



DX Monitor

Devoted Exclusively to
Broadcast Band DXing

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News from Headquarters

FLASH TIPS: We'll open with a few bits of news, all of it on stations most of us can't hear. Laser-558, one of two British offshore pirates, has gone off the air, according to a CBS radio news story the week of 11/4. The station's antenna was damaged in a storm, so they limped into port where the ship was seized by British authorities.....According to Review of International Broadcasting (issue #104), KEAD-1485 on Wake Island is indeed on the air, per a SWL who recently passed through the area. They are on 24 hours //101.2 MHz and operate with 50 watts AM, 10 watts FM. Programming is mostly automated tapes with few if any IDs.....There is a TIS at Lester B Pearson airport in Toronto on 530 kHz. Call letters are CFYZ and programming is a 2 minute tape of airport info. Also, there is a new TIS at Horicon Marsh, WI on 1610 kHz. Operated by the US Fish & Wildlife Commission, the station transmits info on goose migrations. Horicon Marsh is located about 50 miles NW of Milwaukee. Also, there's a new LV de Nicaragua outlet on 780.

DX LISTENING DIGEST: The last three items you just read were gleaned from a new publication called DXLG. Published by Glenn Hauser, the publication is a new sibling to his popular Review of International Broadcasting. The difference between the two is that RIB concentrates on programming, while DXLG concentrates on pure DX. Main emphasis is SW, but there's also material on ECB etc in it (why else would we plug it in IRCA?). It also includes "Enjoying Radio", the popular quasi-technical publication by Dave Newkirk. DXLG costs \$17 (US) anywhere in North America. Samples are \$1.50US in NA, \$2.25US elsewhere. Write to Glenn Hauser, Box 490756, Fort Lauderdale, FL 33349.

EXOTIC JAPAN: Here's another interesting sounding publication for TP DXers. This 36 page booklet is a listing of Japanese ECB stations. It includes maps showing transmitter sites in 8 districts, a list of all Japanese stns, addresses, program schedules for NHK-1 and NHK-2, program info on commercial stations, plus info on proposed stations and changes. Cost is \$6.00 US, outside Japan. Hopefully, it's in English..... You can get one from Toshihiko Oka, 64 Suniyama-cho, Kameyama City, Mie Prefecture, 519-01 JAPAN.

ABC TALKRADIO DX SPECIAL! Don't forget to tune in the second annual Ray Briem show on DXing and SWling on Friday Night / Saturday Morning, December 7, 1985. The program will be an all night telephone call in show dealing exclusively with our hobby. Guests will include Grant Manning, Paul Swearingen, and Stewart McKenzie in the studio, plus Bruce Elving and Richard Wood via long distance telephone.... Also Arthur Cushen of New Zealand via even longer distance telephone. It promises to be an interesting night. The program will begin at 0806 UTC and the number to call will be 213-879-8255. Feel free to call in with comments, questions, etc. The program will originate from KABC-790 Los Angeles and will be relayed over about 48 stations throughout the U.S. See the 11/2 DXM for a list.

EASTERN DX FORUM

RICHARD EVANS
English Village Apts, Bldg. 23 Apt. B-6
NORTH WALES, PA 19454

Deadlines: Saturdays
This column typed 11/2/85

Bill Townsend, 4500 Connecticut Ave. NW, Apt. 901, Washington, D.C. 20008 202-966-8046. On Sat. 9/21, Joe Erwin hosted a WADXA get-together at his Largo, Md. pad with 15 attending including Greg Monti, Tom White, and yours truly. WAGE-Va. is now on 1200 (ex-1290) and WFWC-Va. is now on 1480 (ex-1530). WKOX-Mass moved from 1190 to 1200 while CHAN-Ont. switched over to 820 from 1280. I enjoyed the competition's convention in Portsmouth, R.I. over the Labor Day weekend. After dreary days on Friday and Saturday, Sunday turned out super and I trekked from one end of the island (Rhode Island proper) to the other and back, burning up 10 shots on my camera including a couple of shots of the yacht harbour and several on the scenic Cliff Walk in Newport. I waded out to knee depth 25 yards from shore at Easton's Beach in Newport during my 28-mile walk. I heard Ernie Cooper broadcast a classical music show on WOPR-91.9 while in P'Town at the tip of Cape Cod. Before Provincetown, I spent a couple of days in Palmouth, where I walked to Woods Hole (Oceanographic Institute and ferry landing for steamer to Martha's Vineyard and Nantucket) and back for ten scenic miles. I went by boat to the Vineyard and saw the spot where "Jaws" was filmed in the spring of 1974, and saw the famed Gay Head Lighthouse at the west end of the island. I heard Howard Stern and the lovely Robin Quivers on WWDC-660 during my walk to Woods Hole. Stern, who used to be on WWDC-101.1 in the morning, got the pink slip a couple of weeks later. When the April Fools issue of QXM comes out, I'll be in DSA (Chile) for Comet-chasing. It will be best seen in the Southern Hemisphere this time. Halley's won't be back until 2062. It will be closest to the Sun around Super Bowl XX time. Enough blabber for now. 73 and good DX.

David Shapiro, P. C. Box 135, Griffin, Georgia 30224

I am writing to let you dial twirlers know that I am still interested in exchanging cassette tapes of local, regional, and normal skip AM & FM broadcasts with you. I am interested in hearing from people who live next to the Mexican border and others who live in Puerto Rico and in the Caribbean area. I am interested in cassette tapes of Spanish speaking Mexican stations that play the ranchera type of music, and other stations in Puerto Rico and in the Caribbean. I would also love to exchange cassette tapes with anyone in Hawaii and Alaska, because I am interested in normal SS and SR skip conditions there. Here in my shack, fall and winter time DX conditions are just beginning to open up. I've received new catches from XEQ-940 and another Mexican station on 960 kHz. Even the Caribbean Beacon is clear with no fading late at night. WQIS "Q89" is very strong during SSS, but WLS is still the dominant one on that channel. I am glad that we are going back to good ole standard time, and if we all can vote our preference, we would stick to the standard time all year around. 73's to you and good DX.

Richard C. Evans, English Village 23 B-6, North Wales, Pennsylvania 19454

No reports last week, thus no column. It's good to see David Shapiro around again. I remember you from Des Moines, Iowa while I was doing the CDXR so many years ago. On the question of people voting to keep standard time over daylight time, I don't agree, Dave. I remember when Michigan went on Daylight time back in 1967. The state legislature would not approve DST, the people around Detroit got enough votes on a petition to put the question on the ballot, and DST passed on a referendum. At the time the state elections board accepted the petitions as being valid with enough valid signatures, the state had to go on DST, and did so at 0200 on a Tuesday morning. It was a mess. In my last Forum, I mentioned a guy in my apartment building who was a ham, and wondered how he handled it now. I still haven't seen him lately, but have noticed on his Cadillac that there is a whip antenna. Looks strange on a Cadillac, hi. The Philly papers are finally publishing again, and the 10/31 Inquirer carried the Summer, 1985 ratings. The top ten are: WMMR-FM, WUSL-FM, KYW-1060, WBAZ-FM, WCAU-1210, WHGK-FM, WDAS-FM, tie between WPEW-950 and WCAU-FM, and WKDB-FM. Source was listed as Arbitron. Thanksgiving week, I will be in southern Alabama, leaving here on 10/23 and getting back 12/1. The 11/23 deadline will probably be shoved up to 11/21. No feeling yet on what will happen with the next column. Keep sending the reports anyway! PTL.



Western DX Forum

★ ★ ★ ★

WCA—Serving the Broadcast Band DX'er Since 1964

Editor: Ric Heald, 8539 BELLAMY WAY, SACRAMENTO, CA 95828

DEADLINES - WEEKLY ON TUESDAY

DOUG PIFER, 306 HILLSIDE CT., VISTA, CA 92084

Been listening once in a while, but mainly to shortwave. Occasional Clear Channel listening in the morning if I'm going anywhere. It's still fun to listen for content once in a while, of course I always wait for an ID.

Greetings to Jim Hilliker and Steve Mittman. Wish I could make it to those SCADS GTGs, but I just about always work on Saturdays. Speaking of work: Do me favor and lay off the complaining about the post office. It's hard to work hard six days a week and have nice customers say, "Just give me the checks and keep the bills." Hi. I know you guys hate the phone company, gas prices, housing costs, etc. (Doug, we did have fun at KRED with the UPI story about certain big city postal employees being sent to classes to learn how to charm their customers, hi-Rth.)

Anyways, nice plug for the Antique Radio Classified. Subscriptions should be \$15 per year and \$1.50 for a sample copy (issue 728). It's a real good source of information and a helpful guide to prices if your buying or selling.

I'll be moving to Oceanside in a few months if escrow goes through. Buying a house can get your adrenaline going.

Also, Ric, I've never seen so many logging trucks before until I went through Eureka. You're right, a great place it is. (So, you didn't stop by here? A thousand penguin flipper lashes, hi. Getting behind the chip trucks for a nearly free ride is more fun, hi-Rth.) 73.

ROY H. MILLAR, 13714 30th AVE. NE, MARYSVILLE, WA 98270

Recent verie from KSPO 1050 discloses KTBI 810 will be going to 50 ks in the near future. Verie from KBBG 1400 reads in part, "...Your reported reception is the farthest report we have received from the continental United States. We did once get a letter from Denmark, and they did indeed receive us. Either a UFO was aiding our coverage, or a once ever atmospheric phenomenon was occurring."

Regarding the ICR-2010 programmable capability; it isn't as flexible as I'd like it to be; while the "TURN ON" time is completely flexible, (to the exact minute), the "ON" cycles (and resultant "TURN OFF" times) are limited to 15, 30 and 60 minute durations. It would be nice if the latter were completely flexible too (such as the RS Micronta programmable timer), or if at least the "OFF" cycle in the final programmable stage could be defeated so that the final cycle would remain ON indefinitely. I can of course achieve this last condition by manually turning from TIMER to "ON" when I arise at 0655 (my local time); recorders are completely independent on their own timers, so it's just a question of getting the receiver on at proper time, generally on the last programmed frequency, although I can easily change frequency by prior programming of a memory frequency outside the bank used for basic programming. Utilizing the above procedure, I can tape up to five frequencies during the early morning hours, but that's not too practical; generally it looks like I'll make use of two or three frequencies, setting up looking for LA s/ons (circa 0300-0600) then switching over to TP/DU channels for later monitoring, at the moment through 1000 EST.

Radio-wise, I'm not prepared to say much about the ICR-2010 yet; not impressive so far, but will see how the Sony AN-1 antenna, which I've just ordered, works with it. SM-1 works well, but on only one frequency of course. Longwires don't seem to match up well. 73.

GLEN KIPPEL, 612 WEST AVE., MERCED, CA 95340-6577

Well, so far this season DX has been both good and so-so, but it looks like we're going to be hearing some very interesting stuff this winter. Everybody dust off your receivers and get DX'ing.

I must sat that I found Marc Bergman's article fascinating. There's no real substitute for measuring something to find out what it's all about. I would suspect that some areas may have more QRM from various sources. Recently I took my RAX-1 out to the KSNM (AM) site where the tower lightning was re-done and the old Romex was left on. I thought it would be interesting to try out a 500-foot vertical. But there was too much QRM coming from the pole pips at the site to hear anything. Ugh! Anyway, the comment he made about most receivers needing alignment is so true. Most tube receivers should be aligned every two or three years, and more often if bounced around at all. And if you buy a used receiver it should be realigned as

matter of course. When I bought my R-388's I was very disappointed with them until I peaked them up. Now I measure the sensitivity at 1000 KHz as 1.3 microvolts. The SP-600 (modified) is 0.5 microvolts and I measure the RAX-1 at 10.

I suspect that the reason manufacturers are using untuned front ends is to reduce the number of alignments and thus cut costs. The adjustments are usually set at a predetermined point based on a pre-production model and that is why even new receivers could use some tweaking. Of course, some manufacturers get around this by adding an "antenna trimmer" which is nothing but a fine-tuning control for the R_f stage. Most of them have nothing to do with matching the antenna to the receiver. More knobs later, right? Well, more later, so 73.

GARY LARSON, 2806 LINCOLN, BURBANK, CA 91504 (818) 845-1236

Hello. Found out the 29 Palms Beverage DX'pedition was set for 20-21 October while at the SCADS GTG. Left the KPCC fundraiser around 2 PM and stopped by KSES 1420 on the way and picked up a few items. Got to the DX'pedition site near sunset. Heard the locals on 1250 and 1420 s/off before arriving at the site off Ironage Road near Dale Dry Lake. Upon arrival saw several who had been at the SCADS GTG and later saw Greg Hardison and his wife, plus Paul Swearingen who arrived a little later.

I used my GE Superadio with the lead from a SW antenna wrapped around and heard lots of SS plus a few out-of-state stations. (Why didn't you attach the lead to the AM antenna terminal?-RtH.) One DX'er using an R-1000 heard much more than did I.

Was nice being out where there was no smog, freeways, traffic and powerful locals, and away from a big city.

Left on 27 October about noon and stopped at KDHI/KQYN. AM is C&W, 1M contemporary rock. Picked up some stickers. (Gary, you sure it wasn't the weekend of 26-27 October and not 20-21 as you stated earlier?-RtH.)

Drove past old transmitter site of the former 1420 assignment, but couldn't really tell where tower had been. Drove past old studio site which is now a VFW hall.

Stopped at KSES transmitter on La Contenta Road in Yucca Valley. Transmitter is in a small building next door to a Cal-Trans yard.

Talked with someone at the KPCC fundraiser who once worked at KDHI and he mentioned that the former owner hoped to put an AM on air on 660.

Wasn't there an application on 1520 or 1530 for Yucca Valley? I recall something in Broadcasting Information about that.

Robert Wien, thanks for the letter. Still have some stickers to give away to anyone interested.

NICK HALL-PATCH, 1538 AMPHION ST., VICTORIA, BC V8R 4Z6 CANADA

Mighty odd season so far. Although the big JJ outfits have been in most mornings since early September, I've logged only three new Asiatics: N. Korea 855, HLKG 738 and JOPG 585. It's been really unusual to log anything with a more northerly path than the Japanese. So much for the low end of a sunspot cycle!

DU's have been virtually non-existent, yet my best DX this season has been from there: 6WA 558 for the most distant station heard here, and the 2 kw ABC outfits on 756 which are my first Aussies at that power level.

I've been trying to log the V. of Reunification 1053 at home (it's been heard on coastal Beverages), but believe that all I hear is the S. Korean jammer. Bill Harms or Charlie Taylor, are you familiar with that jammer's technique? What I've heard is a sort of ghostly multiple whispering sound; quite peculiar and would be a great sound effect in a haunted house.

Beverage DX'peditions: I've been on three in the past two months, but with little in the way of spectacular results. The biggest disappointment was a planned three-night DX and experimentation extravaganza with Don Moman and local DX'er Paul Routenburg. I'd found a site where wires in a number of directions could be set up and gotten permission to use it from the forest company which leases the area. Unfortunately the site was closed due to fire hazard by the time we wanted to use it, so we had to settle for an inferior site where a "correctional center" (read: jail) had been. The high points were the discovery of some fine blackberries and a trail down to a beach; DX was not great, hi. (If the berries were the Himalaya variety, they make great wine, hi-RtH.)

My Beverage DX'peditions now tend to be time limited affairs since the discovery that it's possible to set up a wire at a couple of sites at 3 AM local time (i.e. in the dark). That way an entire night isn't wasted so that one can log the good DX at sunrise. Now I just have to be enthusiastic enough to crawl out of bed and drive off into the dark. 73.

JIM HILLIKER, 1135 N. MAYFAIR AVE., #2, ANAHEIM, CA 92801

Hi gang. I'm back with a few thoughts I didn't have room for last time, plus some of what I've been up to since last time. Gary Larson, your UNID on 1440 in either the 12 or 19 October DXM is probably RWED since they're non-directional, seem to get out well and use the K-MED slogan. Besides,

KUHL is news/talk now. Also, thanks Ric to you and Gene Martin who figured out my problem of why I get KLAC 570 on 710 MM's when KMPC is silent. Yes, it appears KFI is the cause, as I live about ten miles from their tower! (Jim, explain why I get KUHL/KVON atop 1440 nights when I'm 125 miles from Medford, and KMED gets buried!-RtH.)

DX is OK, but not great lately. I managed to get two newies which were much wanted, because they were two close un-heards: KNEZ 960 and KLS 990. The only two I don't have in SoCal now are 800 Bakersfield and 1290 Santa Barbara, which is silent at present. With KDIA 1310 off recently, I've tried and failed to get KNPT or KCRE. (Gee, I have NO trouble getting KCRE, hi-RtH.) I also hope to get out of bed earlier than 0500 or stay up later to nab some midwest or eastern catches. Two seasons ago I nabbed a few good ones, but recently the east has been the usual stuff. I went through my loggings recently and out of 551 stations heard, only 30 were W's. Of course KDKA is in the east, which I have, but I sometimes wish I was fortunate enough to DX back when the band was less crowded and stations didn't stay on all night. Now you know why I was so excited to log a 1 kw station from North Dakota. And it's not getting any easier for DX'ers just coming into the hobby to hear anything of great distance. With the Clears filling up, I suppose I was lucky to hear 34 states, but now I would have a hard time hearing even 30 because of the rapid changes in the MW band in just the past three years. But there's no way I'll give up DX'ing, it's just too bad younger people aren't getting into the hobby like the once did.

A few veries have started to trickle in: KXO 1230 with map, sticker and station history; KLS 1330 with sticker and map. Verie states they run 460 watts and have applied for 5 kw nights. If approved, they'll put up a three-tower array. KXAK 1310 sent a letter from the music director asking for more information on this hobby, saying she was the DJ I heard, and that the CE would answer my other requests. Then, another letter from the office manager said my letter was "going through the station's processes" and I would be hearing from them again soon. Total veries now 180.

Any history buffs out there interested in a book on the history of radio announcers from the years 1920 to 1945, should read, Golden Throats and Silver Tongues: The Radio Announcers by Ray Poindexter. It was written in 1978 and printed by River Road Press, Conway, Arkansas. The detail and research the write put into the book make for interesting reading, especially the early years of radio when announcers were new and weren't quite sure what to do. (I still have that problem at times, hi-RtH.) I came across it by accident at my local library and recommend it highly. It's full of great stories about radio's formative years and how announcers, even then, went from station to station to network in search of "bigtime."

That's all now from SoCal. Best of DX and 73 'til next time.

RIC HEALD, 8539 BELLAMY WAY, SACRAMENTO, CA 95828

Hi all. I'm still in Eureka, of course, but by the time you receive this issue, I'll have completed the move. I still can't believe I'm doing this, but money talks, hi.

Jim, I can remember that just 20 years ago we on the West Coast used to complain about all those MM pests from the midwest, like KFH 1330, KELI 1430, KEMI 1440, WSPD 1370. . . I could go on. And the Cuban was like a local during KFI's regular MM SP. And daytimers could sign on at full power (there was no pre-sunrise/post-sunset power then) as early as 0400 local time. I nabbed a ton of stuff that way. And DX Tests could be heard coast-to-coast. I used to sit on 1470 from 0200 local to 0500 and work 10 kHz each way for s/ons starting with East Coast regionals. Also, there were a ton of stations that used to equipment test for monitoring companies on a regular basis. Now that's all done during RS at a local level.

Even though the FCC has been deregulated and they basically don't care anymore, that's not entirely true. We just had a memo passed around regarding a \$4100 fine handed out to local KPOD 1240 along with a \$3500 fine to their FM in Oakland, Maryland. The list was awesome. No remote meters in studio, non-functioning EBS equipment, unrepared meters, etc., etc. The FM: Not maintaining paint on tower, not monitoring tower lights, etc. So the FCC still does their thing. Odd though, when they were here because a local FM was caught running as high as 200% modulation, they did nothing. But that same night, they nabbed two CB'ers, their lowest priority! That's like a cop writing a ticket for a minor violation (i.e, broken tail light) instead of chasing a robber. I'm willing to bet we could stay on day power for several evenings and not get fined, but I'm not taking chances, hi.

Nick, you're so right. I thought it was only here. Just the usual big guns from Japan, lots of hets, but nothing to write home about. I've got ten days left here on the coast, once I move inland I don't know how well I'll fare for TPs and those elusive, so far, DUs.

Ah yes, KGO was off Sunday, 03 November. Aside from the all powerful CXQR, heard YL/QM in SS and tried for an ID at 0200 PST, but to no avail. Sounded like proper SS, so possibly Colombia (un-needed of course).

With that, see y'all in 7 and 73 de RtH. .

MWDX-4 & Mini-MWDX-4 Series Phasing Units

Mark Connelly --> WALCON DX Labs
30 William Road --> Billerica, MA 01866
11 OCT 1985

This article describes the construction and use of two similar series of antenna phasing units for reception enhancement. Previous models built here had incorporated two homemade transformers and several other components not readily available in retail electronics outlets. This new design eliminates such custom components in addition to offering, in most applications, improved performance over earlier designs.

These units allow the operator to phase-cancel a dominant (interference, or "pest") signal and thereby receive signals which were formerly covered by the QRN. The phasing scheme can produce a cardioid (unidirectional null) pattern, the null bearing of which is electrically steerable. Two antennae are required: these are typically two end-fed longwires of comparable length.

A two-wire phasing unit consists of two antenna-tuners with outputs that can be combined in both additive and subtractive modes by means of a switchable-phase ($0 / 180$ deg.) transformer in the output leg of one of the tuners.

Each tuner consists of input coupling (the S4 "Length Switch" and associated components), a parallel L-C tank circuit with a low/medium-impedance output "tap" on the inductance (done by means of an inductive voltage-divider in this case), and a tank-shunting pot which adjusts the Q and the output level of the tuner. Antennae having a predominantly capacitive component to their reactance may be tuned with S4 set to "Short" or "Normal"; antennae (typically longer wires) having a large inductive or resistive impedance component should be tuned with S4 set to "Long". The "Long" position shunts each wire input with a 100 ohm resistor, causing some signal attenuation. This is generally not a problem as longer wires that require the "Long" position usually provide more signal than needed anyway. Wires with R and/or L-dominated impedance could be coupled to the tanks inductively, but this would make the circuit more complicated than desired; the improvement in signal coupling would be of minor worth.

Before phasing (nulling) can begin, each tuner must first be adjusted independently for peak signal at the frequency of operation: this is done by setting the S2 Function Switch to the position corresponding to the single tuner being adjusted, the S1 Frequency Range (inductor) Switch to the appropriate range setting (per look-up table), the associated pot to its maximum Q/maximum level setting, and the tuner's variable capacitor to the position producing the strongest wanted-frequency signal.

Once the two tuner-output lines are in a peaked condition, the pot on the tuner yielding the stronger signal from the station to be nulled must be adjusted so that the "pest" station level is equal on both tuner output lines. Actual nulling may then commence.

The S2 Function Switch is set to the Null position: this combines the outputs of the two tuners. Whether this combination is additive or subtractive is determined by the S3 Null-Type switch which is wired to the secondary of the T11 phase-reversing transformer card. The S3 position yielding greater "pest" signal reduction is the position to be used. Nulling requires phase-shifting of the signal on one of the tuner output lines. The tuner whose pot is set to the higher-Q position can be shifted more than the other tuner; therefore, the higher-Q tuner is chosen to be phase-shifted. The shifting is accomplished by offsetting the chosen tuner's variable capacitor from its initial (peaked) position. A significant null is usually attainable with this adjustment; further fine-tuning (as outlined by the operating procedures later in this article) is sometimes needed to get the maximum null obtainable. Formerly subdominant signals occasionally are reduced in absolute strength when the "pest" is nulled; however, the wanted-signal to "pest" ratio is almost always improved dramatically.

Reduction of wanted subdominant signals is generally minimal if there is a substantial difference in great-circle bearing between the wanted signal(s) and the signal being nulled. Use of Beverage-length aerials also reduces the likelihood of mutual cancellation. The angle (horizontal and/or vertical) between the two wires used is not overly critical: useful nulls have been obtained with parallel wires, wires at a right angle, wires in opposite directions, and wires separated by just about any other angle.

Parallel Beverages, one terminated and configured to favour a particular target area (e. g. Africa), and the other unterminated, are said to give particularly good results, especially when the locality chosen has salt water in the direction of desired DX and blockage (hills, mountains, lossy ground) towards "pest" domestic stations.

At this point, it is worth mentioning that the signal ("station") to be nulled can be a local noise source (e. g. light-dimmer, TV) rather than an actual signal from a communications transmitter. The benefits of such a system should be obvious to those involved in weak-signal reception on frequencies below 5 MHz - e. g. the 160-m. ham, the Trans-Atlantic broadcast-band DXer, the LOWFER band operator, and the tropical-bands shortwave buff.

Nulling by means of a phasing unit has certain similarities to obtaining a null by mechanically rotating a directive antenna such as a loop or a Yagi beam, despite the fact that the patterns of a two-wire phaser, a loop, and a Yagi are all different. The greatest similarity regards stability of a null. A null will always be more stable if there is stability in horizontal and vertical arrival angles of the signal to be nulled. High-angle skywave, by itself or mixed with groundwave, is notoriously difficult to keep nulled because of the rapid arrival-angle variations and the multiple paths usually involved. Low-angle skywave and pure groundwave can be nulled to a greater depth (with less need for re-adjustment of nulling controls) than that of short-skip.

MWDX-4 and Mini-MWDX-4 series

MWDX-4 series phasing units are housed in chassis measuring 7" x 5" x 3" (17.8 x 12.7 x 7.6 cm). Mini-MWDX-4 series phasing units are housed in chassis measuring 5" x 4" x 3" (12.7 x 10.2 x 7.6 cm).

The MWDX-4 series offers built-in amplification capability; the Mini-MWDX-4 series units are passive. Mini-MWDX-4 units are intended for urban-site applications: those for which use of a broadband-amplifier is not recommended because of the potential for overload. If gain is desired at high-signal-level sites, an external high-Q / high-dynamic-range TUNABLE output amplifier should be placed between the phasing unit's output and the receiver's input.

Both series of phasers offer two-wire phasing capability; in addition, loop vs. wire capability is offered on the MWDX-4 series. The loop to be used must have certain modifications (this is discussed later in this article).

Individual models are designated MWDX-4A, MWDX-4B, MWDX-4C, MWDX-4D, Mini-MWDX-4A, Mini-MWDX-4B, Mini-MWDX-4C, and Mini-MWDX-4D. The letter suffix refers to the frequency range. Figures 1A through 1F and 2 show the units' circuitry. Table 1 illustrates the relationship of letter suffixes, inductor values, frequency ranges, and S1 switch positions.

FIGURE 1A

(APPLIES TO MWDX-4 AND MINI-MWDX-4)

INPUT TUNERS

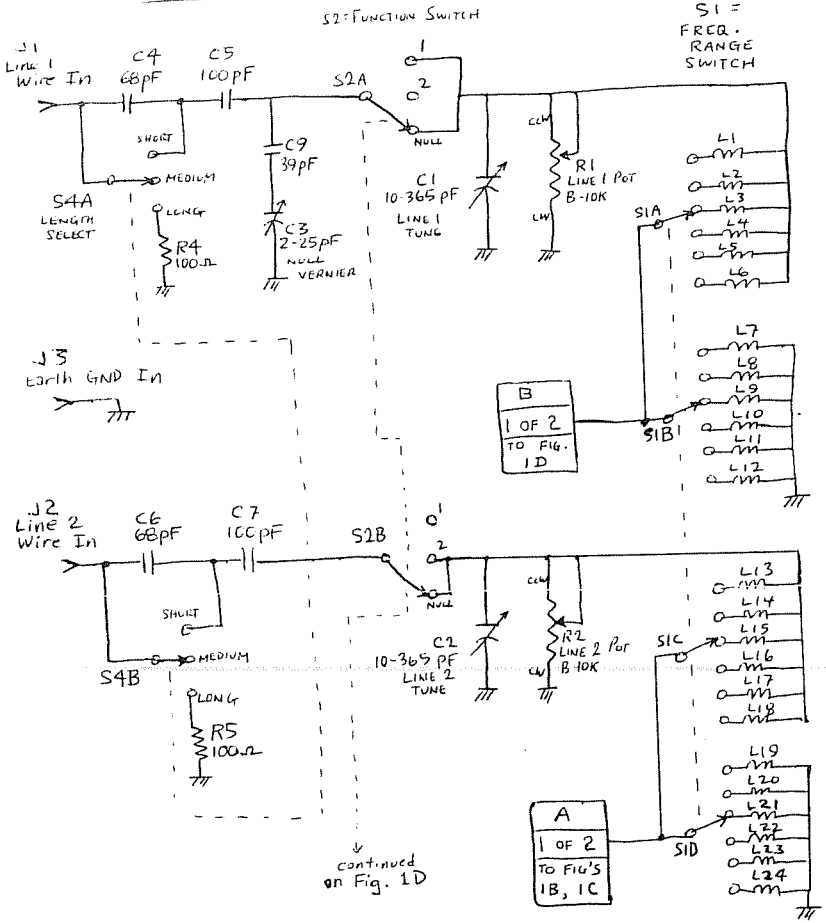


FIGURE 1B

(APPLIES TO MWDX-4 SERIES ONLY)

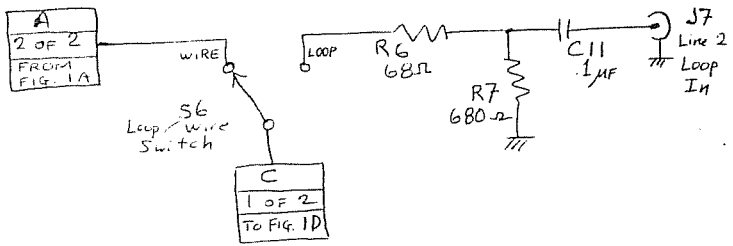


FIGURE 1C

(APPLIES TO MINI-MWDX-4)



FIGURE 1D

(APPLIES TO MWDX-4 AND MINI-MWDX-4)

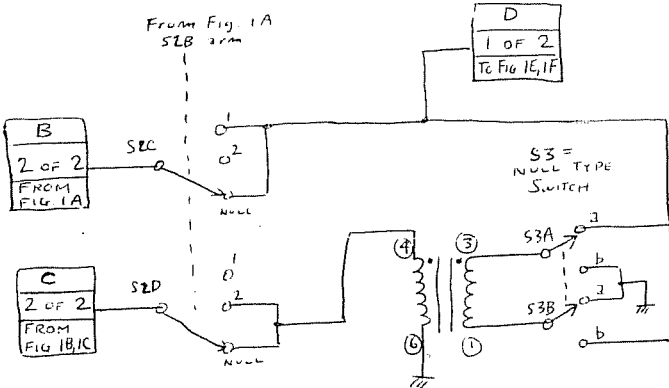
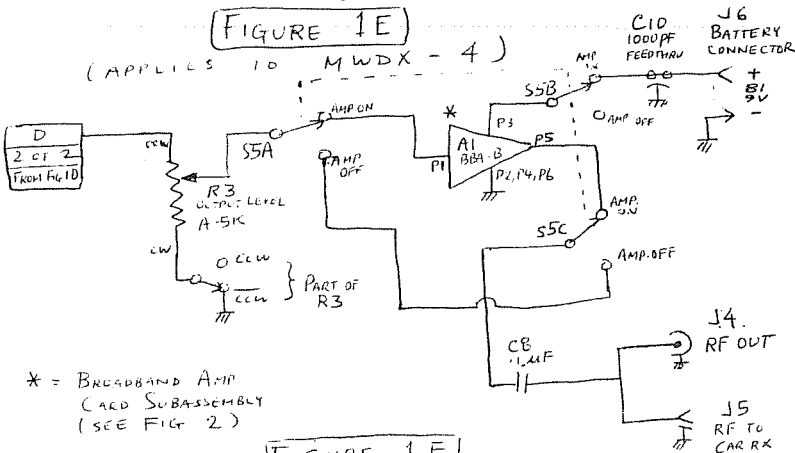


FIGURE 1E

(APPLIES TO MWDX-4)



* = BROADBAND AMP (CARD SUBASSEMBLY (SEE FIG. 2))

FIGURE 1F

(APPLIES TO MINI-MWDX-4)

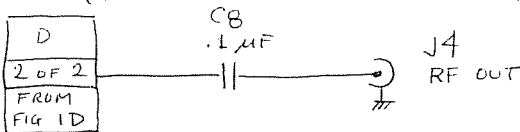
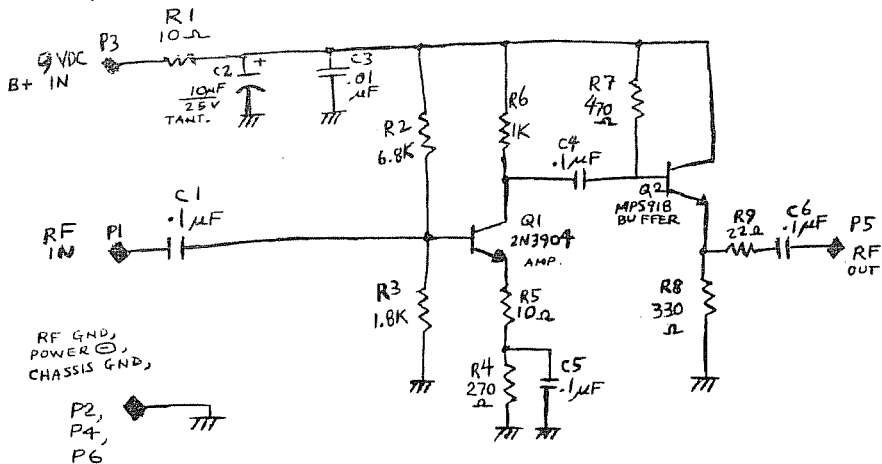


FIGURE 2 (APPLIES TO MWDX-4)
BBA - B Broadband Amp. Card
 Schematic

REV = 20 JUL 1964

(SEL FIG. 6 FOR ASSEMBLY DRAWING)



COMPONENT DESIGNATIONS ON BBA-B CARD ARE SEPARATE ENTITIES FROM MAIN PHASING UNIT COMPONENT DESIGNATIONS.

GAIN ≈ 20dB (dependent on Z_{in}, Z_{out})
0.1 to 30 MHz

TABLE 1

Inductors to be used on S1 (Frequency Range Switch)

| Unit Suffix: | A | B | C | D |
|-----------------------------|-----------------------|---------|----------|------------|
| Freq. Range, kHz (approx.): | 140-300, 480-2000 | 100-600 | 440-2300 | 1500-10000 |
| Inductor L #'s | ← INDUCTANCES in uH → | | | |
| 1, 13 | 4700 | 15000 | 560 | 47 |
| 2, 14 | 2200 | 6800 | 330 | 22 |
| 3, 15 | 390 | 3300 | 180 | 10 |
| 4, 16 | 180 | 1500 | 100 | 4.7 |
| 5, 17 | 82 | 680 | 56 | 2.2 |
| 6, 18 | 39 | 330 | 33 | 1.0 |
| 7, 19 | 1000 | 3300 | 120 | 10 |
| 8, 20 | 470 | 1500 | 68 | 4.7 |
| 9, 21 | 82 | 680 | 39 | 2.2 |
| 10, 22 | 39 | 330 | 22 | 1.0 |
| 11, 23 | 18 | 150 | 12 | 0.47 |
| 10 12, 24 | 8.2 | 68 | 6.8 | 0.22 |

All inductors are standard values of moulded miniature inductors available from Mouser Electronics (Santee, CA) and other vendors.

By the above table, it can be seen that a "MWDX-4D" phasing unit could be expected to operate from 1.5 to 10 MHz, thereby being of use on ham bands from 160 through 30 metres, tropical bands from 120 through 60 metres, and international broadcast bands from 49 through 31 metres.

The next section of this article concerns operating the MWDX-4 and Mini-MWDX-4 series of phasing units. Parts lists and hole-drilling tabs may be found after the operating section. Information regarding the construction of the phasers is an appendix to this article.

(To Be Continued)

BOOK REVIEW

Kuultavissa olevat jenkit [North American Stations Audible in the Nordic Countries] Esa Hanninen, chief compiler. 24 pp., paper. 8th edition, 1985
Publisher not indicated, but presumably obtainable from Suomen DX-Liitto ry, PL 454, Helsinki SF-00101 Finland.

Reviewed by Richard E. Wood

From which spot on earth can all 50 U.S. states, the District of Columbia, all ten Canadian provinces and both Canadian territories still be heard on medium wave? Not from New Zealand. Not from Hawaii. From Alaska? It seems unlikely, and no Alaskan DXer has done it. From the Yukon? The fine DXer there has not achieved it.

The answer, of course, is: from Lapland, the regions of the Nordic countries--Norway, Sweden and Finland located within the Arctic Circle. Documentation is provided in this booklet--modest in form but staggering in content, written in Finnish but using the familiar English-language names of U.S. states and Canadian provinces and territories. In Finnish slang usage, all North Americans are "jenkit", "Yankees," a term which, in English, of course does not apply to Canadians and is of dubious application to U.S. Southerners. So, we have given a more explanatory translation of the title.

Basically the book is in two parts--a listing by frequency, in three columns:

Regularly audible Frequently audible Rarely audible

with the call letters of the station, and the location. (Many Alaskan stations heard are listed simply as AFRN, and in some cases, their precise location cannot be identified, where several low-powered relays are on one frequency.)

The second part consists of two listings by state, province and territory, with stations heard arranged in frequency order. An additional listing is given on the back page for Hawaiians, in two columns rather than three--no Hawaiian is "regular" in Finland, but some are more often reported than others.

Let's look at the statistics. All political divisions of North America are heard via at least two stations. The two divisions which provide this bare minimum of two stations are:

PEI: 630 CFC+ Yukon: 570 CFJH
1190 CHTN 610 CKRW

All U.S. states and the District of Columbia are heard via at least three stations. Here are these rarest states:

DE: 1150 WOEL RI: 790 WEAN
1380 WFRS 1290 WPRC
1600 WKEN 1590 WARV

Four stations per state:

AL: 660 WMOD KY: 680 WCTT VT: 620 WVMT
1280 WNPT 840 WHAS 1230 WJOY
1410 WMML 970 WAVG 1380 WSYB
1600 WEUP 1420 WVJS 1390 WDOT

Turning to the opposite end of the count of stations per political unit, #1 in station ranking (number of stations heard) in North America is...surprise!... Ontario, with the magnificent total of 80 stations heard. Next comes...double surprise...California, with 71 stations heard. How many Californian DXers have yet to hear a single European, let alone one of the Nordic countries? Less surprisingly, #2 in Canada is Quebec with 67, and #2 from the U.S. is Washington State, with 62. Then follow Alaska with the immense total of 55 stations logged, including two AFRNs on 890 and ten other AFRNs.

Surprises go on and on throughout the list. Washington State is followed by... Florida with 51 stations logged. To receive Florida, listeners in all parts of Finland are equally favored, with no obvious advantage to listeners in Lapland.

Thus, the figure for Florida was doubtless swollen by southern Finnish and Swedish DXers for whom the band is open to Florida without interfering or dominant stations from the north and west of North America. Also, stations from Florida and the rest of the South are heard in late spring, summer and early fall when the rest of North America may not be favored; and during auroral conditions of certain types.

Casting a general eye over the statistics, a few random observations. The area around Arkansas, Oklahoma and New Mexico is fairly poorly represented, but moving west from there, Arizona is well up to average. Wyoming is surprisingly weakly represented, probably because of lack of stations there. The states of Indiana, Ohio and Pennsylvania, which do not seem to be advantageously located for QRM-free reception in Lapland, are nevertheless quite well covered--e.g. 21 stations reported from Indiana. Clearly, conditions vary constantly and every area of North America is in reception focus at one time or another, without troublesome co-channel QRM.

Turning back now to the main body of the book, the by-frequency listing shows a minimum of two North American stations heard on every 10 kHz channel. Let's look at the specifics on those channels where only two, three or four stations have been heard, and consider them by regularity of reception:

| | Regularly audible | Frequently audible | Rarely audible |
|-----|--------------------------------------|--------------------|----------------|
| 720 | KOTZ Kotzebue, AK WGN Chicago, IL | | |

To emphasize the obvious point, KQWV Las Vegas, NV has not been heard in the Nordic countries and is the most pointedly missing clear-channel 50 kW station in the book. Check its night radiation pattern in the supplement to the NRC Night Pattern Book. Continuing with channels where only two North Americans (Hawaii excluded) are heard:

| | | |
|------|---------------------------------------|--------------------|
| 760 | WJR Detroit, MI | KFMB San Diego, CA |
| 1040 | WHO Des Moines, IA | KSDG San Diego, CA |
| 1120 | KMOX St. Louis, MO KPNW Eugene, OR | |

Three North Americans heard:

| | | |
|-----|-------------------|---|
| 690 | CSU Vancouver, BC | CBF Montreal, PQ CBKF1 Gravelbourg, SA |
|-----|-------------------|---|

Thus, no U.S. station (outside Hawaii) has been heard on 690.

| | | |
|-----|---------------------|---|
| 840 | WHAS Louisville, KY | KSDP Sand Point, AK KSWB Seaside, OR |
|-----|---------------------|---|

| | | |
|------|------------------------|-------------------------|
| 1100 | WWWE Cleveland, OH | KIID Grand Junction, CO |
| | KFAX San Francisco, CA | |

Four North Americans heard:

| | | |
|-----|--|---|
| 650 | KYAK Anchorage, AK WSM Nashville, TN | CISL Richmond, BC CKOM Saskatoon, SA |
| 670 | KDLG Dillingham, AK CHYQ Musgravetown, NF KBDI Boise, ID WMAQ Chicago, IL | |

What a fine selection of four regulars in a nice geographic spread across the continent!

| | | |
|-----|---|---------------------------------------|
| 830 | KABN Big Lake, AK WCCD Minneapolis, MN | WNYC New York, NY WTWV Hialeah, FL |
|-----|---|---------------------------------------|

Again, how many DXers inside North America are lucky enough to have heard four U.S. stations on 830!

| | | | |
|------|--|----------------------|---|
| 990 | CBW Winnipeg, MB | CBY Corner Brook, NF | WROU Orlando, FL WNOX Knoxville, TN |
| 1160 | KSL Salt Lake City, UT | WJJD Chicago, IL | CBQR Rankin Inlet, NWT WFEN Fenton, MI |
| 1530 | KFBK Sacramento, CA WCKY Cincinnati, OH | CISV Winkler, MB | KGBT Harlingen, TX |

Turning to the other extreme, the largest numbers of stations are logged, as we might expect, on the graveyards, and, also predictably, most of all on the higher-frequency graveyards, those in the 1400 to 1490 kHz range. It is the most "graveyardish" of all the graveyards, 1490, which provides the breathtaking sum total of 43 North American stations identified, all the way from California to Maine and from Alaska to Florida. Then follow 1400 with 39 and 1450 with 35

stations, again coast-to-coast and north to south. How many domestic DXers have heard as many? Canadians alone are listed as "Regularly heard" on most graveyards. Here are the regulars:

1230 CJKK Ft. McMurray, AB
CHFC Ft. Churchill, MB
CFFB Frobisher Bay, NWT
CHVO Dolbeau, PQ

Yes, folks, a Northwest Territories graveyarder is a regular in northern Europe.

1240 CJCO Yellowknife, NWT

Of course, and without detracting in any way from the rarity of such DX catches, when there is a pinpoint DX opening to the western part of the Northwest Territories, much of the rest of North America is in daylight, during the polar winter, and the graveyard is unlikely to be a jumble of competing stations. Identifying stations from more crowded areas may be more of a challenge.

1340 CFYK Yellowknife, NWT
CBGA7 Ste-Anne, PQ

1400 CKSO Stettler, AB
CJFP Rivière-du-Loup, PQ

1450 No regularly dominant station

1490 CJMC Ste-Anne, PQ

Notice how certain locations like Ste-Anne recur, as propagationally favored.

A few final observations. AFRTS Søndrestrøm, Greenland, which one U.S. DXer has recently claimed still to be on its former 1425, is listed (and regularly heard) only on 1420. This is the only Greenlander in this listing, although numerous other Greenlanders (civilian stations) are of course also heard in northern Europe. It was presumably included to help identification, because of its U.S.-style programming. All frequencies have regular North Americans except 540, 550 and 1450. (In this particular, minor way the Nordic countries are not as highly favored as Hawaii, where 540 provides CBK Watrous, SK nightly, 550 always shows KAFY Bakersfield, CA (not reported from Nordic Europe) and 1450 is very consistently dominated by KVEN Ventura, CA.)

Canadians and/or Alaskans are dominant on most channels where they exist. Where there are none, as e.g. on 770, U.S. stations dominate. With new legislation assigning new Canadians to previously U.S.-only clear channels, this situation will change. For example, the arrival of new CKQR Castlegar, BC, as the first Canadian on 760 may already have affected the dominance of WJR on 760, depending upon CKQR's night antenna pattern. It is apparently too new to be listed. New stations like KSKD McGrath, AK on 870 show up prominently. Without doing a precise statistical breakdown, the political unit which appears to be most frequently represented in the "regularly heard" column is Alberta, with its many stations powered at 10 kW or over, many of them beamed north. To conclude--Lapland remains a DX paradise, Finnish DXers remain the best in the world, and to participate in a winter DXpedition to Lapland is the holy grail of DX experiences on this earth.

Disc jockey to serve two cities

THE ASSOCIATED PRESS

DALLAS — Disc jockey Tom Joyner soon will be in the air almost as much as he's on the air, commuting between a weekday morning drive-time show in Dallas-Fort Worth and an afternoon show in Chicago.

Joyner, 36, has signed contracts that will keep him on the air Monday through Friday at KKDA-FM, where he has worked for the past two years, from 5:30 to 9 a.m. Beginning Oct. 15, he also will handle the 3 to 7 p.m. show Monday through Friday at WGCI-FM in Chicago.

"We've been negotiating these contracts a long time, and we would not have entered into them without a lot of research, thought and the certainty that what we're doing is not only possible but will work out for everyone's benefit," Joyner said.

Both stations use contemporary formats focusing primarily on black rock artists. According to Arbitron ratings, Joyner's show is among the top morning programs in the Dallas-Fort Worth area.

Joyner said he has been working on

the logistics of commuting between Dallas and Chicago daily for the last month with travel agents.

According to his game plan, Joyner will head to the airport when he gets off KKDA-FM at 9 a.m. and catch one of several commercial flights that will get him into downtown Chicago by noon.

Joyner said he'll have time for lunch and even a health club workout before going on the air at WGCI-FM.

"We researched weather conditions and we found that had I been doing this last year, there would have been only three days all winter where we might have run into some weather-related problems," he said. "And two of those days were on this end, when we had ice storms."

He refused to disclose his salary at either station, but his traveling expenses will be high. Braniff, which says it offers the lowest regular fare, charges \$198 for round-trip flights between Dallas and Chicago. That's \$990 a week, or \$47,520 a year, assuming Joyner takes four weeks of vacation.

Joyner, who said he is paying his own daily air fare, will be flying first-

class on an unlimited mileage plan that will cost \$30,000 a year.

If he wants more leg room and better food, he'd have to pay \$688 for each round-trip first-class flight on American Airlines. Of course, travel between two jobs is tax-deductible.

Joyner said he's not worried about the toll the jobs would take.

"It's not as difficult as it seems," he said. "The key to it is the job itself. The job itself is not stressful. I have fun on the air. How can you burn yourself out having fun?"

Joyner said he and his family will continue to live in the Dallas area, with him returning there each evening from Chicago.

Ron Chapman, program director and morning DJ at KVIL-FM, Dallas-Fort Worth's top-rated station, said he couldn't believe Joyner would be able to maintain the pace of the dual jobs.

But, at least, he pointed out, Joyner can use much of the same material on both shows.

"What he does in Dallas in the morning, he could do in the afternoon in Chicago, and it would be fresh," Chapman said. "He's found a way to recycle material."

Cape Cod
Times
via Ernest
Cooper

The PHASE ONE -- A Delay Line Phasing Unit

Berry Thomas

In the past few years, I've built and used over a half dozen different phasing units (from Ron Schatz's LSCA to some of Mark Connelly's designs) and have come to appreciate what phasing can and cannot do in the pursuit of DX. If you have never used a phasing unit, I suggest you give one a try -- I can almost guarantee that you'll hear stations you've never heard before. But, this being the imperfect world that it is, phasing has its limitations; there will be times when you want to null an offending station, but you won't be able to. Nonetheless, in my opinion, every serious DX'er should have a phasing unit in his or her shack.

As I stated, I've built several phasers including some designs of my own (e.g., electronic FET schemes, etc.) and have almost always been satisfied but never totally happy. Phasing units based on a tuned L-C circuit have several potential advantages, foremost of which are inexpensive components and potentially improved signal-to-noise ratios. I, however, have usually been driven a little nuts by the array of control knobs to manipulate and by problems like hand capacitance causing phase shifts, etc. Also, to null the splattery sidebands (in addition to the carrier) of an undesired station, you have to spoil the Q of the tuned system, which reduces the signal-to-noise ratio. For the past year or so, I've been tinkering around with a somewhat different approach to phasing and would like to pass along a circuit that I'm not only satisfied with but also almost completely happy with.

Phasing Theory (in brief)

Phasing, in theory, is really very simple -- combine two equal amplitude, antiphasic signals and you get...nothing, a null. With a loop and longwire set-up, because the two receiving (figure 8) lobes are 180 degrees out of phase, all you have to do is combine an appropriate signal from the second antenna so that it's antiphasic with one of the loop's lobes and you have a cardioid receiving pattern. The tricky part of phasing comes in when you deal with the fact that the two antennas are displaced in space, resulting in a given wavefront arriving at the two antennas at different times. This time difference must be corrected to effect a null. Tuned L-C phasing units attack this problem by slightly de-tuning one of the antennas, causing it to lag behind the other. Because the phase relationship of the two antennas is so critical in obtaining optimal null depth (one degree of antiphasic difference reduces null depth by almost 20 dB), things like hand capacitance in a less than optimally designed or constructed unit can make phasing somewhat touchy. But, on the whole, the tuned L-C approach works well.

A Different Approach

Ideally, we could deal with the time of arrival differences between the two antennas by using a continuously variable delay line. Continuously variable delay lines are available and are used in commercial and military applications but they cost big bucks. The circuit described in this article uses a series of fixed delays (to make a band of frequencies "appear" to arrive at two different antennas at the same time), a phase shifter (to continuously vary one of the signals through 360 degrees), a level control (to set the optimal amplitude), and two broadband amplifiers to offset the attenuation of the delay line/phaser. Several circuits/discussions of the use of delay lines to achieve HF phasing have appeared in the radio engineering/amateur radio literature over the years, but the circuit which follows is a modified version of one described by John Webb in the October, 1982 issue of QST (pp. 28-32) that was used to null military jamming signals on the HF frequencies.

Delay Lines

Several companies manufacture encapsulated "lumped constant" delay lines that are used in military and industrial settings and which are suitable for MW/SW phasing. These lines range in price from about \$30 to \$85 on the low end. I purchased an LC3002050A from Allen Avionics (224 East Second St., Mineola, NY 11501) for around \$35. The LC3002050A is a 14 DIP packaged line with a maximum delay of 300 nSecs and an input/output impedance of 50 Ohms. A nice thing about this delay line is that it provides the 300-nSec delay required for optimal MW phasing as well as nine other taps (in 70% increments) to extend the usefulness of the circuit to around 12 MHz for use on the SW bands. Mouser Electronics (11433 Woodside Ave, Santee, CA 92071) recently al-

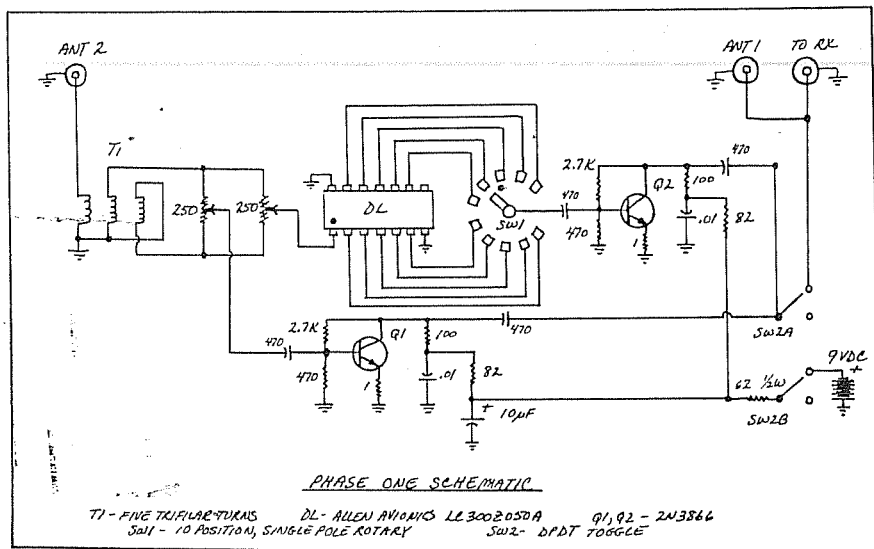
so began carrying delay lines at very attractive prices (about \$9) but the longest delay they offer is 200 nSecs and other specifications (e.g., input/output impedances, attenuation, etc.) are unknown (to me; a spec sheet has been ordered). Perhaps two of the 200-nSec Mouser lines could be cascaded in the described circuit (with suitable component value changes).

Phasing/Amplitude Controls

This portion of the circuit samples relative amounts of in-phase and out-of-phase signals to provide a resultant signal whose phase can be set anywhere between zero and 360 degrees. Relative amplitude is also controlled at this stage. To create this control, the signal from one of the antennas is passed through a broadband transformer with two secondaries -- one in phase, one 180 degrees out of phase. The broadband transformer is wound on an FT-37-61 toroid (Amidon Associates, 12033 Otswego St., No. Hollywood, CA 91607) with 28# wire in a five-turn, trifilar configuration. The outputs of both secondaries are paralleled to two, 250-Ohm linear taper, carbon composition potentiometers whose wipers serve as outputs to the next stage. Finding the required pots can be a problem (and expensive -- mine were \$5 each) but 250 Ohms allows fairly easy fine phasing adjustments. Easier to find 500 Ohm pots can be substituted but adjustment becomes a little touchier. Do not use wirewound pots.

Broadband Amplifiers

To offset the attenuation of the delay/phasing circuitry, two bipolar broadband amps are used. Special bipolar transistors were chosen (instead of FET's) for a couple of reasons. First, the low input impedance (less than 150 Ohms) of the bipolar transistors reduces the probability of amplifying stray RF and, secondly, the chosen transistors are used in CATU amps and have good dynamic range, linearity, and excellent noise figures (better than many FET's). The output of each amp at 10W frequencies is 15-20 dB and they are very quiet. I originally used the LT1001A made by TRW but the circuit values listed here are for the easier-to-find 2N3856 (Radio Shack 276-2030). The 100-Ohm output impedances of the two amps are combined to produce an approximate 50-Ohm impedance to the receiver input.



Construction

The circuitry is assembled on a PC board and housed in a metal, shielded cabinet. Signals are inputted and outputted to the Phase One using UHF con-

nectors and **RG-58U** coax (leads are as short as possible). Power is supplied with 9 **UDC** wall transformer and a **DPDT** toggle switches the Phase One in and out of the signal line.

Step-by-step construction details are being foregone in this article for several reasons: a) apparent displeasure on the part of some readers for lengthy technical articles; b) experienced tinkerers should have no trouble working directly from the schematic; and c) the Phase One in kit (with detailed instructions) and assembled form should be available from **Radio Plus+ Electronics** in 60-90 days.

Operation

The Phase One has only three principal controls -- delay range, amplitude, and phase. A single setting of the delay range control covers a large range of frequencies (about 1 MHz at MW frequencies), so it is not routinely adjusted while DX'ing the **BCB**. The amplitude and phase controls interact so alternately adjusting each is required for the deepest null. I've found that simultaneously rotating each locates the general null settings quickly then alternately adjusting each for deepest null works best for me. With practice, optimal nulls rarely take more than 10 - 15 seconds to attain. Once a null has been established, it can be "steered" throughout 360 degrees using the phase control and with only minor adjustments to the amplitude pot. Because the bandwidth of the null in this broadband design is also quite large (depending on the spacing of the antennas, etc.), it is often possible to change receiver frequencies several tens of kHz and retain the same nulling effect. As an example, using the Phase One with a dipole and a longwire, I was trying to receive **WUQB-600** (a regular receiver sensitivity/selectivity test station of mine). **WUQB-600** is located about 150 miles to the west of me and radiates 1 kW. Reception of **WUQB** is usually bothered by both **WHYM-610**, a local splasher, and **WDLP-590**, a messy rocker. Luckily, because both **WHYM** and **WDLP** lay roughly in a straight line to the east of me, a single setting of the Phase One was able to simultaneously null both the 590 and 610 pests, and, at the same time, double the signal from **WUQB** to the west (due to the summing of the in-phase signals on the opposite side of the null). This was my best ever reception of **WUQB**. This example represents phasing in general, and broadband phasing in particular, at its best. Phasing has its limitations though. In fact, phasing is definitely not guaranteed to null all undesired stations. It can do very well with single mode, one hop signals but if an offending station is "beating" or fading, this usually indicates either a combination groundwave/skywave arrival or a multi-hop skip. In these cases, a single null will remove one signal but the other will remain. (On the drawing board, incidentally, is a two-stage phaser (the Phase Two) to attempt to deal with this situation... we'll see how it works.)

So far I've used the Phase One with two longwires, a loop and longwire, a loop and dipole, and a longwire and dipole and have had no trouble nulling all of my locals (the strongest is 5 kW **WCQR-1370** at six miles) to the noise level. From what I've read, two verticals are the best to phase but I haven't given those a try. Neither have I spent a great deal of time testing the Phase One at frequencies above 1.6 MHz other than to confirm that at least partial nulls (due to the multi-skip nature of SW signals) can be obtained up to about 12 MHz. Much more testing needs to be done at HF frequencies and perhaps some design changes.

Well, that about sums up the Phase One. If you have any questions (or can provide any answers, hi) or if you would like to be notified of the availability of the Phase One in kit or assembled form, drop me a line at **RADIO PLUS+ Electronics**, 3636 Chastain Way, Pensacola, FL 32503. 73's....GT

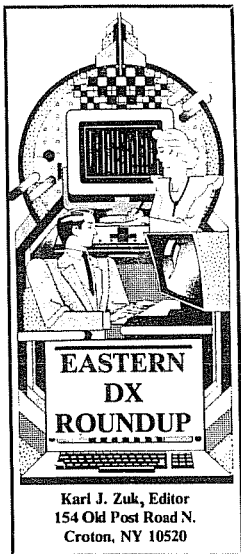
Radio station gimmick is foul play

GEORGETOWN, Del. — Radio station WSEA-FM may have the USA's only Dead Chicken Report. Sussex County is in the heart of Delaware's poultry industry, so chickens are a big item here. Anyone can get one of the 10,000 Dead Chicken Cards that have been printed and become a member of the Dead Chicken Patrol, which reports to WSEA about dead chickens on roads. It's all in fun, morning disc jockey James McHugh says, and it fills a void. "Big radio stations in the cities, they do traffic reports and pothole reports. But since we don't have too much of a traffic problem and the roads are in pretty good shape, the next problem is dead chickens, and we're here to tell people where they are." The reports allow motorists to "avoid (the dead chickens) or run them over, depending upon their disposition," McHugh said. Dead Chicken Card holders are eligible for prize drawings — conducted while a tape plays the sound of screeching tires and the cackle of an expiring chicken.



KORE AM — 1050
FM — 93.1

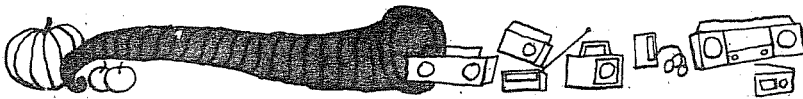
P. O. Box 296
Springfield, Oregon 97477



REPORTERS IN THIS WEEK'S ISSUE:

- (RE-NY) Raymond Bauernhuber, 141-12 243rd Street, Rosedale, NY 11422...Panasonic RF-2800 with shotgun loop.
- (MB-ON) Mike Brooker, 245 Old Forest Hill Road, Toronto, ON M6C 2H5...Panasonic RF-2200
- (JHD-PA) John H. Demmitt, K0848, Box A, Bellefonte, PA 16823 Sony ICF-S5w
- (MH-NJ) Mike Harla, 1337 Norris Drive, Vineland, NJ 08360
- (RCR-PA) Robert C. Ritchey, RD#1, Box 738, East Freedom, PA 16637...Realistic DX-160 with 150 foot longwire
- (GS-DC) Gardner Smith, 1000 Perry Street, Washington, DC 20017...Sony 2010, w9ALZ, Ed:LWCA, graphic artist.
- (WPT-DC) William P. "Bill" Townshend, 4500 Connecticut Avenue NW, #901, Washington, DC 20008...Realistic 12-660 Portavision.
- (WPT-MD) William P. Townshend DXing outside his office.
- (KJE-NY) Karl J. Zuk, 154 Old Post Road North, Croton, NY 10520...on the road in St.Louis and Lincoln, NE... No time to DX this week! Play ball, not radio!

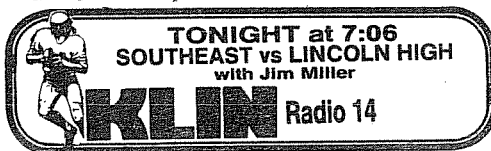
- 540 CBGA1 PQ, New Carlisle. 10-18 0645 Fair with woman speaking in French introducing song. In null of CQSB, Ottawa, ON. (JHD-PA)
- 580 WLES VA, Lawrenceville. 10-22 0602 Sign on by man, weak, into news. (RCR-PA)
- 620 WTMJ WI, Milwaukee. 10-22 0715 weather by man, ID "WTMJ" mention of station contest, fair. (RCR-PA)
- 640 KFL CA, Los Angeles. 10-5 0641 Fair to poor, man said "Let's go back to Here Comes The Sun by The Beatles on KFI." weather and invite to write in for TV game show tickets. (JHD-PA)
- 660 WESC SC, Greenville. 10-21 0815 Talkshow, ad for Disneyworld, ID "WESC" several times, very good, over WNBC, New York, NY. (RCR-PA)
- 690 WVOK AL, Birmingham. 10-1 0638 Good with ID "All New WVOK." Record "Country Road West Virginia" and "Fooled Around And Fell In Love." weather and CBS news followed by local news, sports and weather. (JHD-PA)
- 740 WPAQ NC, Mount Airy. 9-28 0303-0317 Equipment test with C&W music, periods of open carrier in between songs, 0317 ID by man with thick Gomer Pyle type drawl: "WPAQ, Mount Airy, NC completing equipment tests" then off. Fair to good with no CBL, Toronto, ON carrier. (ME-ON)
- 740 CBL ON, Toronto. 10-18 0830 with ID, News of Canadian events. Good. (JHD-PA)
- 750 WBLM MD, Baltimore. 10-18 0838 Good to fair with preacher talking about faith and Jesus walking on water. (JHD-PA)
- 800 WTMR NJ, Camden. 10-12 1425 First time heard mid-day. Slogan: "Your inspirational radio station in The Delaware Valley." Religious music, on top of three or four others. (GS-DC) (But do they play Madonna?-kz)
- 830 CFJR ON, Brockville. 10-21 1730 Music by Carly Simon, ID "830 CFJR," into local news, ex 1450 kHz, very good, station #800. (RCR-PA) (Congrats!-kz)
- 900 CHML ON, Hamilton. 10-7 0712 Song title contest answer: "Who's holding Donna Now?" and a bakery ad. (JHD-PA) (This is the right song title, John. When you wrote "Who's Holding Madonna Now?" it made me laugh-kz)
- 920 WMMN WV, Fairmont. 10-7 0703 with net news, weather, ID. In with wKVA, Lewistown, PA. Fair. (JHD-PA)
- 930 WFMD MD, Frederick. 10-7 0715 with traffic report with many references to the Capitol Beltway. In with wCNR, Bloomsburg, PA. Fair. (JHD-PA)
- 950 WPEN PA, Philadelphia. 10-19 1900 ID slogan "The Station Of The Stars" with Music of Your Life type music, news and weather. (RB-NY)
- 970 WWDJ NJ, Hackensack. 10-19 1830-1900 with The Pat Boone Show, religious pgm. with Christian songs. (RB-NY)
- 1000 WRAR VA, Tappahannock. 10-21 1745 with local ads, mention of Tappahannock, ID "WRAR", good at first but faded into the fray. (RCR-PA)
- 1080 WTIC PA, Hartford. 10-19 1800 with pop music, news and weather. Good. (RB-NY)
- 1090 CKKW ON, Kitchener. 10-9 0545 with ID, Eagle's "Take It Easy", time check at 0557, then discussion about The Kansas City Royals. Poor. (JHD-PA)
- 1100 WWWE OH, Cleveland. 9-26 0020 with "Exotic Moments In Sports." Fair. (RB-NY)
- 1110 WBT NC, Charlotte. 9-28 2330 with "Solid Gold Saturday Night". Very Good. (RB)
- 1140 WCJW NY, Warsaw. 10-18 0804-0810 UPI network news, local news by woman, mention of Warsaw, sports by man, mention of upcoming game on "WCJW", poor to nil under wRVA, Richmond, VA. (RCR-PA)
- 1170 WOBM NJ, Lakewood. 10-19 1745 Sung ID, spots for Tom's River, and Freehold, NJ. Authorized for 1160 kHz, but hasn't moved yet. (GS-DC)
- 1170 WBRW NJ, Bridgewater. Listed as Somerville, but gave location as Bridgewater. 10-19 1730. (GS-DC) (I heard the same thing, last week-kz)
- 1190 WKDJ PA, Huguesville. 10-12 0715 with sign on moments before WANN, Annapolis, MD. Gave power as 1kW. Slogan "K-1190." A brand new station. (GS-DC)
- 1200 WKOX MA, Framingham. 10-19 1710 with light rock, heavy on sports. Sunset skip over local WAGE, Leesburg, VA. (GS-DC)+10-12 0800 with special news announcement asking radio operators to report to town hall to join a rescue party. Regular news followed. Fair to good. (JHD-PA)



It's a Horn Of Plenty (of DX) this week in Eastern DX Roundup! Happy Thanksgiving!

- 1200 WOAI TX, San Antonio. 10-4 2345 Good with man preaching about sin, evils of the flesh, booze and how to be saved. (JHD-PA)
- 1200 WAGE VA, Leesburg. 10-4 1300 with top 40 music, ID by young lady. Noted on new frequency, ex 1290 kHz. (WPT-MD) + 10-12 0735 with news of Fairfax, VA, ID, music. Interference from WKOX, Framingham, MA. 0756: Kenny Roger's "Ruby Don't Take Your Love to Town." Fair. (JHD-PA)
- 1210 WCAU PA, Philadelphia. 10-19 1820 with Dr. Sammy Weinberg's call in program about computers. (RB-NY)
- 1240 WCNC NC, Elizabeth City. 10-16 1742 Sung ID, fair over WCEM, Cambridge, MD. (WPT-DC)
- 1250 CHWO ON, Oakville. 10-8 2300 Following an ethnic program came an ID and a hockey game, national anthem "O Canada", etc. Ads and ID. (JHD-PA)
- 1280 WKST PA, New Castle. 10-4 2340 with ID, ads, and contest. Barbra Streisand's "My Heart Belongs To Daddy." Fair. (JHD-PA)
- 1280 WPXY NY, Rochester. 10-14 0137 On top with high pressure rock. ID as "98-PXY." (97.9 FM) All I ever hear here is WADO, New York, NY. They must be off Monday mornings. (GS-DC)
- 1290 WJBR DE, Wilmington. 10-21 no time. Has changed format from nostalgia to oldies. (MH-NJ)
- 1290 WFBG PA, Altoona. 10-4 1559 ID by man, fair with WAGE on new frequency. See 1200 kHz. (WPT-MD)
- 1290 WPVA VA, Petersburg-Colonial Heights. 10-4 1600 ID by man with mention of Colonial Heights. Fair. (WPT-MD)
- 1310 WJLK NJ, Asbury Park. 10-19 1845 with "WJLK Gold" and commercial for The Mark Russell show. (RB-NY)
- 1360 WDRC CT, Hartford. 10-7 2241 Fair with promo for "Heart Of Gold" contest. ID, record, and more IDs with Hartford mentioned each time. (JHD-PA) + 9-19 0050 with rock and roll music. Fair. (RB-NY)
- 1420 WHK OH, Cleveland. 10-4 2322 ID as "14-K", weather, song by The Miracles, time check, and record "Little Sister." Good. (JHD-PA)
- 1480 WPWC VA, Quantico. 10-18 1328 with C&W music, ID by man. Noted on new freq., ex-1530 kHz. (WPT-MD)
- 1510 WMRE MA, Boston. 10-4 2317 with Delta Queen Contest, ID, ads for "The Harris Cafe, Associate's Assistance Company and Newton Options." ID, good. (JHD)
- 1530 WJDM NJ, Elizabeth. 9-24 1900 with rock music, oldies. Good signal. (RB-NY)
- 1530 WOBR NC, Wanchese. 9-25 2000 Emergency broadcast during Hurricane Gloria, playing The Beatles' "Let It Be", a bit ironic. Slogan is "Outer Banks Radio." (GS-DC)
- 1540 WPTR NY, Albany. 9-24 1700 with oldies, excellent signal. (RB-NY) (I thought they were country format.-kz)
- 1540 WYNC NC, Yanceyville. 10-10 1844 Sign off with mention of 500 watt power. Fair. (WPT-DC) (Could this be a critical hours power? I have them at 1kw)
- 1550 WSER MD, Elkton. 9-27 0230 On all night with hurricane warnings, flood watches, etc. Special emergency broadcast during Hurricane Gloria. In between weather warnings they played pop music, including one very appropriate song "Blow Away." (I wonder if they also played CCR's "Who'll Stop The Rain?") Fair to good signal over nothing in particular, CBE Windsor, ON off, heard often on SSS. (MB-ON)
- 1550 WBSC SC, Bennettsville. 10-6 1958-2002 with end of gospel program, 2000 spot for gospel record store in downtown Bennettsville, 2001 spot for Nick's Garage, into another religious program. Good signal in null of CBE, Windsor, ON, probably still on day pattern. (MB-ON)
- 1550 CBE ON, Windsor. 10-10 0850 Good with weather, interview with auto workers on the subject of overtime, News: G-String law not legal in Windsor. (Thank God!-kz) CBC news followed. (JHD-PA)
- 1560 KKA A SD, Aberdeen. 10-2 0157-0200 with C&W music, 0200 sign off announcement with followed local weather, mentioned they would be back at 0530, sign off announcement concluded with "...we play your brand of country.. good night." No SSB, Fair over WPAD, Paducah, KY with WQXR off on unexpected silent period (not a Monday morning.) (MB-ON)
- 1570 CHLO ON, St. Thomas. 10-4 2310 Fair with ID "This is CHLO" and record "Music, Music, Music." Three other stations here. (JHD-PA)

No time to DX this week. I was in St. Louis for The Series, where I heard WABC, WNBC and WCBS, among others, in my hotel room, on a not so great radio. Try getting KMOX in Manhattan! I was also in Lincoln NE for Cornhusker football, and found DX very good there. I had 45 hours of OT in five days in StL! Keep writing! Thanks!kz



WESTERN

DX ROUNDUP

Nancy Hardy
2301 Pacific Avenue
Aberdeen, WA 98520

All times are
Eastern Local

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

DEADLINES: Tuesdays

REPORTERS FOR THIS ISSUE:

- (MD) Mike Deckman-908 N. Arrowhead Ave.-Rialto, CA 92376
ICOW R-70, 24" amplified box loop
- (BH) Bill Hardy-2301 Pacific Ave.-Aberdeen, WA 98520
FRG-7, Radio West loop
- (NH) Nancy Hardy-2301 Pacific Ave.-Aberdeen, WA 98520
FRG-7, Radio West loop
- (JH) Jim Hilliker-1135 N. Mayfair Ave. #2-Anaheim, CA 92801
Kenwood R-1000, Radio West loop
- (CK) Guy Kudlemeyer-1320 City Vista #1-Eugene, OR 97402
Modified FRG-7, DA-7 amplified core loop, 900' tunable LW
- (RHM) Roy H. Millar-13714 30th Ave. NW-Marysville, WA 98270
DAK-3 w/unampl. loop, FRG-7 w/longwire
- (RT) Rich Toebe-2972 Martin Ave.-Pleasanton, CA 94566
- (RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
CF Superadio, GE long-range portable, SW-2
- (ØW) John Wilkins-4385 Hoyt St. #205-Wheat Ridge, CO 80033
R-1000, 4' box loop
- (JW) Jack Woods-P.O. Box 1003-Waldport, OR 97394
Barlow Wadley XCR-30, Martens loop

OF SPECIAL INTEREST:

1200 CFCO ON, Ottawa per a friend in Ottawa, CFCO will move to 1200 from 1440 on Nov. 1 w/50kw day & nite. Daytime nondirectional, nighttime directional to north. C.E. wants reports: Mr. H. McRae, CE, CFCO Radio, 1575 Carling Ave., Ottawa, ON K1Z 7M3.
(ØW-CO)

- 540 KNAK UT, Delta 10/29 1958 fair to good signal, out of song w/ID, into s/off. On top of CBK. (JH-CA)
- 560 KMON MT, Great Falls 10/26 2040 contest asking "Who once owned a semi-pro basketball team in Great Falls? Call 453-4921 if you know the answer and win yourself a country classic album..." (Charley Pride). Coming in well o/KSFO tonight, gave current temp. as 58 degrees. New here. (GK-OR)
- 620 KIPA HI, Hilo 10/23 0600 fair w/ID, s/off, SSB. First time heard.(JW)
- 650 CKOM SK, Saskatoon 10/29 2211 fairly good in CISL null w/"65 CKOM" and into song by John Cougar Mellencamp. (BH&NH-WA)
- 670 *KBOI* ID, Boise 10/28 0207 w/TT. (RW-CA)
- 720 (KDWN) NV, Las Vegas off 10/28 0530. No WGN. Weak signal believed USSR. Reported to DX Worldwide West. (JW-OR)
- 730 KTOX ID, Boise 10/27 1957 u/CKLG for a while, then faded up w a "...News-talk 73, KTOX.... ID. Into a call-in talk show discussing backward masking on pop albums. New. (GK-OR)
- KBOY OR, Medford 11/1 1901 "KBOY AM & FM" ID poor w/CKLG nulled. FX-KRVB. Not new, as heard 12 years ago when they were using the call letters KBOY. (NH-WA)
- 760 KMTL AR, Sherwood 10/29 1827 hymns to 1829 s/off annct, NA. Poor in QRM. (ØW-CO)
- ?WJR? MI, Detroit 10/29 2110 good signal noticed u/KFMB, tent. w/ man saying "here in Detroit." WJR most likely, not needed though. (JH-CA)
- 790 KXTC CA, Clovis per call to KXTC, they hope to come back on the air Tues. 11/5. (RW-CA)
- 810 KAFE NM, Santa Fe 10/25 2055 strong in KGO null w/C&W mx & clear ID by woman DJ. Seemed to be full power past SS. (JH-CA)
- 820 KQIN WA, Seattle 10/8 2121 caught 'em on 50 kw, just a few minutes before the nighttime power decrease. Bland, gutless mx by Survivor and other Corporate Rockers. New. (GK-OR) (They are not fulltime yet, as of 11/4!--NH)
- CHAM ON, Hamilton 10/29 2237 loud in WBAP null, stronger than morning logging reported last week. Country mx, several "820 Cham" mentions, southern Ontario wx. (BH&NH-WA)
+10/30 0605 w/Hamilton area ads, sports nx. 3rd Hamilton call, but first new Ontario since 1966 I believe. (RHM-WA)

- 830 KABN AK, Long Island-Big Lake 10/27 0359 in WCCO null w/rock mx, clear "KABN 8-30 AM" ID. Nice to hear Alaska so well! (RT-CA)
+10/28 0238 xint in WCCO null w/talk show about how shooting animals to death can take out frustrations. Shoot the announcer, hi. (RW-CA)
- WCCO MN, Minneapolis 10/30 2245 fair, sports hot line w/guest Bob Lee. (MD-CA)
- KUYO WY, Evansville 10/20 2028 out of gospel mx into a 6:20pm TC, and central Wyoming wx report. Weak, but in well enough to get a full s/off on tape. New. (GK-OR)
+10/24 0845 bombing in w/gospel mx, ID. Amazing how different the reception is here from Hayward. (RT-CA)
- 870 KORD WA, Pasco-Richland-Kennewick 10/28 1030 noted using ID "K-news" during nx broadcasts. DX'ers, beware, they have not changed calls, per call to stn. No legal ID heard, so I was almost fooled!!! Signal still in as late as 1100, 1½ hours after LSR. (RW-CA)
- 880 CKLQ ME, Brandon 10/29 2321 ending first period of Brandon-Victoria hockey game. Ad for IGA in Brandon, more hockey coverage till 2324, promo w/several "CKLQ" ID's and a "Q-Country" mention. New, never logged on 1570. (BH&NH-WA)
- 890 KQLX ND, Lisbon 10/24 0840 weak but clear w/another stn underneath, sports report, call letter ID, temp given as well. (RT-CA)
- 910 ?KALL? UT, Salt Lake City 10/29 1930 tent., no ID heard, but ad for bank in Salt Lake City, nx about minor earthquake in Idaho, lost to KFYI-AZ. Haven't heard KALL in o/a year. (JH-CA)
- 930 KSEI ID, Pocatello 10/26 0726 fair w/ID, rock mx. CJCA nulled. (JW)
KLCY MT, Missoula 10/28 1940 very detailed wx report for western MT, several ments of Missoula and a quick ID before returning to a Top-30 show. New. (GK-OR)
+10/30 1932 ID into wx. Has been in well at SSS the past week or so, many times o/CJCA. Ex-KYSS. (NH-WA)
- 940 KGRL OR, Bend 10/28 1028 wiping out KPFE w/state nx, o/an hour after LSR! (RW-CA)
- 960 KINFZ CA, Lompoc 10/26 2202 finally heard this most-wanted & close unheard stn! Carrying World Series in SS parallel to KTNQ-1020. Clear ID on top mixing w/KOOL & KABL. Legal ID w/call letters in SS and clear "Lompoc, California." I've been trying to get a positive ID on this for 3 years! New. (JH-CA)
- 970 KVWM AZ, Show Low 10/29 1937 fair to good sig. o/KVIN. Local nx, promo for high-school football between St. John vs Show Low "Friday at 6:50." ment. 93.5 FM, gave ID as "KVWM, Show Low, Voice of the White Mountains." (JH-CA)
- 980 KMIM ME, Grants 10/29 1951 pop mx, EBS test tone; 1959 s/off & choral NA. Poor in KMEZ null. New, NM #41. (ØW-CO)
- 990 KELS CA, Santa Barbara 10/26 2120-2127 a surprise catch not expected at all. Heard Big Band mx, other old songs, faint KELS ID. Also on 10/27 2125, better thru KFNB-980 slop, promo for "War of the Worlds" w/ID "Join us for this Halloween program from 1938, here on 990, KELS, Santa Barbara." Was a close unheard, had tried many times before. New. CA #203, total 551. (JH-CA)
+10/28 0313 noted w/EZL, local spots good in KKIS null. Didn't sound like an ET, I don't have a night CP listed for them, either. (RW-CA) (I have 500 watts as nighttime power.--NH)
- 1010 CPFE ON, Toronto 10/30 0630 appeared out of nowhere (arrrant pattern change) w/"Good morning. This is (???) , CPFE News." Good in & out in KIQI null thru 0652, nice ID 0643 ahead of Anne Murray song, another nice ID 0651. (BH-WA)
- 1030 KHWY CA, Folsom 10/26 0759 ID, UPI nx. Fair signal. (JH-OR)
- 1050 KPBA AZ, Tuba City 10/29 1850 relig. program, 1855 IWS News. Good, dominant signal. (ØW-CO)
- ?KOFY? CA, San Mateo 11/1 2010 tent., o/XED in SS w/ment. of Redwood City & Oakland. Only heard one other time. (JH-CA)
- KSPO WA, Dishman 10/30 1959:45 heard call letters in jumble of KORF/CKAL/etc. New. (NH-WA)
- 1150 KACC OR, Klamath Falls 10/26 0820 weak, ID only thru QRM. (JW-OR)
- 1200 WCAJ TX, San Antonio 10/26 2235 good, Spurs post game show & nx. Interference from unknown station. (MD-CA)
- 1230 KPZD NV, Las Vegas 10/30 0242 PSA for Debt Counseling Service; slogan "Your Dial is set to the Easy One. In Las Vegas it's K-E-Z-D," then MYL-type stuff. New, #722. Ex-KLAV. (ØW-CO)
- 1240 KDGO CO, Durango 10/30 0200 s/off heard thru QRM. New, CO #68. (ØW)

- 1250 KEEB AK, Homer per call to KEEB won't be moving to 890 kHz w/10kw nondirectional "for at least a year and a half." CP just granted. (RH-CA)
- 1114 KA, Willits 10/5 2227 first time heard here, but in well every night since. Karen Reed, DC, w/spots for Willits businesses into a Dave Mason song. New. (JK-CA)
- 1011 KA, Roosevelt 11/1 1900 fair w/much fading o/HMS w/legal ID as "Roosevelt-Vernal" & possibly one more town. Sounded like they went into AP nx. (JK-CA)
- 1270 KRLZ CA, Palm Desert 11/1 2005 fair, but fighting WEAP Qsk, ment. a fire in Indio. On w/PBSA, or full power, I couldn't tell. (JK-CA)
- 1287 KL, Rock Island 10/28 0213 DJ Gary Ravens w/"The Best Country Music in the Quad Cities." Good. (JK-CA)
- 1260 ?KQCF? IN, Minneapolis 10/28 0205 regional w/, temps for Waterloo, Rochester & Duluth heard. Local KRRQ was off for about a minute, allowing reception of this. Looped NE. According to BYN #728, KQCF is now all-wx format. (JK-CA)
- ?KQAF? OR, Eugene-Springfield 10/28 1002 poss. one w/YL doing nx, heard 3 ment's of "Oregon" but way down in mud, o/u KRAL/KRYL/KRFL/KIT/KPR, then buried u/KDYL. Too tentative for anything! (RH-CA)
- 1390 KRLQ NE, Logan 10/28 0439 good o/KDYL in KGER null w/ID, unID way under w/talk show. (RH-CA)
- 1400 KART NE, Jerome 10/29 2020-2035 practically on top the whole time w/ agricultural nx, ID's, ads for shops in Twin Falls. They really get out! Only wish other distant QYers got out as well. (JK-CA)
- 1440 KVOH CA, Napa 11/1 1930-1936 in very well in KPRO null w/good local nx coverage, man & woman nx team. Many local ads ment. Napa, promo for KVOH Citizen of the Day. Not heard too often, but usually good when they are in. (JK-CA)
- 1450 KEST CA, San Francisco 11/1 1926 in well on top w/ID and asking for calls on a certain topic man was discussing. (JK-CA)
- 1480 KNUV NE, Hobbs 11/1 1958 poor in KRLZ null, ID after song by Elvis Presley "...on I-double U-X, more country music." (JK-CA)
- 1490 KRCO CA, Calexico 10/29 2105 out of AI nx, fair w/clear ID "5 past 5 on KRCO, Calexico," into MOR nx. Not heard much here any more. (JK-CA)
- 1560 KIQE CA, Willows 10/30 1345 ID. Had been "in and out" since 1300; if 250 watts, possibly best "mid-day ID" yet. Nice what a "clear channel" can produce! (RH-CA)
- 1580 KZIA NE, Albuquerque 10/30 0450 Larry King Show; 0459 eye doctor ICA. Apparently all-nite now. First noted on 3160 kHz (2x1580) while bandcanning. Good signal there, while 1580 was poor in QRL. (JK-CA)

UNIDS:

- 820 10/27 0350-0356 in WEAP null w/Willie Nelson nx, fadey, poor to fair. Is this KQIN? (RH-CA) (KQIN isn't fulltime yet. Sounds a lot like you had GRAM!--WR)
- 1360 10/29 0200 unID w/KART's s/off w/BS nx. Looped N-S. MORU? (RH-CA)
- 1450 11/1 1922 G&W nx, then fading out heard a faint ID, sounded like "KZFI." Poor signal. Looped north. (JK-CA)

I'll have some Monday deadlines during December, so watch the beginning of the column where deadlines are listed! ☺

Church needs radio exorcism

SALT LAKE CITY (AP) — Heads were bowed for noon Mass at the Cathedral of the Madeleine when a disk jockey was heard on high.

The soft but unmistakable sounds of a commercial radio station somehow got in through the 1,100-seat cathedral's loudspeaker system, despite efforts to exorcise it, said the Rev. Francis Mannion.

"No, we haven't installed Muzak music," the priest told worshippers from the pulpit when the sounds disrupted Sunday's service. "This is

coming from a new radio station in town and we've been trying for three days to get it out of our PA speakers. But now it's worse than ever."

Mannion proceeded to preach with no pauses to let the worldly serenade through, but smiling parishioners glanced upward at the source of the muffled piano and instrumental music.

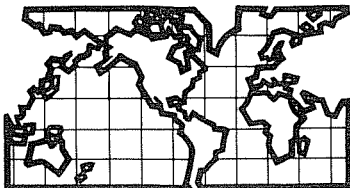
Audio technicians hired to investigate the problem said the signal was coming from KUTR, a new 50,000-watt AM station which has its transmitter five miles southwest of the church.

"We think it's being picked up by some fluke through the microphone

cable near the altar rail," said engineer Clay Anderson. "It's been frustrating. We tried everything all day Saturday to get it out and nothing worked. I was ready to suggest beads and exorcism."

Station manager Richard Elliott said the errant signal also leaked through the public address system of a Mormon meeting house in Salt Lake City's Rose Park neighborhood during a funeral service last week.

"We want listeners, but not like this," he said. "I've got our engineers on it."



DX WORLDWIDE - WEST

Pat Martin - Editor

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PHONE: (503) 861-3185

TIME; UTC

First off the electric typewriter went on the blink and I have to use this old thing for a few weeks. It had to be sent off for repairs and may take six to eight weeks. I guess it is better than nothing. Well on with reports:

DX REPORT FROM HAWAII

- 540 KUWAIT, Sulaibiyah-AA type mx and wailing alone on frequency at 1550 on 10/26. (CB-HI)
- 567 NEW ZEALAND, Wellington-2YA hrd w/pops and rather bored ancr at 1542 10/26. (CB-HI)
- 576 U.S.S.R., Khabarovsk-good w/RR talk and mx at 1530 on 10/28 (CB-HI)
- 585 UNITED, man and woman talking in unknown language, used some EE words like "OK". Possibly KBQN-American Samoa?? at 1621 on 10/28. (CB-HI) (No KBQN as yet hrd here. WVUV was quite good the other night 11/3, checked 585. You might have hrd Indonesia. They might be running programming with EE words, as been reported in the past.PM)
- 702 D.R. KOREA, Chongjin-KCBS good with usual semi-classical mx at 1610 on 10/29. (CB-HI)
- 703m +Also noted with angry woman ancr poor heavy KKUA-splatter, not on 702, but //2850 SW (DP-HI6) on 10/14 at 1117.
- 747 JAPAN, Sapporo-JOIB-man talking in JJ on NHK2 net //774. Fair, with KGD-QRM 0806 on 10/14. (DP-HI8)
- 774 JAPAN, Akita-JOUB, rapid talk in JJ //747 Poor 10/14 at 0814 (DP-HI8)
- 891 JAPAN, Sendai-JOJK, ID pips, and possibly mx at 1600 10/21 (CB-HI)
- 972 REPUBLIC OF KOREA, K Drama w/2 YL ancrs Poor 970 QRM 1113 10/14. (DP-HI6)
- 1080 HAWAII, Honolulu-KWAI-1103 on 10/2 back on the air w/new wave top 50 mx Per phone call they returned to the air at 0200 10/2. (DP-HI)
- 1098 MARSHALL ISLANDS, Majuro-WSZO at 0827 9/16 local chorus mx. DJ in lang. faded, earliest ever logged. Vy poor w/KFAX het. (DP-HI)
- 1116 UNITED, possibly USSR, Mayak signature, talking in RR o/u other unid at 1630 on 10/29 (CB-HI)
- UNITED, man talking at 1630 10/29, sounded a little like Filipino, there was a musical signature type tune played, then more talking o/u USSR (CB-HI)
- 1134 JAPAN, Tokyo-JOQR, american tunes, sort of EE language lesson with entertainment at 1305 on 10/29. (CB-HI)
- 1179 JAPAN, Osaka-JOOR-at 1049 10/14 excited man w/mx poor New (DP-HI6)
- 1200 UNITED, Lat in mx by man pops, no sign of WOAI. Who? A at 0823 10/14 (DP-HI8) (I hrd Cuba here recently when WOAI was off.PM)
- 1206 P.R. CHINA, Radio Beijing FS-woman w/language lessons for Koreans at 1044 on 10/14 (DP-HI6)
- 1220 MEXICO, Mexico City-XEB at 0801 on 10/14, SS ID by man, poor (DP-HI8)
- 1250 ALASKA, Homer-KBBF-at 1600 10/27 w/temperatures, 7Cs. (CB-HI)
- 1305 UNITED, two men and a woman w/rapid fire talk, again sounding abt like Filipino, sounded like SS word or two at times //1053 weaker at 1619 on 10/29. (CB-HI)
- 1314 UNITED, New Zealand? pretty sure NZ due to 7Cs at 1607 10/21 (CB-HI)
- 1332 NEW ZEALAND, Auckland-1XI-"I Limited" IDs, +c and pops 1610 10/21 (CB)
- 1350 NEW ZEALAND, Rotorua-1ZC, EZ rr, 7Cs, little talk 1615 10/21 (CB-HI)
- 1395 INDIA, Bijaner-AIR Hindi mx, annts, got good recording of this one at 1617 10/21 (CB-HI)
- 1449 NEW ZEALAND, Palmerston North-2YM-Woman DJ w/MOR oldies //810 and 819 1545 on 10/28 (CB-HI)
- 1458 UNITED, Probably USSR, another Mayak station 1600 10/29 (CB-HI)
- 1476 NEW ZEALAND, Auckland-1XA*strong w/pops at 1605 10/28 (CB-HI)
- 1512 UNITED, Pretty sure CC here, woman talking quite strong w/usual poor CC audio 1628 on 10/21 (CB-HI)
- 1521 UNITED, One of these nxcasts in EE, with lots of strange language mixed in, this person had a kind of British Accent, lots of QRM at 1608 on 10/28 (CB-HI)
- 1566 REPUBLIC OF KOREA, Cheju Do, at 1320 10/3 poor and new. (DP-HI)
- 1580 UNITED ARAB EMIRATES, Abu Dhabi-talking by man and woman with musical interlude. Have 40 minutes on tape at 1600 10/26. (CB-HI)
- 1611 UNITED, getting strong het evening against Caribbean Beacon, around Hawaiian SS (0415 UTC), sometimes faint words in unknown language, Noted on 10/27 (CB-HI) (How about Vatican-1611? PM)

PAN-AMERICAN DX ROUNDUP

- 640 CUBA, CMBB poor in KFI null 0742 10/20 w/progresso net pgm // 660. New Cuba #9 (TRH-Ca)
- 730 MEXICO, Mexico City-XEX caught s/off w/full ID and NA 0759 on 10/20 Unfortunately CKLG kept out any good DX. (TRH-Ca)
- 1470 MEXICO, Mexico City-XESM-10/28 0930 weak w/KXOA KUTV w/full ID. Rare here usually XECU in. (RW-Ca)

TRANS-PACIFIC DX ROUNDUP

- 594 JAPAN, Tokyo-JQAK, fair to good at 1143 on 10/27. 2 or 3 men in JJ. Sounded like Comedy (JW-Or)
- 657 D.R. KOREA, Kangnam-Poor 0915 10/22. KK Opera //6250 SW (TRH-Ca)
- UNITD, weak in and out between 1155 and 1240 10/27. Symphonic mx, Asian talk, choral mx, w/RR sound (JW-Or) (Sounds like North Korea.PM)
- 720 U.S.S.R., Yuzhno-Sakhalinsk-vy weak 1030 10/28. Woman in RR followed by opera. (JW-Or)
- *Also noted-10/28 0853 blasting in in RR way o/KUAI WGN. Minor KFIA slop. Best signal ever hrd on this (RW-Ca)
- 774 JAPAN, Akita-JOUB 10/18 1500-1510, Best TP signal this season (RHM-Wa)
- 810 FIJI, Labasa-Radio Fiji 2-coming in like a ton of bricks all night after 0800 KGO s/off w/Hindi programming way over everything else on freq. Best ever hrd. I wonder if 810 KHZ is now 10KW? on 11/3 (PM-Or)
- 820 ALASKA, Fairbanks-KCBF 10/30 1259-1310 w/PSA, WK after CBS nx. Mucho welcome at this "Alaska-starved" outpost and thx to KQIN for still being Daylight only! (RHM-Wa)
- 828 JAPAN, Osaka-JOBB-good 1137 to 1200 on 10/26. EE Lessons. (JW-Or)
- 837 JAPAN, Niigata-JOQK-10/27 1300 with NHK pips and mention of Nippon Hoso Kyokai. (RHM-Wa)
- 972 REPUBLIC OF KOREA, Fair at 0900 10/22 w/pips, KBS choir, YL with pgm of songs //76015 SW. New country #22 (TRH-Ca)
- 1476 UNITD, 1105 to 1130 on 10/28. Station with Asian language being jammed by tone. Similar to WWII jamming. Fades of the talking and jamming stations at different rates. Taped several minutes. (JW-Or) (Sounds like you had USSR in CC and CHINA there.PM)

VERIFICATIONS:

- 730 MEXICO, Mexico City-XEX-sent form on top of personal letter from KEX Director-Jose Luis Moreno V in EE. First XE QSL in quite sometime (PM)
- 1107 JAPAN, Kanazawa-JOMR-5KW three QSLs along with beautiful color books on Japan and Kanazawa sent air, along with stickers. (PM-Or)

THANKS TO THESE REPORTERS:

- CB-HI CHUCK BOEHNKE-Post Office Box 488-Keaau, Hawaii 96749
- TRH-Ca TIM HALL-350 G Street F-1 Chula Vista, California 92010-4505
- RHM-Wa ICF-2010 Radio West Loop
- ROY H. MILLAR-13714 30th Avenue NW-Marysville, Washington 98270
- DAK3/unamp loop, ICF-2010/LW
- DP-HI DALE PARK-2253 Kanealii Avenue-Honolulu, Hawaii 96813-1345
- DXing also from Kailua Beach Park DP-HI8, DXing from West Kailua at friends house DP-HI6 with ICF 6700W
- RW-Ca ROBERT WIEN-1309 Dentwood Drive-San Jose, California 95118
- GE Superadio
- JW-Or JACK WOODS-Post Office Box 1003-Waldport, Oregon 97394
- Barlow Wadley XCR 30, Martens Loop
- PM-Or YER EDITOR
- SP-600JX, RBO-2, 1-700 foot NNW Mini Beverage, 2-1500 foot East Bev. 200 foot NNE LW, Ground system.

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