

# DX Monitor

### Devoted Exclusively to Broadcast Band DXing

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Microwaves and RF magazine reported in their February 1983 issue that a one megawatt medium-wave station was recently installed by the government of Thailand at Saraburi. The article added that, according to the company that built it (NEC), "the system is keeping interfering signals from other countries at bay". Anyone have any idea as to what frequency it's operating on?

The propagation freaks in the club might be interested in the following. The government has published a report called "A Simplified Model of the High Latitude Ionosphere for Telecommunications Applications". It presents a simplified model of the polar ionosphere which allows radio users to modify propagation prediction models to allow for the properties of the high-latitude ionosphere. The model is based on a combination of observations from vertical ionospheric sounders, satellite sensors, and ground-based sensors. While it is intended for high-frequency propagation, it may be useful for understanding or predicting transpolar medium-wave propagation (on the other hand it may not be, hi). It's 32 pages long and costs \$7.50. It can be ordered by accession number PB 82-187197 from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

Craig Healy needs a schematic for a Mackay Marine Type 3010C, Mod 2 receiver. He needs it "almost" desperately and is willing to pay for copying expenses, etc. If you have such, contact him at 66 Cove St., Pawtucket RI 02861, Craig also says the WHIM DX test went well, but the signal seemed to stop at the Mississippi River. Probably because of too much KFAB.

Do you have a stack of old bulletins, radio books, or promo items you don't want, but don't have the heart to throw out? Do you have any old radios, parts, or accessories you no longer need? Would you like for them to find a new home? If so, start saving them up for the IRCA Auction, to be held at the convention in Seattle this summer. Watch these pages for details on where to send them....

As a reminder, we're always in need of newspaper clippings on radio stations or (better still) original articles on radio, DXing, etc. There was an excellent list of suggestions in the January 22 DX Monitor. And there's nothing tricky about typing them either. Just type your article single spaced, neatly,on plain white paper ( $8\frac{1}{2}x1^{4}$  is preferred but  $8\frac{1}{2}x11$  is okay) and send it in. We'll do the rest.

Now turn the page for more news from the wonderful world of broadcast band DXing. 73, bp.

### Geomagnetic Indices

Sheldon Remington NI6E 102 Wreden Avenue Fairfax, CA 94930

This column is being resurrected with a new format, which hopefully will be of use to BCB DXers in trying to understand past variations of propogation, and also in predicting the future variations. Previous columns presented data in a tabular format; I feel that a graph will be easier to interpret, especially since the geomagnetic field has been so unstable and seemingly unpredictable.

Each horizontal row in the graph has a width corresponding to 27.1 days. This is the mean rotation rate of the sun as seen from earth, at the solar latitudes containing most activity. So if there is a long-lasting active sunspot region on the sun, it will be facing exactly toward earth every 27.1 days. It has long been known that BCB DX has a good chance of being repeated 27 days later; the same applies to lack of good DX. This is true on SW and LW also, although different phenomena will be observed at different wavelengths in response to a sunspot region.

For BCB propogation, the geomagnetic field is the single most important variable. There have been many discussions of this relationship in BCB DX literature, so I will just mention the two most important effects:

- (1) AURORAL PROPOGATION: when the geomagnetic field is active, BCB signals at high magnetic latitudes (such as TAs, TPs, Alaskans, and, to a lesser extent, Transcontinental DX) are absorbed, and low-latitude signals (latins) may be enhanced. This is the dominant effect in long-haul reception.
- (2) MAGSTORM-ONSET PROPOGATION: in the few hours between a major solar activity burst and the peak of the resulting magnetic storm, enhancement may be observed on all paths. Little data has been published regarding this effect (an opportunity for BCB DXers to make a contribution).

Note that the sunspot number and solar flux number themselves do not correlate directly with BCB propogation (unlike SW), so I will not be listing those on a daily basis.

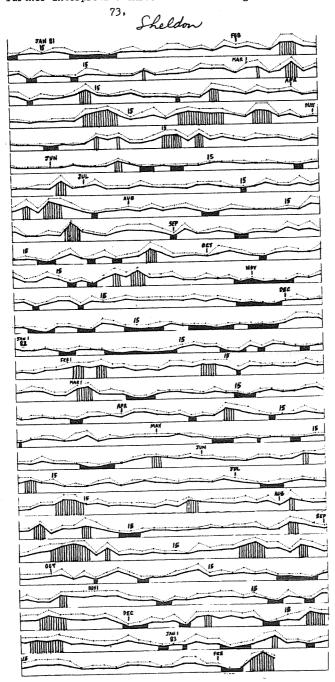
There are several different indices of geomagnetic activity. I have chosen two, both on the K-scale, which is logarithmic and runs from zero (quietest) to nine (major magstorm). The upper curve in the graph shows the PEAK K-INDEX for that date. This is simply the highest of the sixteen daily K-values at Anchorage, AK and Fredericksburg, VA (measured by NOAA). For BCB propogation, this corresponds to the worst-case auroral absorpation for that 24-hour period. The lower curve represents the MEAN K-INDEX; this is in effect the average of the 16 aforementioned K-values for that date. This figure is an approximation of the Ap index (traditionally used by BCB DX researchers), except that the K-scale is logarithmic and the A-scale is linear. I have added vertical stripes to periods with mean K=5 or greater, and solid black to periods with mean K=2 or less. I feel that the peak K-value may actually be more useful than the mean, since BCB propogation seems to be affected more by a short burst of magnetic activity than by a short period of quiet field. Indeed it is axiomatic that the magnetic field must be fairly quiet for several days before the high-latitude paths begin to open.

The key issue in all of this is predictability: how likely is it that high or low magnetic activity will be repeated 27 (54, 81, etc.) days later? During the quiet solar years (mid-1960s, mid-1970s, mid-to-late 1980s) the repeatability seems much higher. Currently we're on the declining side of sunspot cycle #21, and this period may be the worst for predictability. Another way to approach the question is to ask what caused the high or low geomagnetic activity. An article in Science News 6/21/80 said that of 65 magstorms from mid-1976 to mid-1979, 42 were associated with disappearing solar filaments, 34 with coronal holes, 27 with flares, and 5 unknown (some magstorms were associated with more than one cause). Of these three causes, the most repeatable normally is coronal holes. Unfortunately, the last couple of years have had so many flares and disappearing filaments that the coronal holes are difficult to pin down. Things should gradually sort themselves out as we head into the quiet-sun years, and then predictions should then become much simpler. On the graph, flare-related storms occurred around 2/4/83, 12/21/82, and 11/24/82. Disappearing filaments were related to the storms around 1/10/83 and 12/17/82; and coronal holes were associated with the storms around 1/29/83, 1/24/83, and 1/16/83. What a tangle! And no wonder BCB DX has been so poor for the last year.

There are two recent trends visible on the graph, however: the quietest periods have been concentrated in the middle third of the 27-day cycle, and the most disturbed periods have been at the ends of each cycle. Incidentally, the largest magnetic storm observed at Fredericksburg this solar cycle was the event of 9/6/82, with an A-index of 139 (Anchorage was 235!). Anyway, the above trends allow us to predict that the most-likely periods for long-haul propogation will be around Feb. 16 thru March 2, and March

 $1_{\rm 9}$  thru 29. It even appears that the very best conditions might occur on March 1-2 and 28-29, but that's probably a long shot.

I hope this information is useful to you, and I solicit comments and suggestions relating to it. I will be presenting updated data regularly, along with further interpretive info. Good listening!





A Monthly Column of Logaings Information and Discussions of the 1600-1800 kHz Range. Times: GMT, Next Deadline: 3-31

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

From Vincent Pinto: A new "station" on 1622 kHz! It broadcasts the Satellite News Network audio and some program cues not intended for broadcast. This is the unidentified station reported by lots of folks. The call sign is MJZ-PB. Power is 100 watts into a five foot (!) vertical on top of an eight story building. Address is: Engineer in-Charge; Remote Field News Broadcasts; Group W Satellite News Channel; 1111 18th St., NW; Washington, DC 20008.

Vincent also spent some time with the FCC: The C.W. signals (U288, FQ196, etc.) appear to be fishing net buoys, or markers. The "crickets", as the FCC calls them, are Loran A type signals. These are mostly from the area of the Bahamas or Caribbean basin. This was suspected, but confirmation of this is helpful.

- ...... MAINE Mt. Desert Isle-0125 2-3 KFB 760 TIS Acadia Nat'l Pk (White) 1610
- KENTUCKY Boone County- 0020 1-21 TIS poor w/ usual talk (Reid) 1610
- ???- 0120 1-23 CW (not MCW) signal. Four or so letters repeated. 1610 "W" and "A" may have been two of these. Not the "WART" pirate per phone call to station. (Reid)
- GUATEMALA Rabinal- (no time/date) Usually at least once every 1613 week. (Frodge)
- DC Washington- (various) Group W Satellite News Channel. (Pinto) (Starr) (Stan) (Reid) (Healy) (Bedoya) 1622
- ???-0125 2-3 FQ 532, 2 second dash followed ID. FK 530 also 1627 noted. (White)
- $\ref{prop:condition}$  ???-0230 2-1 F293, D385, D290, D447, S382, B446, P288, S190, D443, X274, E446, U2??, and many more down in the noise. (White) 1635&
- 1642
- ???-0335 2-6 C443 noted w/ keying chirp. (Healy) 1635
- ???-0340 2-6 X274 ID repeats 3 times. (Healy) 1635
- $\ref{thm:local}$  "Late Jan./Early Feb.-post midnight" Unid w/ rock mx. When I hear it, it runs all night. Not local, fades in at SSS. Harmonic or spur? (Reid) 1640
- ???-0345 2-12 Three dots-two "half dots" noted. (Harrison) Sounds 1644a like one of those "cricket" radionav stations-ed.
- IOWA Waterloo-0020 1-21 KXEL distorted spur, fair. Heard many 1654 nights since. Varies a few kHz at times. (Reid)
- ???-(no time) 2-3 C443, two second dash. (White) 1656
- BELIZE R. Belize 2nd harmonic. Classical mx noted. (Thomas) This 1668 was per a phone call and I lost the time/date. Sorry. ed.
- ???-1115 2-11 ZM beacon fair, loops NW/SE (Peterson) 1700
- 1745/6 ???-(no time/date) "Sonar sounds" (good description-ed) almost nightly. Loops N/S. (Frodge)
- ???-(no time) 30 pips/minute. Occasional pauses for a few 1783 seconds. (Frodge)

- $\ref{eq:constraints} -0.350$  2-27 and every night. Same 30 pips/minute here, usually at good level. Have heard double length pips for two minutes on the 1783 hour and half hour. Not consistantly, though. (Healy)
- DOMINICAN REPUBLIC-2328 2-9 Harmonic of Radio-TV Dominicana heard 26 20 regularly. Concludes the Rosary at 2328, a program carried at that hour for years. (Stan)

Harmonics of KNEW, Oakland, CA via Art Peterson

(6th) Very weak carrier only as was 6370 (7th), 7280 (8th) and 1820 (2nd) Fair audio 5460 2730 9100 (10th) but: (3rd) Fair, noisy audio

3640 (4th) Weak audio 2190 (9th) Very weak audio.

4550 (5th) Very weak audio No harmonics noted from other stations.

Department of Redundancy Department: Or, Why Pirates Aren't Included Here. One- They are listed in the regular domestic loggings section. Inclusion of them is unnecessary duplication. Two- They have irregular power, hours, and frequencies making them less than reliable propagational indicators. Three- I don't really want to open the Pandora's Box and turn Top End into a clandestine's column. One letter received here stated in part: "I don't see how a section which covers primarily the frequencies between 1600 and 1800 can ignore the pirates." I have nothing personally against pirate radio, but just feel it inappropriate in Top End. I do thank those who submitted pirate loggings and hope they understand.

Credits, in no particular order:

Art Peterson-Richmond, CA-FRG-7, Radio West loop, longwires Harold Frodge-Midland, MI-DX-302, loop Dave White-Cherryfield, ME-BC-348Q Mike Reid-Willowdale, ONT-TRF, SM-2 Charles Harrison-Lincoln, RI-DX-300, Giblin loop C.M.Stanbury (Stan)-Ridgeway, ONT - HQ200, 90 foot LW Jerry Starr-Youngstown, OH - HQ180A (modified), loop Vincent Pinto-Suffern, NY - R7A, Homebrew active whips and loops (sounds kinky) Gerry Thomas-Pensacola, FL-Radio, Antenna Craig Healy-Pawtucket, RI-R7A, 125 foot loaded LW, ferrite loop And other, much appreciated correspondance from: Bill Harms-Laurel, MD Tom Farmarie-Grafton, MA Mike Roth-Milford, CT

I still need more 1600-1800 kHz bandscans to make any useable info. It only takes a short time to do one and can really help to get a good cross section of what is widely heard.

Many cordless phone reports from 1640-1795 are sent in. I don't put these in the loggings because they are strictly local. I suppose it is within the realm of possibility to receive them on skywave, but..... I will say that they are becoming quite pesty around here. 'Til later.....





BOX 2983-FARGO, N. DAK, 55102



# EASTERN DX FORUM .....

RICHARD EVANS P.O. Box 1294 NORTH WALES, PA 19454

Deadlines: 3/12, 3/19, 4/2, 4/23, 5/14, 6/11, 7/9, 8/6.

Richard E. Wood, College of Education, P. O. Box 959, Abha, Saudi Arabia
In my last Forum Report I said that King of Hope in occupied Lebanon had moved from 945 to new 1593. Let me now amend that and say that 1593 is additional to 945 and at the times I can observe both, parallel to it. I can't hear 945 so much because Ethopia there is a semi-local here (don't you wish you had that problem!) They may be at different sites and may not always be //; SW 6215 is not always // 945, but uses various languages, e.g. Serbo-Croatian, Russian and Hebrew, mostly for prerecorded U.S. or Canadian fundamentalist religion, while 945 continues with mianly English gospel DJ shows and news. So I suspect 1593 may provide a MW outlet for that previously SW-only breakaway programming. Pity we don't have an active member in the northern Middle East for whom Entipoia would not be a problem and who could report this. DXing in Central and Southern Europe is getting more and more difficult in roughly the same way it's getting harder in the U.S., too, with the last clear channels finally breaking up. The problem in Europe is pirates and unlicensed stations, now permitted or tolerated in many countries but especially Italy. A powerful Milan station, for example, is heard throughout northern Italy on 1300; this will wipe out much of the audience for the BBC's European Service, including Italian, and World Service on 1296. A few years ago the NW band in Europe, especially its higher end, was turning more and more to transnational, continent-wide broadcasting, and some German radios had a bandspread "Europa-Band" covering 1400-1600 or thereabouts; now the pirates crowding the band have reduced the coverage of the superpowers. Am corresponding with Carlos Relvas de Assuncao, MW editor of Danish SW Club Int'l, in Lisbon, Portugal, and he says the many Spanish stns and Portuguese ANers have made DX more difficult even in a basically good coastal location on the edge of Europe. We had some flooding and high winds causing power outages and limited DX, but weather is springlike now. With winter over I must relinquish hope of North Americans this year, but I'll keep trying mainly for PJB and Brazilians in spring and summer. TWR Swaziland is testing AN on 1170, so if you hear gospel it may not be WWVA, hi. I hope to fly back to the U.S. on about June 16th. Guess which IRCAn in St. Louis has my car? Hope it'll be in one piece when I get back, as I'll need it to drive to some conventions. 73. (Dr. Wood, would it be possible for you to bring back some Saudi newspapers for me? (I'll pay you for them.) I should be at ANARC this year.--rce)

Charley Keleher, 1723 Forest Cove Drive, #108, Mt. Prospect, Ill. 60056 Read Craig Healy's "Top End" column and it inspired me to chat a DXing the AM Broadcast Band has been an enjoyable hobby for many years now. But in the last 15 years or so, the number of stations, and particularly the number which are operating NSP, has increaded greatly. I suppose it's understandable for DXers to hunt outside the band in an effort to avoid the seemingly-eternal QRM. But one thing should be pointed out: as you go above about 1400 kHz, transmission qualities quickly begin to resemble those of shortwave. Local (groundwave) reception deteriorates, while skywaves, even from lower power stations, can "worm their way" through the atmosphere, and be heard at great distances with fair regularity. I remember a test from WGOE-1590, a 5 kw daytimer, when the annor stated, "In the daytime, we can hardly be heard across town, but we fire up at night and are heard all over the country!" (He was getting a lot of phone calls from DXers.) A historical note: The band from 1600-1800 kHz was once a police band. Teenage hot-rodders of the 1940's and 50's learned to modify their car rigs to pick up this band and keep track of the "fuzz". As soon as radios were available in the WHF-and-higher frequencies, the cops switched to them. It wasn't just that they didn't like being spied on. Local reception on this band was unreliable, especially with the low-powered transmitters and short antennas used in automobiles. Yet they could suffer interference from other police forces hundreds of miles away. Many graveyarders on 1450 and 1490 suffer from the same thing nowadays! I believe this is the reason why proposals to "open up" the broadcast band above 1600 kHz have been generally frowned upon by authorities. If the broadcast band is to

(Keleher, cont...) be"expanded" by IRCA for records, etc., it certainly should be decided by a majority of the membership. But it seems like getting into a whole new ball game. Well, as Johnny Bench used to say, catch va later.

Mark Connelly, 30 William Road, Billerica, Massachusetts 01821 The Sony ICF-2001 works very well for me if used in conjunction with a tuned loop or a tuned longwire. Use of the 2001 with untuned wires results in spurs from overloading on MW & LW unless you're many miles from the closest AM BCB station. Untuned wire is OK above 3 mHz, however. The receiver works exceptionally well with the SM2 and R.West loops. Connecting a 10K pot at the output of the loop amp. ('top' of pot to loop amp out, 'bottom' of pot to ground, and wiper arm to the ICF-2001 external antenna input) gives you gain control. This is desirable to prevent feedback from the ICF-2001's built-in antenna to the loop being used. Of course, there is also a connection from loop fround to receiver ground. The pot is best installed in the loop amp. housing. This pot will also allow you to set adequate gain for hearing a station without overloading the receiver with signals from stronger stations close enough in frequency to be within the gain passband of the loop amplifier's tuned output. My main complaints with the ICF-2001: 1. It's a battery hog. As a result, I run it on AC mains whenever possible. 2. Dial light can't be kept on without keeping a finger on the light switch button. 3. LCD readout seems to disappear at certain viewing angles. 4. Internal birdies on some LW frequencies. 5. Receiver falls down often if in upright position: some sort of swivel-out support stand should be provided. 6. Selectivity, although adequate for domestic & strong-split foreign DX, is not sufficient for serious foreign split DX or for DXing hams using SSB & CW on crowded bands. A narrow/wide selectivity switch would be highly desirable. ..Despite these shortcomings, if you can get an ICP-2001 for under \$150, by all means buy it. It's not a R-7 or R390A. but then, what portable is? For its size, it can be a real workhorse on DXpeditions & other trips. If you play by its rules (e.g. tuned input necessary) you should have good luck.

John H. Rose II, 26015 Thomas, Warren, Michigan 48071
I think I will survive all this gorgeous weather we've had here. You East Coasters can keep the snow for awhile yet. (hi)...Electronics projects here include the making of ajunction box for the monitoring station. I thought to do it up fancy and right, I'd get outlet boxes from surplus house wreckers (cheap, cheap) and stuff in mov surge transient suppressors and RFI/EMI filters to save the ol' eardrums and provide some lightning protection. Turned out to be a big job literally cramming it all toether and it works. Now if I only had the courage to open up the refrigerator and put a couple mov's in there to kill some interference at the source, but I lose courage right around the leftovers on the bottom shelf. The mov and the filter are standard Radio Shack items by the way. And speaking of leftovers, it's lunch time! CU later. (portions deleted--rce)

Denver Post Feb 24, 183

Those unfamiliar faces being seen these days around the halls of KOA are those of potential buyers for that station and its FM outlet, KOAQ. Both stations have been placed on the sale block by owner General Electric Broadcasting. This week, GE's radio vice president, Randy Bongarten, has been showing interested parties through the two stations, including executives from Gulf Broadcasting and

Dallas' Belo Corp. More are to come.

No price tag has been placed on the properties, but it is expected that they would bring \$25 million to \$30 million. Wolman Army and Armonia to Manager and KoA is the city's second-highest-rated station, and KOAQ ranks No. 5 in a Pelo Corp. of Dallas is the TV outlet, Channel 4.

RIGHT: Communications News, March 1983

LEFT: Via Gene Martin, who notes:

field of 36. "No place else can you find owner of WFAA, the only U.S. theid of 36. "No place ease can you much a better package," remarked one observer. "The people who are looking at the stations are high rollers, and extensions are hight rollers, and extensions are highly and extensions are highly on 570.

### FCC Allows Buildina of Radio Service

The Port Authority of New York and New Jersey have been authorized by the FCC to build and operate a low-power radio broadcast service within the Lincoln and Holland tunnels, which connect New York City with parts of New Jersey.

The system will retransmit the broadcasts of metropolitan-area New York City and New Jersey AM radio stations within the tunnels and will broadcast emergency and traffic advisory information. The Port Authority, which controls the operation of the tunnels, will have exclusive control of the system, and the emergency and advisory information.

ditions are met. Additionally, the new service must not cause harmful interference to other authorized radio serv-



# Western DX Forum

IRCA—Serving the Broadcast Band DX'er Since 1964

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

1982/3 DEADLINES - WEEKLY ON TUESDAY, 12 DAYS PRIOR TO PUBLICATION DATE

ART PETERSON, 851 31st ST., RICHMOND, CA 94804

Just returned from a month-long business trip in the Pacific Northwest which took me to such far-flung places as Port Angeles, Aberdeen, Seattle and Reedsport (home of KDUN). Attempted to pay the Hardys a visit while I was in Aberdeen, but they were down with some form of "creeping crud" and were doing well to be able to answer the phone. I hope you're back to normal

now, Bill and Nancy.
While in Seaside, I had several good visits with Pat Martin and enjoyed some armchair copy from about all the Hawaiians at Pat's DX'er Heaven. Being next door to a swamp, he has excellent ground conductivity, and being less than a mile from the ocean, there's no skyline blockage to keep that juicy DX from getting in. Even FM is good there. I was shocked to hear good copy on the car radio from Seattle area FM'ers, 150 miles away. Many thanks to Pat for his fine hospitality during my stay.

Lately I've noticed quite a number of unID beacons reported at the edges of BCB. Anyone with a serious interest in longwave would benefit by joining the Longwave Club of America. For those of limited interest and with an occasional unID, I'm willing to help ID them. I ask that an SASE be enclosed and that you have patience because while I may ID some immediately, others I may not know for some time (never on a few). No info yet, for example, on CYV 526. Good DX and 73.

GENE MARTIN. 3303 E. EVANS AVE., DENVER, CO 80210

For my money, the most refreshing example of radio entertainment currently on the air is a two-hour program each Saturday evening named "The Prairie E Home Companion." It's carried nationwide on NPR originating in St. Paul, Minnesota. The music tends to be a strange variety of folk music, guitar and banjo-picking, but no one listens for the music. Instead they listen for the comments and the fictitous commercials offered by emcee Garrison Keilor and his weekly propert or whethis gains or in lake Woohners. Wisconsin and his weekly report on what is going on in Lake Woebegone, Wisconsin.

This down-home feature, usually running eight-to-ten minutes comes about ten minutes into the second hour of the program. Lake Woebegone is also fictitous, supposed to be Keilor's home town. Keilor has supplied it with features and characters that the mere reference to them is good for a laugh. On Main Street, there is a statue of the Unknown Norwegian, and the Sons of Knut is a local fraternal order. The fictitous commercials in the show are for Lake Woebegone sponsors. There is Ralph's Pretty Good Grocery, where if you can't find what you want, you probably don't need it anyway. There is Bob's Bank, which operates out of a van on Main Street, where the slogan is "Neither a Borrower or a Lender be." Bob's Bank transfers operations to San Diego when the Minnesota winter comes. Perhaps the major sponsor is Powder Milk Biscuits, made from wheat grown by Norwegian bachelor farmers, biscuits so good they give you the strength to get up and do what needs to be done. Keilor's ingenuity, his puckish sense of humor, remind me of Will Rogers.

He's getting to be a sensation on college campuses, packing them in like a Rolling Stones concert. The Prairie Home Companion, for me, is a weekly reminder of how far commercial radio has strayed from the full potential of

the medium. 73.

RIC HEALD, 1632 J ST., #4, EUREKA, CA 95501

Looks like everyone is waiting for the Anniversary Issue. A reminder that members in the Pacific (Australia, New Zealand, Okinawa, Japan, Hawaii, etc) are also in WDXF turf and I'm sure the rest of IRCA would love to hear from

you.

Gene, Prairie Home Companion is successful in a way that made the late, great K-FAT a success. Except they worked at it 24 hours a day NSP. They had all sorts of drop-ins and phony commercials. One I remember was dropped in between two blue-grass cuts. Had a guy with a "good old boy" accent saying, "Y'all wanna know how tough my old lady is? My old lady is so tough she can kick-start a 747."

Had quite a memorable and adventurous trip to Reno last weekend (25-27 February). This agency does gambler's junkets two-to-four times a month and decided to take one up (most leave during the week) and do the fam trip rou-

Humboldt's route to the east was blocked by slides to had to go US 101 south and across. Arrived three hours late thanks to 60 miles at 30 mph with chains over Donner. Upon arrival (0630 PST), check out conditions from my hotel room. SRS was still there (barely) and noticed SoCal stations really chugging away. (Reno is due north of Los Angeles). Nothing exciting: Bay Area really strong, which with the exception of the powerhouses, I didn't expect. Sacramento a lot weaker (and closer) than the Bay Area.

On their local scene, KPTL 1300 Carson City has dropped CWM in favor of a bland ADC. KONE 1450 doind a fine CWM, but their signal is dirty and over-modulated. KBET 1340 is doing their own version of MYI, KCBN 1230 still a bad rocker. KOH, KOLO, KROW, KROI all get out well and most of us know their current formats. Did locate transmitter sites of KBET, KONE, KOH and KOLO.

Years ago I saw three towers alongside the Truckee river on W. 4th St. (the old US 40) several miles west of town. I always speculated they may have belonged to short lived KOBY 1550. This time the towers were gone, so

it must have been KOBY, or somebody moved.

Got an unexpected extra night due to road closures into Eureka (US 101 was closed due to rock slides north of Legget) and spent the night in Ukiah. I can't believe how KUKI 1400 is getting away with their super dirty signal. We were two miles south of their transmitter and the spurs were horendous. Tuning directly to 1400 it was so overmodulated it was hard to listen.

Art, in a note to me asked if our office in Arcata was next door to a branch office of his firm. That's a big 10-4. Personally, I've never met them because they choose to speak to no one, hi. And during the week between Christmas and New Years they took a vacation. Ya see, they control the heat to our office and the vet lab upstairs and when they left they turned it off! We had to break in to their offices to turn it back on. Nice guys. That's it this week. Hope your DX is better than mine. 73 de RtH.

## KOOL aims format at mature

KOOL (960 AM) will take one step forward and one step backward Tuesday when the station introduces a new format. At the same time, a new announcing lineup will be unveiled.

The leap ahead, coming one month after Tom Chauncey purchased the station from Stauffer Communications for \$2 million, relates to restoring the station's tattered image in the market.

Chauncey owned KOOL for more than 30 years prior to Stauffer's purchase of it more than three years ago. The company renamed the station KARZ and took it to the cellar in the ratings. The KOOL name was revived upon Chauncey's takeover of the facility Jan. 23.

The step backward — a positive step — comes in the form of a somewhat nostalgic music approach called The Entertainers, the format being syndi-cated by a California company known as Radio Arts.

General manager Bill Smith describes the format middle-of-the-road, known in the industry as MOR. It will be dominated by vocalists such as Frank Sinatra, Johnny Mathis, Tony Bennett, the Carpenters and Peggy Lee and "sprinkled tastefully with today's contemporary artists," he said.

"The format is 95 percent vocal. While it could be considered unobtrusive, (it) is definitely not a background sound," he continued, reporting that former KARZ station manager Del Hull has been hired to be morning personality.

"Del is an extremely smooth communicator," said Smith, detailing the remainder of the lineup changes. KOOL's current morning man, Joe McNamara, will shift to middays; Jack Blair, morning man at oldies sister station KOOL-FM, will switch to afternoons on KOOL; while midday map. Stave Noble will handle the night shift. KOOL's current afternoon voice, Bobby Butler, will take over mornings on KOOL-FM.

The format is directly aimed at the 35- to 54year-old listener and positioned between contemporary KOY, which has shifted to playing more rock music, and big band KLFF and beautiful-music stations KMEO-FM and KQYT. Radio / Bud Wilkinson

"I think KOY has totally abandoned the adult audience. They've abandoned the mature adult, musically," Smith said. "K-Life (KLFF) sounds like a radio station that was around 30 years ago. I'm not knocking it. That's just where it is. It's programming for anyone who likes the big-band sounds of the '40s."

Smith expects KOOL to split the difference. "We found there was a definite hole in the marketplace."

KOOL will emphasize the news personalities of CBS Radio and will also bring KOOL-FM newswoman Bobbie Clark over to KOOL to provide local news in the morning.

The decision to make KOOL a MOR station was made several months ago, but only three people knew about it until a staff meeting Wednesday.

Early speculation by other broadcasters had KOOL all but signed, sealed and delivered as a news/talk competitor to KTAR. However, Smith said that competitive factors and the fact that it takes years for a news/talk station to build a loyal following swayed management in favor of MOR.

Asked to comment on why KARZ failed, Smith replied, "They changed the direction of the station several times. Musically, they were all over the road. They were trying to be too many things to too many people without succeeding in any area.

Since the takeover, Smith has been assessing personnel. KARZ programmer Scott Huskey was not retained by new management. Several people in the sales area were not asked to stay aboard, either.

Smith said he has not named an official program director for KOOL; Blair will handle music duties, while Hull will keep contact with CBS.

Arizona Republic, 2-27-83, via Dennis Kibbe

### **FASTERN DX ROUNDUP**

Bob Lazar

1711 Wainwright Dr.

Reston, VA 22090

Deadlines: Saturdays 3/12, 3/19, 4/2, 4/23, 5/14

### Eastern Highlights

1510 WMRE MA Boston, 2/21 0153 Gene Kelly song, nx by w. Fair u/ WLAC. Ex-WITS, ex-WMEX. (WPT-DC) 1560\*KKAA\*SD\*Aberdeen, 2/21 0137 ID by m during ET. Fair. WQXR off. (WPT) 1620 SNC ?? ??, it's not clear from Karl Zuk's 1620 log in the 2/19 DXM, but Stamford, CT is the uplink (transmitting (to the satellite --ed)) site for Satellite News Channel, so no coincidence the

transmission is from Stamford. Next time I'm up at Sat. Nx Channel, I'll find out exactly where it coms from! (CH-GA)

790 WNWS FL Miami, 2/24 1946 talk show by m & w. Good atop WTAR. (WPT-DC) 900(WIMD)MD Laurel, 2/12 0900 noted off air. (WPT-DC)

900 (WLMD)MD Laure1, 2/12 0900 noted oil air. (WPT-DC)
1190 WKOK MA Framingham, 2/20 1702 AP Net Nx, local ads, long version of
Joan Baez w/ Dylan's "Mr. Tambourine Man" at 1712 till s/off
anmts at 1717. Off at 1717½. Fair. (PEC-ME)

1230 WESX MA Salem, 2/20 1658 "This is the North Shore broadcasting stn,
WESX." Jazz mx, "Bible Hour" at 1700. Good. (PEC-ME)

1250 WKBR NH Manchester, 2/20 1643 simple "WKBR" ID, mx from Stray Cats &
Foreigner. Fair. (PEC-ME)

TABLE NOT MAINTENSIEF, 2/20 1045 SIMPLE "WKBR" ID, mx from Stray Cats & Foreigner. Fair. (PEC-ME)

1450(WOL) DC Washington, 2/13 1141 noted off air. (WPT-DC)

WTHU MD Thurmont, (Tentative) 2/13 1142 ment of Smurf, C&W mx. Fair then dog-gone WOL came back on! (WPT-DC)

1520 WPOE MA Greenfield, 2/20 1622 "Region's Nx Leader, WPOE", rock mx & local ads. Weak. (PEC-ME)

### DX Test

1110 WHIM RI Providence, 2/20 0200 DX test in loud & clear w/ ID "WHIM (code), then 'WHIM East Providence, RI testing', WHIM (code)", recordings were Xmas mx. (BC-VT)

### Eastern DXers

PEC - Paul E. Choroszy, 66 Clark St., Saco, ME 04072 (FRG-7000, 30' longwire) (Welcome, your reports are finel-ed) BC - Bob Curtis, 17 Cobbleview Dr., Colchester, VT 05446

(Philco and longwire)

CH - Chuck Hutton, 1035 Latham Rd., Decatur, GA 30033

WPT - Bill Townshend, 4500 Connecticut Ave.NW, #901, Washington, DC (Realistic TRF, Sony ICF-S5W)

Infoworld, 3-7-83, via Armand Difilippo

### Seattle commercial radio station broadcasts software

By David Needle, IW Staff

Computer owners who were in range of radio station KMPS AM/FM in Seattle, Washington, on March 6 had their modems ready. On that Sunday morning, KMPS made what it believes was the first transmission of computer data or software over a commercial radio station.

In the past few years, radio's potential as a low-cost alternative to the traditional method of sending computer transmissions over telephone lines or cable has come under increasing scrutiny. Most of the proposed schemes have involved the use of "subcarrier"

channels; that is, the channels between existing FCC-approved stations.

Last year, a newly formed company called INC Telecommunications announced an ambitious plan to send computer transmissions over the radio waves in cooperation with National Public Radio.

The FCC has yet to act on INC's request to use FM subcarrier channels. but a spokeswoman for the company said INC hopes to get approval soon and begin experimental broadcasts in the Washington, D.C., area this month. INC plans to lease potential users a special receiver to "capture" its subcarrier transmissions.

Although the KMPS experiment hasn't gotten formal FCC approval, the station did inform the regulatory agency of its plans. "Our attorneys



George Garrett, news director at KMPS AM/FM in Seattle

# CENTRAL DX ROUNDUP

Robert Kramer 6416 N. Richmond Chicago, IL 60645

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SPECIAL, CHANGES, UniDed, et. al.
RI PROVIDENCE, 0310-0330 2/21, tent. very weak tones at 0312, 0321 & 0323. TMJ,
         WYYM
                          tent. CW ID 0319 2/21 way U/WNOX. RK-IL
                         EAST PROVIDENCE, 0151-0302 2/20 good on DX Test W/XMAS mx, CW ID, VID, QSL address: "Craig Healy Box 182 Cumberland, RI 02864. TMJ-IL DIAMONDALE, 2/14 1438 poor U/WGZS W/WDTE Nx promo & CNN nx format. JA-WI
1110
        WHIM
                   RT
1170
         WDTB
                  MI
                         WHEATON, 2/24 0000-0115 weak U/KXEL W/C&W mx & oldies. TMJ-IL, 2/24 0008
1540
         WM DO
                  MD
                          fair on DX Test U/KXEL W/mx & ID. RK-IL
                         UnIDed TTer not WMDO 0011, 0014 & 0101 2/24, any ideas ? TMJ-IL
         UnIDed
                                                                             All da Rest
                         JACKSONVILLE, 2/6 1850 good W/CNN nx & ID, lost to pattern change. JA-WI
600
         MOKA
                   FL
                         TYIER, 2/6 1855 fair W/pop adult mx & ID. JA-WI
         KTBB
                         TILER, 2/0 1055 lair W/Dop adult mx & ID. JA-WI
WICHITA FALLS, 2/6 0039 good signals, ID, mx, lcl ads. CK-IL (Casey, please
report in Eastern Time & put your initials on your loggings, ed.)
NACOGDOCHES, 2/8 1900 fair O/KONO W/C&W mx & S/Off no SSE. JA-WI
SHEMAN, 2/6 0127 fair, ID, QRM. CK-IL
SOUTHERN PINES, 2/8 1800 poor U/WNOX W/S/Off no SSB. JA-WI
ARTSIA, 2/9 0000 fair W/Gospel Preacher then S/Off by YL & SSB. JA-WI
620
         KWFT
860
         KS FA
                   TX
910
         KIKM
                   ТX
990
          WCEL
                   NC
         KSVP
                   NM
                          (Judging from this S/Off time, my reception of them on 1/31 must have been
                         coughing from this 5/011 time, my reception of them on 1/31 must have been an ET. I played the tape back to be sure, & there is a KSVP ID, ed.)

CHESTYLEW, 2/4 1830 fair W/C&W mx & S/Off using Brams Lullaby in background, owned by "Crestview Broadcasting". JA-WI

CORAL CABLES, 2/13 2100 poor-fair O/KRID W/oldies & ID. JA-WI

FONTIAC, 2/15 1824 poor-fair W/MoR mx, Cent. IL Wx & ID, deep fades. JA-WI
1050
         WJSB
1080
         WVCG
                   FL
          WPOK
                    IL
                          DEFIANCE, 2/15 1945 good in WMRO null W/2 different H.S. BKB games at the
1280
         WONW
                   OH
                           same time.
                                             TMJ-IL
                          DECATUR, 2/21 1637 ID by location, XLNT signal, mx, PSA, lcl ads. CK-IL
1310
         WXI.T.
                   GA
                          NASHVILLE, 2/20 1610 ID, mx, nx, fair W/QSB, QIM. CK-IL
SALEM, 2/22 0600 good W/S/On. RK-IL
1360
         WNAH
                    TN
1480
          WSAY
                   VA
                          WEST LAKE HILLS, 2/16 1915 U/WPAD W/S/Off, no SSB. JA-WI (Jim, they are a
1560
          KTXZ
                          fulltime station, are you sure this was a S/Off, ed.)
1600
          KFNV
                    TA
                          FERRIDAY, 2/18 1835 fair W/LA Net. Nx & pop adult mx,
                                                                                                                  JA-WI
                          GOLDEN MEADOW, 2/18 1842 fair O/KFNV W/pop adult mx & ID. JA-WI REIDSVILLE, 2/22 0505 fair on ET W/OC & ID. RK-IL
          KLEB
          WRNC
                                                             Wanted by their local police:
JA.... Jim Albrecht 3313 N. Weil St. Milwaukee, WI 53212 (RF-2200, ICF-S5W, Kowalski "45 Magnum" shotgun antenna, bullets)
TMJ... Tom Jasinski 503 Jensen Shorewood, IL
CK.... Casey Kerchner RI- Box 91 Edelstien, IL 61526
 (DX-100, built in ferrite rod)
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checked it out with staff over at the FCC, and they gave us a verbal OK," KMPS news director George Garrett told InfoWorld.

RK.... Not me

Garrett, who had the original idea for the broadcast and is now directing its implementation, admitted the goal of the program is still relatively modest. "I'll be happy if more than 25 people confirm they received the transmission," he said.

The station broadcast a simple, 27second, English-text message simultaneously (AM and FM) at 7:30 A.M. on March 6. There were five to ten seconds of lead time for users to lock their modems onto the station's audio carrier tone. The message was actually sent twice, with a one-minute delay in between so that people could try re-

ceiving AM and then FM.

(R-1000, HQ-140X, HQ-129X, Radio West loop, Kowalski Loop, spiral loop)

The transmission was sent at a rate of 300 baud in 7-bit even, odd and noparity configurations. Home users who were able to bring the message up on their screen are encouraged to send a card or letter of confirmation to KMPS. The station will send a certificate of participation to anyone who reports receiving the message, which was also broadcast verbally.

The audio transmission included an additional keyword to prevent nonusers from claiming participation, though.

Since a telephone was not required to receive the broadcast, home users having an acoustic coupler were advised to hold an earphone or headset connected to their radio to the moden

Local user groups, A.P.P.L.E., the Boeing Computer Society and the Northwest Computer Society, as well as The Microperipheral Corporation, helped KMPS with the project.

KMPS is owned by Affiliated Broadcasting, a subsidiary of Affiliated Publishing, the parent company of the Boston Globe newspaper. If the experiment in main-channel transmission receives an adequate response, Affiliated Broadcasting will duplicate the broadcast at stations in Springfield, Massachusetts; Sacramento, California; White Plains, New York; and Jacksonville, Florida.

"We're using a mix of technology that can be applied anywhere in the country tomorrow," noted Garrett.

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

# WESTERN DX ROUNDUP

All times are Eastern Local

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Phone for hot WDXR tips: (206)532-6827 till 10pm(PLT)--no collect calls
DEADLINES: Tuesdays 3/15 (Anniv. Issue), 3/22, 4/5, 4/26, 5/17, 6/14
REPORTERS FOR THIS ISSUE:
        Jim Hilliker-1502 E. Hedgewood Ave.-Anaheim, CA 92805
(JH)
          Kenwood R-1000, Radio West loop
Ed Hoffman-P.O. Box 125-Burlington, WA
(EH)
                    IC-R70, SM-2
(RHM) Roy Millar-Box 1493-Bellevue, WA 98009
rundig 5077 w/SM antenna
(MaS) Mark Strickert-706 25th Ave.-San Francisco, CA 94121
                    Panasonic RF-2200, TRF
          Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
GE Superadio, CE long-range portable, SM-2
                                                                                ***********
OF SPECIAL INTEREST:
                   CA, San Francisco now runs "NBC Talknet" 0205-0800, also has
  680 KNBR
                    local "Sportsphone 68" w/Ken Dito 2305-0200, or to 0300 on
                    nights they carry GS Warriors BKB or SF Hants BKB games. (MaS) CA, Modesto 2/17 0520 call change, ex-KBEE. ID o/KYTE/KUZZ as "Your Star Station for the northern valley, K-Hive 90-7, your Star Station!", ID's the next day hrd as "K-Hive 97" & "97 AM"
  970 KHYV
                    which was old slogan. Several promos hrd on why mx is "brighter" on the new "K-Hive". (RW-CA)
 CA, San Diego 2/14 0935 fair/poor in usual KFRC-610 slop w/stock mkt. reports, "on KOGO Radio Magazine." (MaS-CA)
  600 KOGO
                    OR, Portland 2/12 0710 noted ET'ing w/OC. (EH-WA) HI, Honolulu 2/15 0421 good w/MYL. "Coral 65" IDs, ads. (EH) TN, Nashville 2/6 0226 poor, no KORL but lots of QRN w/what sounded like "Music Country Network," mentioning a couple of
  620 *KGW*
  650 KORL
           WSM
                     stations & an 800 request number, then to local Nashville area
                     wx. (MaS-CA)
   680 (KNBR) CA, San Francisco 2/15 0515 noted totally off. UNID SS in
                     weak . (EH-WA)
                     UT, Blanding 2/21 0837-0846 finally hrd after 4+ years of try-
   790 KUTA
                     ing. Severe KABC/KGHI QRM. Extremely fluttery signal. Sports.
                     clear ID, into rr, then lost. #1 most-wanted UT stn, #1017.(RW)
HI, Honolulu 2/21 0948 nice signal in XEVQ null w/rr, ID. XEVQ
   830
          KTKT
                     sounds more like 100kw than 1kw! Was looking for KABN which
                     wasn't hrd. (RW-CA)
                     OR, Lebanon 2/13 0820 good w/auction promo, IDs by YL into rr
   920 KGAL
                     mx. (EH-WA)
                     \underline{\text{AZ}}, Show low 2/21 0912-0929 tent. w/nx item about AZ legislature
   970 ?KVWM?
                     taking the day off, into program where want-ad items are read of
the air to be sold. Several 367- & 368- prefixes hrd. What's
 KVWM's prefix in BYB? (RW-CA)
1090 (XEPRS)BCN, Rosarito Beach 2/21 0413 off briefly w/OC due to tech.
 1200 KEPRS BUN, ROSATILO BEACH 2/21 041) off biletry w/oo due to teem.

problems. KBOZ alone. (RW-CA)

1120 *KPNW* OR, Eugene-Springfield 2/15 0546 noted w/TT. (EH-WA)

1220 KLIP GA, Fowler 2/21 2045 fair but alone (KIBE s/off a minute early, as often happens) w/full, long s/off, no SSB. (MaS-CA)

1230 KGFJ CA, los Angeles 2/21 2051-2058 fair o/KPRL/KWJ/KPAK (And maybe
                     KGEO--oldies. Hard to tell, hi.) w/female DJ, ads for area spots, then sports rpt "At 12:55 and 5:55, sponsored by Budweiser main topic being Anaheim Rams football team players in a BKB
                      game vs KCFJ "Jays." After 3 dozen tent. receptions, the #1 most
                      wanted finally stays up long enough to confirm ... next stop,
                     KQTE-1460 (Darn you, RW, hi). (MaS-CA)

CA, Bakersfield 2/20 2025 quick ID, faded up out of mess. Also on 2/24 2050 ad for Broadway Store, DJ gave ID "K-G-E-Oldies on KCEO." Pop mx, Olivia Newton-John. Fair. New. (JH-CA)
            KGEO
                    CA, Bishop 2/18 2110-2132 much fading in & out of mess, C&W mx, DJ ment. Bishop, "42° in Bishop." Ad for sporting goods store "on Main Street in Bishop." Ad for AM-PM Mini-Mart in Bishop. No ID hrd. Then, on 2/24 2107 after ABC nx, "Wx for Owens Valley... 36° at KIBS." Poor/fair in KCFJ null. New. (JH-CA)
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CA, Paso Robles 2/21 2047 good w/pgm called "Sentimental
1230
      KPRL
            Journey, Part 2," start of 5th Dimension's "Aquarius", then
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lost in the muddle. (MaS-CA)

1400

1420

KRE

CA, Monterey 1/31 0510 ID; atop all nicely. #70 log on 1240.

CA, Monterey 1/31 0510 ID; atop all nicely. #70 log on 1240.

CA, Santa Maria 2/21 2112 good o/KENZ/KSUE/unID SS, (RHM w/end of CBS nx, "MYL" promo, "Radio 1240" nx, BBD mx, "Something Special, on KSMA." (MaS-CA) +2/24 2055 unusually strong, on top for a couple of minutes.

MOR mx, ID by male DJ "It's 5:55 at KSMA, where the music is always memorable." Fair to good. (JH-CA) 1240 KNRY KSMA

WA, Pullman 2/15 2230 xlnt way o/KKFX w/ment. of AM & FM 1250 KWSU stations, high school BKB game. (EH-WA)

OR, Portland 2/24 0330 good in KFAC null, ID "... greatest music on K-U-P-L, 13-30." Wx for Portland, "More Music of Your 1330 KUPL Life on KUPL." (JH-CA)

 $\overline{\text{NY}}$ , Reno 2/24 0350-0400 on top of KMAK for awhile, then mostly 1340 in & out of the mess. PSA, gave phone number, "...825-..., at KBET." Then 0400 "Good morning, it's 1:00 at K-B-E-T, Reno." Into ABC nx. Poor-fair. New. (JH-CA)

ND, Williston 2/14 0720 fair w/college BKB ment., ID, C&W mx. 1360 KEYZ KMO off. (EH-WA)

OR, Myrtle Creek 2/18 0330 good o/KMO w/CaW mx, IDs. Nighttime KROR operation due to flooding conditions. (EH-WA)

AZ, Parker 2/20 2008-2015 in null of unID C&W stn, hrd ment. of 1380 Lake Havasu, wx for Parker Valley, into C&W mx. ID, TC "It's 11 after 6, 70° at KZUL-AM gets ready to sign off, tune to 96.1 FM for continued local coverage, I'm Michael Jay, I'll be here till midnight." Song by Alabama. 2014 "KZUL, Parker AZ now concludes another broadcast day." Ment. 1380, 2500 watts, slogan like "Kaz-ul," gave address of studio. No SSB. Fair. New. (JH-CA) CA, Berkeley 2/17 2059 good w/EZL mx, ID, nx. (EH-WA)

AZ, Sierra Vista 2/26 0355-0405 C&W mx, DJ talk 0355 "5 minutes before 2m on K-Tan a good Saturday morning to year.

KTAN Defore 2am on K-Tan, a good Saturday morning to ya, Sierra Vista." Into song, 0358 "This will take you up to newstime, 5 minutes from UPI, this is Naughty Rose Waltz, after news, Merle Haggard & Willie Nelson." 0400 ID "Cochise County, Country Connection, K-T-A-N, Sierra Vista." Into UPI nx. 0404 SID "14-20 K-T-A-N." Fair to good. New Channel sounded like a GY'er at times. (JH-CA)

1440 KODL OR, The Dalles 2/21 0615 poor, deep fades o/u KUHL w/wx, ID "43 degrees here at KODI" into C&W. Listed as 0800-0307 MMs in Oregon Broadcast Guide, & also off MMs in NRC Log, and also listed as MOR/rock, not C&W! Are they 24 hr.? New, #1016. Thought

I had KVON at first, hi! (RW-CA)  $\underline{\text{UT}}$  , St. George 2/23 2200 faded up slowly out of the mess "...14-50 K-D-X-U, St. George" into ABC nx. 2nd time logged, 1st time was 1450

last Nov. Fair. (JH-CA)
CA, Santa Maria 2/20 2045 in tight KWIZ null, hrd male give ID, 1480 KSBQ s/off "...tomorrow morning at 6am, KSBQ...." KWIZ came up w/loud jingle wiping it out, then was quiet to hear male again "...address letters to General Manager, KSBQ, P.O. Box..." wiped out by KWIZ. Poor. New. (JH-CA)

CA, Eureka 2/21 2044 was looking for KSBQ to see if I could hear KRED them better, tight KWIZ null, fairly strong, ad for flying lessons, ment. Murry Field, Eureka. ID, TC "on K-Red." Lost'em, must have powered down. 1st time hrd since '72. (JH-CA) CA, Merced 2/20 2100 ID "We are KYOS, Merced, the Valley's best

KYOS

Music." Fair. (JH-CA)

AZ, Tucson 2/23 2102 out of pop song "Summer Breeze," ID, "Care 14-90, K-A-I-R, Tucson." Female voice "Good evening, it's 7:02" into nx. Fair. (JH-CA) 1490 KAIR

CA. San Rafael 2/17 2043 good w/EZL mx, "15-10" IDs, into s/off.

UT, West Valley City 2/16 0304 good w/IDs by Yl, (EH)

CAW mx. KKHI nulled. (EH-WA) KTIM 1510 1550 KRGO

KY, Paducah 2/14 0408 ID; also in fair around 0432-0440. Far cry from level old WDXR used to make it in with; however, I've 1560 WPAD spent a lot of time on 1560 since call change & this is first definite ID! (RHM-WA)

DX test tried, not heard: 0300-0330 2/21 WLKW-990 RI (RW-CA)

1240 2/21 2114 u/KSMA/KENZ, sometimes even w/KSMA, w/SS talk & mx. Not quite clear enough to decipher. (MaS-CA)

1420 2/26 0415 faded up, seemed like "...on 14 caret gold country," SID not intelligible. Into C&W mx. (JH-CA)

### MEDIUM WAVE STATIONS IN AUSTRALIA

# From an Australian government list via Harry Weatherly

FREQUENCY	CALL	CLASS	POWER	AERIAL	LOCATION		GEOGRA		_
(kHz)	SIGN (Note 1)	(Note 2)	(kW)	TYPE (Note 3)			O-ORDINAT (Note	4)	
						٥	S '		E '
531	2MC	С	5	DA	Kempsey	31	06	152	50
	3UL	С	5	DA	Warragul	38	06½	145	55½
	4KZ	С	5	DA	Innisfail	17	32	146	03
	5UV	P	0.5	OD	Adelaide	34	50	138	345
	6DL	N	10	OD	Dalwallinu	30	17	116	36½
540	4QL	N	10	OD	Longreach	23	23½	144	13½
	7SD	С	5	DA	Scottsdale	41	06½	147	32½
549	2CR	N	50	OD	Cunnock	32	463	148	42½
558	4AM	С	5	DA	Atherton	17	01½	145	29
	4GY	С	5	DA	Gympie	26	10	152	49է
	6WA	N	50	OD	Wagin	33	20	117	05½
	7BU	С	2	OD	Burnie	41	02½	145	52է
567	2BH	С	0.5	OD	Broken Hill	31	56½	141	26戈
	4ЈК	N	10	DA	Julia Creek	20	39	141	49
	6PU	N	0.1	OD	Paraburdoo	23	135	117	40
	6MN	N	0.1	OD	Mt Newman	23	21	119	43
	6TP	N	0.1	OD	Mt Tom Price	22	42	117	46½
576	2FC	N	50	OD	Sydney	33	56월	150	53
	<b>ZWEB</b>	P	2	OD	Bourke	30	06	145	58
594	3WV	И	50	OD	Horsham	36	38 <sup>2</sup>	142	15½
603	6РН	И	2	OD	Port Hedland	20	24	118	40½
	72L	И	10	OD	Hobart	42	55½	147	30
612	4QR	N	50	OD	Brisbane	27	19	153	01
	6NM	N	0.2	OD	Northam	31	39½	116	40첫
621	3AR	N	50	OD	Melbourne	37	435	144	47
630	4QN	N	50	OD	Townsville	19	30፟፟፟፟፟	147	20ት
	6AL	N	0.4	OD	Albany	35	5ٍ00	117	49
	7QN	И	0.4	OD	Queenstown	42	03	145	31½
639	4MS	N	1	OD	Mossman	16	251/2	145	235
	5CK	N	10	OD	Crystal Brook	33	21	138	15
648	21/10	N	10	OD	Tamworth	30	47	150	441/2
	6GF	И	2	OD	Kalgoorlie	30	47	121	24
657	2BY	N	10	DA	Byrock	30	39	146	25է
	8DR	N	2	OD	Darwin	12	25½	130	51
666									
675	200	N	10	OD	Corowa	35	573	146	25
	6BE	N	0.05	OD	Broome	17	58	122	14
14	8KN	N	0.05	OD	Katherine	14	283	132	15կ
17									

FREQUENCY (kHz)	CALL SIGN (Note 1)	CLASS (Note 2)	POWER (kW)	AERIAL TYPE (Note 3)	LOCATION		GEOGRA CO-ORDINAT (Note	ES OF	
							5		ь .
684	2KP	N	10	OD	Kempsey	31	400ع	152	57
	6BS	N	4	OD	Busselton	33	395	115	13½
	8TC	N	1	OD	Tennant Creek	19	395	134	11
693	4KQ	С	5	DA	Brisbane	27	23	153	14
	5SY	N	2	DA	Streaky Bay	32	45½	134	111/2
702	2BL	N	50	OD	Sydney	33	56½	150	53
711	4QW	N	10	DA	St George	28	00	148	40½
	7NT	N	10	DA	Launceston	41	06월	146	47
720	2AN	N	0.05	OD	Armidale	30	30	151	40
	2ML	N	0.4	OD	Murwillumbah	28	15	153	29
	3MT	N	2	DA	Oneo	37	09	147	39
	4AT	N	4	OD	Atherton	17	185	145	33½
	6WF	N	50	OD	Perth	31	513	115	49
729	5CL	N	50	ΦO	Adelaide	35	06월	138	31
738	2NR	N	50	OD	Grafton	29	293	153	07
747	4QS	N	10	OD	Toowoomba	27	08₹	151	18
	8JB	N	0.1	OD	Jabiru	12	40	132	531/2
756	2TR	N	2	DA.	Taree	31	495	152	245
	4QA	N	2	OD	Mackay	21	06첫	149	13½
	6KW	N	0.1	OD	Kununurra	15	45	128	44
765	2BE	С	3.5	DA.	Bega	36	443	149	56
	2BE-T	С	0.5	DA	Moruya	35	511/2	150	08
	6ка-т	C	0.1	OD	Paraburdoo	23	13½	117	40
	6КА-Т	С	0.1	OD	Mt Tom Price	22	42	117	46½
774	3IO	N	50	OD	Melbourne	37	435	144	47
	4TO	С	5	DA	Townsville	19	19	147	02
783	2KA	С	2	OD	Katocmba	33	431/2	150	23
	6VA	С	2	OD	Albany	35	017	117	50날
792	4QG	N	10	OD	Brisbane	27	19	153	01
801	4QY	N	2	OD	Cairns	17	03ት	145	46ት
	5RM	С	2	OD	Renmark	34	15	140	387
810	2BA	N	10	OD	Bega	36	421/2	149	49
	6WN	N	10	OD	Perth	31	513	115	49
819	2GL	N	10	OD	Glen Innes	29	47½	151	46
828	3GI	N	10	OD	Sale	37	11½	147	06
	4NA	С	5	DA	Nambour	26	37	153	02 ·
	6GN	N	2	OD	Geraldton	28	4412	114	37
837	3CR	С	0.25	OD	Melbourne	37	48½	145	00
	4RK	N	10	OD	Rockhampton	23	27	150	27½
	6ED	N	1	OD	Esperance	33	45	121	521/2
	7Qr	С	0.5	QO	Queenstown	42	05	145	32

FREQUENCY (kHz)		LASS ote 2)	(kW)	AERIAL TYPE Note 3)	LOCATION	GEOGRAPI CO-ORDINATES (Note 4	OF Tx
846	2CY	N	10	OD	Canberra	35 13	149 07½
	4CA	С	5	DA	Cairns	16 54	145 49
	6CA	N	0.2	OD	Carnarvon	24 52	113 40
855	4QB	N	10	DA	Pialba	25 16½	152 49½
	400	N	10	OD	Eidsvold	25 24 3	151 07녛
864	4GR	С	2	OD	Toowoomba	27 36	151 55
004	6AM	С	2	GO	Northam	31 40ኒ	116 36½
	7HO	С	2	OD	Hobart	42 55	147 19
873	2GB	С	5	OD	Sydney	33 49½	151 05
	6DB	N	2	OD	Derby	17 57ት	123 40
882	ЗҮВ	С	2	DA	Warrnambool	38 20½	142 30½
	4BH	С	5	DA	Brisbańe	27 28첫	153 08
	6PR	С	2	OD	Perth	32 02	115 48½
891	5an	N	50	OD	Adelaide	35 06ኒ	138 31
900	2LM	С	2	OD	Lismore	28 49	153 21
	6ВУ	С	2	OD	Bridgetown	34 03	116 10½
	7AD	С	2	OD	Devonport	41 10	146 19
	AH8	С	2	OD	Alice Springs	23 46	133 52
909						7.41	149 09
918	2XL	С	2	OD	Cooma	36 143	149 09
	4VL	С	2	OD	Charleville	26 23	117 121
	6NA	С	2	QO	Narrogin	32 57½	145 06
927	3UZ	С	5	OD	Melbourne	37 44½ 23 51½	151 143
	4CD	С	5	DΑ	Gladstone	23 51½ 24 23½	150 293
	4CD-T	С	0.1	OD	Biloela	32 01	115 531
	6NR	P	2	DA	Perth	19 30½	147 153
936	4AY	С	5	DA	Ayr Hobart	42 55½	147 30
	7ZR	N	10	DA	Bendigo	36 42 3	144 135
945	3BO	С	2	OD	Sydney	33 51½	151 04
954	2UE	С	5	OD DA	Griffith	34 193	146 08
963	2RG	C	5	DA DA	Warwick	28 01½	151 58ኒ
	4WK	C	5	OD	Bunbury	33 20½	115 45
072	6TZ 2MW	C C	2 5	DA.	Murwillumbah	28 19날	153 30ኒ
972	5DN	c	2	OD	Adelaide	34 50	138 345
981	3HA	С	2	OD	Hamilton	37 41	142 01
301	4RO	c	2	OD	Rockhampton	23 21	150 28
	6KG	С	2	OD	Kalgoorlie	30 44	121 30
990		c	2	OD	Perth	32 00½	115 50½
<del>55</del> 0	8GO	N		5 OD	Gove	12 111/2	136 47½

FREQUENCY (kHz)	CALL SIGN (Note 1)	CLASS (Note 2)	POWER (kW)	AERIAL TYPE (Note 3)	LOCATION GEOGRAPHIC CO-ORDINATES OF TX (Note 4)				
	· .						5 '	• I	Ξ'
999	2NB	N	2	DA	Broken Hil	31	56	141	29
	2ST	С	5	DA	Nowra	34	53½	150	32
1008	2XX	P	0.3	OD	Canberra	35	13	149	07
	4IP	С	5	DA	Brisbane	27	23	153	14
	6GE	С	2	OD	Geraldton	28	44	114	37
	7EX	С	5	DA	Launceston	41	27	147	13
1017	2KY	С	5	αO	Sydney	33	50戈	151	04
•	6МН	N	0.1	OD	Wyndham	15	28	128	06
1026	3DB	С	5	OD	Melbourne	37	44	145	06
	4MK	С	5	DA	Mackay	21	07뇌	149	13
	6NW	С	2	OD	Port Hedland	20	23	118	35
1035									
1044	2UH	N	1	DA	Muswellbrook	32	14	150	55
	4WP	N	0.5	OD	Weipa	12	375	141	531/2
	5PI	С	2	OD	Crystal Brook	33	19	138	16
1053	2CA	С	5	DA	Canberra	35	13	149	07뇧
1062	<b>4TI</b>	N	2	OD	Thursday Island	10	35	142	13
1071	3CV	С	5	DA	Maryborough	37	02½	143	49
	4SB	С	2	OD	Kingaroy	26	25	151	50
	6WB	С	2	OD	Katanning	33	39	117	30
1080	2MO	С	2	OD	Gunnedah	30	59	150	12½
	4MI	N	0.2	OD .	Mount Isa	20	41	139	30
	6IX	C .	2	OD	Perth	31	56	115	545
	7нт	С	5	DA	Hobart	42	56	147	30
1089	3WM	С	5	DA	Horsham	36	445	142	31
	2GZ	С	5	DA	Orange	33	27ት	149	07첫
1098	4LG	. <b>C</b>	2	OD	Longreach	23	24	144	13
	6MD	С	2	OD	Merredin	31	30	118	12
	7LA	С	2	OD	Laurceston	41	233	147	04ት
1107	2UW	С	5	OD	Sydney	33	50월	151	04월
1116	4BC	С	5	DA	Brisbane	27	32	152	58
1125									
1134	2AD	С	2	DA	Armidale	30	33	151	42
	3CS	С	5	DA	Colac	38	19չ	143	32
	6CI	С	2	OD	Collie	33	22ኒ	116	113
1143	2HD	С	2	ФO	Newcastle	32	52	151	42
1152	2WG	С	2	CO	Wagga Wagga	35	02월	147	25
1161	4MB	С	2	OD	Maryborough	25	28	152	44
	5PA	N	10	DA.	Naraccorte	36	56½	140	39½
	7FG	N	1	DA	Fingal	41	411/2	147	52\

FREQUE (kHz	() SIGN		POWER 2) (kW)	AERIAL TYPE	LOCATION		CO-ORDI	GRAPHIC NATES OF	F Tx
	(Note ]	.)		(Note 3)			° 5 ' '	,	е'
1170	2CH	С	5	OD	Sydney	33	50½	151	045
	4GC	С	0.1	OD	Charters Towers	20	04	146	175
1179	3KZ	С	5	OD	Melbourne	37	445	145	07
1188	2NZ	С	2	OD .	Inverel1	29	47	151	13
	6XM	N	2	OD	Exmouth	21	57 <del>\</del> 2	114	07ኒ
1197	4GG	С	5	DA	Gold Coast	28	00	153	24
	5KA	С	2	OD	Adelaide	34	50½	138	35½
1206	2CC	С	5	DA	Canberra	35	13	149	07첫
	2GF	С	5	DA.	Grafton	29	40½	152	59½
	6KY	С	2	OD	Perth	31	56	115	545
1215	2ST-T	С	0.35	OD	Bowral	34	295	150	24
1224	2WS	С	5	DA	Sydney	33	48	150	53
	3EA	S	5	DA.	Melbourne	37	37	144	56
1233	2NC	N	10	OD	Newcastle	32	48	151	40
1242	3TR	С	5	DA	Sale	38	ړ33	147	02
	4AK	С	2	OD	Oakey	27	28	151	45
	5au	С	2	DA	Port Augusta	32	50	137	56
	8DN	С	2	OD	Darwin	12	26	130	515
1251	2DU	С	2	OD	Dubbo	32	د 164	148	40ኒ
1260	3SR	С	2	OD	Shepparton	36	23	145	31
	6КА	С	1	OD	Karratha	20	43½	116	495
1269	2SM	C	5	OD	Sydney	33	50	151	04
1278	3AW	С	5	CO	Melbourne	37	445	145	06
1287	2TM	С	2	OD	Tamworth	31	10	150	55½
1296	4BK	С	5	DA	Brisbane	27	28	153	07ኒ
	5SE	С	2	DA	Mt Gambier	37	48	140	43
1305									
1314	2WL	С	5	DA	Wollongong	34	31	150	52날
	ЗВА	С	5	DA	Ballarat	37	325	143	46կ
1323	2GO	С	5	DA	Gosford	33	22	151	22½
	5AD	С	2	OD	Adelaide	34	50½	138	35½
1332	3SH	С	2	OD	Swan Hill	35	25	143	34
	4BU	С	5	DA	Bundaberg	24	51	152	245
1341	2NX	С	5	DA	Wallsend	32	53½	151	40½
	3GL	С	5	DA.	Geelong	38	10½	144	275
1359	2LF	С	2	OD	Young	34	20 է	148	20
1368	2GN	С	2	OD	Goulburn	34	45	149	42
	4LM	С	2	OD	Mt Isa	20	43	139	30ት
1377	3MP	С	5	DA	Melbourne	37	56	145	13
	8AL	N	2	OD	Alice Springs	23		133	52
1386	2EA	s	5	DA	Sydney	33		151	04
	5AA	c	5	DA	Adelaide	34	451	138	36¾
18							•		-

FREQUENCY (kHz)	CALL SIGN ( (Note 1)	CLASS Note 2)	(kW)	AERIAL TYPE Note 3)	LOCATION	GEOGRAP CO-ORDINATE (Note	S OF TX
:						22 24	150 07
1395	2LT	С	5	DA	Lithgow	33 24 33 09	148 13
1404	2PK	С	2	OD	Parkes		
1413	2KO	С	5	DA	Newcastle	32 51½	
1422	3XX	С	5	OD	Melbourne	37 44½	
1431	2WN	11	2	OD	Wollongong	34 32	
1440	2CN	N	2	OD	Canberra	35 13	149 07½
1449	2MG	С	5	DA	Mudgee	32 35	149 35
1458	2NM	С	2	OD	Muswellbrook	31 14½	150 543
	5MU	С	2	OD	Murray Bridge	35 07½	139 15½
1467	3MA	С	2	OD	Mildura	34 11	142 075
1476	2KA-T	С	0.5	OD	Penrith	33 445	150 39½
	4ZR	С	2	OD	Rcma	26 33½	148 49
1485	2LG	N	0.2	OD	Lithgow	33 29	150 09첫
	4EB	P	0.1	OD	Brisbane	27 31	153 00
	4HU	N	0.05	OD	Hughenden	20 51	144 115
	5LN	N	0.2	OD	Port Lincoln	34 44	135 53
	2EA	S	0.1	OD	Wollongong	34 31	150 52½
1494	2AY	С	2	OD	Albury	36 03½	1.46 58
1503	2BS	С	5	DA	Bathurst	33 22	149 32
1505	3AK	С	5	DA	Melbourne	37 45	145 06½
1512	2NA	N	10	OD	Newcastle	32 48	151 40
				QO	Deniliquin	35 37½	144 55½
1521 1530	20N 2VM	C C	2 2	OD	Moree	29 28	149 50
1548	4QD	N	50	OD	Emerald	23 27½	148 09½
	2RE	c	2	OD	Taree	31 55½	152 28
1557	3NE	С	5	DA.	Wangaratta	36 19	146 22
1566	4GM	N	0.2	OD	Gympie	26 13	152 41号
1070	200	C	5	DA	Wollongong	34 29	150 47첫
1575	200 2WA	N	0.1	OD	Wilcannia	31 34	143 22
1584		N	0.2	OD	Mt Gambier	37 495	140 473
	5MG	N N	0.05		Woomera	31 12	136 49½
	5WM		0.03		St Helens	41 20	148 17
	7SH	N		OD	Newcastle	32 52	1.51 42½
	2EA	S	0.1		Southport	28 02½	153 26
1593	4SO	И	0.2	OD	Renmark	34 16	140 375
	5MV	N	2		Соста	36 13	149 08
1602	2CP	14	0.0		Leigh Creek	30 29	138 25
	5LC	N	0.0		Warrnambool	38 22	142 30
	3ML	N	0.2	OD	Wattiguroot		

### Notes

1. T Translator

2. N National C Commercial P Public S SBS

<sup>3.</sup> DA Directional Aerial OD Omnidirectional Aerial.

<sup>4.</sup> Geographic co-ordinates are specified to the nearest  $\frac{1}{4}^{\circ} \cdot$ 

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