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"Twenty year a is a long time with any organisation, but I've enjoyed every minute of my two decades with the NRC !" (G. H. DeLeurere, WV)

ON THE INSIDE.....

- "Hour of Decision" Station/Schedule List Ernie Cooper
- More on the Dymek DA-3 Antenna RjE
- Clipping Corner Various
- Build a Handy Binder for Your Old DX Newses Darryl Belanger
- Observations of TransAtlantic Medium Wave Radio Signals C. W. Bailey

NEW MEMBERS

- * Mike Mitock, 975 Oeborn Ave., Lorain, OH 44052 * Jerry Morris, Rt. 1, Box 203, Bells, TX 75414 * Kenneth G. Brown, Keats Cir., Salisbury, MD 21801
- * Paul Q. Kalisz, 2321 Powell Ave., Bronx, NY 10462 * Jean-M. Gauvreau, 1233 Avenue Forget, Sillery, P.Q., CANADA G1S 3Y6

- * Howard F. Schafer, 303 So. Spruce St., Appleton, WI 54911

 * James E. Lawhead, 825 Caddy Lane, Wichita, KS 67212

 Donald C. Storms, 3475 Spring Valley Blvd., College Park, GA 30349

 * John T. Arthur, P.O. Box 42, Bridgeville, CA 95526 (re-joins)

 * Daniel G. Camp, 4870 St 139th, Beaverton, OR 97005.

RENEWALS

T. C. Skeats, R. Pietsch, R. Hansch, R. C. Evans, M. Joyce, W. Grant, W. T. Doyle, H. Frankel, J. Strang, W. Murphy.

UPCOMING GETTOGETHERS INCLUDE.....

The 1st Annual Midwest DX'ers Kap & Bull Symposium, sponsored by the Great Lakes & Grand River DX Asens, will be held on June 21st. All bands and all facets of DX are the order of the day. For more info on this, contact Bill Whitacre, 2609 Devonshire, Lansing, MI 48910.

The Minnesota DX Club (also all-bands) publishes a bulletin and holds monthly meetings. There are no dues. Next meeting is 6/2/75, 7 pm, at the Walker Branch Library, 2901 Hennepin Ave., Minneapolis. Subsequent meeting will be 7/8/75, 7 pm, at the Twin City Federal Community Room, Village North Shopping Center, Brooklyn Park, MN. Meetings run alternate months 1st Monday at the location shown for June, and the 2nd Tuesday the intervening months at the location shown for July. More info can be gotten from the President, Tom Gavaras, 16920 - 17th Ave., No.; Wayzata, MN 55391. The membership roster which was included with the info sent by Miles Bredvold showed no NRC'ers are members.

A tentative July get-together in Suburban New York is being considered for the weekend of July 13. More details on this (if it comes to pass) in the next issue, which will be dated 6/16/75.

02

Following Bill Coleman's comments in Musings about the Dymek DA-3 antenna, I have received a few comments. One comes from Pete Taylor, who wrote the review of the unit carried in reprints. He notes that he finally received a replacement unit from the manufacturer, but that it was worse than the first in terms of FM interference and lack of sensitivity and selectivity above 1300 kHz. He has sent this unit back also. Other DX ers have encountered similar difficulties although not as severe. As I continue to receive requests about the unit, my personal opinion is that the unit is NOT INTENDED FOR SERIOUS DX'ERS ! Much of McKay's sales are to broadcasters or plants were reception of semilocals is even bad. As is the case with ANY loop, the user will notice a marked improvement over longwires, shortwires or no external antennas at all.

It should be noted that contrary to the manufacturer's publicity ("No one else makes anything like it") the DA-3 is modelled after the Worcester Space Magnet. which is designed specifically for MW DX'ing, and costs less than 2 the price. Although the Space Magnet series do not sport many of the appearance improvements, its functions are not impaired by this lack. The info on obtaining manufacturer's spex on either unit is contained in the Antenna Reference Manual, available from HQ for \$2,25. This volume also contains two evaluations of the Space Magnet.

Also included in our mail was a "rebuttal" to Coleman's comments from McKay's Marketing Manager. Larry Engard, which was erroneously sent to Al Merriman. In part, Engart states, "Whether or not this product, or any product for that matter, is worth the price depends on how much good it does for the user." I can't agree more, and my knowledge does not turn up a single SERIOUS MW DX'er who has been truly pleased by the unit who has tried the alternative of the Space Magnet. As Engart further states, that one must also consider "whether or not he can get the same or similar product elsewhere for the same or lower cost." It is already evident that for the DX'er who values performance and cares not about fancy looks that this consideration can be satisfied.

Referring to Coleman's comments of the Dymek AM-5 Tuner, Engart notes that it was originally produced in New Zealand as stated, but that "the replacement unit is nowhere near the quality that the first unit was." It is also noted that the basic DA-3 was never produced abroad as stated by Coleman, which is indeed true. It is truly enlightening to note that in Engard's description of yhe Tuner, he refers to it as a "true High Fidelity AM tuner". This contention may indeed be true, as most manufacturers have not attempted to achieve this end. For this reason also, we would caution DX'ers that this tuner is not designed for DX purposes.

As I have conversed personally with the manufacturer at a time shortly after the DA-3 was introduced, I can state at this time that my comments regarding the design of the DA-3 being patterned after the basic SM-1 are indeed fact, and can also state that my opinion regarding the intended purpose for the unit as stated to me at that time were indeed as I have noted herein.

- B. J. Edmund-

(This article is solely the personal opinion of the author, and does not reflect any official position of the NRC, which, of course, has none. Neither is it intended to cast aspersions on the functions of the units referred to in the proper performance of their INTENDED functions. - RiE)

international dx digest

editor.. Alan Merriman P.O. Box 6 Fairfax, Va. 22030

* Phone 703-354-2135 Before 2200 EDT * All Times Are CMT * Deadlines Are Friday *

A very slim column this week - only 3 reports received. Ye Ed hasn't had his rx on for about 6 weeks, so I have no idea whats happening, hi. If you're still DXing. let us know whats being heard.

New stations, changes, skeds, etc.

ANGOIA Radio Clube do Huambo exchanges its listed frequency of 1151 khz for 1162 khz after 1900. (DX Corner, Radio RSA, 4/16, via Hauser)

CABINDA Voz de Cabinda has moved from 1570 to 1586 khz: power is much greater than 5 kw, and it is signing off later than before. (Richard Cinbey, on R. RSA DX Corner, 4/23, via Hauser)

HAWAII KIOE-1080 Honolulu (ex-KHAI-1090) has closed down. (Arthur Cuchen's April Report, via Hauser)

IRAQ Radio Baghdad is being heard on 1038 khz, with 1000 kw beamed toward North Africa. Power may even be greater than a megawatt. (BBC World Radio Club. 4/16. via Hauser)

ISRAEL Resumed summer time (GMT +3) on 4/20, which means all home services sign on and off an hour earlier. (Hauser)

NETHERIANDS WEST INDIES PJD2, Voice of Sint Maarten is now on 1300 khz. (FINNDI, 4/22, via Hauser)

PANAMA The 1120 khz station (listed WRTH 75 as Radio Montunita) is now Radio Continente. (R. Finland's FINN DX, 4/22, via Hauser)

SOUTH VIETNAM Among the many changes is the reversion to GMT +7 time, matching Hanoi, rather than GMT +8, as mentioned on a newscast. (Hauser)

And now, whats been heard

- COLOMBIA Possibly HJKA as I heard Bogota mentioned several times between 1057 and 1100 on 4/24. Signals not too good. (Wilkinson)
- -ST KITTS ZIZ Basseterre. In well at 0350 on 4/12 w/MoR and accented EE. Heard virtually every nite on Collins. (Brainerd)
- -USSR FES station, location unknown. With light opera at 1122 on 4/16. Louder at 1205 on 4/28. (Wilkinson)
- -COSTA RICA TIXE San Jose, Radio Omega. On Collins, this one booms in very often. First heard on 4/13 at 035%. (Brainerd)
- -USSR FES (Vladivostock?) At good volume at 1110 on 4/16. Good again at 1148 on 4/20. (Wilkinson)
- -HAWAII KORL Honolulu heard at good volume for past 2 weeks. Has program for Philippine population at 1200 week day mornings. (Wilkinson)
- -EL SALVADOR YSS San Salvador, Radio Nacional atop North Korea at 1118 on 4/24. Turn of loop eliminated North Korea. (Wilkinson) * In on 4/13 w/*R. Nacional* ID at 0445. (Brainerd)
 - -NORTH KOREA Pyongyang at good volume w/light opera type of music at 1133 on 4/26. (Wilkinson)
- -JAPAN (JOAG/JOOG?) Atop South Korean stn at 1136 on 4/26. South Korean took over frequency after a minute or so. (Wilkinson)
- -COSTA RICA TIJC San Jose, "Radio Sonora" ID weak but clear at 0422 on 4/13. -AUSTRALIA 2NR Grafton, NSW broke through at 1220 on 4/26 w/different loop setting. "ABC" News starting at 1300. Stronger at same time on 4/27 and 4/28. (Wilkinson)

-JAPAN JOFB/JOKD (Hiroshima/Kitami) one of these atop frequency at 1138 on 4/26. Frequent visitor. (Wilkinson) -JAPAN Possibly JODP Morioka w/baseball game between 1216 and 1230 on 4/19.

-UNID In SS w/"cuckoo clock" IS at 2342 on 4/12. Is this just Cuba or something interesting? (Brainerd)

04

-NORTH KOREA Outlet fair w/"talk" at 1214 on 4/19. (Wilkinson) -SURINAM SRS Paramaribo, PZX26 at good volume w/heavy static at 0916 on 4/16. (Wilkinson) * Generally my loudest split frequency in April using the R390A. Heard in EE and oriental languages w/AST plus 2 hour to's. (Brainerd)

JAPAN JOIB Sapporo v/good at 1212 on 4/19. Extra loud on 4/24,26. (Wilkinson)

JAPAN JOUB Akita good on 4/16, 4/24 and 4/28. (Wilkinson)

-COSTA RICA TIOS San Jose, Titania heard on 4/13 at 0450 w/IA and rock music. Weak (Brainerd)

JAPAN JOBB Osaka like local most mornings after 1200. Has newscast in EE. Don't confuse w/3GI in Australia! (Wilkinson) I won't. (ED)/(Brainerd)

-BELIZE Radio Belize. "You are tuned to Radio Belize" ID heard on 4/10 at 0200, followed by nx w/YL ancr, ad for loan co., and a program called "Young Ceneration". Also some programming in what I assume to be an Indian language.

-UNID Chinese speaker. Unknown ID. Heard many times this season. Very loud

at 1228 on 4/28. (Wilkinson)

-HAITI 4VEF. Heard many evenings without IDs, in FF, during April. Finally IDed via Linda Brodsky's report in 4/20 IDXD. Also discovered later that I had a FF ID on tape: phonetically "Radio Cat-rer Vay Er Ash (R. 4VEH). Besides "William Tell Overture", 4VFF uses a 4 note IS played on bells, I believe. (Brainerd)

-JAPAN/SOUTH KOREA JOOK Niigata and HLKY Seoul battling at 1225 on 4/28. HLKY

on top at 1226. HLKY has good variety programs. (Wilkinson)

-GILBERT & ELLICE ISIANDS VSZ1, Tarawa, w/lots of volume this past week. S/off between 1000 and 1015. Varies each morning. (Wilkinson)

-JAPAN/SOUTH KOREA JOPK Shizuoka and HLKI Taejon battling each other at 1247 on 4/20. JOPK topped frequency at 1251. (Wilkinson)

-AUSTRALIA 5AN Adelaide, SA copied from 1313 to 1327 on 4/26. (Wilkinson) -JAPAN/SOUTH KOREA HLKB Pusan. w/sporting event at 1202 on 4/24. JOHK Sendai

topped HLKB at 1211. (Wilkinson)

1015 -EL SALVADOR (Tentative) YSC R. Internacional heard w/rally or ball game in SS on 4/13 at 0502. (Brainerd)

1040 -CHINA Shanghai (?) is a regular most mornings after 1130. Woman announcers

are quite the thing in China. (Wilkinson)

1041,6-CUBA (tentative) Strong ID taped at 0145 on 4/15, but some essential parts, like stn name and TC were fuzzy. ID sounded like "R. Cariba", so I believe it was R. Caribe running off frequency. Does this Cuban often stray from frequency? WHO inaudible. (Brainerd)

1055 -UNID TP Asian station - ID unknown. Beautiful chimes/deep sounding bells sounded for full minute at 1200 on 4/28. Followed by succession of short and long beeps. Man spoke in Russian. Woman spoke in RR while mx played softly. The chimes sounded like the ones played on 575 khz. (Wilkinson)

1180 -DOMINICAN REPUBLIC HIBE Santo Domingo, Radio Mil. While hoping for Radio Globo, heard this one w/"Radio Mil" ID after WHAM s/off at 0508 on 4/27. Deep fades. (Brainerd)

-JAPAN JOOR Osaka in at fine volume at 1248 on 4/26. (Wilkinson)

-JAPAN JOWF Sapporo w/baseball game at 1123 on 4/26. (Wilkinson)

-MAIAYSIA SARAH Radio Malaysia, Sabah w/fine mx program at 1133 on 4/27. (Wilk)

Thats it. I guess what has been one of the lousiest DX seasons that I can remember since starting DXing in 1958 has really come to an end (did it ever get started?). We can always hope for next year, hi.

The reporters for this issue

Sam BRAINERD - Newark, Delaware Collins R390A (on loan); Sears Com-Trek portable; /loop Glenn HAUSER - Enid. Oklahoma HQ-160. SM-2. longwires Hank WILKINSON - Santa Rosa, California SP600, Sanserino loop

If you're still DXing, report. Deadline for the next column will be June 6. I see the other club changed its convention dates, so I'll probably make both. 73 ex DX

OMESTIC



editor.. Wes Boyd 960 W. Liberty Girard, Ohio 44420 216 545-4543

HUNTSVILLE, ONT.

POA 1KO

Hi group,

Looks like the season has really had it, only a handful of reports came in, and about 65% were used. As we're into the long summer breaks this will get back to you around 6/1. My cut date for this issue was 5/1 so if your stuff isn't here, it was to old ... sorry.

r c's April::

4th, MM:: WBFD 1310 w/ 1K TT (JF)

4th. THU: WSMG 1450 w/ dt. IDs @ 2 min--0300-0315, 15 min. early (JF)

MAY::::

1st. MM:: WCNC 1240 w/ TT (DS)

lst. FRI: WRAN 1510 w/ TT 0045-0048 & off (JS)

2nd. THU: WSFC 1240 w/ TT 0002-0015 (JS) WHLN 1410 w/ TT 0030-0037.then OC

till 0044 ID & off (JS)

3rd. MM:: WHSC 1450 w/ TT (DS)

changes from reporters:

790 WEAN RI net Ac (RM)

1240 KWJB AZ not on air, CP recently sold (JS)

1260 WEZE MA Sunday S/on 0500, SP: SM & MM ??? (1891)

1350 WKLX VA omitted from log's alphebetical listing (JS)

1500 WTOP DC Net C & AP

600 WSOM OH Sunday s/on is 0830 (HWB)

And now all the FCC stuff:

1140 WAKK MS Authorizied Pgm. Authority --- is on RS

1350 WKLX VA seeks change city of license to Norfolk, Va.

1490 WSIB SC Initial decision refused license renewal, license revoked....

THIS IS ONLY AN INITIAL DECISION -- EXPECT COURT BATTLES TO FOLLOW!!

KGEN Tulare. Ga --- \$250 for operation with more than 105% licensed power. WEZK Monroe Wi --- \$500 for operation beyond licensed sunset time.

CALL LETTER ACTION:

1090 KBOZ MT Granted this call--Bozeman "CP"

1340 KGPC ND requests call KXPO

1360 KRUX AZ requests call KNWZ

1440 WBJW FL requests call WNBF

1460 KYAC WA requests call KILO

1470 KWSL IA ex: KTRI

1510 KAAR WA ex: KURB

P.O. BOX 218 **CHARLOTTE, MICHIGAN 48813**

Applications and such: 1170 K??? CA Another application for the facility in San Jose--this one is for 50Kw daytime.

1170 W??? NC Clinton Granted 1,000 watts non-DA days

1580 K??? AR Hardy application here for 250 non-DA days

850 W??? CT Wallingford -- INITIAL DECISION -- granted license to this city,& refused Ridgefield.Ct application for same freq.

MORE FINES:

1150 KGMC CO Fined \$1000 for excessive power during pre-sunrise hours.

1290 WEYE NC \$1500 for operating without regard to times of local sunrise, and either operating with excessive power of making false readings.

1370 WTAB NC \$1000 for excessive power during pre-sunrise hours.

1400 WFPR LA \$2000 for operating after sunset with full daytime power.

ODDS AND ENDS:

980 WRC DC will go with new NBC NNIS net on 6/18, existing AM format goes over to WRC FM.

1360 KRUX AZ Requests call KNWZ (Kay-News) & goes with NBC NNIS net 6/18.

musings of the members

The opinions expressed in this column are those of the individual members, and do not necessarily reflect those of the editors, the publishers, or the National Radio Club.

RICK SHAFTAN - 60 Gramercy Park - New York, New York - 10010 212-0R4-7542 Howdy gang! Mucho DX here so here goes: 4/12 SSS- WONR u/WPAT & WASA through "da toiteen toity one" as we say here w/WX, MBS, etc. Thanks to Phadez. 4/18 SSS- UnID SS on 1580 7:17pm o/WPGC. Like a jerk, I tuned away for more elusive stuff. CKTS blocks 900 @ SSS as shown tonight. TIIX tentative through SRS w/SS, Super unID - Phadez & I are wondering who the constant TT u/ WCAU here is, noted daytime (1:20pm) 4/18 w/rr but too weak to ID. Nothing near & I doubt WKNX in day as Michigan is a bit far for the day, even if they beamed right at me. WRDI is o/WSUF here at late afternoons, no sign of c/w WCRV, hmm. TRS gets WCRV & no WRDI, even though he is closer. WDAS busts through WHOM all day here, WWEL ditto w/WNJR. 6:58pm, WIAN o/all for newie. WEGP-1370 till 7:17. WVCH-740 s/off for another close unheard (closest are WTIM WTNJ WBUD WOWW WENR WSNG & WHOL). These don't exist. WEUP s/off u/WWRL 8:15. CBEF is an SSS pest, also WHYN o/WFIL for a newie from N.Y.C. HJHJ, HJKL, on yop. WNYC OC/ETed that morn. CBO dominates 910 till s/off when WRNL o/WRCQ, on SM. Globo, HIBG, KFAB very strong as usual but one of the YVs was cutting u/KFAB, probably YVQT, unn. Sunday, Shel Swartz here & IDed my unID EL on 1570 as WPEP. He also advises those wanting WRKO (if anyone really would?) to try MMs when they run PSAs & stuff w/10kw day pattern which is less restricted. SSS, WIKW finally w/50,000 w, which reminds me HWB, that the only reason that I was wondering about WIKW PSA was that 500w seemed odd for being socalose to CBY when WNTY was allowed to little and assumed this to be a requirement that WLKW would have to DA. Also how much does WEEP put my way & if it is a better bet to try for their 55w & PSA. How can WEEP cover City Hall in Pittsburgh w/5mv/m w/55w? Also WCTR w/1.8w to cover all of the town? Best of DX: WUFO, WYNX, WVKO unn pest this month. MM 4/21- WOW o/CMW/WEET null, CJRC on top whilst trying for KWKY r/c. Pattern is obviously out as is CJRP's. WKAQ unn, HJJM unn. CFTR w/EL & rr o/WRKO w/teletalk on 10kw o/umID rr, WPTF? WGY ETing w/mx. 860 is perfectly clear here MMs w/the HI pest off except for a weak rr undermeath, unID . WPAT pronounced the best hitter in baseball as Blomberg instead of Bloomburg, how droll. no "best" way to hear weep in N4C except on a test. Your unid 1210 almost surely a spore! PAUL MOUNT - 471 Emer son Avenue - Teaneck, New Jersey - 07666 More semi-old DX: 2/17- WJW-850 s/off 12:01 w/vocal SSB weak. Unn WPOR-1490 (who does, hi) w/ID 12:24. Then black-formatted station took over, 12:24-12:34, umID, WUSS? WEJL = 12:46 & various other times u/MoR-rr, probably WMAL. I called him up around 2:45, said he had calls from Providence, Alan in Chicago, & someone in Hartford who asked "Is that you?", he said yes, and Hartford caller hung up. That's keeping the phone bill down. The CFTR item in #19 DDXD is that they played four records in a row, had an ID (CFTR is not WRKO) & went into more mx. I sorta took this to be an ET. On 1580 I decided to stay with the TTer since I had nothing better to do. Of course it was WSRF which I guess everyone heard, new for me. Akron in well on 1590 & 1350 @ 3:05 & 4, no sign of WCRV so they must not have been on. 3:33-3:39: talk & mx way u/WPAT turned to be WBEN. Back to the #19 DXDD, I and t try for WINE too hard though needed since CHNSD was coming in on 960 & I need to verie N.S. so I went to 960. I only tried for WINE for about 30 seconds. Rocker in EE on 1570, IFs CKLO more than CHLO. Would CHLO be on 4-4:21? WMEX ETing w/TT & part of AT 40 Show. 5, WCOJ s/on o/WSO- or WFO-. As for WMBG, I suggested 2/17 @ 3am so WCers may have a shot. (You can't always tell how far 500w will go). The card came back saying "Station WMBG will be conducting tests on third Monday or each month starting at midnight to 6am exp. period." At the bottom it said "as time & opportunity permits will delay monthly f/c until @ (sic) 3am local. GR." So if they have a r/c they're on whether heard in Parsippany or not? In Feb. seems they got W & S well but not N as even TRS heard them. I hope someone got a new logging on WMBG. They were heard as far as Chicago, and I'll find out more later. 73. REMEMBER THE 30-LINE LIMIT. GIVE DATES, CALLS, FREQUENCIES & TIMES IN E.D.T.:

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06
And finally:: The World Series -- League playoffs, & All Star game, normally
heard on NBC moves to CBS this year & the next 3 years. This will be the
first time since 1936 the World Series has been on CBS. Should provide some
interesting DX chances as many station now can carry the baseball games.
(I don't mean to say NBC stations don't carry them, but the different net
will allow different stations to carry it) Might prove interesting for the
west coast games and all star game.
sunset & evening
900 WFIA KY 5/5 Atop 2045 w/ s/off (JS)
1580 WITH WI 5/5 Mostly dominating 2109 w/ lite concert mx to s/off 2115-
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no SSB (JS) KTGR MO 5/5 S/off 2130--15 min. late (JS)

1600 WARU IN 5/5 Loud w/ early s/off 2056, uses good nite type jx, plug FM on 98,3--no SSB (JS)

midnight to sunrise 800 Unid ?? 5/5 Someone w/ ET & 1K TT 0152 to 0200 in CKLW null-No ID (JF)

Maybe WDUX WI, they ET about 0200 every weak or so--HWB 860 WKKO FL 5/12 ET w/ RR 0110-0120 (FD)

KWRF AR 5/6 Think was the f/c--had IDs @ 3 min (FD) MKOV 980 WRG BC 5/12 On ET 0213 w/ OC (DS) CKGM PQ 5/12 W/ RR & ADs 0330-0345 (FD) P. O. Box 190

WONE OH 5/12 ET to 0322 then ID as xmtr. ajd. (FD) WELLSTON, OHIO 45692 1060 CJRP PQ 5/12 Pinning meter w/ FF nx 0104, noted reverb in audio, this thru KYW OC & getting buried (DS)

1070 WAPI AL 5/13 ET-TT-OC 0120-0210+, ID 0205 atop all (JS)

+1140 WAKK MS 5/11 Noted 0710, fair w/ KS00, how long has this been on?(SS) KSOO SD 5/11 Fair w/ WAKK, O/ at 0705 & mentions Bicentenial station for the plains (SS)

1190 WIXE NC 5/5 TEST:: Hrd. by JF & DS WANN MD 5/5 OC-ET, ID 0130, during WIXE ET/POP (JF)

1280 CHAM ON 5/12 Atop 0105-0130 w/ RR--No CJMS-WGSO this AM (DS)

1340 WALL NY 5/12 ET 0100-0105+w/ TT, ID 0103 (FD)

1370 WSPD OH 5/12 Noted off 0203, back 0230 (DS)

1390 WFMJ OH 5/12 ET w/ TT 0355-0359, ID 0400, o/ WFBL (FD)

1400 WBAT IN 5/5 Strong w/ CBS nc, PSA, s/off & SSB 0102-0107 (JF)

*1440 WBCM MI 4/30 RUNNING OFF FREQ. -- Measured on 1440.830 at 0030 and had a

loud het. Still here 5/2..called CE & they fixed it (JS)

+1490 WMIN IN 4/20 ID hrd. 0500, log sez off 0000-0530 (JF)

1580 WORG SC 5/12 ET-RR-OC 0020-0040 (DS)

1590 WEHH NY 5/13 ET-TT killing WAKR 0100-0130+, ID 0118 (JS)

*1600 WWRL NY 5/12 Seemed off again this AM...(JS-Silly-etc.)

WUNR MA 5/12 This off 0204 this AM (FD)

WPOM FL 5/12 Noted w/ s/off 0158 (FD) 5/12 noted w/ Scott Ross stuff till 0158 s/off---NSP didn't last long!! (DS)

WTRU MI 5/12 RR 0302-0311, then ID & classical stuff, ID said was ET(FD) (Per phone call to WGIV who said "no" and WTRU who said "yes"- RiE)

WTYM MA 5/12 The 2nd.MM f/c 0205-0207, right as WUNR went off, used 1K

Seems FD just found WWRL is off MMs now, but didn't realize it. He sez he had same WWRL type stuff ther, just weaker --- didn't know that was KATZ. Also overlooked a C&W type "in there" while digging the above stuff out. So he missed KLAK COLORADO. Lets get some 1600 tests going while the WWRL MM SP is in effect!! (HWB) REPORTERS::

Frank Dailey Preston, CT HQ180-loop-beveridge FD Kenwood 9R59DS--SM1 JF Jeff Falconer Clinton, ON Windsor,CT HQ180-loop RMRon Musco

Davski Schmidt New Castle, DE HQ180--SM2

Scott Strentzsch San Antonio, TX

Richland Incorporated Hubbard, OH JS Jerry Starr HQ180--loop HQ180--loop P. O. Box 8 . Mansfield, Ohio 44901 HWB Ye ED Girard, OH

OPPS:: RM hrd. 1230 WMOU NH 5/11 to 0021 s/off after Red Sox BB, went straight to s/off after game. Normally off 2300.

Someone also reported hearing WLAN 1390 running YANKEES PROMOS ...



CARL 🔐 DABELSTEIN - 3300 North 56th Street - Lincoln, Nebraska - 68507 I have had a very enjoyable time talking with several fellow DXers recently. A few weeks ago old friend Bill Nittler of McCook stopped 🙀 here while he was in town with his son for a EKB tourney. On the seekend of 4/12-13, Neal Zank & I visited Bruce Reynolds at his home in Warrensburg & while Passing through K.C. we stopped by & visited fellow NRCer John Tull. On the evening of 4/30, Neal & I had a most enjoyable visit with Jim Critchett here. Ironically, Jim lived about one mile S of my present address about 30 years ago. DX has been dropping off considerably. 4/10 brought the r/c-DT from WCNU-1010, Crestview, Fla. @ 2:33. The DX TEST from KVBR-1340 heard well w/code IDs on 4/14. The all-new KD:N-720, Las Vegas was heard on 4/15 from 10:00 for 15 minutes till Pattern change. They ID as K-Dawn. 4/19 brought unn KLi/T-1230 w/ET/TT @ 1:12. 4/20 brought unn KODY-1240 ending f/c-TT @ 2. JPD-1150 Tuscaloosa heard w/CBS NX @ 6 folo by s/ons from WMST, Mt. Sterling, Ky. @ 6:10 & WGGH Marion, Ill. @ 7, both also on 1150. On 4/21 KGMO-1550 was heard until s/off @ 1:15. The pregramming was from their FM, but it appears as though they accidentally left their

AM on. The announcer acknowledged calls from Ind. & Ill. but still thought nothing was wrong. On 4/29 I heard an ET/TT from WXAP-860 in Atlanta. Latest veries to come this way have been v/ls from TIJC, KRBB, KVBR, KIUN, KCIA, WCNU. V/fs from KVRC, KNOR, WGGH. Total now at 1,717. For the individual who asked in a recent letter about CPC TEST arranging, the past season I contacted 122 stations and got TESTs from 31 of them. Last year it was 11 out of 56, so 25% would seem about the average response to expect. By the way, word from KBES is that the veries will be sent after the CE receives the new CSs from their printer. Hats off once again for another fine season to our fine editors and NJFC. Withmout their dedication, our club could not exist. (Carl might add too it takes a 'sixth sense' to know what stations to contact for a TEST. - ERC)

JEFF KLEPPINGER - 502 East 2 Street - Northampton, Pennsylvania - 18067

Well, my GR-78 is finally fixed up to par for full service now. Images are gone, & sensitivity & selectivity are good. With my 30' IW (my house is aluminum-sided, cutting signals quite a bit), WIIX-540, WHAW-1180, WEZ-1030, KDKA-1090, & WHIC-1080 & WGY-810 all come in in the daytime - most w/ strong signals. Yesterday afternoon (4/21), WP.W-1450 in Pottsville came in good & on 4/14, CMHG-660 in Santa Clara came in the WNBC SP. Even with the large gain my IW provides, WNAR-1110 comes in fairly well next to WCPA-1100 on the GR-78. On 4/18, I visited the WCPA studios. Except for a few instances, the programming is fully automated, including their FM outlet, WEZV on 95.1. The person who showed me around said a couple of Winters ago when they had a 250w TEST on a MM, someone from California called in reporting he had received them. Well, that i about it for now. Good DK to all & 73s. By the way, who knows WNAR-1110's power? One source says it's 50kw & another says it's 5kw. (I thought 'twas 500w'. -ERC)

**ERC **WSGD NRC COG **I* **STO **W. **O. **C. **I*
**TIM KERFOOT - 34 Cross Street - Weston, Ontario - M9N 2B9

While good CX prevailed throughout the first half of this season, there was a marked deterioration after January here. The first months of the season witnessed an interesting combination of Auroral CX bringing graveyarders from the So. U.S. & excellent openings to the NE into Quebec. There was a greater number than usual of potential good catches going unIDed. Yet CX made a complete turn-around after January, when the static became severe, & only two new stations were heard after January. In all, 61 new catches were made this season, 21 less than last season. Two new countries were heard, but no new states. Quebec was the leading province again w/seven new stations heard, & Fa. the leading state w/eight new ones. Ontario still leads in my overall province totals, with Quebec mecond. N.Y. is the leading state w/93 heard; Pa. follows w/80 heard; O. has 46, Va. has 33, & Wich. 31. Metro Toronto totals now stand at 740 heard, 346 confirmed. Countries are 17/13, provinces 10/10, states 42/42. Most-wanted station is WADD-1560. Thanks to ERC for another year of Musings. (Thanks. Tim.

GENE S. ALLEN - 134 Bret Harte Way & Wallejo, California - 94590

For all DXers interested in a fine RX - the latest Eddystone model
958/7 covering 10k to 30m sells for \$8,850! (I presume that does not include air
conditioning, sales tax, or license!) KMCL-1240 was heard w/r/c first MX 3:09 to
3:23 w/many IDs in code - very difficult y/KROY. Also, all first Sat. f/cs in
Arizona as listed from Joe Fela were heard - KPGE-1340 was a new one for me. Latest

but the REAL thanks goes to those who have MUSED! - ERC)

(Allen)
veries in from KREW-1560 & KBRT-740 for a total of 2,839. Not much other BCB
news except I'm still looking for a good RX - I have written to McKay-Dymek to
ask them to design a good BCB DX receiver with modern features. 73. (How about

HANK WILKINSON Jr. - 384 Rockgreen Place - Santa Rosa, California - 95405
Asian DX was quite good from 4/16-4/28. Aussies broke
through on 4/26. The Aussie on 700k was like a local on 4/26-27-28, especially
good 2 hour after daylight. I will DX two to three morning per week the rest
of Spring & most of the Summer as an experiment. I did some comparative DXing
with the HQ-180 and the SP-600 in the morning on 4/24. The SP-600 was better
than the HQ-180 on split frequency stations. And that is where the DX is. It's
nice to see Stan Morss, Frank Wheeler & Ralph Sperry's groups of veries listed in
DX NEWS of 4/20. I'm also happy to see Roger Anderson over the 100 mark in
countries verified. A fine job. I am really enjoying retirement. I will be

DR. TOM WILLIAMSON - 43 Forest Hill Drive - Guelph, Ontario

selling our home here and moving to San Diego late this Summer. 73.

one that translates SS into EE, Gene, hi? -ERC)

Greetings DXers; This is my first Muse after nearly two years in NRC, so I guess some intro is in order. I'm 51, married with four children (no DXers:) & a medical doctor, specialist in laboratory medicine. I have been a keen DWer since 1936; but .ainly on SW until recently. BCB DX has been increasingly attractive to me since immigrating to Canada eight years ago. On the Other Side of "The Pond" it a not so fascinating since there are less stations in Europe, and many with super-high power which ruins the channels for small stations. Asso the wide geographical distribution of stations makes SSS DX for example, much less obvious, and less profitable. Well. since joining NRC. I've had a whale of a time, & am up to 40 states verified at present. This last season has perhaps not been too sensational, but lots of goodles were heard. Fspecially have I enjoyed the CPC TESTs, hearing WCSH, WTKM, WFIA, WAJR, WILL, WIVS, WHA, WFAR, WINE, KBEN, WEOK, WMES, WLEK, WGIL, WPUT, WMBG. All verified except WFIA & KBEW reports; anyone hear from them? My location here in So. Ontario is not the best for DX with so many high power locals in Toronto, Kitchener, Hamilton London & Buffalo blocking paths to the West especially, but I can't complain. The biggest pest actually is local CJOY-1460 which has only an hour or two off.MMs. & even then keeps its beastly carrier on! Its splash also ruins 1450/1470 for me. My equipment is HQ-180/DX150B w/SM-2 & a 60 meter dipole used as an IW. I think I'm out of space now so 73 to all of you, and love live the NRC! (Welcome to you, Tom! We hope you'll be a regular here from now on and we so invite you! -

PAT HARTIAGE - 9200 Wendell Way - Jeffersontown, Kentucky - 40299
4/28. Not a while lot of DX lately. The amplifiers on my loop
are inoperative at present and have had to be by-passed. However, I have been
busy with other things to the exclusion of DX, mainly a new addition to the family
a GIRL BORN #10. Recently added: 4/7- WSSA-1570 @ 7:58pm w/WHEL nulled. Same
evening I heard 8:30 s/off of WFRL-1570. KCHA-1580 was heard w/full ID & FM plug
@ 8:50pm. 4/8 brought WMPO-1390 @ 7:30pm w/Ae NX, WKKE-1380 @ 8pm pattern change
* WKCU-1350 @ 8:18 w/ID as "Home of Casey Jones." Numerous Wy./Ind. stations
were added week of 4/9-16. "R. 143", WLCE-1430, Buffalo-Hodgenville, Ky. is now
heard daily. Other new stations now heard regularly evenings: WGRK-1550, WCCH1460, WLCK-1250, WKXO-1500. KSCH-1050 (ex-KMYO) heard 4/16 @ 8:45pm s/off, w/ID
as "Little Rock's contemporary gospel station. I was very interested in the
LSCA. I plan to build one this Summer! Welcome back to NRC, J. R. Bruner! If
you get to Louisville, look me up. Phone here is 502-491-1789. I won't make
it to Hartford this year.

ALAN DAVENPORT - 31 Madison Drive - Ogdensburg, New Jersey - 07439

Here is my DX for April. 4/2- WKBO-1230 Pa. up just long enough
for an ad. 4/8- WHYP-1530 Pa. 5:50pm; WFIR-1570 N.Y. @ 6:07. 4/14- CMJN-780; I
listened 45 minutes & thought it was a TTer but was they off WBIM. WGST-920 Ca. @
3:04am w/NX/WX, soon lost to unn WHEL. Who was TTer w/varying pitch TT 2-3:15am
tuneout? 4/18- CKLY-910 Ont. @ s/off @ 2:09 w/GSQ; unn WINZ-940 Fla. Tring w/ID @
2:35; CJRP-1090 covering KYW 50% of the time & giving QRM 100% w/FF ID @ 3am.
They had female DJ. 4/30- CFGO-1440 Ont. well u/R. Luxembourg het (sic), no audio
from Luxembourg, though. 73.



<u>ල</u>

Go shead. Touch that dial on your radio. Roam through the stations there.
Say most of them are playing the same records. Nobody will disagree. Say they all sound the same. Everybody in the business and a lot of civilians will give you an accumont.

A station identity and audience target at the sound of radio to the basically what the sound of radio to the basically what the sound of radio to the safe to say they can deliver a specific audience to an advertiser.

mutating and begatting continues lividual stations work to achieve a le identity within each subcategory.

The format determines what the d jockeys sound like, what records a jockeys sound like, what records a played and how often and b played and how often and be not generally there can be and even it as mercials there can be and even it as one of the cases, what commercials can be brought of the sound of t to guarantee a prerait soundto guarantee a prerait soundspecific program, and a consistent sound
keeps them listening.

So roam the dial. is a sound just tailor

S. Ferrales-1255 M vincehers thy dedications of symms, match. MING-000 W/off & 2:10, till 5. 100,0-570 off today. WANO-1510 may be His as onbined I subdiscon a tenedrateban I tel and ten by PP/c as alfalled I tenedrates a no a 1511-6011 o ser/IR on cold-bank adding along on 1500 of 1200 along whith white-1500 on 81/12 numeral "biogu" on sa s/ll- willi-lico, wind-listo, diche-tiso wide-tiso a con-tgrowolfeboro, Mell., a station I didn't even know existed till them. Seported, naton. 79", 5/150 A surprise, MoH u/Mini-1430 @ 3:43je turnes out to be needed which in u/wGes C 1147. If NE/SW u/WIG-1080 0 Sill. WEMS-790 IDs at times as Spirit of 1250, Che-9.0. Will heard s/off 0 2:03, & Schmitt-7-4 heard 6 2:03. Will-860 P? ANSALY OLL THE ALBERTON OF "CATVERS A MALLES" . 181 5/5- OFF were wide-1310; Child Loss of other calls carrying a certain religious program. Unit delembran on 1170 The united at 112, tooled #21 m Tring of early about the 153, both-1940 mentioned The Looping M/W on 1060, 2127-3107 & on, anybody into who this boby was SM 5/4-& so I ded sneak in here with mine. 5/3- WHIR-1330 Lacky 13" w/Mes on top d ligo. 5/13 except for one single-spaced Musing which is being beld over, for that resom this address on the pre-sked deadline date of 5/45, he everything's in received to Me we closed this teams out on Juneary 5/13 due to moving to TREET P. COOPER - The Cape Tip Date - 5 Anthony Street - Province Comp. Mess, COOST Mensahor, Lativille to Your Convention site in 1976. 73. All, with the projects we're working on though, I was't be completely inscilve. I-may galquest to been Leuss up d sugget bottwod state vehick a at a'I am tradite

and lundary night would seen staying up messily 26 hours. I see, your bing it up till on Schot, plays forms U.S. Tr & Like as "Geograph". Make don't look too prestsing nine Loggings in ten days, best being a. Barbados-900. Time-CaS a real pest now Wire on shald six ND dud bald store dog sw'l wolk . smants of manual sweet sain it al the memorage. On to me I finished April w/35 catches, though only one in the To make could statish even of gradeshard at each at bests of Liv gailets tendenne & as the 'to convention bid. A good deal of progress is being made on both projects, tie be set up at John's place in Brandenburg (about 30 miles SE of here), as well till late causing the above mentioned problem. We discussed the proposed beverage his first class Moonshields had to tenve early & Mitinger didn't arrive unsepliced) who plans to get a job at the total stattens as soon as he gets plus Indiara Mark Mittinger & host Jim Mall, & boas darding, an PM DA (currently John Barris, in Green of Cincinnati, John Hoogsmiside of Brandenburg, & syself, there at any one time. Fresent were BROwn Gary Atkins, bick brank, fat Hartlege, Attendance reach as all-time high of tem, though unfortunately only mine were All games The LAIS had their fourth & biggest get-together on 5/10.

STRON - ACCOUNTING ALLIANDED - SOURCE AVERTAIN AND - SOLD

BISSY - named coincink and - alderbauon Bisg - England ENDA

a while back, broadesting live - quite an experience. 73s to all you DN framis. are CDT. (Floams use EDG, Mikel -EBC) KONO-6 O Local held a dance at our school ton, Tex. 6125an. NORO-1A90 Watchinchie 6139an, this one wanted a lot. All times Postratite 2:32 MEXH-020 Hongon 1:04 MVIN-200 10x* 1:158 2/3- MICH-040 104colonia and the control off-AMIN -35/4 raxs got of bobbs sentions sented +same-to Then comes Colombia w/four. Latest varie to come in is a mide v/g, wide-1350 New have 15 countries (counting U.S.) best foreign is desire syll, next is cube, 6. minte in Ohin. Desides Tome, w/four. Then in., J. Tomes I have 25 verified. I believe, enough for a report. It is CBM-990 8 s/off. I have 52 veries, bent have 134 w/149 more to go at last count. I have only one from Canada, I do not Wilt, then fences, 12. After that I believe to Art. & Fla., both wite. Tones, I bottless Terms is a two way tie w/Chait. A 104 both w/m more is. Bant comes No. reaghly 66 fureign stations w/Newton northburing about 11 of these. Rest state heard, 52 verted. Overall totals are 396 beard, rought about 310 are descrites, Werles I would like to reach 150. Bot h may be a bit hard. Totals now are 150 I would like to end by first year in DMing 2/550- 00 stations, at least 0/500. In . shows of Bulynt an I Lang a sward I (27/02/0) ButME to trang really us to has sait ye this will be printed, I will be 15 & anxiously awatting the avriant of my SM-S. Miles, but I can attest to the fact you're not the LART! HI -1883 By the time The ID on thes 3/30, maybe hear to hear thes, who known (Could be saxy to Lear, heard all for Aberdeen & there's two Aberdeens on 15to, inn't there's I got a postwon, or San to Cathon Cor. I had a tentestive on ACAA while back but only YOU went adducte by a mole of measured parameter at a 'at showsee no MI I made a won fines a tuck and buttlessed and tent ten beselved of the galket as I as I as traper Greecings from "the Taco Falece" of the Universe. Not much in to

TT

I	On the dial	Station	Power, In Kilowatts	hour	roadcast s per week - Present	hours	News, per week Proposed	hours	ic affairs, por week Proposed	Public service announcement, number per week	Come	nercials, %	Number of employes	' Total assets	Program format	General manager
AM	59	KGMB	5	168	168	14	8	1	1	274	28	17.0	46	7.1 million	"Middle of the road" music	Earl McDaniel
	65	KORL	10	163	163	13	13	82	7 1	158	14	8.8	28	574,000	Talk shows	Kenneth Chapin
	69	KKUA	10	168	168	13	11	1/2	1	336	17	10.0	21	380,000	Contemporary music	Robert Wilson
	76	KGU	10	126	163	10	10	4	4	201	14	11.5	27	161,000	Standard pops	Don Metzger
	83	KIKI	10	168	168	8	8	6	6	148	10	7.4	19	400,000	Contemporary music	C. C. Lasson
	87	KAIM	5	131	123	13	12	5 .	3	141	2	1.7	9*	320,000(1)	Religion and classical music	Cliff Scott
	94	KAHU	10	162	162	12	11	5	5	19	19	11.8	16	630,000	Country-Western	Harry Chu
	104	KHVH	5	132	132	75	70	24	17	410	13	9.8	29	636,000	All-news	Stewart Chifet
	108	K-108	5	168	168	8	8	3	2	21)	6	4.0	12	124,000	"Uptempo" adult music	Jack O'Neil
	113	KLEI	10	130	131	9	9	0	3	210̈́	7	5.5	8	80,000	Contemporary music	Terry O'Connell
	117	коно	5	135	138	18	13	15	11	132	15	11.2	30	186,000	All-Japanese	Akikazu Ishida
	121	KZOO	1	136	163	19	16	25	24	161	19	13.8	38	84,000	Japanese programs	Torao Kobayashi
	127	KNDI	5	168	168	Ō	3	15	18	582	3	2.1	18	38,000	Religion, community service	James Ownby
	138	K-POI	5	168	168	11	8	1	3	207	13	8.1	17**	600,000	Contemporary music	Steve Wrath
	142	KCCN	5	136	135	9	9	2	2	415	12	9.2	14	3.3 million	Hawaiian music	Jim Wethington
	150	KUMU	- 5	168	168	12	15	1/2	1/2	139	7.	4.1	12	236,000(2)	"Good music"	John Weiser Jr.
	154	KISA	5	82	82	7	6	1	1	<i>77</i>	4	5.2	23	112,000	Filipino	Ben Manayan
FM														·	•	,
1	93.1	KGMQ	100	168	168	4	4	7	1	168	6	3.9	12·	209,000	Standard pops	Tony Wrath
	94.7	KUMU	60	166	168	9	9	1/2	1/2	134	7	4.1	14	(2) see AM	"Good music"	John Weiser Jr.
1	95.5	KAIM	37	116	145	9	9	3	3	110	1	1.5	9*	(1) see AM	Religion, classical music	Cliff Scott
	97.5	KHSS	100	168	168	7	5	0	2	222	7	4.3	17**	400,000	Contemporary music	Steve Wrath

Pahu's 21 Radio Stations

By Janos Gerepen

Star-Bulletin Writer

"YOU WANT to see the WHAT?" That was the initial reaction at most of Oahu's 21 radio stations when I walked in to ask for the pub-

To their credit, the station staffs all recovered quickly from the initial shock and did their very best to comply with the strange request.

The idea to check public files came from the announcements I heard on the air - that this is station license renewal time and the Federal Communications Commission requires a copy of the application to be placed in the public file. available to anybody's inspection during regular husiness hours

BEING A TRUE blue radio fan. I set out during those regular business hours to inspect, not having the faintest idea what I might find - a real adventure.

What's in those applications? Does anybody ever look at them? Is there a way to get some comparative information about how big Oahu's stations are, what they do, how they

At most stations, polite amazedoes it look like? . . . " "What do you need it for? . .

I learned quickly what the major form - Section IV-A of the renewal application - looks like, what it contains and what I can find in it.

INFORMATION ABOUT broadcasting hours, the amount of news, program format, commercial time, number of employes, total assets, etc., gave a rough picture of Oahu's crowded airwave situation.

Compiling the information provided the first such comparative chart of facts about Oahu's commer-

cial stations. KTUH-FM, the University's radio station, is not included in this report because it is a noncommercial station operating under regulations and circumstances other than the commercial stations.)

SOME OF THE findings at the AM stations:

 Power ranges between 5 and 10 kilowatts, except for KZOO, an all-Japanese station with 1 kw broadcasting power.

- Broadcasting hours go from a. ment greeted me — "Nobody ever looked at the public file ..." "What 168 hours for many stations, mean- (KKUA and KUMU) and 82 for ing 24-hour-a-day broadcasting.

> - There are no major différences between what was reported for past

A rough picture of Oahu's crowded airwave situation has been obtained by checking the public files of Oahu's 21 commercial radio stations.

performance and what is proposed. Hours of broadcast, program format, etc., will be pretty much as before, according to the reports to the

- Hours of news broadcast during week range from a low of zero for KNDI to a high of 75 for KHVH which is an "all-news" station. The average hours of news came to about 10.

- Public affairs broadcasts took and a whopping \$7.1 million for KORL, whose talk show format comes under the definition of "public affairs "

- The number of PSAs, or public service announcements, during a week ran from 77 for KISA to a rather astronomical 582 for KNDI. Most stations run about one PSA per hour.

> - The total of commercials, expressed in hours per week, went from a low of 4 for KISA to a high of 28 for KGMB. The percentage of commercials was a low of 1.7 for the for KAIM to KGMB's 17.

> - In the category of number of employes (including part-time help), KGMB was way out in front with 46, while KLEI reported the smallest

— Total assets, which mean more ming?

Bob Berger, president of KHVH, "paper figures" for accounting purand KNDI to \$3.3 million for KCCN doing any and all conceivable forms

THE ONE outstanding fact about Oahu's radio situation - easy to notice even without a "survey" - is how crowded the airwayes are. Twenty-one stations would represent a very large group even for a city four times the size of Honolulu

How do they survive financially? There is no answer to that from the public file. Earl McDaniel, general manager of KGMB, explained that profit figures are reported to the FCC on a confidential basis.

The FCC uses this information for regional market figures so that the agency may make financially sound decisions about granting new licenses. If a city has a number of stations just struggling to stay in business - and Honolulu may be one of those cities - then the FCC does not license new stations.

HOW ABOUT range of program-

poses than how "rich" a station is, said that "the spectrum is covered in Honolulu;" there are stations

of broadcasting. "Each is trying to find a special place, a niche of its own on the dial.

A staff member of KPOI said that she thinks there's "overcoverage that too many stations do the same thing.

For this reporter, a fan of classical music, it does appear somewhat inequitable that KAIM is the only station with that kind of program while more than a dozen stations do the same rock-pop bit.

WHILE THERE have been some surprising FCC decisions lately renewal applications denied instead of the formerly routine approval it appears from the public files of Honolphy stations that this may not hannen here

Complaints (part of the public file and closely scrutinized by the FCC) are at a minimum and even formerly controversial stations appear to have no big problem as far as sizable public opposition is concerned.

The FCC licenses are good for

three years. If all goes well, we'll go around the stations again in 1978, checking 'em out.

T.	TWE IS SC	MUMI	AND DOCAR II	TO AT THE STATE				
	·			CAT	IFORNIA			
ALABAN		920	4:00 p.m.	Alturas	KCNO	570	3:05 p.m.	
124404	WHMA	1390	1:00 p.m.	Bakersfield	KPMC	1560	9130 p.m.	
Amniston		1450	1:05 P.D.	Belmont	KGEI	3	4:30 p.m.	
Bessemer		1070	6:30 Palls	Dinuba	KRDU	1130	3:05 p.m.	
Birmingham					KXO	1230	9130 p+m+	
Calera		1370	1:05 P-m-	El Centro	KOWN	1450	10:00 p+n+	
Clanton	WKLF		3:05 p.m.	Escondido	KEAP	980	3:05 p.n.	
Demopolis	WXAL	1400	1:05 p+m+	Fresno	KMJ	580	6:35 p.m.	
Florence		1240	9930- ann-			1390	5:00 p.m.	
Foley	WHEP	1310	1:05 p.m.	Long Beach	KGER	640	10:00 p.n.	
Gadsden		1350	6:05 p.m.	Los Angeles	KFI			
Haleyville	WJBB	1	1:05 P.E.	Madem.	кнот	1250	1:05 p.u.	
Huntsville	WAAY	1550	7:00 B+B+	Modesto	KBEE	970	6135 p.m.	
		1500	1:05 P-m-	Redding	KQMS	1400	9:05 p.m.	
Montgomery		1170	10:05 p+n+	Sacramento	KRAK	1140	1100 p.m.	
Oneonta	WCRL		1:05 P+B+	San Diego	KOGO	600	9105 p.m.	
Sylacauga	WFEB	1340	1:05 p+#+	San Francisco	KNBR	68 9	10:05 P. E.	
Talladega	z u n w	1230	0:35 p.m.	Tulare	ксок	1270	9100 p.n.	
Troy	WTBF	970	6:05 p.m.	Watsonville	комұ	1340	9:00 p.B.	
Tusca100sa	WNPT	1280	1:00 p.m.					
				CO	LORA DO		CARLES THE CO.	
A L ASK	A			Alamosa	KGIW	1450	5:00 p.m.	
Anchorage	KFQD	750	10:00 p.m.	Boulder	K B O L	1/490	10:00 p.s.	
Cordova	KLAM	1450	9130 P.m.	Burlington	KNAB	12N0	5:00 p.m.	
Fairbanks	KFAR	660	10:05 p.s.	Colorado Spgs.	KPIK	1580	5:00 p.m.	
Glena 11en	KCAM	790	4:00 p.m.	**************************************	KRAI	550	2:05 p.m.	
Juneau	KINY		10:05 p-m-	Hailey	*KSKI	1340	5:00 p.m.	
Ketchika n	KUT KUN	930	10:05 p.m.	Montpelier	*KSVI	1450	5:00 p+m+	
Nome	KICY	850	9:00 p.m.	Pocatello	*K W I K	1240	10100 p+B+	
Sitka	KIFW	1230	5:05 p-m-	Delta	KDTA	1400	1:05 p.m.	
DICKE	** # 1 "	460	2102 2100	Denver	KAAT	1090	12:30 p.m.	
ARIZO	TNT A			Denver	KLZ	550	9:05 p. n.	
Bisbee	KSUN	1230	10:05 p.m.		KQXI	1550	6:00 p.m.	
Douglas	KAWT	1450	10:05 p.m.		KRKS	990	3130 p+m+	
Flagstaff	KCLS	600	10:05 p.m.	Durango	KIUP	990	5:00 p+m+	
Globe	KIKO	1340	10:05 p.n.	Ft. Collins	KCOL	1410	10:00 p.n.	
Kingman	KAALK	1230	1:05 p.a.		KFTM	1400	5:00 p.B.	
Nogales	KFBR		10:05 p.u.	Grand Junction		1290	10:00 p.m.	
Page	KPGE	1340			KYOU	1450	10:00 p.m.	
Phoenix	KHEP	1980	4:05 p+m+	Gunnison	KGUC	1450	5:00 p.m.	
INOCHIA	KTAR	620	10:05 p.m.	La Junta	KBZZ	1400	5:00 p.m.	
Prescott	KNOT	1450	1:05 p. n.	Pueblo	KPUB	1440	5:00 P+B+	
rrescouc	KYCA	1490		Rifle	KSWR	810	5:00 p.m.	
Sierra Vista		1430		Salida	KVRH	1340	5:00 p.m.	
	KCEE	790		Sterling	KGEK	1230	5:00 p.u.	
Tueson					KCRT	1240		
Yuma.	K B L U	560	10:05 p.u.	Trinidad	K C K T	12340	5:00 p.m.	
4 T)750 3	TOAG			O.	TO THE OWNER OF THE			
ARKAN		040	4-05-1		NNECTICUT	690	0.05 0.0	
Camden	KAMD	910		Ansonia	WADS		2105 p.a.	
Conway	KCON	1230	1:05 p-n-	Hartford	WTIC	1080	10:30 p.m.	
Fordyce	KBJT	1570			WINY	1350	1:05 p.m.	
Helena	KFFA	1360		Southington	WNTY	990	1905 pam-	
Норе	KXAR			Willimentic	WILI	1400	1:00 p.n.	
Hot Springs	KXOW	1420						
${ t Jonesboro}$	KBTM	1230	THE RESERVE AND ADDRESS OF THE PARTY OF THE		BIAWARE		No. of the Control of	
Little Rock		900		Wilmington	MDET	1150	10:05 p.n.	
Pine Bluff	KPBA	1590		300				
Siloem Spri	ngsKU O A	1290	2130 p.m.	* Error by ER	C - these l	eling	in Indio.	

The above (and continuing) list was received from The Billy Graham Evangelistic Foundation, Minnes polis, Minnes ota.

DISTRICT OF COLLIMINA Potomo c-Cabin John W C T N 950 (1:00 p.m. (4:00 p.m. (4			IOUR OF DECIS	ION" AM LIST, com	-	2)	
W C T N 950 (1:00 p.m.						3040	1.0E D m
## While Company in the Company in t			(1.00 n m				
## Washington W R C 980 10:05 p.m.	wci	N 950		Chicago			
FLORIDA PRICE Pr	II-abinahan II D (080			-		
Each Color	wasnington wax c	900	10.00 р.ш.				
Delray Beach W M F J 1500 1000 p.m. No. 2 1000 p.m	MT TSO YES			m ()/ 42			g 2,05 р.ш.)
Daylon Beh W F J 1 1 1 1 1 1 1 1 1		ит опп	1.05 p.m.				
Delray Beach W D B 1150 10:00 p.m. Peoria W P E O 1020 1:00 p.m. Pittsfield(Wed.) W B B A 1580 9:15 a.m. Pittsfield(Wed.) W B R A 1580 9:15 a.m. Pittsfield(Wed.) W B R A 1580 9:15 p.m. Pittsfield(Wed.) W B R A 1580 9:15 p.m. Pittsfield(Wed.) W R R R 1330 1:00 p.m. Springfield W C V S 1450 10:00 p.m. Springfield W C S 1 10							
Delray Beach W D B F 1420 9:30 P.m. Pittsfield(Wed.) W B B A 1580 9:45 a.m. Rockford W R R 1330 1:00 p.m. Rockford W R R 1330 1:							
Section Sect							
Lakeland							
Leesburg							
Miami				Springfield	wevs	1450	TO:OO D.m.
Miami				a			
Minimal Beach W K A T		and the same of th				Sec. 2	4704
Monticello W W S D New Sayrra De W S B B S Decatur W A D M Decatur W A		4000000					
New SmyrnaBc W S B B 11		to the first decree					
Orlando W H O O		-		Decatur			
Palatka	·	1		Evansville			
Palatka W S U Z Panama City W P C F Punta Gorda W C C F Quincy W C N H St. Augustinew F O Y Sebring W S B B Stuart W S T U B Stuart W S T U B Stuart W S T U B Stuart W F L A Vero Beach W T T B W L F Allansase W T A L Tampa W F L A Vero Beach W T T B Stattant W S B B Clarta W S B C Cordele W M J M M S D Clarta W S B C Cordele W M J M M S D Clarta W S B C Cordele W M J M M S D Clarta W S B C Cordelia W S B B C Columbus W S B C Corden W K C C Griffin W K E U C Hinesville W G M L Scott City K F L A 1310 12:30 p.m. Pittsburg K O A M 860 10:05 p.m. Bacon W M A Z C Topeka W I B J Barbourville W X C B Hindoulu K A I M 870 5:30 p.m. Hawall Eleele K U A I 720 9:05 p.m. Hanolulu K A I M 870 5:30 p.m. KENTUCKY Barbourville W X C B Hintsville W X V E Machane W I N I 310 9:05 p.m. KENTUCKY Barbourville W X V E Machane W K C B I I I I I I I I I I I I I I I I I I	Orlando WHC	0 990		Ft. Wayne	WFWR	1090	4:00 p.n.
Panama City W P C F Mt. Vernon W P C O Mt. Nernon W P D C O Mt. Nernon W P D C O Mt. Nernon W P C O Mt. Nernon W P C O Mt. Nernon W P C O Mt. Nernon W T D		25.0		Huntington			
Punta Gorda W C C F Quincy W C N H St. AugustineN F O Y Sebring 70. W S E B Stuart W S T U Tallahassee W T A L Tampa W F L A Vero Beach W T T B Vero Beach W T S L Vero Beach W T T B T B Vero Beach W T T T B Vero Be		-		Indianapolis	WIBC	1070	10:00 Patta
Quincy W C N H St. AugustineW F O Y Sebring		0.00		Mt. Vernon	WPCO	1590	1:05 p.m.
Stebring				South Bend	WSBT	960	5130 pam-
Stebring TV W S E B Stuart W S T U Tallahassee W T A L Tampa W F L A Vero Beach W T T B GEORGIA Alma W U L F Atlanta W S B Claxton W C L A Cordele W M J M Cornelia W C O N Dalton W B L J Fitzgeral W B H B Generation W K G G Generation W C I A Cordele W M J M Cornelia W C O N Dalton W B L J Fitzgeral W B H B Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson K W B W U U G Generation W K G G Hutchinson W K W S W U B Generation W K G G Hutchinson K W B W U G Generation W K G G Hutchinson W K W S W W B Generation W K G G Hutchinson W K W S W W B Generation K K G G G F G Generation W K G G Hutchinson W K W S W H G Generation K K			1105 p. n.	Terre Haute	HTHI	1480	9:05 p.m.
Stuart W S T U	St. AugustineW F C						The state of the s
Stuart W S T U Boone	Sebring WSE	B 1340	1:05 p.n.	IOWA			
Tallahassee W T A L Clinton K C L N 1390 Newman W F L A Des Moines W H O C 1420 Newman W F L X Newman W C O H New	Stuart WSI	U 1450				1260	6:30 p.m.
Tampa	Tallahassee W T A	L 1450	1:00 p.H.				
Des Moines		A 970					
Dubuque*: W D B Q 1490 N				-			
## Fort Dodge		85000					
Alma W U L F Fort Madison K X G I 1360	G EORGTA						
Mason City		F 1400	2:30 p.m.	_			
Claxton W C L A Shenendoah Waterloo T X X L 1540 5100 p.m. Cordele W M J M Waterloo T X X L 1540 5100 p.m. Cornelia W C O N Dalton W B L J Shenendoah Waterloo T X X L 1540 5100 p.m. KANSAS Fitzgerald W B H B C Coffeyville K G G F 690 6:30 p.m. Glennville W K I G C Colby K X X X X 790 2:30 p.m. Gordon W K O G Hutchinson K W B W 1450 11:05 p.m. Griffin W K E U Pittsburg K O A M 860 10:05 p.m. Hinesville W G M L Scott City K F L A 1310 12:30 p.m. Newman W C O H Columbus W P N X Topeka W I B W 580 9:30 p.m. Newman W C O H Columbus W P N X Bowling Green W L B J Savannah W B Y G Hindman W K C B Lexington W B L G Hindman W K C B Lexington W B L G Louisville W A V E Manchester W W X L Monticello W F L W Paducah W D X R Paintsville W S I P Paris W P D F Shelbyville W C N D Wancheve W M T C TIDAHO Nace K I D O 630 10:05 p.m. Boise K I D O 630 10:05 p.m. Burley K B A R 1230 5:00 p.m. Burley K B A R 1230 5:00 p.m. Baton Rouge W J B O 1150 10:05 p.m. Cannada K S Y L 970 10:05 p.m. Baton Rouge W J B O 1150 10:05 p.m. Cannada K S Y L 970 10:05 p.m. Baton Rouge W J B O 1150 10:05 p.m. Cannada K S Y L 970 10:05 p.m. Baton Rouge W J B O 1150 10:05 p.m.	Atlanta WSE	750					
Cordele W M J M C O N Dalton W C O N Dalton W B L J							The second secon
Cornelia			1:05 p.m.				
Dalton				Waterioo	A A B A	7340	Stave bent
Fitzgerald W B H B Coffeyville K G G F 690 6:30 p.m.				T/A NICO	A.C.		
Colby		F-100				600	6.20 p m
Gordon W K O G Griffin W K E U Pittsburg K O A M 860 10:05 p.m. Hinesville W G M L Scott City K F L A 1310 12:30 p.m. Macon W M A Z Topeka W I B W 580 9:30 p.m. Newman W C O H Columbus W P N X Rockmart W P L K Rome W I Y N Bowling Green W L B J Savannah W B Y G Hindman W K C B W S A V Lexington W B L G Thomson W T W A Louisville W A V E HAWAII Eleele K U A I 720 9:05 p.m. HawaII Eleele K U A I 720 9:05 p.m. Hanolulu K A I M 870 5:30 p.m. K G U 760 9:05							
Griffin W K E U							
Hinesville W G M L Scott City K F L A 1310 12:30 p.m. Macon W M A Z Topeka W I B W 580 9:30 p.m. W Rokmart W P L K Barbourville W Y W Y Rokmart W P L K Barbourville W Y W Y Rokmart W B Y G Hindman W K C B W L B J B W SA V Lexington W B L G Louisville W A V E Manchester W W X L Monticello W F L W							
Macon							
Newman			1:05 pene	-			
Columbus W P N X Rockmart W P L K Barbourville W Y W Y Rome W I Y N Bowling Green W L B J W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W B L G W S A V Iexington W W X L W S A V W S A V Iexington W B L G W S A V W S A V Iexington W B L G W S A V W S A V Iexington W B L G W S A V W S A V Iexington W S A V W				Topeka	WIBW	580	9:30 p.m.
Rockmart W P L K Barbourville W Y W Y Rome W I Y N Bowling Green W L B J I							
Rome W I Y N Bowling Green W L B J N							
Savannah W B Y G			And the Party of the Contract				
HAWAII				_			
Hawaii			2107 Dette	Hindman			
HAWATI Eleele K U A I 720 9:05 p.m. Monticello W F L W Paducah W D X R Paintsville W S I P Paris W P D F Makawao K N U I 1310 9:05 p.m. Shelbyville W C N D Wancleve W M T C IDAHO Boise K I D O 630 10:05 p.m. Alexandria K S Y L 970 10:05 p.m. Burley K B A R 1230 5:00 p.m. Baton Rouge W J B O 1150 10:05 p.m. C Bothster and the first an				Lexington	WBLG	1300	10:05 P+E+
Monticello W F L W Honolulu K A I M 870 5:30 p.m. Paducah W D X R Honolulu K A I M 870 5:30 p.m. Paris W P D F W C N D Makawao K N U I 1310 9:05 p.m. Shelbyville W C N D W M T C W M T	Inomson WTV	A 1240	1:05 p-m-	Louisville	WAVE		10:05 p.n.
Monticello W F L W Honolulu K A I M 870 5:30 p.m. Paducah W D X R Honolulu K A I M 870 5:30 p.m. Paris W P D F W C N D Makawao K N U I 1310 9:05 p.m. Shelbyville W C N D W M T C W M T				Manchester	WWXL	1450	2130 p.n.
Eleele		- m	0.05	Monticello	W F L W		
Hilo K H L O 11.10 9:05 p.m. Paintsville W S I P Honolulu K A I M 870 5:30 p.m. Paris W P D F K G U 760 9:05 p.m. Shelbyville W C N D Makawao K N U I 1310 9:05 p.m. Vancleve W M T C IDAHO Boise K I D O 630 10:05 p.m. Alexandria K S Y L 970 10:05 p.m. Burley K B A R 1230 5:00 p.m. Baton Rouge W J B O 1150 10:05 p.m. C3 more are listed under Colorado on Denham Springs W L B I 1220 1 05 p.m.				Paducah		1550	
Honolulu						1490	
Makawao K N U I 1310 9:05 p.m. Shelbyville W C N D W M T C							
Makawao K N U I 1310 9:05 p.m. Vancleve W M T C	KGU	r 760	9:05 p.m.				
IDAHO Boise K I D O 630 10:05 p.m. Alexandria K S Y L 970 10:05 p.m.	Makawao KNU	JI 1310	9:05 p.m.				The second second
Boise K I D O 630 10:05 p·m. Alexandria K S Y L 970 10:05 p·m. Burley K B A R 1230 5:00 p·m. Baton Rouge W J B O 1150 10:05 p·m. (3 more are listed under Colorado on Denham Springs W L B I 1220 1 05 p·m.					0	100	3
Boise KID 0 630 10:05 p·m· Alexandria KSYL 970 10:05 p·m· Baton Rouge WJB 0 1150 10:05 p·m· Baton Rouge WJB 0 1150 10:05 p·m· Denham Springs WLBI 1220 1 05 p·m·				LOUI	SIANA		
(3 more are listed under Colorado on Denham Springs W L B I 1220 10505 p.m. Denham Springs W L B I 1220 105 p.m.				_		970	10:05 D.m.
(3 more are listed under Colorado on Denham Springs W L B I 1220 1 05 p.m.			5:00 p.m.				
				_			
	the first page of	this li	st -EKC)	Lake Charles	$K \mathbf{L} C \mathbf{L}$	1470	10:05 p.m.

B Taitet	T LL Y GRAHA ANA (com' c	M'S'I (F	HOUR OF DECIS	ION" AM LIST, o	ontinued	(3)	
Monroe	K M L B	1440	10:05 p.m.	Minneapolis	KTIS	900	2:35 p.n.
New Orleans	WWL	870	8:30 p.m.		WWTC	1280	9:30 p.m.
1(0# 01=04==		. &	11:05 p.m.		WCCO	B30 .	11:05 p.n.
Ruston	KRUS	1490	7:30 a.m.	Pine City	WCMP	1350	2:00 p.n.
Shreveport	KCIJ	980	1:05 p.m.	Rochester	KOLM	1520	4:00 p.u.
Diazo (ap a a a	KWKH	1130	10:35 p.m.	Rosean	KRWB	1410	12:35 p.n.
S1ide11	WSDL	1560	1:05 p.m.	St. Cloud		1490	10:05 p.m.
м	AINE			M	ISSISSIPP	T	
Augusta	WRDO	1400	10:05 p.n.	Columbus	WFFF	1360	9:30 a+B+
Bangor	WLBZ	620	10:05 p.n.	Greenville	WJPR	1330	1:05 p.n.
Potrtland.	WCSH	970	10:05 p.n.	Greenwood	WGRM	1240	10:05 pen-
Rockland	$\mathbf{W} \mathbf{R} \mathbf{K} \mathbf{D}$	1450	10:00 p.u.	Gulfport	WGCM	1240	1:05 p.n.
Waterville	WTVL	1490	10:00 p.m.	Hattiesburg	WFOR	1400	10:05 p.n.
110001111111	• . –			Iuka	WVOM	1270	1:30 p.m.
MA	RYLAND			Jackson	WSLI	930	9:05 p.m.
Baltimore	WBMD	790	2:05 p.n.	Iaure1	WAML	1340	10:05 p.m.
	WBAL	1090	10:05 p.H.	Maridian	WMOX	1010	1:00 p.m.
Cumberland	WTBO	1450	10:05 p.m.	Pascagoula	WCIS	1460	1:05 p.B
Hagerstown	WJEJ	1240	1:05 p.m.	Laucagoula	" 0 1 5	<u></u>	
		1570	2:35 p.m.	18	USSOURT		
				Bolivar	KBLR	1130	1:05 p.m
MA	ADSACHUSET	TS		Caruthersvill		1370	1:05 p.m
	WMEX	1510	9:35 a+m+	Kansas City	KBEA	1380	10:05 p.m
	WRYT	95 0	1:05 P+m+		WDAF	610	10:05 p.m
Brockton	WOKW	1410	1:05 P+H+		KCCV	1510	3:00 p.m
Fall River	WALE	1400	10:05 p.n.	Piedmont	KPWB	1140	9:45 a.m
Lawrence	WCCM	80 0	1:05 p.n.	Poplar Bluff	KWOC	930	5:35 p·m
Worcester	WAAB	1440	10:00 p.n.	St. Louis	KSD	550	12:00 noa
				201 2112	KSTL	690	3:30 p.m
	CHI GAN				WEW	770	8:35 p·m
A 1pena	WATZ	14-50	10:05 P+0+	Springfield	KWTO	960	6:05 p.m
Battle Cree	kwvoc	1500	1:05 p+m+	-1	KGBX	1250	10:05 p.m
	WBCK	990	10:05 p.m.	Waynesville	KJPW	1390	1:05 p.m
Cadillac	WATT	1240	10:05 P+B+				
Charlotte	WCER	1390	1:05 P+B+	N	ACNTA NA		
Flint	WMRP	1570	5:00 p+n+	Billings	K G H L	790	10:00 p+n
	WKMI	1360	5430 D+B+	Bozeman	KBMN	1230	10:00 p.n
	WFDF	910	10:05 p.n.	Butte	KBOW	550	10:00 p+n
Grand rap-d		1570	15100 b+n+		K X L F	1370	10:05 p.n
+1010 4 11100	WBCH	1220	8105 p.m.	Dillon	KDBM	1490	5:00 pen
	WHTC	14-50	2:05 p.s.	Glasgow	KLTZ	1240	5:00 p.m
	w J B L	1250	2:05 p.m.	Great Falls	KMON	560	10:00 p+n
Jackson	WIBM		5:00 b*#*		KARR	1400	10:05 p.B
Kalamazoo	WKPR	19430	3435 P+8+	Helena	KTOM	1340	10:00 p.n
	WKZO	590	9:30 P+E+	Lewiston	KXLO	1230	5:00 p.s
0	WILS	1320	9130 p.m.	Libby	KLCB	1230	5:00 p.m
Lapeer	WMPC	1230	9105 p+z+	Livingston	KPRK	1340	10:00 per
	WMTE	1340	9130 P+E+	Miles City	K A T L	1340	10:00 per
Muskegon	WKBZ	850	6:30 P+E+	She1by	KSEN	1150	5:00 p.s
Pet oskey	WMBN	1340	10:05 P.D.	Sidney	KGCX	1480	5:05 p+n
Port Huron	WPHM	1380	10:05/p.n.	Missoula	KYSS	930	5:00 p.t
Rogers City	WHAK			Wolf Point	KVCK	-	6:05 p.n
Royal Oak	WEXL		10:00 P.B.				
	WSAM			N1	EBRASKA		
	WRBJ		1:05 P+B+	Alliance	KCOW	1400	5:00 p.n
			1:05 P+D+	Chadron	KCSR	610	5100 p.b
				Grand Island		750	2:30 p.n
Whitehall	WLRC	1490	9t30 p.n.	Lexington	KRVN	880	5135 pet
				Mc Cook			1105 p.n
	NNES OTA	-	4.00	Ogallalla	KOGA	960	5:00 p.u
			1 40'3 C. C. St.				
Auston	KQAQ		1:05 p.n.	Omaha	K L N G	1490	10130 p.B
Auston Duluth	wwjc	850	2135 p.n.	Omaha Scottsbluff	K L N G K N E B	960	9130 p.m
Auston Duluth		710	2135 p.n.				9130 p.m 9130 p.m 10100 p.m 5:00 p.m

BILLY (HOUR O	F DECISION"	AM R∆DIO NETWOR	K, contin	ued (4)	
E 1ko Ias Vegas Reno	K O R K K O H	1240 1340 6 30	5:00 p.m. 9:05 p.m. 6:35 p.m.	Spring Lake Tabor City Washington Weldon	WFBS WTAB WEEW WSMY	1450 1370 1320 1400	9:00 I 1:05 I 1:05 I)•m•)•m•
NEW Exeter Nashua		1540 1590	1:05 p.m. 5:00 p.m.	Wilmington Wilson	M K L M	980 1 350	4:00 I 10:35 a	
NEW Bridgeton Camden Trent <i>o</i> n	JERSEY WSNJ W TMR WTTM	1240 800 920	1:05 p.m. 1:00 p.m. 4:00 p.m.	NORS Devils Iake Fargo Williston	TH DAKOTA K D L R K F N W W D A Y K E Y Z	1240 900 970 1360	9:05 I 2:30 I 10:05 I 5:00 I	p•m•
MEG	MEXICO			CHILD				
A Ibuquerque Artesia Farmington	KOB KSVP KENN	770 990 1390	9130 p.m. 1005 p.m. 10100 p.m. 5100 p.m.	Akron Cincinnati	W L W W C K Y	1330 700 & 1530	9:35 1 12:00 1 10:05 1 11:05	noon p•m•
Gallup Roswell Ta o s		1020	10:35 0+m+ 5:00 p+m+	Cleveland	W J W W W W E	1100	10:05	p.m. p.m.
NEW Albany Auburn Babylon		1460 1340 1290	9:30 p.m. 1:05 p.m. 10:30 p.m.	Line Handurky Waverly Banesville	W O N E W I M A W L E C W P K O W H I Z	960 1150 1450 1380 1249	9:05 9:00 8:05 1:05 10:05	P.m. a.m. P.m.
Beacon	WBNR	1250	1:00 pen-	OPT A	TT/9464			
Binghamton Boonville	WINR WBRV	900	8:15 n.n.	OKIA Enid	KCRC	1390	8:30	Dette
Brockport		1960	1:05 p.H.	Lawton	KSW0	1380	10:05	P+H+
Corning	WENY	1230	1:05 p.m.	Oklahoma City	K B Y E K T O K	1000	3100	
Elmira Fulton	WOSC	1300	1:05 p.m.	Shawnee	KGFF	1450	9:30	
Jamestown	WJTN	1240	10:05 pen-	Stillwater	KDPI	780	1:05	Delte-
Malone	W I C Y W M S A	1340	2:05 p.m. 1:00 p.m.	Tulsa	КГМЈ	1090	2130	Delia-
Massena New York	WOR	710	7100 pan-	OREG	CD)			
	WNBC	660	10:05 p.n.	Albany	KWIL	790	5:00	
Manager B. 1:	WHN	1050	11:00 p.n.	Cottage Grove	KNND	1400	1:00	
Niagara Fall Rochester	WHAM	1270	2:05 p.m. 9:35 p.m.	Eugene Grants Pass	KUGN Kagi	590 930	9:30	
	W R O C	1280	10:05 p.m.	Medford	KMED	1/40	9:05	D+10+
Schenectady	WSNY	1290	9:00 p.d.	Portland	KPDQ	800	2130	
Syracuse Rome	W S O Q W K A L	1/1/50	2:05 p.m.		KWJJ	1060	9100	D+D+
Warwick	WTBQ	1110	1:05 p. w.	PEWN	SYLVANIA			
Watertown	WATN	1940	3:00 D+E+	Altoona	WFBG	1290	10:00	
N	ORTH CAROL	ANA.		Bellefonte Coudersport	W B L F W F R M	1330	1:05 1:05	
Asheville	WWNC	570	1:00 p.n.	Doylestown	WBUX	1570	1:05	D. M.
Black Mtn.	W F G W W S O C	1010	1:05 p.m. 10:05 p.m.	Johnstown	WCRO	1230 850	1:05	-
Charlotte	WBT	930 1110	10:30 p.n.	Iancaster	WJAC	1390	10 :0 5 5 : 30	
Gast onia	WGNC	1420	1:05 p.n.		WGAL	1/190	10:05	
Greensboro	WGBG	1400	1205 p.m.	New Kensington		1150	1:05	
Hickory High Point	WHKY	1290 1070	2:00 p.m.	Oil City	WKRZ	1340	10:05 8:00	
Kinston	W IS P	1230	9135 n.m.	San San Salah	SPEE	950	9:30	
Lenoir	WJRI	1340	1105 p.m.	Phillipsburg	VPHB	1260	2:35	p.m.
Morganton Murphy	WMNC	1430 <i>6</i> 00	10105 pens	Pitteburdi.	WPIT	730	1:00 4:30	-
Raleigh	WPTF	680	11100 p+n+	Roaring Spring		1370	12:00	
RoanokeRapi		1230	12:30 p.n.	St. Marys	WKBI	1400	2:05	P•m•
Rocky Mount Shallotte	WEED	1390 1410	2:30 p.n.	Scranton	WICK	1950	1:05 10:05	

	IX GRAHAM vania (co		UR OF DECISI	ON" AM RADIO NE	TWORK, co	on'd (5	5)
		1480	11.20 - m	THINK HAVE BEEN			THE REAL PROPERTY.
Shippensburg			11:30 a.m.	Atlanta	KALT	900	2:30 p.m.
Towanda	WTTC	1550	1:05 p.m.	Austin	KLBJ	590	1:05 p.m.
Tyrone	WTRN	1340	1:05 p.m.	Beaumont	KLVI	560	9:00 p.m.
Uniontown	WMBS	590	5:30 p.m.	Brownfield.	KKUB	1300	8:30 a.m.
Washington	WKEG	1110	9:30 a.m.	Corpus Christ		1030	5:00 p.m.
Wellsboro	WNBT	1490	2:05 p.m.	Dallas	KSKY	660	
Williamsport		1400	10:05 p.m.	Del Rio			4:00 p.m.
" Tamaamb por o	11 21 21 21	7100	Toso) beme		KWMC	1490	8:30 a.m.
100 CO	ODE TOTAL	2000		El Paso	KTSM	1380	10:05 p.m.
	ODE ISIAN		coleT at her	Galveston	KGBC	1540	1:00 p.m.
Providence	WRIB	1220	2:00 p.m.	Houston	KTRH	740	11:00 p.m.
					KWBA	1360	6:05 p.m.
Sr	UTH CAROL	INA		Lampasas	KCYL	1450	1:05 p.m.
Beaufort	WSIB	1490	1:05 p.m.	Lufkin	Appropriate to the second		T.02 Peme
Charleston	WOKE	1340	10:05 p.m.		KLUF	1420	6:05 p.m.
(2.00000) (3.0000)				Muleshoe	KMUL	1380	1:30 p.m.
Columbia	WIS	560	9:35 p·m·	San Antonio	WOAI	1200	9:30 p.m.
Conway	WLAT	1330	1:05 p.m.	Stamford	KDWT	1400	5:00 p.m.
Florence	WJMX	970	2:35 p.m.	Waco	KWTX	1230	9:00 p.m.
Greenville	WESC	660	3:35 p.m.	Weslaco	KRGV	1290	10:05 p.m.
	WFBC	1330	10:05 p.m.		1. U V	12,0	Toood beme
Greenwood	WGSW	1350	12:35 p.m.	770	DA TT		
	WMTY	1090	1:05 p.m.		CAH		1.105mby (
Hampt				Blanding	KUTA	790	1:00 p.m.
Hampton	WBHC	1270	1:05 p.m.	Cedar City	KBRE	940	5:00 p.m.
Hartsville	WHSC	1450	1:05 p.m.	Logan	KVNU	610	10:00 p.m.
Hemingway	WKYB	1000	11:30 a.m.	Moab	KURA	1450	9:30 p.m.
Laurens	WLBG	860	6:30 p.m.	Ogden	KVOG	1490	1:05 p.m.
Marion	WATP	1430	12:35 p.m.	Guan	KLO		
			37 1	Price		1430	10:00 p.m.
SOL	TH DAKOTA				KOAL	1230	5:00 p.m.
Aberdeen	KSDN		1,005	Provo	KOVO	960	10:00 p.m.
		930	4:05 p.m.	St. George	KDXU	1450	5:00 p.m.
Huron	KIJV	1340	9:00 p.m.	SaltlakeCity	KALL	910	10:00 p.m.
Lemmon	KBJM	1400	11:00 a.m.	Verna1	KVEL	920	5:00 p.m.
Pierre	KGFX	1060	10:00 a.m.				, ere peme
Rapid City	KIMM	1150	5:00 p.m.	VI	ERMONT		
Sioux Falls	KNWC	1270	1:00 D.m.	Burlington	TJ TJ M m	600	10.05 -
Sioux Falls		1270	1:00 p.m.	Burlington	WVMT	620	10:05 p.m.
	KSOO	1140	6:05 p.m.	Burlington Rutland	W V M T W S Y B	620 1380	10:05 p.m. 10:05 p.m.
Sioux Falls Yankton				Rutland	WSYB		
Yankton	KSOO KYNT	1140	6:05 p.m.	Rutland VI	W S Y B	1380	10:05 p.m.
Yankton TEN	KSÖO KYNT NESSEE	1140 1450	6:05 p.m. 1:05 p.m.	Rutland VI Clintwood	WSYB IRGINIA WDIC		
Yankton TEN Camden	KSOO KYNT NESSEE WFWL	1140 1450	6:05 p.m. 1:05 p.m.	Rutland VI	W S Y B	1380	10:05 p.m.
Yankton TEN Camden Chattanooga	KSOO KYNT NESSEE WFWL WDEF	1140 1450 1220 1370	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m.	Rutland VI Clintwood	WSYB IRGINIA WDIC WSVS	1380 1430 800	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville	KSOOKYNT NESSEE WFWL WDEF WAEW	1140 1450 1220 1370 1330	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville	WSYB IRGINIA WDIC WSVS WBTM	1380 1430 800 1330	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m.
Yankton TEN Camden Chattanooga	KSOO KYNT NESSEE WFWL WDEF	1140 1450 1220 1370	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna	WSYB CRGINIA WDIC WSVS WBTM WMNA	1380 1430 800 1330 730	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT	1140 1450 1220 1370 1330	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m. 1:05 p.m. 2:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC	1430 800 1330 730 1490	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR	1140 1450 1220 1370 1330 1280 1240	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m. 1:05 p.m. 2:00 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC WSVA	1430 800 1330 730 1490 550	10:05 p.m. 12:00 noon 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:235 p.m. 10:05 p.m.
Yankton TEN Camden Chattanooga Crossviile Dayton Fayetteville Jackson	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR WTJS	1220 1370 1330 1280 1240 1390	12:30 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC WSVA WRAAA	1380 1430 800 1330 730 1490 550 1330	10:05 p.m. 12:00 noon 1:05 p.m. 1:05 p.m. 1:05 p.m. 12:35 p.m. 10:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR WTJS	1140 1450 1220 1370 1330 1280 1240 1390 790	6:05 p.m. 1:05 p.m. 12:30 p.m. 10:05 p.m. 1:05 p.m. 2:00 p.m. 1:05 p.m. 5:35 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC WSVA WSVA	1380 1430 800 1330 730 1490 550 1330 1450	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m.
Yankton Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR WETB WETB WKPT	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270	6:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m. 2:00 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC WSVA WRAA	1380 1430 800 1330 730 1490 550 1330	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR WTJS WKTPT WSKT	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270 1580	6:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville	WSYB CRGINIA WDIC WSVS WBTM WMNA WVEC WSVA WSVA	1430 800 1330 730 1490 550 1330 1450 990	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville	KSOOKYNT NESSEE WFWL WFWL WFWL WFWL WFEF WAEW WDNT WEKR WTJS WKTPT WKKT WKTTE	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270 1580 620	6:05 p.m. 1:05 p.m. 10:05 p.m. 10:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows	WSYB CRCINIA WDIC WSVS WBTM WMNA WVEC WSVA WRAA WNRAA WNRYA WNRV WPWC	1430 800 1330 730 1490 550 1330 1450 990 1530	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.
Yankton Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport	KSOOKYNT NESSEE WFWL WDEF WAEW WDNT WEKR WTJS WKTPT WSKT	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270 1580	6:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond	WSYB CRCINIA WDIC WSVS WBTM WMNA WVEC WSVA WRAAA WNRAA WNRAV WNRAV WPWC WRVA	1430 800 1330 730 1490 550 1330 1450 990 1530 1140	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville	KSOOKYNT NESSEE WFWL WDEFWAEWWDNT WETBWKPT WKPT WSKTE WLAF	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270 1580 620	12:30 p.m. 10:05 p.m. 10:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico	WSYB CGINIA WDIC WSVS WBTM WMNA WVEC WSVA WRAA WNRV WNRV WRYA WRIS	1430 800 1330 730 1450 550 1330 1450 990 1530 1140 1410	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville	KSOOKYNT NESSEE LWFWLAEWWDNTWEJBWKPTWSKTWWSKTWWSKTWWSAP	1.140 1450 1220 1370 1330 1280 1240 1390 1270 1580 620 1450 1400	6:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke	WSYB RGINIA WDIC WSVS WBTM WMNA WVEC WSVA WRVA WNRV WPWC WRVA WRIS WSLS	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 1410 610	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie	KSOOKYNT NESSEE U WF WLF WAEWWDNT WETTB WKPT WKPT WKRT WETEFWGAP WHDM	1.140 1450 1220 1370 1330 1280 1240 1390 790 1270 1580 1450 1400 1440	12:30 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton	WSYB CRCINIA WDIC WSVS WBTM WMNA WVEC WSVA WRYA WNRV WPWC WRVA WRYA WRIS WTON	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 610 1240	10:05 p.m. 12:00 noon 1:05 p.m. 9:30 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMinnville	KSNT NESSEE WFDEFWAEWWDNTWELAFFWKSKTEWKSTEWWLAFFWWBHMC	1.140 1450 1270 1370 1330 1280 1290 1270 1580 620 1450 1440 960	1:05 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke	WSYB RGINIA WDIC WSVS WBTM WMNA WVEC WSVA WRVA WNRV WPWC WRVA WRIS WSLS	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 1410 610	10:05 p.m. 12:00 noon 1:05 p.m. 9:30 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMinnville Memphis	KSNT NESSEE WFWFWWDMT WEKRS WKTTJB WKTTTB WKTTTWETTE WKTTE	1.140 1450 1270 1370 1380 1280 1290 1270 1580 620 1450 1440 960 600	12:30 p.m. 1:05 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton	WSYB CRCINIA WDIC WSVS WBTM WMNA WVEC WSVA WRYA WNRV WPWC WRVA WRYA WRIS WTON	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 1410 1240 1400	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMimnville Memphis Milan	KSNT NESSEE L W DEFW W DEFW W DEFW W DEFF W A E W W E T J B W K F T W K F T W G A P W H M C C W W R B W K B J	1.140 11450 1220 1370 1330 1280 1240 1390 790 1270 1580 1450 1440 960 1600	12:30 p.m. 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:00 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton	WSYB CRCINIA WDICS WBTM WMNA WVECWSVA WRAA WNRAA WNRV WPWC WRVA WRISS WTON WINC	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 1410 1240 1400	10:05 p.m. 12:00 noon 1:05 p.m. 9:30 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimwille Memphis Milan Millington	KSNT NESSEE L W D E W W D E W W D E J W E T B W K F T T W E T A P W H D M C W C A P W H D M C W C B J W T N	1.140 1450 1220 1370 1330 1280 1290 790 1270 1580 620 1450 1400 1440 960 600 1380	12:30 p.m. 1:05 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester	WSYB CGINIA WDICS WBTM WMNA WYEC WRAA WNRV WPWC WRIS WSLS WTON WHPL	1430 800 1330 730 1490 550 1330 1450 990 1530 1140 1410 1240 1400	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMimnville Memphis Milan	KSNT NESSEE L WFWFWWFWWWFWWWWWWWWWWWWWWWWWWWWWWWWWW	1.140 1450 1220 1370 1330 1280 1240 1270 1580 620 1450 1400 1440 960 600 1600 1380	12:30 p.m. 1:05 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester	WSYB RGINIA WDIC WSVS WBTM WMNA WVEC WSVA WNRV WRVA WNRV WPWC WRVS WRIS WTON WINC WHPL HINGTON	1430 800 1330 730 1490 550 1450 990 1530 1140 1410 610 1240 1400 610	10:05 p.m. 12:00 noon 1:05 p.m. 1:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimwille Memphis Milan Millington	KSNT NESSEE L W D E W W D E W W D E J W E T B W K F T T W E T A P W H D M C W C A P W H D M C W C B J W T N	1.140 1450 1220 1370 1330 1280 1240 1270 1580 620 1450 1400 1440 960 600 1600 1380	12:30 p.m. 1:05 p.m. 1:00 p.m. 1:05 p.m. 1:00 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham	WSYB CRCINIA WDIC WSVS WBTM WMNA WVEC WSVA WNRV WPWC WRVA WNRV WPWC WRVA WNRV WPWC WRVA WNRV HINGTON KOGT	1430 800 1330 730 1490 550 1450 990 1530 1140 610 1240 1400 610	10:05 p.m. 12:00 noon 1:05 p.m. 1:05 p.m. 1:05 p.m. 10:05 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimwille Memphis Milan Millington	KSNT NESSEE L WFWFWWFWWWFWWWWWWWWWWWWWWWWWWWWWWWWWW	1.140 1450 1220 1370 1330 1280 1240 1270 1580 620 1450 1440 960 600 1600 1380 1360	12:30 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia	WSYB CRCINIA WDICS WBTM WMNA WVECS WSVA WRAVA WNRV WPWCS WRVA WNRV WRISS WTON WINCS WHPL HINGTON KELA	1430 800 1330 730 1490 550 1450 990 1530 1140 1410 1410 1400 610	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMinnville Memphis Milan Millington Nashville	KSNT NESSEE L W D E F W A E W W D E F W A E T W D E T	1.140 11450 1220 1370 1330 1240 1390 790 1270 1450 1450 1440 1380 1380 1380 1240	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax	WSYB CGINIA W DICS W BTM W MN A W YECA W RAAA W NRV W RYAA K C L X	1430 800 1330 730 1450 930 1530 1450 990 1540 1410 610 1440 610	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMimwille Memphis Milan Millington Nashville Union City	KSNT NESSEE L WFWENT WALAFT WKKSTE WKKKSB WKLAFP WKKKNNH WELAFP WHREC WKRNNH WSN	1.140 1450 1270 1370 1380 1280 1270 1580 620 1450 1440 960 600 1380 1360 650	12:30 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Olympia	WSYB USYS WBTM WMNA WYEC WRAA WNRV WPWC WRIS WSLS WTON WINC WHPL HINGTON KCCLX KGY	1430 800 1330 730 1450 550 1450 990 1530 1410 610 1240 1400 610 1450 1450 1450 1450 1450 1240	10:05 p.m. 12:00 noon 1:05 p.m. 1:00 p.m. 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly	KSNT NESSEE L W D E W W D E W W D E T E W A E W W E T A A P W H B N C W C B N C W C B N C W C B N C W C C C W C C C C W C C C C W C C C C	1.140 11450 1220 1370 1330 1240 1390 790 1270 1450 1450 1440 1380 1380 1380 1240	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Clympia Port Angeles	WSYB RGINIA W DIC W SVS W BTM W MNA W VEC W SVA W MVA W NRV W PWC W RVIS W TON W IN C W H P L HINGTON K C L X K C N P	1430 800 1330 730 1490 550 1450 990 1530 1410 610 1240 1400 610 1450 1450 1450 1450	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly	KSNT NESSEE L W D E W W D E W W D E T W A E W W E T E F W G A D M W E T E F W G A D M W B M C C W M B M C C W M B M C C W M C D M W M B M C C W M C D M W M	1.140 1450 1220 1370 1330 1280 1240 1270 1580 620 1450 1440 960 650 1240 1060	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Olympia Port Angeles Quincy	WSYB RECINIA W DICS W BTM W MNA W YEC W SVA W MYVA W NRV W PWC W R V A W NR V W P V A W N R V W P V A K C L X K C Y P K P O R	1430 800 1330 730 1450 550 1450 990 1530 1410 610 1240 1400 610 1450 1450 1450 1450 1450 1240	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly	KSNT NESSEE L W DEFW W	1.140 11450 1220 1370 1330 1240 1390 790 1270 1580 620 1450 1440 1360 650 1240 1060	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Clympia Port Angeles	WSYB RGINIA W DIC W SVS W BTM W MNA W VEC W SVA W MVA W NRV W PWC W RVIS W TON W IN C W H P L HINGTON K C L X K C N P	1430 800 1330 730 1490 550 1450 990 1530 1410 610 1240 1400 610 1450 1450 1450 1450	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly TE Abilene	KSNT NESSEE L W DEFW W DEFW W DEFW W DEFF W A E T E T E T E T E T E T E T E T E T E T	1.140 11450 1220 1370 1330 1280 1240 1390 790 1270 1580 1450 1440 1600 1380 1360 1240 1060	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Olympia Port Angeles Quincy Seattle	WSYB RECINIA W DICS W BTM W MNA W YEC W SVA W MYVA W NRV W PWC W R V A W NR V W P V A W N R V W P V A K C L X K C Y P K P O R	1380 1430 800 1330 730 1490 550 1330 1450 990 1530 1140 610 1240 1490 1450 1240 1450 1240 1450 1240 1450	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly	KSNT NESSEE L W DEFW W	1.140 11450 1220 1370 1330 1240 1390 790 1270 1580 620 1450 1440 1360 650 1240 1060	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Olympia Port Angeles Quincy	WSYB WGINIA W DICS W BTM WMMNAC WSVAA WMNRVC WSVAA WMNRVC WSVAA WMNRVC WSVAA WMNRVC WROLS WTON KCGINO KCCINO KCCINO KCCINO KCCINO KCCINO KCCINO KCCINO KCCINO KCCI	1380 1430 800 1330 730 1450 930 1550 1440 610 1450 610 1450	10:05 p.m. 12:00 noon 1:05 p.m.
Yankton TEN Camden Chattanooga Crossville Dayton Fayetteville Jackson Johnson City Kingsport Knoxville La Follette Maryville McKenzie McMimmville Memphis Milan Millington Nashville Union City Waverly TE Abilene	KSNT NESSEE L W DEFW W DEFW W DEFW W DEFF W A E T E T E T E T E T E T E T E T E T E T	1.140 11450 1220 1370 1330 1280 1240 1390 790 1270 1580 1450 1440 1600 1380 1360 1240 1060	6:05 p.m. 1:05 p.m. 1:00 p.m.	Rutland VI Clintwood Crewe Danville Gretna Hampton Harrisonburg Luray Martinsville Narrows Quantico Richmond Roanoke Staunton Winchester WAS Bellingham Centralia Colfax Olympia Port Angeles Quincy Seattle	WSYB WGINIA W DIVS W BTM W MN E CA W MY E CA	1430 800 1330 730 1490 550 1450 990 1530 1140 1410 1410 1450 1450 1450 1450 145	10:05 p.m. 12:00 noon 1:05 p.m.

	GRAHAM'S	"HOUR	OF DECISION"	AM RADIO NETWO	RK, con'd	. (6)	19
Bluefield	WHIS	1440	10:00 p.m.	Boisevan	CJRB	1220	1:30 p.m.
	WKAZ	950	10:00 p.m.	Brandon	CKX	1150	8:35 a.m.
Clarksburg	WBOY	1400	10:05 p.m.	Dauphin	CKDM	730	1:00 p.m.
Fisher	WELD	690	2:05 p.m.	Flin Flon	CFAR	590	The second secon
Grafton		1290	1:05 p.m.	Steinbach	CHSM	1250	1:30 p.m.
Huntington		930	10:05 p.m.	Winnipeg	CKY	580	7:00 p.m.
Logan		1230	1:05 p.m.	WITHII POB	0 11 1	,000	
Martinsburg	WEPM	1340	1:05 p.m.	NEW	BRUNSWIC		
Morgantown		1440	10:05 p.m.	Campbellt on	CKNB	950	5:30 p.m.
Wheeling		1170	6:00 p.m.	Edmundston	CJEM	570	1:30 p.m.
WILCOTTIES.	" " ' "	7710	озоо раша	Frederickton	CFNB	550	5:00 p.m.
WTSC	CINSIN			Moneton	CKCW	1220	9:30 p.m.
Beloit	WGEZ	1490	1:05 p.m.	Newcastle	CFAN	790	5:00 p.m.
Eau Claire	WBIZ	1400	5:00 p.m.	St. John	CFBC	930	10:00 p.m.
La Crosse	WKTY	580	9:30 p.m.	Woodstock	CJCJ	920	1:00 p.m.
Madison	WIBA	1310	10:30 p.m.		0000	1	meso peme
Marinette	** ** **	570	10:05 p.m.	MEM	FOUNDIAND		
	WRJN	1400	10:15 p.m.	Corner Brook	CFCB	570	6:00 p.m.
Rhinelander		1240	10:05 p.m.	Grand Banks	CJOX	610	5:30 p.m.
	WKTS	950	1:05 p.m.	Grand Falls	CJCN	680	5:30 p.m.
WiscinsinDel		990	1:05 p.m.	St. Johns	CJON	930	5:30 p.m.
	100	,,,	Teo, beme	000000		,,,,	yeso peme
WYOM	IIING			ONT	ARIO		
Buffalo	KBBS	1450	5:00 p.m.	Ayax	CHOO	1390	1:00 p.m.
Casper	KVOC	1230	10:00 p.m.	Blind River	CJNR	730	1:00 p.m.
	KTWO	1030	10:35 p.m.	Brampt on	CHIC	790	4:00 p.m.
Cheyenne	KTBC	1240	10:00 p.m.	Branford	CKPC	1380	9:30 p.m.
Gillette	KIML	1270	5:00 p.m.	Chatham	CFCO	630	11:30 p.m.
Jackson	KSGI	1340	5:00 p.m.	Cornwa 11	CJSS	1220	10:00 p.m.
Kemmerer	KMER	950	5:00 p.m.	Fort Frances	CFOB	800	10:00 p.m.
Laramie	KOWB	1290	10:00 p.m.	Gue1ph	CJOY	1460	9:30 p.m.
New Castle	KASL	1240	5:00 p.m.	Huntsville	CKAR	630	1:00 p.m.
Powell	KPOW	1260	5:00 p.m.	Kenora	CJRL	1220	10:00 p.m.
Rawlins	KRAL	1240	5:00 p.m.	Kingston	CKWS	960	1:30 p.m.
Riverton	KVOW	1450	5:00 p.m.	Kirkland Lake	CJKL	560	9:30 p.m.
Rock Springs		1360	5:00 p.m.	Kitchener	CHYM	1490	10:00 p.m.
Sheridan	KWYO	1410	10:00 p.m.	Leamington	CHYR	710	4:30 p.m.
Torrington	KGOS	1490	5:00 p.m.	Midland	CKMP	1230	10:00 p.m.
Worland	KWOR	1340	5:00 p.m.	North Bay	CFCH	600	9:30 p.m.
				Owen Sound	CFOS	560	1:00 p.m.
ALBE		0 -	ollin I miles	Peterborough	CHEX	989	9230 p.m.
Calgany		810	10:00 p.m.	the Maleo that d	(May-Sept		7:30 p.m.
	CJDV	910	1:30 p.m.	Pembroke	CHOV	1350	1:30 p.m.
Camrose		790	5:30 p.m.		CFPA		3:30 p.m.
Lethbridge		1220	10:00 p.m.	St. Thomas	CHLO	1570	5:00 p.m.
Lloydminster		1080	1:00 p.m.	Samia	снок	1070	10:30 p.m.
Medicine Hat		1270	9:00 p.m.	SaultSte.Mari		1050	10:05 p.m.
Peace River	CKYL	610	9:30 p.m.	Smith Falls	CJET	630	10:00 p.m.
7010 7777	TOIL GOTING	DT.		Stratford	CJCS	1240	2:30 p.m.
	ISH COLUM		0-00	Thunder Bay	CKPR	580	6:00 p.m.
Abbottsford	CFVR	1240	9:30 p.m.	Timming	CKGB	680	9:05 p.m.
Chilliwack		1270	9:30 p.m.	Toronto	CKFH	1430	8:00 p.m.
Dawson Creek		1350	3:05 p.m.	Welland	CHOW	1470	6:30 p.m.
	CKGO	1490	9:30 p.m.	Wingham	CKNX	920	9:05 p.m.
Kitamat		1230	10:00 p.m.	CTT-	mma		
Nanaimo		1570	9:30 p.m.	Montage 1		7), 70	1
Port Alberni		1240	9:00 p.m.	Montreal Sherbrooke	CFMB	1410	4:30 p.m.
Prince Ruper		1230	9:30 p.m.	prier.pr.ooke	CKTS	900	1:00 p.m.
	CKCQ	570	9:35 p.m.	CAG	VA MOTOR LAND		
Terrace	CFTK	590 610	10:00 p.m.		KATCHEWAN		0-00
Trail	CJAT		1:30 p.m. 7:30 a.m.	Moose Jaw	CHAB	800	9:00 p.m.
Vancouver	CJVB	1470	1:30 gollio	N.Battleford Prince Albert	CJNB	1050	1:30 p.m.
364	NITHODA					900	9:30 p.m.
A It ona	NITOBA	050	1.20 p.m	Rosetown Saskatoon	CKKR CKOM	1330	1:00 p.m. 9:00 p.m.
ALCOHA	CFAM	950	1:30 p.m.	Swift Current	CKSW	1400	1:30 p.m.
				Horkton	五百年日	1198	1:30 p.m. 1:80 p.m.

OBSERVATIONS of TRANSATLANTIC MEDIUM WAVE RADIO SIGNALS

by C. W. Bailey

Since the middle of March 1974 observations have been conducted at Holden, Massachusetts practically nightly about thirty to ninety minutes past local sunset on approximately fifty specific medium wave radio frequencies. Records covering more than 320 sessions have been accumulated and collation of some of the results is in progress. Transatlantic Radio Stations (TA's) located by certain degrees latitude and transmitting on certain wave lengths were selected. The medium wave radio frequency band was divided into four (4) parts: (I) 520-699 Khz; (II) 700-999 Khz; (III) 1000-1399 Khz; (IV) 1400-1615 Khz. An examination of Table 2 should clarify the TA selection process used.

Observation sessions were conducted about as follows. A station's signal strength in decibels was observed on the receiver "S" meter for several seconds and then recorded; readability of the signal was also adjudged.* Noise level readings were recorded for identical channels nightly in each of the four frequency bands (I, II, III and IV). Readability and signal strengths of a number of mid-west United States stations and those in a few Latin American countries also were noted and recorded. Daily WWV-WWVH propagation data for the observation period was logged, but the tables accompanying this article will not attempt to summarize band conditions or "A" indices. (Presumably you know of those conditions first hand). Except in very extreme and unusual cases terrestrial weather conditions were not recorded nor was any attempt made to equalize (in the raw data) for transmitter power or antennae patterns of the various stations. Sporadic "E" and auroral conditions were observed and noted, but will not be summarized here.

The receiver used and maintained at the best level of efficiency in the operator's capabilities was an R390A/URR in the 1 Khz selectivity and fast AGC positions; the "S" meter, calibrated normally in decibels, was checked from time to time with the Carr meter adjust potentiometer that is standard in the receiver. A 1200 foot, unterminated, long wire (Beverage) bearing 90-270 degrees was the antenna used and the receiver was located at the west (270°) end of the Beverage. Several other antennas are in the area but were not used for observations.

The area soil is granitic, fairly level to rolling, covered by a forest of deciduous and coniferous trees and shrubs. WTAG (5000 watts) 580 Khz transmitter is $l_2^{\frac{1}{2}}$ miles east of receiving position and when transmitting its daytime pattern delivers a measured 200 millivolts/meter at our location. The WTAG night pattern results in a slight null toward the receiver position. Three other medium wave broadcasters are within 7 miles of receiver location. but of these, only one (WAAB, 1440 Khz) delivers minor distortions. Holden is approximately 30 air miles west, north-west of Boston so WBZ, WRKO, WHDH, and other east coast stations present no great problems although at times weather conditions (humidity etc.) seem to contribute to various phasing and intermodulation effects.

Table I shows the number of nightly observations conducted in the various months on certain TA stations including Sinkiang, China. TA's were heard 319 of 324 nights (about 99% of the observation times) and of these nightly receptions 34 (about 10%) were considered unreadable to poor. During these obserwations Sinkiang was heard 135 nights and of these receptions, the signal was fairly readable about 46% of the time. Table 2 shows an extract of stations

*Seven degrees of readability from non-existant (-) to barely heard (0) with BFO on, to readable with attentive listening (3), and (4) indicating good readability, were used. R5 was practically impossible to obtain in the operator's opinion.

observed by frequency segments and by degrees bearing from Holden for March 1974. For the sake of brevity, not all TA observations are included in either Table I or Table 2.

Some tentative conclusions are offered:

Almost daily TA reception is possible under certain conditions.

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- Stations higher in frequency and lower in latitude are more consistently heard.
- Sporadic "E" propagation occurs from time to time on the medium wave band.
- 4. In the northern hemisphere, in summer months, transpolar propagation through what seems to be, at least, a partial daylight path, seems possible. Then again it might be long path.

Special credit should go to Gordon Nelson who suggested certain aspects of this project, was often consulted, and is currently processing some of the data obtained.

OBSERVATIONS OF TRANSATIANTIC MEDIUM WAVE RADIO STATIONS

TABLE No. 1

					#Sinkiang, Chir	g, China receptions		
Month/	Yr.	#nightly obs.	#nights TA's neard	#nights vy. marg. rec.	Nights heard (inc. next col.)	#nights heard R3 or better		
March April May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. March	174	17 24 27 30 28 26 24 25 29 29 27 14 24	17 24 27 28 26 26 24 29 29 29 27 14 24	(0) (3) (5) (4) (5) (4) (5) (3) (0) (0)	9 7 9x 13 7 4 6 11 13 19 12 16	7 6 3 3* 4 2 3 4 3 14 3		
Tot	als	324	320	(34)	135	62		

xSinkiang (1525 Khz) signal indicated but with no positive ID on 3 longest days of the year.

*Russian language and music format @ 0045 on 27 July '74. Signal was 32db, R4 in possible transpolar (partial daylight) path. Am 95% sure it was Sinking since the format matched completely. Did not tape.

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Figures in parenthesis () i.e. readability considered

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marginal n R3.

receptions

Holland 746 Khz Great Britain 647 Khz 1(0 Station 7(6) 1(0) Italy 845 Switzerland 527 Khz 4(2) Station to stations 55-60 Khz 12(10) 0 Rec. from Spain 683 Station

TABLE

MARCH 1974

RECEPTIONS

Khz Khz Germany 1268 Khz 1586 Khz 14(5) 11(6) Monaco 1466 Khz Albania 1394 Khz 11(8) 9(7) Spain 737 Khz 1554 Khz Spain 1223 60-65 Khz Khz 16(4) 11(8) 12(8) 10(8) Kec. Portugal 1578 Khz Portugal 782 Khz Spain 1385 Morocco 529 Khz Station Khz 15(7) 11(8) 14(7) 10(4) Senegal 764 Khz Fortugal 1594 Khz Fortugal 665 Khz Portugal 1034 Khz Station 15(6) 15(3) Rec.

III 1000-1399 1400-1615 Segment Segment 520- 699 Khz 700-999 observation post 0 70 17(13)

II

H

2 REQUIRED (POISICUE STEK OR BALSA) FIRST FOLD FIRST FOLD FOLD CARD CARD CARD 9% 9%x6% 9%x 634 X 21

> * The second and third folds should be transposed, I didn't feel like drawing it over, Hi.

I am sure other DX'ers have gotten the same static from wife, mother or sister about the condition of your "shack" what with Rx, antenna and a multitude of DX reference material hanging around for them to dust and straighten up. The problem seems to be widespread.

It occured to me one day as I was punching holes in some DX information sheets that I wished to save in 3 ring binders that I had all the issues of DX News since I became a member just lying around gathering dust.

While the other information that I required for future reference was printed normally on an 8 1/2 by 11 sheet and could be easily stored by the binder method, the printed format and staple binding of DX News prevented this form of storage, Noticing also that the central "gutter" was not large enough to use spiral binding, the problem of storage of DX News without mix-up and loss of issues was increasing with every copy received.

Obviously the solution is to get it all together in an attractive looking binder that will keep the ladies from forever hounding you about the mess.

The answer came to me as I was perusing my latest copy of National Lampoon - in it they suggest keeping your copies in a special binder that they also sell. Fine, but these binders are hard to come by in the size required and are also fairly expensive. This is a factor to be considered if you are a student or father of 10 and don't have a great deal of money to throw around.

So, if they cost so much, why not make your own, to the size you need, preferably with low cost material that's readily available.

Aha, your re saying - that seems to be an ambitious undertaking, and so did I until I actually started on the project, In the end, you can finish up with an eve pleasing product and at low cost.

First, If anyone has ever noticed the Lampoon binders. they consist of the whole magazine being held in place by a sturdy wire placed through its' central pages, the wire being held in place by grooves in the end of the binder. Therefore, to begin

At the local hobby crafts store purchase the correct amount of heavier guage wire lengths that are used by hobbyists to make the stems for imitation flowers, they are about 18" in length and cost about a cent each. Next. to the hardware store for the required length of MAC TAC adhesive covering in whatever pattern you like (I used a dark wood grain to match my shelves). The measurements following permit three (3) binder coverings per vard of material.

If there is a small printing plant nearby or stationery store, buy a 4-ply card or heavier if available and cut the necessary number of pieces 9 and 5/8 by 6 and 3/4 inches and a smaller piece 9 and 5/8 by 2 1/2 inches for the spine of the binder. I couldn't get balsa wood locally so I could construct the groove portion but the hobby shop provided popsicle sticks which proved adequate. The only other things necessary are a tube of white bondfast resin glue for wood, plastic and paper and several sheets of 24 pound bond paper cut slightly smaller than the sizes mentioned above.

The construction is very straight forward - per diagrams. After the MAC TAC is folded in place, apply the smaller sized sheets of bond over the folds to hide cutting imperfections. Glue the pre-assembled grooves to the finished spine, set aside until dry. Cut wire to fit, open DX News at center pages, slip wire in place, close magazine and place wire in the grooves, continue until the binder is filled, then set on shelf.

Following about an hours' total work even with a couple of kids to "help" I ended up with some attractive binders that now contain part of my DX News collection. Now all I need spare time to finish all the binders I'll require, Of course, it's not necessary to follow my measurements, you can make the spine of the binder any size you wish,

Good luck and enjoy your "new" hobby.