

13

VOLUME

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THE INTERNATIONAL RADIO CLUB OF AMERICA

WHOLE NO 408

MARCH 13, 1976

DX CALENDAR DX CALENDAR DX CALENDAR

NO. 25

ELT

NRC Mon. 3-22-76 0005-0330 WHUM-1240 Reading, PA 1/4

IRCA 0100-0200 KSEK-1340 Pittsburg, KS 1/4

IRCA Thu. 4- 1-76 0530-0630 KBBV-1050 Big Bear Lake, CA ¼kw

IRCA Mon. 4-12-76 0600-0630 KCVR-1570 Lodi, CA 5kw

WHUM-1240 will be on for a PoP Test. 0300-0330 will have various TTs with voice and code IDs. Reports to J.K. Hodgkins, CE, Radio WHUM, Berkshire Towers, Reading, PA 19601. Arranged by David E. Fox.

KSEK-1340 will mention IRCA, no other details. Reports to James D. Harbart, Radio KSEK, P.O. Box 610, Pittsburg, KS 66762. Arranged by C.R. Weinstein.

KBBV-1050 (daytime only) will mention IRCA, no other details.
Will also have KFX669 - 1622 going with 250w ND. Reports
to Vern Thompson, Radio KBBV, P.O. Box 1050, Big Bear
Lake, CA 92315. Arranged by Mike Sanburn.

Lake, CA 92315. Arranged by Mike Sanburn.

KCVR-1570 (daytime only) will have tones, music, and IDs.

Reports to Ed Gehres, CE, Radio KCVR, P.O. Box 600, Lodi,
CA 95240. Arranged by Mike Sanburn. (This station had
a test for the NRC in 1964. It's a friendly station and
will verify with a letter.)

KDWN-720 Las Vegas has the IRCA's program "DXer Report" on once a week at 2145 PST (0045 EST) every Wednesday night.

CPC Results and FLASH TIPS...

The Radio Millon-625 test was heard in Seattle by ye Ed-in-Chief weak but clearly. The address for DXers in North America is Radio Million, P.O. Box 592814 A.M.F., Miami, FL 33159. For DXers elsewhere: Radio Millon, Apartade 4218, San Jose, Costa Rica. Remember that other tests have been tentatively scheduled for 3-27, 28, and 29.

From Conrad "Chick" Boilard WNIVCU, Indian Orchard, MA: WNUS-1490 (ex WTXL) went on the air 12-30-75 at 0530 EST. They run 1kw-D, 250w-N, and sign off at 12 midnight EST. Tel number is 413-781-5200. It's an all news station and they call themselves W-NEWS-15. Will answer all reports sent to Al Schultz, CE, Radio WNUS, 34 Sylvan Street, West Springfield, MA 01089.

From Brian Cartwright, Johnstown, PA: KRYT ID heard through WCKY just before they went to TT 0414. All other tests were unheard, or I was just plain asleep.

From Germany comes this letter: "Dear Listeners of the DX Monitor,

We have a small tape-sponding service here in Germany and want to produce a program about radio in the USA on the occasion of the 200th anniversary of the United States. Specifically we need information, popularity and history of American radio stations in large cities like New York and San Francisco, towns of about 100,000 people and smaller cities with 1 or 2 radio stations. Please let us have your information and cuts of medium wave and FM stations (FM stereo if possible) on tape at 3% or 7½ i.p.s. or cassette. We will return the tape with cuts of German and European medium wave and FM stations. We will be very pleased if many DXers will send us tapes and station information. Our address is: TZW, Wolfgang Hippler, Schubertstreet 34, D 4755 Holzwickede, Fed. Rep. of Germany." (Slightly reworded at IRCA HQ.)

The ARRL National Convention will be held in Denver from July 16 to 18, 1976. For more information write to: Koatz, 2450 South Quitman Street, Denver, CO 80219. Please send a SASE. (Rob Harrington)

* * * NEW MEMBERS

Howard F. Schafer, 303 So. Spruce St., Appleton, WI 54911 Rob Gerardi, 402 James St., Carbondale, IL 62901 Michael W. Scheel, Com. Supt. Co. FMF, Multichannel PI.T, MCB

Camp Pendleton, CA 92055
James R. Miller, 92h E. 58th St. So., Wichita, KS 67216
Bill Smith, W5USM, Route 2, Box 2281, McKinney, TX 75069
NZ DX Times, P.O. Box 2956, Wellington, NEW ZEALAND
Kenneth R. Goldman, 3781 79th Ave. S.E., Mercer Island, WA 98040
John L. Rouse, P.O. Drawer M, Bowie, MD 20715
Mark West, 2350 Beacon Ave. S., #9, Seattle, WA 981h4
James W. Young, P.O. Box 576, Wrightwood, CA 92397

Address Change:

Mr. John Bradley, 2606 Logan Circle, Colorado Springs, CO 80909

Renewals

Credo A. Bisquera, Michael Wilson, Park Barton, James L. Pitts, Ronald J. Musco, Charles G. Molloy, C.M. Stansbury II, Bertram A. Podall, Adolph Rattay, Bruce R. Heimburger, Dr. Robert Mendelsohn, Mary S. Sweany, John N. Sampson, Alvin E. Harvey, John A. Gallarman.

TIXE special was heard by everyone in the Seattle network, with pre-taped announcements in Spanish, Portugese and English. There were what sounded like chirps between announcements as well as a three tone IS before and after. ID's as R. Million plenty of times. Also testing their SW outlet on 9.615 Mhz. (Ye publishing staff--Jon Orren, Bruce Portzer, Jef Jaisun, Phil Bytheway and least we not forget Mike Worst)

BROADCASTING

(as compiled by Mike Worst)

Day WOKI 710 1000 St. Matthews, SC Start operation KWSR 810 1000 Rifle, CO renewal denied 940 10000 10000 Agana, Guam KHEE CP cancelled KOKK 1190 Huron, SD 500 start operation From the Feb. 2, 16, and March 1, 1976 issues.

Geomagnetic Indices

Feb. 18-24 15 18 17 12 10 3 2

The Inside Story _

EDXR -- 296 EDXF -- 296, 297 - 297 CDXR - -WDXF - -WDXR -- 301, 302 DXWW II Special 302 Ad-Visor FCC Superpower Proposal - 303, 304 - - - -Graveyard Records - 300 - 304 NRC Night Pattern Book review - 306 eastern dx Editor: Mike Mitock, roundup

Box 533 Lorain, OH

680 690 just barely snuck in u/CBF. Something about a concert, contest, and then a low-voiced DJ with "WAPE". Heard mention of Northern Blvd., if there is one in Jay. Listened from 17th mention of Northern Blvd., if there is one in Jax. Listened from 1744-1756, 2/24. (BIG-CT)
OH, COLUMBUS 1737 2/24 w/wx, gave downtown Columbus temp. Very weak signal. Local nx at 1738. (BIG-CT)
NY, KINGSTON it must be a NY day.
Coming in well 1654, 2/24 w/some old horse tale of Upstate NY. (BIG-CT)
NY, HYDE PARK again coming in unbroken at 1650-1653. Auto Insurance spot, HVW News. Poughkeepsie noted. 2/24. Anybody in metro area who hasn't pegged this one because of WPEN should try now. (BIG-CT)
FL, ORLANDO 2/23 0428-0448, fairly good signal mixing w/WNOX/CBY on ET-OC. Three IDs noted @ 0428, 0429, & 0439. (RA-MA)
NF, CORNER BROOK 2/23 0433-0436. Noted 820 920 WYYW 950 OOHW 990 NF, CORNER BROOK 2/23 0433-0436. Noted poorly u/WHOO ET & WNOX w/complete weather for Maritimes. (RA-MA) CBY CT, SOUTHINGTON at 1646 very briefly with a spot for a CT bank. I'm trying to get all those little 500 w WNTY stations cleaned up in this state, but it ain't easy. 2/24. (BIG-CT)
PQ, QUEBEC in FF 1639-1641, 2/24.
Sears spot "Lex Jour de l'anniversaire or Birthday Sale. FF TC, ID, and some mx. (BIG-CT) 1.060 CJRP some mx. (BIG-GT) NC, GREENVILLE, a real shock! While tuning for CBA. Some WTIC-1080 QRM, spot at 1730 for Dickinson Furniture 1070 WNCT outlet, and announcement for WNCT-FM Prog. tests, so they can be on 24 hr. ID just before, at 1731 2/24. (BIG-CT) CT)
PQ, THREE RIVERS Not sure, but it
was definitely FF, and this was the
only thing I could think of. Coming
in so-so 2/24, 1727-1729. (BIG-CT)
IL, CHICAGO at 1819 w/TC, DJ "The Kid"
(??) mx, "Tiger by the Tail", 2/23.
Another "should be easy" first.
(BIG-CT) 1140 CJTR 1160 WJJD (BIG-CT)

NY, POUGHKEEPSIE 1715-1716 2/24, mixing w/WRIV. Leon Russell "Lady Blue". Got smothered at 1716.5 (BIG-CT)(I presume that matches 1716:30?...mrm)

DE, WILMINGTON 2/23 0230-0238, NNIS

News ending @ 0230 & then local news segment. Topping WOL nicely.(RA-MA)

PA, HARRISBURG jx, John Denver, at 1707 2/24 u/WOKO. (BIG-CT)

NY, ALBANY on 2/24 1707-1709 blasting at times, letting WCMB under for a second. Nx, jx, "OK 1460", into some c&w mx. (BIG-CT)

PA, ALLENTOWN NBC Nx, Metro. Life spot, local nx, Lehigh Valley, Valley Forge mentioned. 1703-1706 2/24. (BIG-CT) (BIG-CT) WEOK 1390 1450 WILM 1460 WCMB WOKO 1470 WSAN (BIG-CT) NJ, DOVER at 1655-1700 2/24 w/ski cx, Eagles "Take it Easy", and nx at 1700. Very crummy, mixed w/WPUT Brewster NY. (BIG-CT) 1510 WRAN #############################

NC, LAURINBURG 2/23 DX Test heard w/readable signal u/WTIC 0330-0350 w/ 1080 sta. info, many IDs, instrumental mx, and series of tone tests that began @ 0346. (RA-MA) DX Tests of 2/23 NOT heard by RA: CJRW-1240; WZYQ-1370; WSYB-1380; WCVS-1450 see ya next week in the big anniversary issue!

> central rounded New Buffalo,

Richard C. Evans P.O. Box 392 New Buffalo, Mich. 49117

1430-2300+ (ELT) work 616-469-4012 Phones: 616-469-3866 After 2400 (ELT) home

Deadlines: 3/11 3/18 4/1 4/15 4/29 5/13 6/3 7/1

0305; new here and reported. (SAM)
1080*WEWO*NC*Laurinburg, 2/23 0343 good on DX over
WTIC w/Mx and TTs. (KDF)

1090*KKYN*TX*Plainview, 2/16 0331 good on DX w/TT,
C&W Mx. IDs. (KDF)

1250 WREN KD Topeka, 2/27 0300-02. Very good o/all
QRM w/Nx headlines & weather, rptd.

QRM w/Nx headlines & weather, rptd.
by Randy Jordan. New & rpt sent.(SAM)
*WTAE*PA*Pittsburgh, 2/23 0230-35. Very good,
dominating the freq. on ET w/TT & some
OC, ID at 0235; frequent 1250 visitor
around here. (SAM)
*WKBL*TN*Covington, 2/22 0334-45. Fair on PoP
test w/some WDAE QRM. 500 cycle tone
and 1 ID; called stn, sent rpt.(SAM)
1340*KICK*MO*Springfield, 2/23 0348-0400. XInt on
f/c w/1000 cycle tone, way o/all GY
QRM; extended ID at end of check, but
no breaks in tone noted during check; no breaks in tone noted during check; resumed RS at 0400; possible r/c not on list; 1st time hrd here. (SAM)

on list; 1st time and nere. (SAM)

1370*WTTS*IN*Bloomington, 2/28 0233-0307. Fair to

very poor (or XInt to good) on test

which featured either various TTs or

1000 cycle tone only; occasional

periods of OC and 1 ID at 0306. Some

WSPD/KFRO QRM; someone else was testing

wspu/KFRO QRM; someone else was testing at the same time, but never gave an ID, so I don't know what test belongs to whom; never hard here before. (SAM) 1380*WGUS*SC*North Augusta, 2/24 0110-14. Fair to completely unreadable on r/c w/1000 cycle tone & IDs every 2 minutes; unbelievable WAOK QRM, all but impossible to null: found testing on 4th tible to null; found testing on 4th Tues. rather than on 3rd, as listed; often tried for, but never hrd before, report sent. (SAM) 1400*WJZM*TN*Clarksville, 2/23 0157-0200. Very poor, just barely making it thru GY QRM on PoP test w/TTs ranging between 1000 & 5000 cycles; 1 IP at 0200.(SAM) 1510 *WJIC *NJ * Salem, 2/9 0129 poor on DX w/two code 1530*KECK*NE*Lincoln, 2/26 0147-53. Very good, nice clean signal u/WCKY on f/c w/1000 cycle tone & IDs every 2-3 minutes. hrd several times before & may possibly be a r/c though not on list. v/l (SAM) 1560°WTOD°OH°Toledo, 2/25 0210-0307. XInt on test w/C&W Mx,("Sweet Sensuous Feelings" hrd 9 times); nice strong signal with slight QRM from KKAA & my unID LA buddy; 1 LD; never hrd before. (SAM) 1570*KLLA*LA*Leesville, 2/26 0121-24. Very good on f/c u/XERF w/1000 cvcle tone & ID at completion of check; no QSB; hrd before on RS, but never on f/c; this could be a new r/c not listed. v/l. (SAM) 1580*KTGR*MO*Columbia, 2/23 0258-0319; Good to poor on test w/some QSB & considerable WALG QRM; 1000 cycle tone, "Top 40s"-type Mx and many, many IDs mentioning a "program test" (?) (sic-rce) test format sounded almost like a DX special; very happy with this one. Called CE and rptd.(SAM) *KWIP*CA*Merced, 2/16 0338 poor u/static with code IDs and TT. (KDF)

1590*KWEY*OK*Weatherford, 2/23 0106-08. Good, holding
its own against WALG QRM on f/c; 1000
cycle tone & 1 ID noted before turning elsewhere; hrd before; v/l. (SAM) 1600*WAOC*PA*Bedford, 2/9 0305 fair/qood on DX with TT & ID. (KDF) PER THE LIST: WCVS-1450 IL (SAM) WSMG-1450 TN (SAM) hrd 0403-0415 4th MON: 4th THU: KSIW-1450 OK (SAM)
WPRN-1240 AL (SAM) with dial tone 4th FRI: A TIP OF THE HAT THIS WEEK TO: KDF - Karl Forth, 630 South Ardmore, Villa Park, Illinois 60181 SAM - Scott A. Mentzer, Route 3, Tylertown, Mississippi 39667 Been staying late at work the past couple of weeks

teaching my midnight kid how to read rate tariffs. Was out there for 4 hours MM from 0000-0400, then stayed the next night until 0230. Makes for long days, but the hard parts over with now. No DX done, of course, hi. Gotta run. 73.

NANCY HARDY, Editor

2301 PACIFIC AVE.

western dx roundub

ABERDEEN, WA 98520 ALL TIMES ARE EASTERN LOCAL

DEADLINES: March 20, April 3, April 17, May 1

REPORTERS FOR THIS ISSUE:

(NHP) Nick Hall-Patch-3272 Alder St.-Victoria, BC National HRO, 4' box loop V3% 1P2 (BLH) Brett Hanavan-845 First Ave.-Chula Vista, CA

HQ-180C, SPR-4, Sanserino loop, 92011 DA5, longwire

(NH) Nancy Hardy-2301 Pacific Ave.-Aberdeen, WA Lafayette HE-30, SM-1 98520 (SLH) Steve Herman-1709 Kassabian-Las Vegas NV

Hammarlund SP-600-JX, Panasonic 98104 RF-565, 20 meter inverted-L antenna

540 KDLT UT, Delta 2/27 1532 poor groundwave signal w/Country mx. "Number one in country Utah." I think they're new on air. 1 kw daytimer. (SLH-NV)

600 KROD TX, El Paso 3/2 2302 ID, MOR mx. Local KOGO partially nulled. (ELH-CA)

660 WNBC NY, New York 2/27 0145 w/good steady signal o/my usual 660 noise--strongest signal for a long time for a station

signal for a long time for a station that shows maybe 10 times a season.

ON, Windsor 3/1 0323 w/nx, / (NHP)
many mentions of Michigan and Detroit,
u/PJB, w/CHAB. (ELH-CA) 800 CKLW

 $\underline{\text{CA}}$, Oxnard 2/22 1833 in SS, mixing w/ $\overline{\text{XEAO}}$ & KJJJ. Local KDEO was off due to KOXR 910 a power outage. (BLH-CA) CA, Palm Springs 2/22 1845 w/rr, o/u XEBH. KDEO off due to power failure, KDES 920 opening 900, 910, and 930. (ELH-CA) CO, Durango 3/2 2247 w/rr mx, then wx for the Durango-Farmington area. KHJ KIUP 930 very weak. They still seemed to be ND. In KHJ null. (BLH-CA) MO, Kansas City 2/23 0338 call given between songs. In KFWB null. (BLH-CA) KS, Wichita 2/28 2131 "This is country music radio-KFDI!" Sponsoring contest 980 KMBZ 1070 KFDI for 5-12 year olds. State #26. U/KNX and was actually dominant for about a minute. (SLH-NV) LA, Shreveport 2/27 2123 "It's 8:23 at KWKH", played old MOR mx. Dominant on frequency o/KSDO. Only 2nd LA. (SLH)

1D, Boise 2/28 2125 picked up 2nd new catch in 2 minutes! "It's 7:37 at 1130 KWKH 1140 KGEM catch in 2 minutes! "It's 7:37 at KGEM Boise..." Was dominant on small Panasonic. (SLH-NV)

SD, Sioux Falls 2/23 O615 extensive wx forecast for Sioux Falls, mention of KSOO, spot for someplace in Sioux Falls, mx. Poor to fair, some QRM--WRVA?? CKXL on suddenly at O623. (NHP)

AZ, Coolidge 2/28 2137 moved up 10 kh & got 3rd catch of night. Gave phone number, played C&W mx. (SLH-NV)

CA, Los Angeles 3/1 O330 poor to good in null of mini-pest CKIQ, w/ID & light rrmx. KAYO off. Much wanted as KAYO & CKIQ usually hog this freq. between them. (NHP-BC)

AB, Lethbridge 3/1 O241 w/jingle, into 1140 KS00 1150 KCKY 1150 KIIS between them. (NHP-BC)

AB, Lethbridge 3/1 0241 w/jingle, into C&W mx. XEB interference. (BLH-CA)

BC, Creston 2/25 0715 "Voice of Kootenany Country" ID, fair and reasonably steady on top of GY mess.

SK, Saskatoon 2/25 0706 "This(NHP) is CJWW nx" followed by Saskatoon wx. Fair to good o/u CFOK, CHPQ nulled. Originally, this was to be CIQR, but it seems to have changed, according to this, and to Broadcasting Info in 2/21 DXM. Apparently RS, wonder how long 1220 CJOC 1340 CFKC 1370 CJWW DXM. Apparently RS, wonder how long this has been on? (NHP-BC) this has been on? (NHP-BC)
HI, Honolulu 3/1 0446 w/religious pgm.
Some typical Hawaiian mx. U/KSTN. (BLH)
CO, Colorado Springs 3/1 0415 full ID
noted in middle of rock instrumentalmentioned NRC. Signal poor to fair,
some local noise, KYXI splash, & unID
TT. (NHP-BC) 3/1 0402 DX test easy after
KFBK s/off. Rock mx, many IDs, some
promos. Sounded like simulcast w/FM.(BLH) 1420 KCCN 1530 *KRYT* GA, Dalton 2/23 0401 just after KFEK s/off. Recorded announcement, "10000 watts, 1530, this is WTTI, Dalton." RR mx. NRC Domestic Log says 10,000 watts 16 West this of the control of the 1530 WTTI watts D6. Was this an ET? Tried calling them, but no answer. (BLH-CA) CO, Colorado Springs 3/6 O815 s/on, no SSB. Poor w/KDAY nulled. (NH-WA) 1580 KPIK

Per the list:

KVSL-1450 AZ (1st MM)

The "H" reporters were out in full force this week. Glad I'm not a Gantzer any more, I would have spoiled the list. Even if your name doesn't begin with an "H" we hope you'll report to your respective Roundum section. 73



DIAL



Maryland's Most Powerful Broadcast Voice

NBC Affilate

1090 KHz

John Zondlo

eastern dx forum 6617 Maryland

Hammond, IN 46323

Andy Kwiatkowski-9624 Avenue M-Chicago, IL 60617 Greetings. I rejoined the IRCA last October, was a member in the good old days 70-71. I'm 33, single, and taking it easy, is their any other way? I use a Drake SPR-4 with their AL-4 box loop antenna. My totals here are 1334/564 48/46 9/8. I have a request to make of you fellow members and that is when you report your verifications, could you please state if they are by letter or QSL card. Sometimes I send a SASE to stations, but if I knew that they verified by card I would not because I want the postmark on the card. Veries in the past 2 weeks: v/f WCOA, v/l WKRA WHTC WUCR WHUT KAOL (DX) v/q WLBK WFLA WMLT WILY KROX. V/r WRSW. 73's. (Welcome back, Andy...report often-jz)

EMFN Philip Boersma - 362-64-7025 - Nuclear Power School class 7606 - NTC, Orlando FL 32813 Hi again from Orange Country. Received a letter from Tim Benko of Lansing, IL, and he clarified my Forum of a couple weeks back (on the Chicago ratings). He pointed out to me that while WGN leads WLS in the quarter hour, WLS leads WGN in the men 18-34. adults 18-49. and women 18-34 the men 18-34, adults 18-49, and women 18-34 categories. The discrepancy is probably that the quarter hour survey was taken during Wally Phillip's show. But what I said about WGN is still true- even if they're not #1 in all categories. In most of those other categories, WGN is number two in all assets they to the categories. wen is number two, in all cases, they're #5 or better. I believe they'll remain in those top categories— their format is still the best (in my opinion) of Chicago radio. Tim also sent me the fallowing info. Well, because of the the following info: WCFL, because of the clobbering WLS has given them, may switch to an EZ listening-shmaltz format very soon. Larry Lujack (because of his contract) may still be the afternoon drive-time personality on that station. The Tim. Locally: WHOO-990 was off the air for 7 hours during the week of 2/16. Somebody took a sledgehammer to their xmtr somebody took a sledgenammer to their xmtr site, demolishing some of the most critical parts of the xmtrs. The local paper quotes WHOO'S CE as saying that whoever did it "kmew what he was doing—he hit all the right spots", knocking WHOO off the air for 7 hours one evening. Also, WORJ-FM was off all week, 2/15—2/20, due to a fire in their transmission line and resultant damage. Well, keep the snow out of your ears, and the ice off yer car. 73s of your ears, and the ice off yer car...73s

Fred Prechtl-6128 Glade Ave.-Cincinnati, OH

Greetings. Checking back, I see that so far this season, I have heard only 20 new stations. In my eleven years as an active DXer, this will go down in history as my worst DX season ever. It is unfortunate that I live in a city with a l-A clear channel station. If this "super nower" properly becomes a realist "I'm realist". power" proposal becomes a reality, WLW will most likely become one of those "super powered" stations. Talking to some "old-timers" (non-DXers), I found out that back in the '30's when WLW was purping 500 km, thou work a real resident WIW was running 500 kw, they were a real nuisance, and were heard all over the dial. Even listening to other locals such as WKRC, WCPO (now WUBE), WSAI, etc., was impossible without hearing WIW in the "background" as they put it. This may be an advantage to those living in some remote area without primery coverage but what about area without primary coverage, but what about those of us living in densely populated areas that want radio listening without interference from the local clear channel "giant". This should definitely be considered by the ECC. should definitely be considered by the ECC. Getting "closer to home", it is doubtful that the FCC gives a d--- about the DXers plight. Latest veries in are WBAW, CKKW, WHMA, KVSA, WFFX, WRKN, WEYY, WBAG, WNYC, and WISE, all ppc's w/WNYC's own v/q an aerial photo of Manhattan. 73's.

Gary Siegel-2728 106th St.-Toledo, OH 43611 Tot of stirrings in Toledo radio. I'm passing along 2 articles from the Toledo Blade which details in part situations involving WSPD and page 298 March 13, 1976

WOHO. My own employer, All-Nx WANR, is undergoing an ownership change. The new owners' last name is "Segal", but that didn't stop the station from cutting what limited time I was getting to nothing or nearly nothing. However, I've got my eyes on other stations locally as I've got my eyes on other stations locally as the WANR status is shaky at best while the sale is being arranged. It will likely be shaky afterwards also. The full timers at WANR are working 6 and 7 hour board shifts 6 days a week while making news gatherings as time permits. The situation is really a bad scene. I can only hope that the station turns the cormer scent Tue to space limitations (?-iz) I'll soon. Due to space limitations (?-jz) I'll reserve most in depth comment on the Toledo situation for the NRC bulletin- most members are in both anyway (but certainly not all, Gary-jz). IRCA is a viable part of the DX hobby and I hope the club flourishes as the two MW clubs compliment each other nicely. WANR's SP has been moved from MM to SM-Oll5 to 0536. The News Director says more listeners are to be had on MM because of the start of the work week and it makes no sense for WANR to s/off on MM's- aarrgghh! Couldn't talk him out of it MM's- aarrgghh! Couldn't talk him out of it gang, sorry! WPSC 1510 conducted a PoP on 2/25 beginning with tone @ 12:12am to past lam. I found out about this through a call to the station in which I inquired as to whether they were on 2/23 MM for a listed F/C. They weren't. WTOD 1560 conducted a PoP on 2/25 from 2am on with a female C&W record and high pitched tone. KRBB nabbed here on F/C per call to station. They were very weak u/WQXR from 0616 to 0631 on 2/25. WOBR 1530 on MM 2/2 for wx emergency. Did 2/20. WUBH 1530 on MM 2/2 for wx emergency. Did any beside Ed Krejny, Frank Merrill, and me get them? (I did, but unn. here-jz) Totals for February now at 25 thru 2/25 with 39 on the year. Last year thru 2/28 I had 32. Total DX now stands at 2,234 with over 2,000 domestics. More soon, 73s.

Scott Mentzer-Rt. 3-Tylertown, MS 39667 Greetings from SAM, the test-gambling man. Not too many TTs lurking around out there this week, and most of the ones I have heard have come sans IDs. Last night, I blew at least 45 minutes on some tone freak from 1560-land who "took the fifth" when it came to IDs, and the night before that, I killed one full hour suffering through that, I killed one full hour suffering through nine renditions of some c/w ditty called, "Sweet Sensuous Feelings", before someone was moved to say, "This is WTOD Toledo, testing." So, you win a few and you lose many, but I'd still rather play the test game than any other type of DX I know. Anyhoo, according to the CE, KAOK runs a r/c either the second or the third MM of every month (add that to the list), and the r/c for WARI is correct as listed. (They were on at a different time for that one month only.) Latest veries include: KAOK. WONS. and KDTH; look for veries include: KAOK, WONS, and KDTH; look for the latest catches in the CDXR. In each Roundup entry, I've started to mention whether I've (1) received a verie or not, or (2) submitted a recent report or follow-up. This way, it might save some of y'all not only time, but 26¢ as well. Finally, I should mention the very nice v/1 (full page, no less) I received from the manager of KEGG in answer to a tentative report on an ET; a verie like that would convert any DXer into a test-gambler for life. 73s, good DX, and hope to be back in 7.

John Zondlo-6617 Maryland-Hammond, IN 46323 Greetings. Gary Siegel passes along a note with his report that reports for WANR should be sent to CE Jim Hartzler. If you'd like to send your report to Gary instead, send it to his home address. New member Tim Benko, who Phil Boersma referred to in his report, is an air check freak. For that matter, he has his own air check company called Windy City Airchecks. If you're interested in swapping airchecks, get in touch with Tim (address listed with new members in 2/28 DXM). Well, next week is the biggy- the Anniversary Issue. Hope you have your report in for that issue already. Only recent verie here is a v/l from KEYH. See y'all in 7......



BEDITOR: RICK HEALD 534 WELDON AVENUE OAKLAND, CA. 94610 (415) 452-4816

FATHER JACK PEJZA-212 S. CARPENTER RD-MODESTO, CA. 95351

I won't be able to be at the March 27-28 BARF because of a meeting in Los Angeles, so I guess it's my turn to get talked about, hi. (Why FJP, whatever do you mean, hi-RtH) Got myself a Radio Shack TRF for traveling, of which I've done a fair amount this year. For its price, the TRF probably can't be beat for selectivity and sensitivity when used w/an external antenna. (Attention, those on low budgets). I'll be in Chicago during Easter week for a convention, so might give some people in that area a call. Two new publications arrived here recently --- the 4th IRCA Foreign Log for one. Mike Worst and company did an excellent job in putting the finishing touches on my work of compilation (although I wish they had found a newer map for the cover, hi). The other book rovd is the 1976 WRTVH, including the articles on BCB DXing by Tom Sundstrom; also one on Philippine stns by Charlie Taylor, articles which should have appeared in "How to Listen to the World". One articles on beverage antennas. All in all, well worth the wait and the cost. Haven't had much opportunity to DX recently, although have gotten a tentative on 2NR 700. This is the time of the year when Aussies and Zedders should start coming in. 73 de FJP. (Read ahead one line and got two lines twisted around, sri FJP, guess I'm getting old, hi-RtH)

BILL HARANG-811 NEVADA AVENUE-SAN JOSE, CA. 95125 <u>Ph: (408) 292-8198</u>

The Gunnar Norberg mentioned in the Nov 1972 National Geographic article about the Monterey Penninsula happens to be Eric Norberg's father. In the Dec 1, 1975 SRDS, there appeared the following advertisement from Pulse: "Do you really expect him to stop and fill out a diary right now? And if not, when? Would you attach a diary to your dashboard? Tie it to a transistor? And if so, which one? If you didn't faithfully record your behavior on the apot, what point of the day or week, would you reconstruct it? On the last day, as many people do? These are questions that needn't trouble Pulse respondents or subscribers. Listening takes place this afternoon. Pulse reviewing takes place tomorrow. No earlier. No later. This is an important piece of certainty. If you know how much time elasped between listening and reporting (as in Pulse) you know something. If you don't know the time lapse (as in ARB) then what do you really know about anything? Worth some exploring, before you invest thousands in research, and hundreds of thousands more in the buy! " Two examples of ARB foulups, (1) About 2 yrs ago, XEGM 950 Tijuana, a SS stn showed up as the #1 stn in Adults 25-49, \$\frac{1}{4}\text{ in shares, 7-12 pm, in the entire L.A.}

Metro zone! Hasn't come close to happening before or since.

Just an ARB fluke. (2) About 4\frac{1}{2}\text{ yrs ago, the #1 stn in San} Francisco, Women 18-34 ½ hr shares 7-12 pm was KFAX. (Oh my gosh, B.B. Fatten strikes again, hi-Rth) ARB was unaware that KFAX was a limited-time stn, off the air at Sunset, and returning to the air after 10 pm, w/a very low power. So these obvious inaccuracies in a few diaries slipped through. (If the stn had been on the air during the whole 7-12 time period, they would have been printed, w/no qualms from ARB, but since the diarykeepers obviously wrote the stn down without listening then, it would have been just as inaccurate. The last time I could remember hearing a KABL spur (or whatever) on 860 here in San Jose was a few years ago (including MM). (Thx Bill, I think I have a case w/the FCC now, 46 mi is just a little to far for 5kw'ers to carry a spur-RtH)

GEORGE B. SHERMAN-104 PINEWOOD CIRCLE-ST. PAUL, MN. 55124

Part II-Continued from last week.....

Formerly people would've listened to a regional til Sunset. noticed the clutter, left, and tuned to another local. Now they would listen to a limited time clear until Sunset of the dominant fulltime clear, then that stn would be in clearly so people might leave the dial setting and these 1-A fulltime clears could then pick up new listeners without increasing their power. Then they could run ads for a radio and/or antenna to improve reception of their station (KSL was advertising an antenna on Nitecap before they had the big network). This solution should be most desireable to nearly all stns, not have to invest in costly new equipment (XR, tower, etc). The effect of Superpower could be disastrous. Don't let it happen. Remember, one European stn w/250kw was getting QRM in what was suppose to be their primary covergae area, from a station in a nearby country w/600 kw. If US clears increase power, LAs on same frequencies could increase power, again evening up interference & resulting in no new interference-free coverage for Superpower stns. 50 kw clears

(1-A) cover the whole country at night & do not own the frequencies worldwide! Superpower is NOT the answer to better reception. I have proposed what I think is the answer. Also, radio stn owners could work towards pressuring or influencing the right people to make better radios (perhaps there should be sensitivity, selectivity, & spur rejection minimum standards required by law). Also, radio stns could work towards pressuring/ influencing appliance manufacturers, etc, to make sure they don't put noise on radios. Also, help listeners w/power company problems (line noise). Write FCC in DC TODAY w/your Superpower objections & alternate suggestions (all comments must be in immediately). Stns to write: KFI 640 wants 750kw DA nite, WSM 650 wants 750, WLW 700, WGN 720, WBAP 820, WCCO 830, WHO 1040, all these want 750kw. 760 WJR & KSL 1160 want 500kw and WWL 870 wants Superpower.

RANDY TOMAR-P.O. BOX 495-ARCATA, CA. 95521

This is my freshman year in serious DXing, and so far the learning process has been pretty interesting. Rovd the new members package and put together the IRCA spiral loop described in it, and have been experimenting with it for a few days. The loop has some real quirks, but has definitely shown me the value of a good directional antenna. Locals KATA, KRED & KINS jump up all over the dial of my DX160 and I was hoping to eliminate this problem, but as it turned out, the loop didn't work at all w/that rx. Works OK on my Halli 8R40 though, at least from 9 kc/s on up, but won't even get KGO, at least I didn't have to hear anymore about the Giant's sale. KGO usually comes in like a local. (Does that well here too, hi-RtH) The loop proved itself when it eliminated KATA splash and got me adjacent KSRO loud and clear. Neither the loop nor my 8R40 provide much gain, si I'm retiring that combination and eagerly waiting for the arrival of my Sanserino loop kit. The spiral loop looks pretty sharp, tho, w/stained hardwood dowels and contrasting balck and red wires. Like others have mentioned and their Forums it gets a fuss from my more artistically inclined visitors! On other matters, was pleasantly surprised at how quickly Foreign Log 4 arrived, and yes, Rick, would like to be at BARF. S'long RT

RICK HEALD-534 WELDON AVE-OAKLAND, CA. 94610 (415)452-4816

No new DX to report. Randy, Arcata is very close to KRED & KIEM XR sites, which would account for spurs. I think KRED is in Arcata if I remember right. You should try the Wedge, designed by out very own Charles Wolff. Works great. George, you have some great ideas, unfortunately, I don't think they'll ever be implemented. Reason, MONEY. Manufacturers want to produce in volume, as cheaply as possible, with as much profit as possible and pay employees as little as possible. It costs a lot of money to make appliances quiet. Did you know that TVI could be almost eliminated? But then if you'd like to spend an extra couple hundred bucks on a color set.......I've often expressed yourthoughts on that subject. Jepko in the mid-60's advertised a super Panasonic radio, ad was quite successfull am told. Problem is, most people aside from the average person not even being able to tune a rx, buys a cheap rx, then expects good coverage from it. The general public is who the FCC listens to, the GP wants to hear radio at night, can't get any now, pressures nearby stns, and bingo, the high power proposals get started. It took us months when I was living on EC to get WABC to clean up their spurs. The spurs went all the way to Boston, and bothered locals in sight of their respective XRs!!!! It took months of massive letter writing just to get that problem cleaned up. When I lived in AK, KIFW 1230 had massive problems (we, at KSEW were absolutely clean, hi) and the FCC man told me point blank they didn't have time to check into a matter that only a DXer would report and no one else did. BUT, I still don't feel FCC will grant nigh power. If they were really seriously considering it, where are all the small broadcasters and their protests? Well, BARF will have been over by the time this hits your mailbox, I'm sure we all had a good time, hi. See y'all in 7. Bye, bye......Seems a few got writer's cramps this time around......



1020 khZ

This confirms your reception of our station:

Bragh

Transmitter RCA 50KW Ampliphase

338 S. Western Avenue Studios:

Los Angeles, Calif., 90020, U.S.A.



HEARD: Dr. Michel Breger VERIFIED: Steve Moss GRAVEYARD: Walter Kuenast

CENTEXDX: 7217 Creekside Drive, Austin, Tx 78752.

GRAVEYARD RECORDS

GRAVEYARD RECORDS			
	1230		
Call Location	Miles	DXer-Location	
WAUD Auburn AL	836	Vesolovski, Omaha NF	
WBHP Huntsville AL	1989	Allem, Vallejo CA	
WTBC Tuscaloosa AL	749 1429	Robertson, Croswell MI Allen, Vallejo CA	
KIFV Sitka AK	836	Allen, Vallejo CA	
KSUN Bisbee AZ KAAA Kingman A7	499	Allen, Vallejo CA	
KRI7 Phoenix A7	1034	Northam, Portland OR	
KATO SAfford A7	901	Dabelstein, Omaha NE	
KINO Winslow A7	858	Dabelstein, Omaha NE	
KCON Conway AR	1.654	Allem, Vallejo CA	
KFPW Ft Smith AR	3887	Wood, Kailua HI	
KGEE Bakersfield CA	2520	Wood, Kailua HI	
KWTC Parstow CA	2619	Wood, Kailua HI	
KIBS Bishop CA	785 2675	Portzer, Seattle WA Wood, Kailua HI	
KXO El Centro CA	2352	Wood, Kaitua HI	
KDAC Ft Bragg CA KGFJ Los Angeles CA	2525	Wood, Kailua HI	
KPRL Paso Robles CA	193	Allen, Vallejo CA	
KRDG Redding CA	2435	Wood, Kailua HI	
KVG Stockton CA	2433	Wood, Kailua HI	
KEXO Grand Junction CO	797	Allen, Vallejo CA	
KBRR Leadville CO	3195	Wood, Kailua HI	
KDZA Pueblo CO	11.33	Kesteven, Edmonton ALE	
KGEK Sterling CO	1.196	Wheeler, Frie PA	
WINE Manchester CT	421	Sorensen, Emsdale ONT	
WSBE New Smyrna Beach FL	854	McCormack, W. Lafayette IN	
WYNV Pensacola FL	828	Cartwright, Johnstown PA McCormack, W Lafayette IN	
UCNH Quincy FL	697		
WBLG Dalton GA	566	Wheeler, Erie PA	
WXLI Dublin GA	2236	Alien, Vallejo CA	
WFOM Marietta GA	680	Abraham, Bridgeport MI	
WSOK Savannah GA	728	Winsor, Valparaiso IN	
KPAR Burley ID	570	McCullough, San Jose CA	
KORT Grangeville ID	623	Allen, Vallejo CA	
KRXK Rexburg ID	665 475	Allen, Vallejo CA Wheeler, Frie PA	
WJBC Bloomington IL WQUA Moline IL	331	Braun, Jackson MI	
WHCO Sparta IL	1.756	Allen, Vallejo CA	
WJOB Hammond IN	736	Belanger, Winnipeg MAN	
WSAL Logansport IN	477	Sorensen, Emsdale ONT	
WTCJ Tell City IN	1.67	McCormack, W Lafayette IN	
WEOW Terre Haute IN	866	Belanger, Winnipeg MAN	
KFJB Marshalltown IA	3958	Wood, Kailua HI	
WHIR Danville KY	2029	Allen, Vallejo CA	
WHOP Hopkinsville KY	1894	Allen, Vallejo CA Winsor, Valparaiso IN	
KLIC Monroe LA	6 7 6 808	Winsor, Valparaiso IN	
VEOK New Orleans LA	544	McCormack, W Lafayette IN	
WITH Baltimore MD WCUM Cumberland MD	454	Winsor, Valparaiso IN	
WMND North Adams MA	224		
WNER Worcester M	432	Sorensen, Emsdale ONT	
WJFF*Grand Rapids MI	161	Heimburger, Port Huron MI	
WIK! Iron River MI	1795	Allen, Vallejo CA	
UMPC Lapeer MI	179		
WSOO Sault Ste. Marie MI	370	Wheeler, Eric PA	
MSTR Sturgis MI	537	Dabelstein, Omaha NE	
WKLK Cloquet MN	406	Dabelstein, Omaha NE	
KGHS International Falls	MN 575	Uinsor, Valparaiso IN Uheeler, Frie PA	
KYSM Mankato MN	715 352	meeter, irre	
KMRS Morris MN			
KTRF Thief River Falls MO	594		
KUNO Uinona MN	667		
WCMA Corinth MS WHSY Hattlesburg MS	708		
WSSO Starkville MS	664		
MAZE Yazoo City MS	1812	Allen, Vallejo CA	
KODF Joplin MO	286	Cabelstein, Omaha NF	
KLWT Lebanon MO	307	Dabelstein, Omaha NE	
KWIX Moberty MO	311		
KEMN Fozeman MT	204		
KHDN Hardin MT	3255		
KXLO Lewistown MT	202		
KLCE Libby MT	850 91		
KTMC Falls City NF		> Mac to ce and common	
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KMAS Hastings NE	1.280	Allen, Vallejo CA
KFLY Fly NV	403	Allen, Vallejo CA
•		
KLAV Las Vegas NV	2728	Wood, Kallua HI
KCPN Reno NV	1,007	Kesteven, Edmonton ALE
UMOU Perlin NH	227	Brown, Ottawa ONT
MCMC Mildwood NJ	70	Sundstrom, Willingboro NJ
KALG Alamozordo FM	3234	Wood, Kailua WI
MOTS Pemine NM	91.0	
		Allen, Vallejo CA
KYVA Gallup NM	247	Kemper, Grand Junction CO
KFUN Las Vegas NM	1419	Wheeler, Erie PA
KRSY Roswell NM	1.1.05	Winsor, Valparaiso IN
WNIA Cheektowaga NY	226	Brown, Ottawa ONT
WENY Fimira NY	561	Winsor, Valparaiso IN
WIGS Gouverneur NY	206	
		Sorensen, Emsdale ONT
WLFH Little Falls NY	280	Cartwright, Johnstown PA
WFAS White Plains NY	335	Wheeler, Frie PA
WSKY Asheville NC		
	764	Prown, Ottawa ONT
WFAI Fayetteville NC	90	Hall, Greensboro NC
WMFR High Point NC	20	Hall, Greenshoro NC
WISP Kinston NC	161	Singer, Richmond VA
WCBT Roanoke Rapids NC	410	Wheeler, Erie PA
KDIX Dickinson ND	3496	Wood, Kailua HI
WUBE Cincinnati OH	605	Sherman, Rosemount MN
VCOL Columbus OH	969	Belanger, Winnipeg MAN
WIRO Ironton OH	253	McCormack, W Lafayette IN
UCWA Toledo OH	1.85	Wheeler, Erie PA
KADA Ada OK	1430	Allen, Vallejo CA
WBB7 Ponca City OK	1.378	
		Allen, Vallejo CA
KVAS Astoria OR	2546	Wood, Kailua HI
KRNS Burns OR	461	Allen, Vallejo CA
	436	
KOOS Coos Bay OR		Hecker, Sáratoga CA
KRDR Gresham OR	2588	Wood, Kailua HI
KOIK Lakeview OR	2582	Wood, Kailua HI
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KYJC Medford OR	2469	Wood, Kailua HI
		Dontgon Conttle UA:
KTDO Toledo OR	224	rottret, beattle mm .
KTDO Toledo OR		Portzer, Seattle WA:
WBVP Reaver Falls PA	353	Winsor, Valparaiso IN
	353 619	Winsor, Valparaiso IN Winsor, Valparaiso IN
WBVP Reaver Falls PA WEEX Easton PA	353	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN
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WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA	353 619 541 417	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY
WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA	353 619 541 417 140 55	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY
MBVP Reaver Falls PA WEFX Faston PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Westerly RI	353 619 541 417 140 55 336	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT
WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA	353 619 541 417 140 55 336 2363	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA
MBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Westerly RI WOLS Florence SC	353 619 541 417 140 55 336	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT
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WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Vesterly RI WOLS Florence SC KISD Sioux Falls SD WAKI McMinnville TN	353 619 541 417 140 55 336 2363 710 720	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI Edmunds, Glen Rock NJ
WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Vesterly RI WOLS Florence SC KISD Sioux Falls SD	353 619 541 417 140 55 336 2363 710	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI
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WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Vesterly RI WOLS Florence SC KISD Sioux Falls SD WAKI McMinnville TN KSIX Corpus Christi TX KILK Del Rio TX KNUZ Houston TX KFRY Kerrville TX KFEF Nacogdoches TX	353 619 541 417 140 55 336 2363 710 720 3764 3540 1635 88 3900	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN Minsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI Edmunds, Glen Rock NJ Wood, Kailua HI Wood, Kailua HI Allen, Vallejo CA Kuenast, Austin TX Wood, Kailua HI
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MBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Westerly RI WOLS Florence SC KISD Sioux Falls SD WAKI McMinnville TN KSIX Corpus Christi TX KHEK Del Rio TX KNUT Houston TX KFEF Nacogdoches TX KOTA Odessa TX KGRO Pampa TX	353 619 541, 417 140 55 336 2363 710 720 3764 3540 1635 88 3900 3440 429	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN Minsor, Valparaiso IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI Fomunds, Glen Rock NJ Wood, Kailua HI Wood, Kailua HI Allen, Vallejo CA Kuenast, Austin TX Wood, Kailua HI Dabelstein, Lincoln NE
MBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFRI Westerly RI WOLS Florence SC KISD Sioux Falls SD WAKI McMinnville TN KSIX Corpus Christi TX KHEK Del Rio TX KNUT Houston TX KFEF Nacogdoches TX KOTA Odessa TX KGRO Pampa TX	353 619 541, 417 140 55 336 2363 710 3764 3549 1635 88 3900 3440	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN Minsor, Valparaiso IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI Fomunds, Glen Rock NJ Wood, Kailua HI Wood, Kailua HI Allen, Vallejo CA Kuenast, Austin TX Wood, Kailua HI Dabelstein, Lincoln NE
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WBVP Reaver Falls PA WEFX Easton PA WKBO Harrisburg PA WCRO Johnstown PA WEP7 Lock Haven PA WTIV Titusville PA WFI Westerly RI WOLS Florence SC KISD Sioux Falls SD WAKI McMinnville TN KSIX Corpus Christi TX KHIX Houston TX KRIV Houston TX KRIV Houston TX KREV Kerrville TX KFEF Nacogdoches TX KOMA Odessa TX KGRO Pampa TX KSTS Sulphur Springs TX KWTX Waco TX KMOR Murray UT KOAL Price UT WJOY Burlington VT WODI Brookneal VA WFVA Fredericksburg VA WNOR Norfolk VA KO7I Chelan WA KWY7 Fverett WA KSPO Spokane WA KRFW Sunnyside WA WTA P#Parkersburg UV WHEY Appleton WI. UCLO Janesville UI	353 619 541, 417 140 55 336 2363 710 720 3764 3540 1635 88 3900 3440 429 882 1487 890 866 304 98 292 658 186 679 705 142 390 990 990 990 990 990 990 990 990 990	Winsor, Valparaiso IN Winsor, Valparaiso IN Winsor, Valparaiso IN Minsor, Valparaiso IN McCormack, W Lafayette IN Bailey, Williamsville NY Gantzer, Fredonia NY Brown, Ottawa ONT Allem, Vallejo CA Robertson, Croswell MI Fdmunds, Glen Rock NJ Wood, Kailua HI Wood, Kailua HI Wood, Kailua HI Wood, Kailua HI Dabelstein, Lincoln NE Nuthals, Green Pay WI Allen, Vallejo CA Kesteven, Edmonton ALB Dabelstein, Omaha NE Sorensen, Fichmond VA Wheeler, Frie PA Winsor, Valparaiso IN F Hardy, Aberdeen WA Allen, Vallejo CA Allen, Vallejo CA Portzer, Seattle WA Fdmunds, Red Dank NJ Felanger, Swan Eiver MAN Sorensen, Fmsdale ONT

MOTF: *: The station now has new call letters. Therefore, the Tixer who holds the record for this station under its old call letters, as well as other DMers, must receive the station under its new call letters and submit the station to Graveyard Records in order to remain in contention for the record. In other words, the station with the old call letters is replaced by the station with the new call letters, with the mileage beginning at O. (Stations off the air will not be included on the records list, either.)

I now have the former records list in my possession. So, send in only your previously unsubmitted stations. If you telieve that I have made a mistake in figuring your mileage, etc.., please let me know. Some of the Graveyard Records material may have been lost in the transfer.

Remember, to submit a station, send in the frequency, call letters, ciber of state, and your listening address. Arrange more stations in alphabetical order by states, for each frequency (as in the column). Use only one side of the paper. These stations need not be verified, only heard. Only US stations on the Graveyard frequencies are accepted. For more information, see DXM October 25, p 65.

BRUCE PORTZER, Editor

All times GMT/UTC Deadline Saturdays

7021 Sand Point Way NE, #215 - Seattle, WA 98115 - 206-522-2521

ATLANTIC DX ROUNDUP

ALGERIA, Ain Beida at fair level w/man in AA, hetted by GW beacon "YCH" (pronounced "yecch!".bp) & MCW beacon 529 "ME" 2242 2/24. At good strength w/sing-song AA talk

575

Oh07 2/25. (Gonnelly, MA)
ALGERIA, Bechar battling it out w/"Cucu" Oh10 2/25 w/a
rough low het resulting. (Connelly, MA)
SPAIN, Madrid potent w/SS talk, inst disco-rock was in-5811

terspersed 0437 3/1. (Connelly,MA)

ENGLAND, Daventry BBC peaking up so well o/WSM slop w/
discussion of African affairs 0413 2/25. (Connelly,MA)

SPANISH SAHARA, El Aaiun, perhaps this was the stn hrd
here 2249-2347 2/28 at various times. Fair sig w/NBC 647 656 splash. Def AA chanting hrd at 2345 but faded out 2347.

Never noticed any rpts of AA on this channel but w/Sa-hara in Moroccan hands it's possible. (Eckman, PA) PORTUGAL, Lisboa hrd w/xlnt sig 2233 2/28 w/mx & PP talk. No trouble from WNBC at this time. (Eckman, PA) 665 -- good w/PP talk show, 2 male voices; one the talkmaster, the other a phone caller at home, 2245 2/24.

At fair level w/acoustic guitar mx 0428 2/25.(Connelly)

SPAIN, Sevilla fair in WRKO splash w/man in SS interspersed w/mx 0h25 2/25. (Connelly, MA) --- good sig at 0216 3/1 w/SS talk & mx. Seemed to be a fast SAH on them as noted on S retain. 683 them as noted on S-meter. Yugoslavia is 400 kw at the moment but not sked on till 0300. SAH gone by 0230 reckeck. (Eckman, PA) (Yugoslavia might have been testing the new 2000 kw xr. bp)

PORTUGAL, Norte very strong w/PP mx 2247 2/28. Considerably stronger than 720 domestics at this time. Very good night for Iberians. (Eckman,PA) --- Norte was usu-719 ally atop at potent local-like strength w/PP phone-in talkshow similar to the one noted on 665; AA chanting noticeable under. Sfax w/chanting dominated briefly during a fade on Norte 2247 2/24. (Connelly,MA)

UPPER VOLTA, Ouagadougou believed to be the one w/un-usual mx 2233 2/28. Fair signal. Dakar strong at this time. (Eckman, PA) --- peaked up at fair level 2349 & 746 2352 3/2 w/AA-style mx (female vocal), then man in FF; abruptly disappeared at 0000. (Connelly, MA)

SENEGAL, Dakar strong w/FF talk 2230+ 2/28. Noted some 764 IA mx later on this one. Don't be fooled by this type of ms on W. Africans; I've hrd it on SW too. (Belman, PA) --- strong w/man in AA dialect 2252 2/2h. (Connelly) 782

PORTUGAL, Miramar best signal ever on this one for me 2300 2/28. Tuned in at 2259 while they were running long tones at ca. 5 sec intervals. One short pip 2300

followed by ID & short tune. (Schman, PA) UNID, Portugal is supposed to be off but a strong CSB9 782 type signal was noted here during a low-band opening which produced strong sigs from Theria & N. Africa, but mediocre reception from higher latitudes. This would make DDR unlikely. Mx was US c/w: Ray Price or Charlie Pride 2253 2/24. (Connelly, MA) (Portugal

charine Fride 4253 2/24. (Connelly, MA) (Fortugal apparently still on, see above item. bp)

MOROCCO, Rabat fair, barely atop a jumble of other stns w/male AA vocal & flute accompaniment 2254 2/24. Heavy unid OC here, likely Andorra 0435 2/25. (Connelly, MA) --- strong w/AA chanting 2234 2/28. No sign of Andorra at this time. (Schman, PA) 818

IIBYA, perhaps this is the one w/very good sig 2235 2/28 w/AA chanting. Apparently not //818 which prob 827 excludes the Moroccan & also it's supposedly off the

air. (Edkman, PA) SPAIN, Murcia good 2256 2/28 w/SS talk. Usually poor 854 audio here: today was no exception. (Eckman, PA)

WEST GIRMANYTURKEY, Mainz w/light jazz usually atop Istanbul, which had a female vocal. Pronounced SAH 1016 of 2.7 Hz. Bodacious splash from Joe Green helicopter traffic rpt on WBZ 2225 2/24. (Connelly, MA)

GERMANY, Mainz strong w/mx (non-AA type) 0211 3/1. 1016 No sign of Istanbul at the time. (Eckman, PA)

NOTE: 15 cannot at the time. (Connelly, PA) (Believe 103lı

Portugal is still operating here. bp) UMID, likely Traq, carrier present here but too much 1038 WBZ to permit audio extraction 2200 2/25. (Connelly) ENGIAND/ALBANIA, Crowborough w/man in EV o/u presumed Albania (woman talking) at fair level w/some WBAL slop, SAN of 0.8 Hz noted 2219 2/24. (Connelly, MA) 1088

1097 CZECHOSLOVAKIA, Bratislava apparently the one w/cl mx 0427 2/28. No by OM in unid lang 0430. Prague mx 0427 2/28.

strong on 1286 at this time. (Eckman, PA)
UNID, good carrier here 0328+ 2/28 apparently not 1124 Zagreb as I've hrd them w/IS at this time in Sept. Mx of some sort hrd 0335 but wasn't able to ID lang

of some sort are 0335 but wasn't able to 1D lang during voice anmts. Maybe Spain but mx didn't sound SS. (Eckman, PA) (Libya on early? bp)

INT'L WATERS, Caroline poor-fair w/rock o/presumed Guatemala-1108; mean het resulting, both badly splashed by CHTN/WOWO 0415 3/3. (Connelly, MA)

MOROCCO, Agadir 3 hrd w/good sig 0437 2/28 w/talk 1187

1196 app in AA. Unusual in that this isn't supposed to be an AA service but doubt that it was VOA. (Eckman)

WEST GERMANY, Munich, VOA fair in CHTN/VOWO shlash w/man in FE followed by barbershop quartet style vo-1196 cal 0352 2/25. (Connelly, MA)

FRANCE, Bordeaux strong w/cl piano mx, then FF talk 2212 2/24. (Connelly, MA) 1205

GREAT BRITAIN, BBC at fair level w/some WCAU QRM w/slow "torch song" type female vocal, then man in EE 1214 2228 2/24. (Connelly, MA)

MORCCCO, Tangler I seemed to be the one w/AA sounding mx 2239 2/28. Poor audio but strong het. Noted gone by 2300. (Eckman, PA) 1232

WEST GERMANY, Neumunster, DLF hrd w/fair sig app// 1538 which was xlnt at the time. R. Paradise was no 1268 problem 0210 3/1.

CZECHOSLOVAKTA, Prague hrd w/strong sig 0331 2/28.
App s/on 0330 as wasn't noted 2 mins prior to that.
Much weaker 3/1 w/carrier on at 0328 but no audio 1286

discernable. (Eckman, PA) 1286 UNID apparent OC, likely Czechoslovakia, at fair level in CJMS splash; if modulated, it was less than

30% 0400 2/25. (Connelly, MA) 1358 GERMANY, Berlin-Koepenick apparently the one here w/some light mx breaking thru the strong het 0308 3/1. Other high-band Germans were xint at the time.

(Eckman, PA) 1394 UNID OC noted 0235 3/1 seemingly too weak for Tirana considering general band ex. Gone soon afterwards. Anyone else notice this one? (Eckman, PA)

GERMANY, Saarbrucken assumed to be the one w/strong het 0218 3/1. No audio discernable. (Eckman, PA) 1421 LUXEMBOURG, Marnarch strong 0005 2/28 w/EE rr mx. 1439 V05 Shampoo comm'l 0006 giving a London mailing addr. by British accented amor. Interestingly enough hrd exact same ad on 6090 // the next evening when Luxembourg was much poorer on 1439. Strong het accom-

panied signal. (Eckman, PA) --- at poor/fair level w/ WENE/WNJR/CFGO/WAAB slop; had EE teenybopper DJ show w/fast-talk ancr who rattled off effusive drivel about contests, rock stars, etc. 2333 2/24. (Connelly) ALBANIA, Durres hrd w/R. Peking relay w/East is Red Oh00 2/28. Good signal. (Eckman, PA)

1466 UNID, another OC seemingly too weak for Monte Carlo noted 0321 2/28. May have had audio but too weak to notice any. Monaco s/on at Ohl40 was vy strong. (Eckman) 1466

1457

MONACO, Monte-Carlo the strongest high-band TA, much better than 1586 w/GG fema'e rock vocal 2237 2/24. Good again w/EE rlgs pgm, man gave address in London 2325 2/24. (Connelly, MA)

AUSTRIA, Wien, tentatively the man in a Germanic-sounding lang noted here at poor-fair level in bad 1475 WLAM/CFOX/WSAR/CHRD slop OhO2 2/25. (Connelly, MA) --- good w/GG OM giving nx OOOh 2/28. (Eckman, PA)

CHIMA, Urumchi apparently the one w/poor carrier 2311-2330 2/28. Woman ancr discrenable at 2325 but 1525

coundn't ID language. (Telman, PA)

VATICAN CITY at fair level w/orch mx 2238 2/24. 1529

1538

VATICAN CITY at fair level w/orch mx 2230 2/24. (Connelly, MA)
GERMANY, Mainflingen, DLF strong w/light mx & GG
talk 0204 3/1. Strong het also. (Eckman, PA)
FRANCE, Hice xint 2/27 0330-0100 w/FF talk & mx. h
pips at 0100 followed by 'IS' that I always hear on
the hour on this one. (Tckman, PA) --- stronger than
1586 w/slow vocal, apparently attenuation greater
on northerly paths 0153 3/1. Similar semi-aurural
cx 3/3 saw Mice much better than Langenberg, consider
able OSB on both sigs 02h0. Low band also showed 1554 able QSB on both sigs 02h0. Tow band also showed

able 958 on both sigs 0200. Tow band also showed auroral effects; the only readable TAs were from Iberia & N. Africa. 855 Italy present only as a carrier w/BFO on. (Connelly, NA)

WEST GRRANY, Langenberg, VDR xlnt 0205+ 3/1 //1602
(also w/xlnt sig) w/light mx. Seems to break away from 1602 on the hour for mx but not positive. (Eckman)
--- at fair level w/heavy MODW slop; pgm was chorale mx more of a pop style than cl or rls 2316 2/2h. 1586 mx more of a pop style than cl or rlgs 2316 2/24.

(Connelly, MA)

MEST GRANNE, Numich fair overall copy, strong carrier but horrendous MERL splash; pgm on Munich was man in 1602 GG 0 03 3/27. (Gonnelly, MA)

March 13, 1976 page 301

COSTA RICA, San José, TICS, R. Titania was clearly dominant w/slow SS male vocal, then woman w/Titania 825 ID; well o/R. Peninsula, which had man in fast SS - low audible het resulting 0h55 3/3. (Connelly, MA)

MEXICO, Culican, Sin., XEVQ w/ments of Culican & R. Mexicana 1308 MM 3/1. (Pejza, CA)

830

BELIZE, R. Belize at good level w/big-band jazz 0437 2/25. (Connelly, MA) 834

EXXCOO, Colaya, Gto., XFFC w/SS ballads; R. Juventud ID 12h5 2/28. (Pejza,CA) 840

MONTSERRAT, Plymouth strong w/EE nx 0001 2/29. Little slop from WCBS. (Echman, PA) 885

ANTIGUA, St. Johns, Lighthouse assumed the one w/fair carrier & bits of a hymn thru KSL/KAYO slop 1165 1002 3/1. Haiti-1035 in well at the time. (Portzer)

ST. KITTS, R. Paradise fair-good w/man in EE (rlgs pgm) 2337 2/24. (Connelly, MA) 1265

UNID SS in & out in jumble w/SS pop songs (not ranchera 0848-0902 3/1. IDs sounded like R. Sensacion but don't think it's XEV7. A Mexican or just 1490 Bakersfield? (Portzer, WA)

PACIFIC DX ROUNDUP

AUSTRALIA, Kempsey, 2KM, 2/28 1155-1204 fadeout w/ OM anmt "5 min away from nx" spot 1158 for a mew & 530 commentary show. 200 repeated several times. Nx at 1200. 1st reception for me, at least w/am ID. Rot sent. (Williams, OR)

AUSTRALIA, Dalwallimi, 6DL 3/2 1128-1500 c/w pgm 530 Think+ TC quarter to 11 & ABC R. 7 to 11 at 1h53. No at 1500. Faded in & out but fades not more than a minute or so. Rot sent. TCs threw me. Are they back on standard time? (Williams, OR)

655

N. KORSA, Pyongyang, man talking in KK, quite good FM 3/1 12k1. (Pejza,CA) AUSTRALIA, Grafton, 2NR presumed the one in SE, very weak, looping the right way 2/28 1306. Too much 700 slop. (Pejza,CA)

JAPAN, Osaka, JOBB fair 2/28 1238 mixing w/WCCO.(Pejza) AUSTRALIA, Rockhampton, hRK 125h-1310 fadeout 2/28. 1259 annt about mx from Brisbane studios. Time pips 1300. Kx & ABC ID 1306. (Williams, OR) 830 81:0

NEW ZEALAND, Auckland, 1YC fair-good w/cl/symphonic mx looping DU 0755 3/7. Annt by YL 0800 mentioning NZ & mixing w/Cuban while trying out Tim's wedge. (Portzer, Bytheway, Kayser, &O'Hare, MA) (Sounds like the name of a new law firm, hi.) 880 300

JAPAN, Sendai, JOHK, NHK pips hrd 1200 2/28 but not much else. (Pejza,CA)

INTERNATIONAL QSL ROUNDUP

MEXICO, Tijuana, XETRA sent v/q, v/s Edie McCotur, & v/l v/s Inis Carrillo, Pres. in 2 wks. (Iazar,WI) COLOMBIA, Bogota, IV de Bogota sent v/l & pennant in 1 week for SS rpt & mint stamps. V/s German 890 Tobon Martinez, Gerente. (Lazar, WI) DOMINICA, Roseau, R. Jumbo sent v/1 in FF & sticker for EE letter & taged rpt w/mint stamps. V/s Patrick Meyer, Directeur General. Took about 3 weeks. Addr 1150 is PO Box OO, Roseau, Dominica, W. Indies. Also has a Paris address. (Lazar, WI)

COMTRIBUTORS

David Ball, 62 Lexfield Ave., Downsview, ON MBM 1M5 DX-150A, SM-2 Mark Connelly, 17 Lakewood Dr., Sudbury, MA 01776 R-390A/URR, 2 1200' beverages w/phashing unit Richard Eckman, 1611 E Mt Pleasant Ave, Phila, PA 19150 B0916/153, Sanserino loop

Bob Lazar, 413 Ogg West, Madison, WI 53706 Realistic TRF

Steve Moss, Rte. 7, Box 939, Austin, TX 78703 DX-150A, SM-1

Tim O'Hare, et al - Seattle, WA, SP-600, HRO, Wedge, IW Father Jack Pejza, 212 S. Carpenter Rd., Modesto, CA 95351 SPR-4, Sanserino loop

Bruce Portzer, Seattle, MQ-180A, SM-2 Dave Williams, 615 Highway 101, Astoria, OR 97103 SPR-4, 3601 IW

Presented as a DXWW II Special, from Bill Trubee, Box 1323, Kealakekua, HI 96750. Alan Roycroft, despite his massive work load, has always been a friend of the DXer.

January 2nd.1976.

Mr. William Trubee, PO Box 1323. Kealakekua <u>HAWAII 96750.</u>

Dear Mr. Trubee,
In reply to your letter of December 28th.

No, KZ00 will not be leaving the air, the public announcement was a little premature. There was a misunderstanding in the matter of a lease renewal for KZOO's use of the KIKI tower. It was my opinion that if the renewal could not be affected, it could take up to one month to install new transmitting facilities and obtain FCC approval. A renewal of the existing site has been affected.

KHAI, or its new call, KIOE, expects to be back on the air by January 31st. We are installing a trap system to permit this station to share the existing tower of KCCN and KISA. We hoped to have got it on the air a month ago from the KNDI tower but the FCC considered that the extra field intensity from the KNDI tower would affect their Waipahu monitoring station, so denied the application.

KTRG will not come back on, it was a political matter and most effectively arranged. However both KHVH and KPOI are applying for 990 and 1010 respectively and because these two frequencies are so close, they are being considered at a hearing to see which station moves on the dial and increases power to 10KW.

KNDI's tower site is now in jeopardy, it seems that they will have to move before July, KCCN's tower also will have to be moved because of leases expiring, so we will have a season of musical towers shortly. We are presently installing a 5KW transmitter at KIPA so on their new 620kHz frequency and the 400ft tower at Pepeekeo Point will provide a new DX goal overseas.

We have been receiving new reports for local AM's, KIKI and KORL have received excellent reports from Florida and New York, KAHU was received in Sweden, the only other station that I know that was similarly received, was KNDI about ten years ago, must be that western Oahu location. Australasian reports show that in order of strength KORL, KKUA, KIKI are the best Hawaiians with KZOO, KGMB and KPOI the weakest.

Best of luck with your hobby.

Sincerely, (signed) Alan L. Roycroft From the Federal Register, Vol. 40, No. 243, Wednesday, December 17, 1975, pages 58467 - 58470.

FEDERAL COMMUNICATIONS COMMISSION

1 47 CFR Part 73 1 [Docket No. 20642; FCC 75-133] STANDARD BROADCAST BAND

Clear Channel Broadcasting

1. This notice institutes a proceeding looking toward the amendment of the rules which govern the use of the 25 clear channels listed in § 73.25(a) of our rules regulations. It solicits assistance in the accumulation of background information

runes which govern the use of the 25 clear channels listed in § 73.25(a) of our rules regulations. It solicits assistance in the accumulation of background information which we deem a necessary basis for an informed decision in this matter, describes the general nature of the rule amendments which are under consideration, and invites general or specific comment with respect to these proposal. In adopting this notice, we are formally and fully reopening the proceeding in Docket No. 6741, which was terminated by a Report and Order on September 13, 1961 (31 F.C.C. 565; 21 R.R. 1808). with the adoption of certain amendments to our clear channel rules, but with other important matters at issue left for resolution at some future time. It is our primary alm herein to seek a final resolution of these issues, in the light of our experience with the 1961 rule amendments, and with due regard to present day conditions and current Commission policies.

2. The 1961 Report and Order in Docket 6741 concluded a proceeding begun on February 20, 1945, to explore the changes which should be made in existing patterns of clear channel usage, in the light of the uncontroverted fact that approximately half of the land area of the United States and about 25,000,000 people were without nighttime primary service from standard broadcast stations. In that proceeding, two approaches to the problem of providing improved service which clear channel stations provide to these areas and populations received extensive consideration, generally almed at enhancing the quality of service which clear channel as a provide new groundwave and skywave services to deprived areas and populations. Studies of possible solutions of this nature usually contemplated the employment of high power on some channels, and duplicate Class I operation on others. Essential to the effective implementation of directional antennas by existing I-A stations for the purpose of probecting the service of duplicating Class I stations over wide areas.

service of duplicating that it is service of duplicating that it is a cover wide area.

3. The decision reached in 1961 left the permissible power and required operating conditions of the I-A stations unchanged, but amended the rules so as to permit the assignment of a single unlimited time Class II station to each of thirteen of the 25 I-A channels. On eleven of these channels new stations Class II.A) were to be authorized, located in specific western states deemed to have a dearth of nightlime primary service. The Class II assignments provided for on the remaining two "duplicated" channels (750 and 750 kHz) were for existing stations, required to be removed from their existing frequencies by the provisions of the then recently negotiated U.S./Mexican standard broadcasting agreement. With the exception of the Channel 770 kHz, which was subject to a separate proceeding involving the conditions of joint operation of WABC, New York, and KOB, Albuquerque, New Mexico, the remaining channels were held in status quo, for possible future consideration for operation by the I-A stations on these channels with increased power, or, in the alternative, eventual duplication of the channels.

4. On this question, our Report and channels.

4. On this question, our Report and Order stated:

Order stated:

Upon careful consideration, we conclude there is insufficient basis before us for a finding that the public interest would be served by authorizing higher power, but at the same time the question warrants further consideration in the light of such improvements and changes in services as may result from the action we now take to authorize additional unlimited time stations on 13 of the Class I-A clear channels.

We thus leave open and unprejudiced the question of whether, and if so, how, the public interest would be served by changing the rules affecting the use of the 12 Class I-A channels now left in status quo. At such time as further developments, including progress under the changes we now adopt, provide additional light on the question we will give further consideration to how best to utilize the 12 clear. channels not now disturbed * • • • .

5. As to the "duplicated" Class I-A

As to the "duplicated" Class I-A channels, we said:

We have achieved such plan with respect to the making of the Class II assignments provided for herein. After the specific loca-tion and facilities of the Class II stations

have become established the way would be open for consideration, in aubsequent rule making proceedings, of any further proposal which may be submitted for additional unlimited-time Class II assignments on the Class II channels in question. As in the case of the Class II—A assignments for which we now provide, any such rule making proposals would be examined in the light of the prime objective of further reducing night-time white areas while at the same time affording due protection to the co-channel Class I—A station.

6. In its Memorandum Opinion and Order of November 28, 1962, denying various petitions for rehearing, recon-sideration or stay of its September, 1961, Report and Order, the Commission ob-served:

served:

** Moreover, a majority of the Commission believes that the additional unlimited time assignments provided for can be effectuated without substantial impairment of the wide-urea service rendered by the I-A stations, and without impingement on the possibility of sufficient improvement of service through higher power—If that is later concluded to be appropriate—on the other 12 channels better suited for that approach, and perhaps also on some of the 13 now duplicated ** **.

and perhaps also on some of the 13 now duplicated ***.

7. These, and other similar pronouncements in this proceeding and related documents made clear the Commission's intention to review, in further proceedings the basic dispositions arrived at in 1961, this review to take place at such time as we were able to assess the service benefits resulting from the implementation of the II—A assignments provided for in the 1961 decision. The ambit of such a review, it appears, would be extensive, and would include consideration of the following:

(a) Whether some or all of the I—A stations on the unduplicated clear channels should be permitted to operate with higher power, whether Class II unlimited time assignments should be provided for on these channels, or whether they should be left in status quo.

(b) Whether additional Class II unlimited time assignments should be provided for on the duplicated clear channels.

limited time assignments should be provided for on the duplicated clear channels.

(c) Whether some or all of the I-A stations on the duplicated channels would be permitted to operate with higher power.

8. Today, more than fourteen years after the promulgation of the clear channel decision, the deployment of class II-A stations pursuant to the assignments contemplated by this decision is nearly complete. New Class II-A stations have been authorized on 10-of the eleven channels made available for such assignments. Mutually exclusive applications for the last of these assignments are presently in hearing.

9. In the light of the above situation, we are now able to assess with some degree of accuracy the service gains which the new Class II-A stations have made possible. Having done this, in accordance with our intention as stated above, it appears that we should undertake to consider what further changes may be appropriate in the rules governing I-A channel usage in the light of the degree of success which has attended our previous efforts.

10. In addition, we have a number of long pending petitions for rule making with respect to the I-A clear channels, upon which we have withheld action in the belief that the relief sought by the petitioners could be considered feasibly only within the context of a reopened clear channel proceeding. These petitions are as follows:

are as follows:

ciear chaining proceeding. These petitions are as follows:

***RM-434. Fleed on April 8, 1943, by the Clear Chainel Broadcasting Service (CCBS) and seeking rule amendments to permit power in excess of 50 kilowatts by all Class I-A stations.

**RM-441. Fleed on May 3, 1963, by WSM, Inc., Ilcensee of I-A Station WSM, Nash-rille, Tennessee. This petition supports the CCBS petition described above, but specifies a proposed power celling of 756 kW, and particularizes WSM's specific interest in higher power operation on 656 kHz.

**RM-478. Flied on September 5, 1963, by Midwest Radio-Television, Inc., Ilcensee of WCCO, Minneapolis, Minnesota, seeking rule amendments permitting power up to 750 kW for all I-A stations.

**RM-530. Flied on November 13, 1963, by Loyola University, Ilcensee of WWL, New Orleans, Loublana, supporting the CCBS petition in general, but specifically seeking more limited relief—rule amendments permitting higher power on the "unduplicated" I-A channels.

11. For a very long period of time we have maintained restrictions on the secondary use of the I-A channels over and above those which can be technically justified, purely on the theory that additional assignments of any nature would limit our future ability to develop an optimum plan for the use of these channels to improve nighttime service. In particular, we have permitted no new day-

¹In 1969, the Commission reopened the proceeding in Docket 6741 for the limited purpose of seeking a solution to the long standing "KOB problem" within the context of this proceeding (notice of proposed rule making, adopted April 22, 1969, FCC 63-465, IT F.C. 24 287). This phase of the proceeding has not been concluded, but the Commission expects to render an early decision in this matter, prior to reaching the more general solutions sought in the instant document.

time assignments on I-A channels during a period long antedating the 1961 decision, even though much more extensive use could be made on these channels during daytime hours without adversely affecting their nighttime employment. A definitive and final decision of literally any nature on the way the channels are to be utilized to provide nighttime service will almost inevitable result in a lessening of the restrictions presently placed on their daytime use.

12. Finally, we note that, for more than a decade, we have maintained special restrictions on the use which overwise might be made of the 30 channels which are within thirty kHz of the I-A channels, restrictions designed to prevent the assignment of new stations to these channels at locations and with operating conditions which could hamper our freedom to implement any future plan we might adopt for I-A channel use, whether for I-A a high power operation, or for further duplication with Class II stations. If these restrictions, which are stations. If these restrictions, which are not dictated by any existing technical

stations. If these restrictions, which are not dictated by any existing technical consideration, ever are to be removed, a final decision as to Class I-A channel use must be made.

13. All of the above are cogent reasons why we should, at this time, attempt once again, to arrive at a complete, definitive and final clear channel decision. However, the previous proceeding which, in its sixteen years of existence, generated thousands of pages of testimony and hundreds of exhibits, representing countless hours of effort by attorneys and engineers and others of the industry and the Commission, and hundreds of thousands of dollars in cost, resulted, in the end, in a decision which left fundamental is sues unresolved. If we are to embark on a new endeavor to resolve those issues, it should be, if possible, on the basis of some prior assurance that we will not become enmeshed, once again, in an extensive, expensive and, in the end, largely fruitless exercise. It is therefore the purpose of this inquiry to undertake a pre-liminary examination of the clear channel question in the light of present day conditions and current Commission rules and policies, and to elicit information which may point the way to methods of attacking the problem which hold promise of leading to some productive end.

14. It should first be observed that the ten new Class II-A stations which the Commission has authorized pursuant to the 1961 rule amendments are providing or will provide a first nighttime primary exercise at the appreciation of 200 decisions and carrent commission has authorized pursuant to the 1961 rule amendments are providing or will provide a first nighttime primary exercise at a previous decision and carrent commission and carrent care and a carre

Commission has authorized pursuant to the 1961 rule amendments are providing or will provide a first nightlime primary service to approximately 300,000 persons. Standing by itself, this appears to be a substantial achievement, but when it is viewed against the period of nearly ten years it has taken to accomplish this end, and the 25,000,000 persons which, it was estimated in 1961, had no nighttime primary service, it is obvious that the Class II assignments have done hardly more than nibble at the fringes of the problem of hadquate nighttime standard broadcast service. We do not believe that of inadequate nighttime standard broad-cast service. We do not believe that standard broadcast stations of other classes which have been authorized since that time have appreciably contributed to a reduction in unserved population, and any up-dated study of nighttime coverage by standard broadcast stations would reveal inadequacies of the general magnitude found to exist in 1961.

NOTICE OF INQUIRY

15. Until comparatively recently, it has been our consistent policy to consider broadcast service needs, and the means for fulfilling them entirely within the confines of each broadcast service This policy heretofore has been followed in dealing with all facets of clear channel matters. However, we believe that the unfilled need for nighttlime service should now be evaluated in the light of the policy enunciated by the Commission and reflected in rules adopted on February 21, 1973 (Docket 18651, FCC 73-220) that thenceforth, in determining requirements for additional standard broadcast stations, the standard broadcast and the FM broadcast services were to be treated together, as a single aural service. Thus, in any future study of existing nighttime service conditions, we believe the contributions of both standard broadcast and FM must be considered, and in planning measures to rectify present service deficiencies, the reasonable potentialities of both services must be taken into account. Studies by the Commission of limited extent would indicate that existing FM stations are This policy heretofore has been followed indicate that existing FM stations are

There are presently approximately 60 day-me and limited-time stations on the 25 I-A time and limited-time stations on the 201-Achannels, an average of somewhat more than 2 per channel. In contrast, the shared (I-B) clear channels accommodate, on the average, more than 22 daytime stations per channel, in addition to many unlimited time Clear Hostoppensis. Class II assignments.

*Action on the following applications has been held in abeyance for this reason: BF-10505 (850 kHz, Gresham, Orc., new); BF-10505 (850 kHz, Pinewille, Orc., KRCO); BP-12211 (690 kHz, Blackfoot, Ida., KBLI); BP-12480 (800 kHz, Blackfoot, Ida., KBLI); BP-12685 (880 kHz, Beaverton, Orc., new); BF-12685 (880 kHz, Beaverton, Orc., new); BF-13693 (1800 kHz, Satt Lake City, Utah, KWHO); and BP-13658 (1050 kHz, White Bear, Minn., new).

providing service to extensive areas which are without primary nighttime service from standard broadcast stations, particularly in the eastern states. However, a nationwide study is required to determine to what degree FM is now supplementing AM nighttime service on an overall basis, and reasonably may be relied on in the future to extend aural nighttime service to those areas and opulations which remain unserved. The Commission intends to conduct a study of existing FM service, relying on available government resources for its accomplishment. When completed, the results of the study will be entered into the record of this proceeding. Assuming that the study will disclose areas and populations which presently are without FM service or AM primary service at night, it appears appropriate to assess the remaining resources of the FM band, and to determine how they may be exploited most efficiently, and the means which may be employed to encourage and direct the future assignment of FM and FM translator stations to locations designed to remedy any service deficiencies which the above mentioned study reveals. We invite the participation of interested parties in conducting studies and developing programs aimed toward the full exploitation of the potentiallilies of FM for extending nighttime service to all parts of the Clinical to the final settlement of the clear channel problem is an un-

tion of the potentialities of FM for extending nighttime service to all parts of
the United States.

16. Crucial to the final settlement of
the clear channel problem is an unequivocal decision by the Commission as
to whether Class I-A stations are to be
authorized, at least in particular instances, to operate with power in excess
of 50 kilowatts. It has iong been recognized that if the quality of secondary
service is to be enhanced to the degree
that it becomes an adequate substitute
for primary service, station power must
be increased very substantially—in the
order of ten to fifteen times. However,
the implementation of such power increases inevitably will have adverse effects on the structure and balance of the
existing broadcast service, effects which
reasonably may be foreseen, but whose
magnitude are difficult to assess with any
degree of precision. The opponents of
clear channel power increases, which include virtually all segments of the broadcasting, industry, with the exception of
the licensees of those few station, which
might be eligible for such increases, have
cited the destructive competition which
they believe such powerful operations
would create, with the draining of advertising revenue from many smaller
stations, and a lessening of their ability
to operate in the public interest. Further, these parties have alleged, high
nower operation would lead to the socially undestrable result of the placing
in the hands of a very small number of
persons, instruments by which they may
influence the thinking and conduct of
vast segments of the population. General
considerations such as these, in the past,
have presented major obstacles to any
action by the Commission which would
raise the I-A power celling. Nevertheless,
the Commission heretofore has avoided
taking a stand which would preclude the
implementation of higher power at some
future time.

17. In addition to the economic and
social problems described, higher power

the Commission heretofore has avoided taking a stand which would preclude the implementation of higher power at some future time.

17. In addition to the economic and social problems described, higher power operation by Class I-A stations presents at least one technical problem—such stations would cause increased interference to other stations, principally to those on adjacent channels. In certain instances, such interference could result to stations in neighboring countries which are entitled to protection under pertlinent treaties. While these effects, internationally and domestically, might be reduced with the ultilization of directional antennas by the high power stations, directionalization for this purpose in many instances may not be consomant with the attainment of desired service objectives, and, in any event, cannot be expected to prevent substantial increases in interference from occurring. Interference to stations in neighboring countries must be resolved by appropriate negotiations. In instances of domestic interference, a determination may be necessary as to whether the service gains resulting from high power operation by each Class I-A station authorized for such operation outweights the losses of service from other stations which would be incurred as a result of increased interference from the Class I-A station. While the interference problem is substantial, it at least lends itself to quantification and evaluation; questions as to the economic and social impact of high power are presented in a context sufficiently unique that attempts at their resolution, without any factual base, have produced results which are little more than speculative. It seems obvious that if the Commission is to again attack this question with any greater probability of success than it has heretofare experienced, some approach more likely to produce definitive results must be employed than previously has been taken. The operation of a I-A station with high power pursuant to a temporary authorization has previously been an approach is fraught with obvious

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practical difficulties which make it less than attractive. The possibility exists that with modern computer techniques a program may be designed to simulate effectively the conditions obtaining during such operation, capable of projecting, at least, the economic impact of such operation in quantitative terms of reasonable reliability. We invite a full discussion of the economic and social effects of high-power operation of Class I-A stations, and the submission of general suggestions or proposals for specific programs for developing meaningful information bearing on these questions.

18. More than ten years have elapsed since Class I-A licensees have evinced marked interest in or willingness to undertake high power operation, if it were authorized, and changes in the broadcasting structure (particularly the further diversion of the nighttime broadcast audience to television) may have made the considerable investment in the necessary facilities so unattractive from the economic standpoint that the question has become of only academic interest. Certainly, the provision by rule, for higher power operation on specified I-A channels would be undearizable if these facilities were to remain unimplemented, or were implemented at power levels which, while higher than is presently permitted, full substantially short of that deemed necessary to provide skywave service of adequate quality. Under such circumstances, the channels involved would not be utilized for the purpose intended, but would have been removed from consideration in any other plan to further their more complete utilization.

19. In any event, the expression of current interest, and to the extent possible, the future intentions of the licensees on Class I-A stations regarding high power operation would contribute substantially to our consideration of the season from such stations would submit applications for operation of Class I-A stations with greatly increases for the following question: If the rules were amanded to permit the operation of Class I-A stat

to operate?

20. In the vicinity of any broadcast transmitter where its field is intense, undesirable secondary effects are often experienced, e.g., blanketing of broadcast receivers, generation of spunious signals in other radio communications equip-ment, induced interference in telephone lines and in home audio systems, and the induction in nearby ungrounded metalillustration in leavy migranted macro-lic structures of voltages, which may, on occasion, be of such magnitude as to be capable of causing burns or shock. As the power of the transmitter is increased, the area over which some or all of these ef-fects may occur, increases, To limit these unwanted side effects, it is customary to

"The following applications for super power have been tendered for filing: Station KSL, Salt Lake City, Utah, 1160 kHz, 560 kHz, U.S Battion WHO, Des Moinez, Iowa, 1040 kHz, 750 kW, U; Station KFT, Loe Angeles, Cali-fornis, 460 kHz, 750 kW, DA-N, U; Station WLW, Cincinnati, Ohio, 700 kHz, 750 kW, U; Station WSM, Nashville, Tennessee, 560 kHz, 750 kW, U; Station WCCC, Minneapoliz, Min-nesote, 830 kHz, 750 kW, DA-N, U; Station WJR, Detroit, Michigan, 760 kHz, 560 kW, DA-1, U; and Station WGN, Chicago, Illinois, 720 kHz, 750 kW, U.

site transmitters of relatively high power in areas where the population and facilities subject to unduly high fields are at a minimum. If any standard broadcast station is to be authorized to operate with power which is ten times or more the maximum presently authorized for such stations, it is obvious that special attentions, it is obvious that special attentions.

nower which is ten times or more the maximum presently authorized for such stations, it is obvious that special attention must be given to the proper location of the transmitter, and that any authorization which may be issued to an existing I—A station to increase power may involve the specification of a new transmitter site in a sparsely settled area, and may impose other special conditions designed to minimize undesirable secondary effects. The licensee of a I—A station interested in high power operation shall indicate the availability of a suitable site from which to conduct it. Parties are invited to comment on the general magnitude of problems of the nature discussed.

21. While it is, of course, axiomatic that substantial increases in the power of stations providing secondary service will result in improvements in the quality of this service, whether it will, under present day conditions, be a fully adequate substitute for primary service is a question requiring full exploration. The average intensity of a skywave signal, even from a station of relatively high power, never attains a level at which it might be considered substantially immune to the effects of co-channel interference under all circumstances. Over the years, such interference from stations in Central and South American countries has reportedly increased in strength. While it has been argued that the clear channel stations require increased power in order to counteract the effects of such interference, a countrary view of the significance of this factor may be taken—that it means the such that the clear channel stations require increased power in order to counteract the effects of such interference, a countrary view of the significance of this factor may be taken channel stations require increased power in order to counteract the effects of such interference, a contrary view of the significance of this factor may be taken—that it may be futile to expect to provide extensive skywave service of astisfactory quality in the presence of this interference, and, accordingly, the clear channels should be more poductively employed. In any event, in any new evaluation of the present and potential use of clear channels we believe that the possible effects of interference from foreign stations cannot be ignored. Thus, we anticipate the need for up-to-date examination of this situation. We request the participation of interested parties in determining the sources and levels of interference existing in U.S. I.—A channels.

22. In any plan to expand the usage of the clear channels by the authorization of additional Class II.—A stations, the impact must be considered of the promulgation, pursuant to the Report and Order in 'Docket 16222, adopted January 13, 1871 (1972 U.S.22) of the amendments

tion, pursuant to the Report and Order in 'Docket 16222, adopted January 13, 1971 (FCC 71-39) of rule amendments influencing the design of directional antennas. The amended rules establish a floor on the degree to which the radiated field strength may be reduced, and hence indirectly control the necessary geographical separation between a directionalized station and a station whose service the directional antenna is designed to protect. To some extent, therefore, these rules would restrict such freedom of action as previously existed in the choice of suitable locations or areas for new Class II—A stations, Comments are

"The Commission's Field Operations Bu-reau would expect to aid in this affort. How-wer, for a reasonably complete picture of channel conditions to be obtained, moni-toring at as many locations as possible, undertaken systematically, is necessary.

Special Features 2301 Pacific Ave. * *********************

BOOK REVIEW: SECOND EDITION, NRC NIGHT PATTERN BOOK Reviewed by Bill Hardy

Some three years after the first edition was published, the National Radio Club has updated and re-issued its book that shows nighttime directional patterns for all the AM broadcast stations in North America.

In addition to incorporating new and changed patterns for U.S. and Canadian stations, correcting a number of small errors in some of the listings from the 1972 edition of the book, and adding a few patterns that were not yet available at 1972 press time, the new book incorporates a number of new features that make the new edition much better than the old

one. And, mind you, the old edition was indispensable.
Actually, the refinements are one of the more important
features of the new volume. There haven't really been that many changes in U.S. directional patterns the past three years, what with the AM freeze and all. So the refinements become the major reason you should shell out \$7.50 (\$6.50 if you're an NRC member) for the 1975 volume if you already have the 1972 volume.

A number of DXers suggested improvements in the pattern book when the first edition came out. Since there had never been a pattern book before, no one had ever tried to use one, so the format was largely experimental. The improvements NRC has adopted are the result of several years' experience by many DXers using the first edition.

requested on the significance of this restriction on the possible future employment of such stations to improve nighttime standard broadcast service.

23. It has been alleged that, over the years, the role of the standard broadcast station has become increasingly localized in nature and that listeners primarily rely on nearby stations for program fare, news and information geared to the interests and needs of each particular area. While this may well be the case where the listener is able to exercise a choice between service from local and distant sources, there are many millions of persons who reside in areas which are beyond the nighttime primary service contour of any standard broadcast station. For these people, in the past, secondary signals from clear channel stations have offered the only useful nighttime broadcast service. FM broadcast signals are now available to many areas beyond the reach of primary standard broadcast service, and television service, which customarily fractionalizes nighttime aural broadcast audiences, is sometimes also available. However, it is questionable whether these alternative services, even when available, can fully meet the needs of the mobile population—truck drivers and others, probably counted in the millions, who customarily travel at night. For these people, the extended range of the clear channel station offers a special advantage—the ability to receive the uninterrupted broadcasts of a single station over many miles of highway. It is pertinent to the resolution of this proceeding to determine, on the basis of actual listenership, the extent to which the secondary service of clear channel stations continues to be utilized and relied upon. We request the submission of the results of audience surveys, designed to elicit responses from listeners residing in areas which receive no primary standard broadcast service a fught, and from those who travel during nighttime hours, revealing the extent to which the secondary service from clear channel stations is customarily utiliz

Processed Rule Making

24. In this proceeding the Commission intends to consider rule amendments in four areas. The first three of the approaches set forth below, implemented separately or in combination, are those pointed to as subject to future determination in our 1861 decision. However, we intend to maintain complete fexibility in our consideration of this matter, and do not preclude the possibility that, after a thorough study of all pertinent information and engineering data, we may propose a resolution of the problem which goes beyond adoption of the problem alternatives, or combination of alternatives to which we have heretofore limited ourselves. Thus, a study of present and potential FM service may reveal a reduction in the extent of nighttine unserved area and population to such an extent that the need for secondary service from clear channel stations will have been substantially lessened. It may also be found that practical obstacles to the institution of measures aimed at improving the quality of secondary service are too great to be surmounted. Under such circumstances, we may wish to consider rule amendments which will affect the basic pattern of clear channel use, e.g. elimination of the protection of secondary service on some or all of the I.-A

channels, and the employment of such channels to provide primary service from a larger number of stations than could be accommodated under previously con-sidered "duplication" formulas. We have sidered "duplication" of the late indicated hereinafter a fourth approach which contemplates clear channel usage of this nature.

25. Accordingly, the Commission invites comments with respect to the fol-

Vites Comments with respect to that for lowing:

(1). Amendment of the rules to permit the authorization of power in excess of 50 kilowatts for selected Class I-A sta-

the authorization of power in excess or 50 kilowatts for selected Class I-A stations.

(2) Amendment of the rules to permit additional unlimited-time Class II stations on the "duplicated" Class I-A channels, either in limited number and in designated areas (the present "II-A" plan), or to permit the addition of new stations in all instances where adequate protection for the clear channel station's secondary service and for other stations is afforded.

(3) Amendment of the rules to permit the assignment of unlimited-time Class II stations to those I-A channels which are presently unduplicated, either on a designated basis, or generally, with protection, in each instance, afforded the I-A station's secondary service.

(4) Amendment of the rules to permit the employment of some or all of the present I-A channels by a multiplicity of stations which are intended to render only local or regional groundwave service.

26. These proposals are, of course, gen-

only local or regional groundwave service.

26. These proposals are, of course, general in nature, and comments thereon may be similarly generalized. However, we will accept for consideration such detailed proposals for clear channel use as interested parties may desire to submit. Having had the benefit of the comments herein, and having reviewed the information filed in response to the questions propounded in the notice of inquiry, we anticipate that we will be able to present, in a further notice of proposed rule making, concrete and specific proposals in this matter.

27. Pursuant to applicable procedures

27. Pursuant to applicable procedures set forth in § 1.415 of the Commission's rules, interested parties may file com-ments, accompanied by other pertinent rules, interested parties may file comments, accompanied by other pertinent material on or before March 18, 1976, and reply comments on or before April 19, 1976. All relevant and timely comments and reply comments will be considered by the Commission before it decides upon the further action to be taken in this proceeding. In reaching this decision, the Commission may also take into account other relevant information before it, in addition to the specific comments invited by this notice.

28. In accordance with the provisions of § 1.419 of the rules, an original and 11 copies of all comments, reply comments, pleadings, briefs, and other documents shall be furnished the Commission. Copies of all pleadings filed in this proceeding are available for public inspection in the Public Reference Room at the Commission's headquarters in Washington, D.C. (1919 M Street, NW.).

Adopted: December 4, 1975.

Adopted: December 4, 1975.

Released: December 12, 1975.

FEDERAL COMMUNICATIONS COMMISSION, VINCENT J. MULLINS, Secretary.

[FR Doc.75-33977 Filed 12-16-75;8:45 am]

No reference work is ever perfect its first time out. Take, for instance, another NRC publication, the Domestic Log, which many of you have. Much more information is included in today's NRC Log than was in the first edition in 1968. Through refinements, small errors have been eliminated in the log, and the information is now presented in a much more useful format.

Something similar has happened with the NRC Night Pattern Book. While the basic format of showing the patterns to scale on maps of the U.S. and Canada, by frequency, has been retained, simply because it is the best way to show this kind of information, a number of small changes make the book easier to use.

Mexican stations are shown in the book for the first time. The 1972 edition did not include any Mexicans, even those such as XETRA-690 or XEPRS-1090 which cover wide areas of the U.S. The 1975 edition shows all Mexicans within the scope of the map whose powers at night are over 1000 watts. Since many Mexican border stations have an impact on U.S. stations on the same frequencies, this information is very helpful in showing just what stations you are likely to hear on a given frequency. In fact, even the patterns our way for the powerful Mexico City stations on 730, 900, 940, and 1220 kHz are shown, even though Mexico City itself is just off the bottom of the map.

Another added feature is the inclusion of an Alaska inset map on all frequencies. Even though only two Alaskan stations are directional at night (the ones on 650 and 1170 kHz), it helps us pinpoint just where in the state the nondirectional stations are. And in the event that any of the Alaskans go directional at night in the future, we won't have to draw a whole new Alaska map on that frequency.

Hawaii is still excluded because all Hawaiians are nondirectional, and being 2000 miles or more from most other broadcast stations, they are likely to stay that way.

One of the most noticeable changes is the fact that nondirectional stations now do show a circular pattern around them. In the old book, a nondirectional station was shown simply as a dot with no pattern around it. In the new book, a circle centered on the nondirectional station shows the relative amount of power being radiated in all directions, on the same scales as the directional patterns. This shows us comparative signal strengths in the DXer's direction for all stations, directional and nondirectional.

Another advantage to showing the "pattern" of a non-directional station is to give the DXer an idea of the station's power at a glance. In the 1972 pattern book, all nondirectional stations had the same size dot, regardless of power, so you couldn't tell if a nondirectional station used 250 watts or 50,000 watts.

A good example of this is on the page for 1280 kHz. In the 1972 pattern book, there are nondirectional dots for KFOX Long Beach, CA; KIT Yakima, WA; and KSOK Arkansas City, KS. To a listener in Utah (assuming semi-local KNAK Salt Lake City were off), from looking at the dots, they might expect KIT, KFOX, and KSOK to come in with equal strength. However, KIT and KFOX run 1000 watts at night. KSOK runs only 100 watts at night. This makes KIT and KFOX feasible catches in Utah, but KSOK's 100 watts sends so little signal towards Utah that KTLK Denver is a much more likely catch, and KTLK has a substantial null towards most of Utah. This is much easier to see in the 1975 edition of the book.

Another example is the page for 800 and 810 kHz (which are on the same page). In the old book, CKOK-800 Penticton, BC, and WGY-810 Schenectady, NY, each got nondirectional dots. But WGY runs a full 50 kw at night, while CKOK is a mere 500 watts. With the old book, WGY is surrounded by a mess of Canadians on 800 and doesn't look like it gets out as well as it actually does. Or, to an east-coast listener familiar with WGY's coverage, he might assume that CKOK gets out as well as WGY does, which, of course, it does not. The circles around the dots in the new book put this all into perspective.

Note that Mexicans were not included in the old book, so XEROK-800 was not shown in the old book. However, if NRC had not decided to show patterns for nondirectional stations in the new book, XEROK's coverage would look just like WGY's and CKOK's. In the new book, XEROK's coverage dwarfs CKOK's and substantially outdistances WGY's. (Note that XEROK and WGY have an asterisk, *, indicating their patterns are actually three times bigger, while CKOK does not. That makes the difference in coverage even more pronounced. In fact, if the XEROK pattern did not have an asterisk, it would completely surround CKOK!)

NRC has continued the practice of doubling up (or even tripling up, and in one case, quadrupling up) maps for the sparser clear channels, such as 640-650-660, 690-700, 750-760-770-780, etc., to make more efficient use of the space. All the duplication is between 640 and 1210 kHz, and no "regional" channels are doubled up with any other channels ("local," or "graveyard," channels do not have maps except for the eight specific stations that operate directionally on them, as we will discuss in a moment).

But NRC has made a very welcome change in the listings for stations that are on maps showing more than one frequency. In the 1972 book, there was no way to tell, for instance, which stations on the 640-650-660 map were on 640, which on 650, and which on 660. Even seasoned DXers can't memorize the frequencies of all the stations in the country.

In the 1975 edition of the NRC Night Pattern Book, the

In the 19/5 edition of the NRC Right Pattern Book, the editors have <u>listed</u> the frequencies in the key to the stations in all cases where more than one frequency is on the same map.

Another irritant in the 1972 pattern book was a pair of Canadian stations on graveyard chamnels (specifically, 1450 and 1490). Because all other stations on 1450 and 1490 were non-directional 250-watt operations at night, these two stations were thrown in with 1440 and 1480, respectively. This meant that the old pattern book put one 1450 station on the same map with the 51 stations on 1440, and one 1490 station on the same map with the 28 stations on 1480. What's more, instead of listing the stations in frequency order (which would put the 1450 and 1490 stations last in each case), the 1450 and 1490 stations were listed first each time. And to add insult to injury, each map was listed as "regional," even though 1450 and 1490 are definitely "local" channels. Confusing, huh?

This time out, NRC wisely decided to give these local-

This time out, NRC wisely decided to give these local-channel directional stations a page of their own. There are now eight stations on graveyard channels using directional antennas at night in North America. All eight are in Canada. All but one are in eastern Canada. So by using 1½ maps of Canada, on the last page of the new pattern book, the editors have shown all eight directional graveyard station patterns, and have kept them off the maps for the adjacent regional channels.

Another good addition to the book is the patterns for the "limited-time" stations in the U.S. Some of the 16 remaining limited-time stations operate a substantial number of nighttime hours. Some, such as WHLO-640 Akron, OH, and WLIB-1190 New York City, operate past their own sunset for a good chunk of the evening until sunset time at the Glass I station they protect. Since these limited-time stations are widely heard during these evening hours, it makes sense to include their patterns in the nighttime pattern book.

Other limited-time stations, such as KGES-1020 Los Angeles and KFAX-1100 San Francisco, operate certain night-time hours that are supposed to be the silent periods of the Class I stations they protect. KGBS has operated 0000-0500 ELT on Monday mornings for years. KFAX uses 1000 watts nondirectional from 0100-0600 ELT nightly, the former silent period of the Cleveland station on 1100 (now WWME). The patterns for these operations are now in the book.

Of course, some limited-time stations might as well be daytimers. If they're west of the Class I station, they don't stay on past sunset. KXA-770 Seattle, WA, therefore can only operate daytime plus during WABC silent periods, but WABC is NSP! However, since silent periods change, and since someday one of the limited-time stations might learn that it can operate during the Class I station's silent periods (and let's not tell them that they can, okay? hi!), it's good to have their patterns in the book. Limited-time stations are shown with a broken (dashed) line, or circle, for their pattern, to distinguish them from fulltimers.

If you like technical articles, you will find the new NRC Pattern Book more interesting than the older volume. The 1972 edition had only 8 pages of explanations and articles. The new edition has 19 pages. Some of the articles are quite interesting. I particularly liked the article on how directional patterns are formed. This was information I had not learned anywhere else in 16 years in the hobby, 11 years in broadcasting, 7½ years with an FCC first-class license (which is supposed to include directional antennas), and 8 months as a chief engineer. Some of the articles are a little involved for the beginning DXer, but they do a good job of explaining complex electronic ideas in fairly simple terms.

There are a couple of things left over from the first book that may bother a few people, but compromise is part of life. The fact that 101 frequencies (all but the six grave-yard channels) are shown in only 76 maps will bother those who would want to have each frequency shown separately. But it makes no sense to have a separate map for 840 kHz, when WHAS Louisville, KY, is the only station on the channel in all of North America at night. It's much more efficient to clump it together with 820 and 830. Consider that the extra 25 pages would have increased the cost quite a bit.

And once again, NRC has given us two different scales for patterns. Most stations, including virtually all with powers of 5 kw or less at night, are shown on a scale of 500 mV/m, meaning each 500 mV/m of signal strength beamed in a particular direction is shown as a given distance (indicated on each map) in that direction. Meanwhile, most stations with 10 kw or more power at night are shown on a scale of 900 mV/m for the same distance. These are indicated with an asterisk (*) by the number. If you see an asterisk in a pattern, you have to multiply the pattern's measurements by three in your mind's eye. (This multiplies the area by nine.) It may seem like a nuisance. But if they had shown all the patterns on the larger 300 mV/m scale, the patterns would overlap so badly that you wouldn't know which one you were looking at. And if they had used the smaller 900 mV/m scale for all stations, the patterns for the low-power stations would be drawn so small that you couldn't tell what you were looking at.

For my money, the improved pattern book ranks right up with the NRC Log itself and the annual frequency-check list as being virtually a necessity for the domestic DXer. NRC members among us already know how to get theirs. For IRCA members who do not belong to NRC, the cost is \$7.50 postpaid from the National Radio Club, P.O. Box 127, Boonton, NJ, 07005

I should mention that when I sent in my check for the new pattern book, I enclosed a note that NRC quoted on the front page of the 2/9/76 DX News. Here is that quote: "The original NRC Pattern Book has been one of the most valuable DX aids I've ever had, so I'm wasting no time in ordering the new edition. If the DAY book were available, I'd have bought that too!" So far, I believe NRC has been so busy updating and improving the original Night Pattern Book that they haven't made too much progress on the proposed Day Pattern Book. I hope such a book will be available within a few years. It should make as much of an impact on sunrise/sunset DXing as the Night Pattern Book has made on nighttime DXing.

TO THOSE WHO HAVE NEVER USED A PATTERN BOOK BEFORE:
You should know that the patterns shown in the NRC Night
Pattern Book are NOT COVERAGE MAPS. The coverage maps some
stations send out with veries, rate cards, etc. show the
groundwave (local) coverage of stations. The patterns in the

NRC book are the radiation patterns from the antenna, showing where the station's power is being beamed, where its nulls are, etc. Coverage maps differ a little bit from this, because of such factors as bodies of water, mountains, ground conductivity, and the like. Since we DXers generally hear stations on skywave, the actual radiation patterns from the antenna system have more of a bearing on what we hear than does the groundwave coverage pattern. So the antenna pattern is used in the book.

The map format in the book is the best way to show where the station's power is being beamed and nulled. However, the pattern shown is based on power, not coverage. Thus, there is no guarantee that you will hear a station even if the map shows your location within the outline of its pattern. Likewise, you will often hear a station clearly, even though you are shown as being outside the outline of the pattern.

Reader comments on this article, and on the pattern book itself, are welcome. --Bill Hardy, 2301 Pacific Ave., Aberdeen, WA, 98520.

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