculating the distribution of power in a modulated signal. 5/69
- T5 Precision Frequency Measurement (1) Ron Schatz. Describes a scheme for determining the exact frequency of a station using a Heathkit IB-1101 frequency counter. 4/72
- T7 Yes, SAH (1) Glenn Hauser. A description of sub-audible hetrodynes, how to detect them, and how they can be used for determining frequencies. 12/71
- T8 DX Mathematics (6) Dave Fischer. Details for using trig tables to calculate Great Circle distance and bearing. A brief description of radio direction finding is included. See Tl2.
- T10 Spurious Responses and How to Recognize Them (1) Michael Northam. Talks about how signals mix inside a superhetrodyne receiver causing stations to be heard on frequencies different from their carriers. (T2)
- Tll The Use of a Tape Recorder in DXing (1) Arthur Peterson. Tips for the DXer detailing the purchase, use and maintenance of a tape recorder. (T2)
- T12 Easy DX Calculations (1) Dave Fischer. A simplified verison of some of the calculations found in T8. 5/74
- T14 Comment on FJP Equations for Arrival/Takeoff Angles (1) Dave Fischer. Corrects an oversight in the computations outlined in T3. 8/74
- T16 Variations in the Ionospheric Gyromagnetic Frequency and Effects on MW Propagation (1)
  Gordon Nelson. Explains why there is little variation in the gyromagnetic frequency
  for a given area. 6/74
- T17 TV Oscillator Harmonic Frequencies (1) Bruce Portzer. Brief discussion of the causes and cures for TV Interference (TVI), and a list of TVI frequencies. 10/80 (T2)
- T19 <u>Directional Antenna Patterns</u> (1) Jim Korn. A short explanation of techniques used by BCB stations to radiate a directional pattern. See T20. 12/68
- T20 <u>How to Read Directional Patterns</u> (2) Jim Korn. Conversion from mv/mile to Effective Radiated Power in watts. Includes table and sample antenna pattern. See T19. 12/68
- T21 <u>A Simple Method</u> of Finding the Great Circle Path and Distance (2) Father Jack Pejza.

  Description of a quick method using map overlays. Includes map and overlays. 3/75
- T22 <u>Summer Static, a Skywave Proposition</u> (1) Gene Martin. Discusses thunderstorm generated static and why the background noise level often goes down as dawn approaches. 7/70
- T25 <u>Radio Direction Finding</u> (1) Dave Fischer. Technique for pinpointing the location of a station using bearing information from DXers. 10/71
- T26 Relation Between Geomagnetic Measurements and MW DX Conditions (2) Gray Scrimgeour.

  Talks about a potential correlation between Afr readings and BCB DX conditions. 1/68
- T27 <u>Precision Frequency Analysis for the Medium Wave DXer</u> (2) Ron Schatz. Describes a technique for station identification by measuring exact frequencies. 11/75
- T28 WWV and You (2) Bruce Portzer. Complete information on the services of WWV, with three charts and time table. 4/76 (NMP)

- T29 Inferential Frequency Measurement by Hetrodyne Analysis (1) Glenn Hauser. An easy method to estimate station frequency by analyzing co-channel hetrodynes. 11/75
- T31 Precision Frequency Measurement in the Mediumwave and the Shortwave Broadcast Bands (8) Charles Taylor. Complete rundown on PFM and how it is accomplished. 2/76
- T32 <u>Auroral/Geomagnetic Activity and its Effect on MW Reception</u> (1) Gordon Nelson. Concise set of guidelines examining the effects of geomagnetic activity on BCB reception. 8/76
- T33 <u>Silencing QRN from a Fish-Tank Heater</u> (1) Nick Hall-Patch. Describes a method for reducing line noise buzzes with a capacitor. 8/77
- T36 Some Thoughts on TP Reception on the East Coast due to the New 9khz Waveplan (2) Bob Foxworth. Comments on the possibility of East Coast reception of some of the more easily heard TPs. 1/78
- T40 Some Non-Technical Thoughts About Long Distance Radio Reception in the Medium Waves (4)
  Gene Martin. A hypothesis is put forth that may explain some effects noted by DXers
  trying for long distance stations. 2/78
- T41 <u>Unusual Antenna</u> <u>Systems</u> (2) Cary Simpson. Unusual antenna locations and layouts used by BCB stations are discussed. 2/78
- T42 Long Distance Receiving Measurements of Broadcast Waves Across the Pacific (2). Field intensity measurements of KNX-1050, Los Angeles, CA made in Japan over the course of a year. 12/31
- T43 Radio Propagation at Frequencies in the Standard Broadcast Band (2) Philip Sullivan.

  Basic discussion covering radio wave propagation. (NMP)
- T44 Palomar Engineers VLF Converter (1) Grant Manning. Review of a converter that translates 0-500 khz to 3.5-4.0 Mbz. 11/77
- T45 Nightime Medium Wave Propagation by Ionospheric Refraction (4) Randy Seaver. Article detailing radio wave propagation theory and ionospheric conditions. 9/78
- T46 On Reflection and Refraction (2) Randy Seaver. Do radio waves reflect or refract from the ionosphere? Both philosophies are discussed and conclusions are drawn. 1/79
- T47 <u>A Method of Finding the Distance Between Two Places on Earth</u> (2) Father Jack Pejza. With these two charts, distance can be determined to within 50 miles. 2/79
- T48 Terrain Charts for Propagation Predictions (1) Mark Connelly. Discusses how variations in the conductivity of local terrain can effect reception in certain directions.

  Includes chart for Billerica, MA. 8/80
- T49 What to Look for when Buying a Receiver (2) Nick Hall-Patch. Talks about points to be considered before selecting a receiver. Sensitivity, selectivity, strong signal handling, readout, etc. are covered. 10/80 (T2)
- T50 Strong Signal Handling (2) Chuck Hutton. Discussion about strong signal handling in a receiver, and what can be done to improve it. 10/80 (T2)
- T51 <u>Audio Filters</u> (4) Bruce Portzer/Sheldon Remmington/Nick Hall-Patch. Includes introduction, reviews of Autek QF-1, MFJ SBF-2BX, SL-55, MFJ-752, Mizuho AP-M1, Laboelectron SF-0330, Datong FL-2 and Hildreth Engineering "CommAudio Processor" filters, and some schematics for "build-your-own" audio filters. 2/83 (T2)
- T52 Gilfer GAR-7, KRS DD-2, KRS DD-1-4D (1) Gerry Thomas/Nick Hall-Patch. Reviews of these commercial digital readouts for radios with Wadley Loops and 455 khz IF. 2/83 (T2)
- T53 More Great Circle Calculations (1) Richard Corry. Simple equations and a Basic program for a HP-25. 11/80
- T54 Seasonal Variation in Medium Wave Reception (2) Bruce Portzer. Author has organized information from several IRCA Foreign Logs and graphed the number of loggings vs. month of the year for TP, TA, LA and DU originating signal paths. 1/81
- T55 <u>Diurnal Field Strength Calculations</u> (1) FCC. FCC method for calculating interference during sunrise and sunset skip. 2 charts and outline for use. 10/82
- T56 <u>Great Circle DX Program</u> (3) Mark Connelly. HP Basic program to calculate Great Circle bearing and distance. The location of many US and world cities is included. 3/83
- T57 Medium Wave Oblique Propagation Another View (4) Randy Seaver. Presentation of the author's theory on propagation, and comparison to other theories. See T58. 6/84
- T58 On Theories, Extraordinary Waves and Elevation Angles in Medium Wave Propagation (3) Randy Seaver. Further discussion of the basis of the theory outlined in T57. 11/84

### FREE REPRINTS TO IRCA MEMBERS

- X1 <u>Achievement Award Certificate Requirements.</u> Details covering the application for awards available to IRCA members. (NMP)
- X2 <u>DX Records Report Explanation and Guidelines.</u> Convenient form to use for submitting totals to the "DX Records" editor. (NMP)
- X4 IRCA Abbreviations List. Complete list of abbreviations used in DX Monitor and in these reprints. This is available free to all persons. (NMP)
- X5 IRCA Constitution, Bylaws and Editorial Policy. Complete and current copy. Also included are the guidelines for submitting proposals. (NMP)

The following exchange of merchandise discount has been negotiated:

National Radio Club (NRC): All merchandise on this list (reprints and books) is available to NRC members at the IRCA member price. All NRC merchandise is available to IRCA members at their member price. For a current list write:

NRC Publication Center P.O. Box 164 Mannsville, NY 13661

Please be sure to include a SASE when writing the above organization.

This reprint list was completely revised by Phil Bytheway and is printed in March of 1985.

### OTHER IRCA PUBLICATIONS AND SUPPLIES

<u>Principles of Broadcast Band DXing</u> (NMP). This is our New Member Packet, sent as part of an initial membership in IRCA. The NMP is a comprehensive introduction to the hobby of Broadcast Band DXing. Topics covered include antennas, receivers, reception reports, logging stations, etc. and the IRCA Constitution and Bylaws. Price is \$2.00 postpaid.

 $\underline{IRCA}$  Stationery. Red and black masthead with the IRCA emblem and name. Just the thing to use when writing for verifications. 100 sheets, \$5.00 postpaid.

The IRCA Foreign Logs (FLs). Edited by Father Jack Pejza/Phil Bytheway/Bruce Portzer/Nick Hall-Patch and Mark Connelly. Complete listing of foreign stations reported to IRCA's World Wide columns for a full year (2 years in Vol. 9), plus articles on foreign DXing (Vols. 6-9), Utility lists (Vols. 7-8), Shortwave parallels (Vols. 8-9), BCB propagation (Vols. 6-8), and other pertinent information. There is no other single source of this data. A must for anyone interested in hearing foreign stations on the Broadcast Band.

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Volume 3 (1973-74 season): $2.00 each (close out special)
Volume 4 (1974-75 season): $2.00 each (close out special)
Volume 6 (1976-77 season): $2.00 each (close out special)
Volume 7 (1977-78 season): $2.00 each (close out special)
Volume 8 (1978-79 season): $4.50 each ($5.00 to non-IRCA members)
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