

VHF-UHF DIGEST

May 1989



PRE-CONVENTION ISSUE!



VHF-UHF DIGEST

is the official monthly publication of the WORLDWIDE TV-FM DX ASSOCIATION, published at Milwaukee, Wisconsin, about the first of each month. Make checks payable to the club at Box 5001, Milwaukee, Wisconsin, USA, 53204

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MAY, 1969 Vol. 2, Nr. 5

Add \$2

This month's cover didn't come out too well so I shall explain it. It is an enlarged portion of 8mm film with an ID slide for CKCK-TV, 2, Regina, Sask. Canada.

No sunspot count available for March, but I understand its hi.

Next publishing day may be erratic because of the WTFDA Convention over the weekend we normally publish

We have received a proposed list of rules for the contests we shall be running. At the Convention we plan to make the final decision for the first contest, altho Mike has suggested that the rules be subject to change at any time as improvements are suggested, and we fully agree. More next month.

LATE CONVENTION NX:

On the Convention News page there is a statement that rooms would be \$12-15/night. This is the price/rm and not necessarily per person as insinuated. If 2 or 3 people are in one room the rate per person is lower. (In Omaha, Morrie, Bill and I tripled-up in a room and cut our per person expense to \$5-6/night.) If you know a friend who'd double up you can save money, and have someone to talk to during off-hrs. If you'd like to double-up and do not know anyone, write HQ immediately, as I for one wud like to double-up, and others may also be interested, too. Reservations shud be sent direct to the motel; if U wish to double but have no one, U may make a single reservation direct to be sure of a room, or take a chance and write HQ first. Limit is 3 in a room so I'll accept the first 2 offers I get to share MY rm.

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REMEMBER: DUES ARE GOING UP!!!!

As has been publicized dues are being raised effective June 1, 1969. If your subscription to WTFDA is going to run out shortly -- get smart and renew now...at the reduced present rate.

All applications and renewals received after May 31 will be billed at the following rates:

1 year -- \$4.50
2 years -- \$8.50
3 years -- \$12.00

(in USA, Canada, and Mexico)

Those desiring First Class Mail should add \$2 per year.

For those in other countries:

Regular edition - \$5/year
Overseas edition - \$3.50/yr.

**the overseas edition is a smaller edition which excludes some columns of interest for American DXers

FCC NEWS & DATA

GARY A. OLSON
5901 W. BROWN DEER RD.
#107, BROWN DEER, WIS.

STATIONS OPERATING (AS OF APRIL 17, 1969)

UHF ETV	100
UHF Com	174
VHF ETV	76
VHF Com	506

TV

Total Authorized Stations On The Air 856

Stations Authorized To Start Operation:

- *WWWU-TV, ch. 24, Morgantown, W.Va., 400 kw.
- KEET (TV), ch. 13, Eureka, Calif., 32.4 kw.

New Target Dates Reported:

- *WIIQ (TV) ch. 41, Demopolis, Ala., Fall, 1969
- WSNS (TV) ch. 44, Chicago, Ill., 2.5 million kw., ant. 1420', target date now April, 1970

FCC COMPLETED ACTION

New Grants:

- New Orleans, La., ch. 38 (Rault Petroleum) 864 kw.
- Elko, Nevada, ch. 10, (Washoe Empire) 4.29 kw.
- Fort Smith, Ark., ch. 24, (Broadcasters Unlimited) 1056 kw.

Call Letter Changes:

- *KDPS-TV, Des Moines, Iowa, now KDIN-TV

New Call Letters Issued:

- Dubuque, Ia., ch. 40, granted KDUB-TV
- Milwaukee, Wis., ch. 30, granted WMKE-TV

Miscellaneous Changes Reported:

- WNET (TV) ch. 16, Providence, R.I., delete call letters and construction permit -- grant has been cancelled

Other Changes Allowed:

- WETV (TV) ch. 30, Atlanta, Ga., ERP to 776 kw.
- WKBG-TV, ch. 56, Cambridge, Mass., ERP to 822 kw.
- KLYD-TV, ch. 17, Bakersfield, Calif., ERP to 316 kw.
- WGN-TV, ch. 9, Chicago, Ill. decrease ERP to 110 kw. - move ant. to John Hancock Bldg. and increase height to 1340'
- WICS (TV) ch. 20, Springfield, Ill., ERP to 142 kw. - ant. to 1430'
- KLBK-TV, ch. 13, Lubbock, Tex., ERP to 251 kw. - ant. to 880'
- WFLD-TV, ch. 32, Chicago, Ill., decrease ERP to 610 kw. - move ant. to John Hancock Bldg. and increase height to 1400'
- KMEC-TV, ch. 33, Dallas, Tex., ERP to 97.5 kw.
- WSVI (TV) ch. 8, Christiansted, V.I. ERP to 58.5 kw.

ACTION APPLIED FOR OR REQUESTED

Applications For New Stations:

- Jackson, Miss., ch. 3 (Civic Communications) 95.7 kw -- note: channel already occupied by WLBT (TV)
- Greensburg, Pa., ch. 40 (Warman Communications) 410 kw.
- Flagstaff, Ariz., ch. 2 (Grand Canyon Television Co.) 24.5 kw.
- Dothan, Ala., ch. 18 (S.E. Alabama Broadcasting) 776.2 kw.
- Stockton, Calif., ch. 58 (A.J. Crevolin) 270 kw.

Miscellaneous Requests:

- State ETV and radio board of Iowa and KVFD-TV in Fort Dodge, Ia., have requested a substitution of ch. *49 for ch. 28 at Estherville and the addition of ch. *46 to Fort Dodge along with existing ch. 21

- Maryland Educational and Cultural Commission has requested deletion of ch. *68 and the addition of ch. *31 at Hagerstown; in the process ch. *31 would be deleted from Altoona, Pa., and either ch. 17, 23, or 38 would be added to Altoona.

TIDBITS AND MISCELLANEOUS ITEMS OF INTEREST TO TV DXERS

- # KVRL (TV) ch. 26, Houston, Tex., will begin construction on a \$5-million complex to house their studios -- no target date has been announced
- # The FCC has substituted ch. 2 for ch. 9 at Flag staff, Arizona
- # KDIN-TV (formerly KDPS-TV) ownership has been transferred to the state of Iowa as a base station for a state ETV network; the 2nd link will be ch. 12 in Iowa City
- # The ETV reservation at Watertown, N.Y. has been shifted from ch. 50 to ch. 16
- # WSKG (TV) ch. 46, Binghamton, New York's non-commercial ETV station has been struck by a major financial crisis; station operations have been reduced to 87 hours weekly (and 25-30 hours weekly during the summer months). The station is said to have gone one million dollars into debt due to equipment purchases
- # Latest word from Broadcasting indicates that New York's channel 9, WOR-TV, has gone into heavy daily stock market coverage. Other stations currently programming stock reports several hours each weekday are UHF'S: KWHY-TV, Los Angeles; KDTV (TV) Dallas; and WCIU-TV, Chicago.
- # Rhinelander, Wisconsin's WAEO-TV, ch. 12, will rebuild thanks to donations from area families. The station was demolished on November 17, 1968 when an airplane struck the station tower. Representative A.E. O'Konski (R-Wis.) the station owner, had previously indicated he might not rebuild the station; however the public response assisted his campaign to reconstruct -- \$150,000 in contributions has been received to date. Target date for the NBC affiliate to resume operations is July 1, 1969
- # Plans for state ETV networks have been coming under fire as of late. Although some states have quite successfully initiated networks with strings of stations, many of the wealthier states have been reluctant to commit funds to such projects. Rumored taxpayer revolts have been contributing to legislative unwillingness to provide the essential monies for station development. As an example, Wisconsin, which was to allocate \$6.6 million to creating a network of stations, has found proposed funds slashed to almost nothing; it looks as if Wisconsin may not have more than the three existing ETV stations for several years (unless attitudes change).
- # Lots of talk and pressure is being exerted in Congressional circles for manufacturers to provide equality in tuning between UHF and VHF in all-channel TV sets. Many existing and prospective UHF station owners are complaining that VHF outlets have a tremendous advantage with VHF channels on a well-developed turret tuner while UHF stations must be tuned on non-sensitive tuners which make it impossible to pre-tune and pre-set station choices.
- # Worry about land-mobile radio operators taking UHF TV channels 70-83 or sharing ch. 14-20 with television stations may not come to pass as earlier threatened. Recent studies have shown that the land-mobile frequencies are poorly allocated; with proper staggering and regulating it appears all existing land-mobile operations could continue to operate in their own bands without being forced to infringe upon the television band.

* * * * *

* A WORD OF THANKS *

* TO: *

* Stu Grade, *

* Ames, Iowa *

* Morrie Goldman, *

* Chicago, Ill. *

* Ron Azarkiewicz, *

* Chicago, Ill. *

* (our column *

* contributors *

* for May 1969) *

* * * * *

EASTERN DX

Morrie Goldman WA9RAQ
8046 South Euclid Ave.
Chicago, Illinois 60617

This column is for all television reporters east of the Mississippi River. APRIL
Deadline: 15th of each month

Reports for this month, or perhaps I should say the lack of reports this month indicate a sharp drop off in DX as compared with last month's packed column. No sign of Es was reported; MS was very poor and only a few notable trop openings occurred. Aurora, however, was observed with moderate strength on March 11 and again with greater strength on March 23.

Featured in the May 1969 issue of Electronics Illustrated in C. M. Stanbury's "The Listener," is the story of what will become Britain's first pirate TV station. C.M. suggests there may be an outside chance for US and Canadian DXers to log this station's test transmissions in the Spring when two aircraft will be equipped with TV gear by an American company inside the US. For all the details, pick up a copy. Also in the May EI, is an article on using better antennas for color and another on "Choosing an Antenna Rotator".

Next meteor showers: Lyrids, April 19-23
Aquadrids May 1

Look for possible
or 20th. Coincidence
last reported a

THIS COLUMN DELAYED DUE TO POST OFFICE ERROR.

f 12 per/hr
2 per/hr

on or 8th and again on April 19th.
position of the sun, this is 27-28 days after the
and March 23.

WJJY-14, Jacksonville, Illinois has already past their target date of February 1969 (see FCC News & Data, Feb. 1969) with no reports of operation as yet. With an expected power of 4500 kw and a 1610' tower, this one looks like a good bet for DXers all over the midwest, south, and east. Has anyone seen them yet?

Bill Draeb, Ellis Street, R. R. #2, Kewaunee, Wisconsin 54216 (CST)

Not much to report this month in the line of DX. Everything I did see was very weak with few exceptions. 2-16: Trop 1805 WUCM-19 2-18: Trop 1635 WUCM-19, 1640 WCMU-14, 1828 WKNX-25. 2-19: 1630 WUCM-19, 1632 WKNX-25, 1635 WCMU-14. 2-21: Trop 2035 WUCM-19. 2-26: Trop 1628 WUCM-19. 3-1 Trop 2145 WLFI-18, 2200 WICD-15, 2210 WLKY-32. 2-2: Trop 0639 WGEM-10, 0820 WICD-15. Also on 2-2 I noticed something strange. WTTW-11 was pretty strong here and caused CCI w/WLUK-11; the strange thing is they both appeared to be the same offset. This one really had me racking my brain before I made a positive ID. Has anyone else seen this? 73's and Good DX, Bill. (I've seen no other reports of such an occurrence and a call to WTTW produced no help, so its still a mystery. Can anyone help? MG)

Dave Pomeroy, 3516 Lansdowne, Apt. B, Lexington, Kentucky 40503 (CST)

As you can see from the following report, my second month in Lexington was not as successful as my first-- DX wise. However, I did see two additional Kentucky ETV stations and my new total stands at 23. 2-17: 9:30PM trop WKHA-35 Hazard, Ky. 2-18: 10:00PM WKZT-23 Elizabethtown, Ky.; also by trop. I am now working as a television producer-director at the University of Kentucky Television Center. Most of our work is intended for closed circuit distribution throughout the state-wide community college system, but some productions will be distributed by the ETV state network which has its headquarters here in Lexington. Verifications of reception can be obtained from local transmitter engineers if they can be found or reports for any of the transmitters can be sent to: Ronald B. Stewart, Director of Engineering (Thanks for the info, Dave; I'm sure it will be a help for our members. MG)
Kentucky Educational Television
600 Cooper Drive
Lexington, Kentucky 40502

Ron Azarkiewicz, 8453 S. Hermitage, Chicago, Illinois 60620 (CST)

Well, with the exception of two trop openings which produced no new stations, last month proved poor for DX. 2-16: 0545 WSPD-13 Toledo, Ohio, 0546 WLWI-13 Indianapolis very strong, 0550 WTTV-4 Indianapolis, 0623 WZZM-13 Grand Rapids, Mich. 3-19: 0640 WSBT-22 South Bend, Ind., unusually strong, 0646 WICD-15 Danville, Ill., 1620 WNDU-16 South Bend w/good strength, 1625 WSJV-28 Elkhart, Ind. w/good strength. Does anyone know of any stations carrying the Stanley Cup Hockey Games that are blacked out in Chicago?

Morrie Goldman, Editor (CST)

Things really dropped in DX activity since last month. Other than a couple fair trop openings on 3-17 and 3-19, no trop was seen. Aurora was observed with moderate strength across the low band on 3-11 with no IDs and again much stronger and into the high band on 3-23; again no IDs. On several days I forced myself to get up early for meteor scatter, but even this received negative results.

Not much more this month, except for hope for better things next month!

73, Morrie WA9RAQ

STATION BREAK

Editor: M. Goldman
8046 S. Euclid Ave.
Chicago, Ill. 60617
Deadline: April 18

Rates: Member (non-commercial) 2¢ per word. Non-member (non-commercial) 5¢ per word. Commercial 8¢ per word; other ad rates, such as for custom, half, or full page ads, upon request. ZIP code may be included free of charge. WTFDA reserves the right to refuse any ad which we feel may be misleading to our readers or in poor taste.

WANTED: Any or all AIPA bulletins. Bill Heusmann, 3116 Sangamon Street, Steger, Illinois 60475

WTFDA still has a limited quantity of some VHF-UHF Digest back issues. To members, the cost is only 25¢. WTFDA, PO Box 5001, Harbor Station, Milwaukee, Wisconsin 53204

YOUR ham or SWL call letters on a rubber stamp, nearly 1/2" high. Call alone, \$1; in combination with your address, city, state and ZIP, \$2.75.

XACTO type hobby razor knife blades. 25¢ per package of 5, or 3 packages for 50¢, Postpaid. M. Goldman, 8046 S. Euclid Ave., Chicago, Illinois 60617

WPE9TV

P. O. BOX 5001, HARBOR STA.
MILWAUKEE, WI. 53204

WTFDA is holding its first annual convention on Memorial Day Weekend, May 30, 31, June 1 in Steger, Illinois. Details in this month's CCI column. Don't miss it!

Extra gear or magazines laying around? Sell them with a VUD ad! VUD ads are low in price and circulate to over one hundred DXers each month. Perhaps you're looking for a magazine back issue or a cheap TV signal preamp; whatever your needs, try a VUD ad. When answering VUD ads, always say you saw it in the VHF-UHF Digest!

An Important Notice:

In order for WTFDA to bring you quality up to date TV DX photos each month, we need your help. Send to headquarters any DX photos you feel are good enough to reproduce or send along the original negative and we'll make the print on high contrast photographic paper. This usually gives a higher quality print for reproduction and is preferred. A self addressed stamped envelope would be appreciated for prompt return.

EASTERN TV DX ★

Morrie S. Goldman WA9RAQ
8046 South Euclid Avenue
Chicago, Illinois 60617

This column is for all television reporters east of the Mississippi River . . .
June Deadline: May 15, 1969

As you've probably already noticed, there are two EDX columns this month: both last month's and the May column which you're reading. What's the reason for this? Well, as was mentioned in an addition to last month's column, the Post Office is to blame! It seems that some misguided postal employee felt that no such box number as 5001 existed at "Harbor Station" and after kicking around the column stencils for a week or so returned them to me. Needless to say, by now it was too late for inclusion in the April Digest.

This month Bill Draeb reported reception of WTIU-30 Bloomington, Indiana proving they're finally on the air. Bill's logging is believed to be the first occasion that WTIU has been seen by a DXer.

WTFDA's first convention appears to be well on the road to success. If you haven't made plans yet to attend, there's still time. Details on accommodations and activities are elsewhere in this issue. Don't miss it!

With the DX months now upon us again, the size of this column will most probably greatly increase. This means more editing to conserve space. As was done last year, the apparent size of the column will be assessed so that as much detail as possible can be included in each report; so in a large month, such material as distance, signal strength or program content may be deleted. Include as much information in your report as you desire and as much of it as possible will be included. Thanks.

Next Meteor Showers: Aquarids - May 1-6 - expected hourly count: 12.

Centids - May 19 - 21 - expected count is not known.

DX during late March and early April showed to be quite an improvement over last month. Numerous trop openings on good strength were reported along with the strong aurora of March 23 and 24. Finally some of our DXers reported scoring on some aurora induced Es. As predicted, aurora also showed up on April 8th, but with weak strength.

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Mark Lewis, 224 Honiton Street, Downsview, Ont. CANADA (EST)

3-22: Some fairly strong signals with good color from WUAB-43 Lorain, Ohio, WJET-24 Erie, PA and WSEE-35 Erie. WAKR-23 was noted with weak signals. My tuner is broken in the High band UHF and it took some doing to get Lorraine in here for even a few moments, but the color was strong. On vhf, at 11PM WICU-12 was really blazing in here almost like a Toronto local, with CFPL-10 London pounding in. Also noted was WWNY-7 Watertown NY; I surprised Wayne with that one, he came over to get some CRTC news. I was up late that night and by 2 caught WGR-2 Buffalo s/off. At s/off WGR was unbelievable in signal strength. With the Delhi 8282, I never worry about poor signals on 2 & 7, but their intensity was something else that night. WHEC-10 Rochester, NY was in with strength almost equal to CFTO-9 here in Toronto at S/off. I also receive someone's CATV feed converting CBLT-6 Toronto to ch.10; probably about 5 miles NE of here. Luckily it's not too strong, and only comes in when I aim the antenna that way. When CFTO is on, there is no trace of it. Thank goodness there's nothing worthwhile DX wise out there. 3-23 Auroras, the first for me were really strong here. While at a friends house, I noticed offset on 2, 3, and 4 even tho Buffalo had a fantastic signal. I knew that this wasn't from the south, but at 3pm thought little of it. When I got home at 5:30 there was just too much coming in to even get a picture, but as luck would have it, at 8:57 PM, I logged CKBI-5 Prince Albert, Sask. (new) with adequate signal strength to get a decent color picture on Ed Sullivan at 9pm. I wasn't

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able to log any more and went to bed early. At 1030 I checked the channels and WICU-12 Erie was coming in with only slight traces of 24 & 35 Erie. WQLN-54 Erie was in quite well. My UHF part of the 8282 was installed wrong. It looks like a loop is shorting out to the corner reflector. The AR-22R performed great in winds gusting to 40. 73's and lots of DX, Mark. (Glad to hear you pulled CKBI-5 out of the aurora. Let's hope there's more to come! MG)

Jerry Pulice, 143 Gibson Avenue, Staten Island New York (EST)

Finally traced down un-id "KSTL-3" of 7-8-68. I sent photographs of the ID panel to the three most likely stations and rcvd a verie from KARD Whichita, Kansas. It seems the symbol of the Kansas State Network (KSN), resembles KSTL in the way the letters are joined together. It even looks like KSTL on the station letter head. I wonder if this violates FCC rules, as no station ID was shown. 3-24: auroral QRM noted at 2030 on chs. 2 & 3. When I looked outside, the whole sky was glowing! Only aurora I've ever seen. On the radio the next day, the NX said it was the most brilliant aurora seen in the area in 25 years. Strange, since much stronger auroral QRM has been seen, but with no visible glow. Recently I worked over a 6ER5-6cg8 TV tuner into a preamp for DX. Since it is a tuned RF amp, it really reduces WCBS's slop over on KYW-3. To tune in the booster I first set the booster to the desired channel and adjust the antenna slug so that the RF amp oscillates. Now with a battery and pot, a few volts of bias are applied to the tuners AGC terminal to just stop the oscillation. Gain is now very high, (judging by the claimed 8 db gain of the dual 6HA5 winegard booster. During the year's first good trop (2030 4-4-69), the new booster had a chance to prove it's worth. WTEV-6 WJAR-10 & WPRI-12, all R.I., were in fair to good with it, although were not visible without. Total cost of the project was \$3.00 for the tuner, which proves there is still something to be said for the "build it yourself" school of thought, hi. 4-14-69: 0630 WBAL-11, WJZ-13 (180), WTOP-9 (180). Finally got WNCT-9 (400) w/tp and an ID photo. Also saw new WWBT-12 (280). If I hadn't read about the call letter change from WRVA in VUD, I would have had fun trying to find in Jones R-TV. Hope 1969 trop break some records! 73 & best DX, Jerry. (The aurora of the 23rd - 24th was indeed something as you mentioned. Former TV DXing great, Bedford Brown, of the weather bureau informed me that the aurora was observed deep into the south. Sounds like your home made booster is working out well. This type booster seems to do the most good on older sets. How about writing a construction article on your booster for the Digest? MG)

Bill Draeb, Ellis Street, R. R. #2, Kewaunee, Wisconsin. 54216 (CST)

I had a good trop opening here on April 3rd which gave me three new stations (all on UHF). In all there were 46 UHF stations in here that day and if I'm not mistaken I think that's the most the most I've seen in a day. On the evening of March 23 there was a good aurora opening here which gave me my first skip of the year. 3-13: 1854 WUCM-19, 1856 WCMU-14. 3-15 0729 WKNX-25. 3-18: 1900 WUCM-19, WCMU-14. 3-19 1858 WLFT-18, WICD-15, WCAE-50, 2000 WAND-17, WEEK-25, 2100 WIRL-19, WMBD-31, WEEQ-35, WICS-20. 3-23: 1625 WCMU-14, 1700 WUCM-19, 2005 As CFRN-3, CBXT-5, 2050 Ed Sullivan on ch.3, minus offset on channel 5, UnID on ch.2. 4-3: 1235 WANE-15, WPTA-21, WKJG-33, WLFT-18, 1610 WICD-15, 1630 WAND-171636 WEEK-25, WMBD-31, 1640 WICS-20, 1651 WIRL-19, 1657 WUST-16, 1700 WFIE-14, 1704 WEHT-25, 1708 WLKY-32, 1735 _____-35 Madisonville, KY (NEW) (didn't catch their call), 1737 WKZT-23 (Elizabethtown, KY (NEW)), 1740 WTIU-30 Bloomington, Indiana (NEW and first stn seen on that channel for me) 1800 WKYT-27 1805 WYTX-19, WUCM-19, WKNX-25, 1845 WCMU-14, 1911 WDHO-24, 1916 WAKR-23, WVIZ-25, 1918 WKBD-50, 1931 WXON-62, 1932 WTVS-56, 1954 WUAB-43, 2018 WKBF-61, 2020 WFMJ-21. 4-4: 0450 color bars-8 to SW, 0458 WJW-8, 0526 WTRF-7, 0530 WIIC-11. My total is now at 394 with 105 on UHF. 73's and good DX, Bill.

David Cox, Box 16, Carrollton AL 35447 (EST)

Not much in the way of DX. YSR-2 broke the ice on 4-2 @ 1930 for the only DX seen since 2-8. Warmer weather has brought increased EGW and I'm hoping there is a trop opening in the making. Recently bought a used Alliance U-83 rotor; am using with my 7 element LP and another antenna that was given to me. It has driven elements for 6 and 13 and six directors for 13. Veries in from WLWB-10 Miami and WLGY-10 Tampa for

my two best tropes and from KTVI-2 for a new state and station. Hope I can make it to the club convention this year; money is the main object right now. That's about all from here, BEST of DX to ALL! (It really is remarkable how often you see YSR-2! If only some of that LA DX would work itself up here more often! Hi. MG)

Gary A. Olson, 5901 W. Brown Deer Road, Apt. 107, Brown Deer, Wisc. 53223 (CST)
April 2: Improving tropes seen. April 3: WTLX-10 (NEW) logged at 7 AM. Also logged were WOOD-8 and WTVO-17. At 7 PM WXXW-20 (new) was received. Received later were WHA-21, WKOW-27 and WMBD-31, WEEK-25, WMTV-15. The tuner in my set is now fixed. The picture seems to have most of its old snap back. So, I guess I'm ready for a big DX season (hi!) with my VHF and UHF antennas mounted about 20 feet off the ground in a tree outside my window. Despite the VHF locals, ch. 2 is open for skip and there's always something new happening on UHF, so maybe I can get my log to a decent level this summer. 73's, Gary.

Rod Luoma, 15437 Asbury Park, Detroit, Michigan 48227
 First news first, which means I've finally succumbed and purchased a color set. It's a 23" Zenith with AFC, solid state IF amplifiers and a not usual (unfortunately) low cost audio system including a 5" x 3" speaker in a beautiful Early American console. I intend to hook it into my stereo system soon, as it really isn't much compared to my old Satchell-Carlson. Luckily there is large space in the base of the cabinet where I was able to install on a rack my four "Trap-Ease" units which can be lowered for DX-ing and raised out of sight for esthetic purposes. I still like my old Blonder-Tongue BTU-25 for UHF because it is slightly more sensitive than the set's UHF tuner, but the real gain is that with the BT Unit, I know what channel I'm seeing, having inscribed markings on the circular tuning dial for every channel I've gotten so far. The calibration of the UHF dial on the Zenith is atrocious! You can hardly tell which local channel you're on. However, for family use the AFC does a nice job of snapping in the UHFers just as AFC on an FM tuner does. The selectivity on this set is very good, especially on adjacent channel audio rejection. Now to the reception department. April 3 brought in a good UHF opening, bringing in two new stations. Due west was the hottest, pouring in the Madison, Wisconsin group of WMTV-15, WKOW-27 and new WHA-21 at about 325 miles. Also new, from Fond du Lac Wisconsin, KFIZ-34. From Illinois came WFLD-32, WTVO-17 and WCEE-23 from Chicago and Rockford-Freeport areas respectively. WSBT-22 South Bend made a showing along with Fort Wayne's trio on 15, 21 and 33. The Cleveland-Lorain bunch on 25, 43 and 61 were good and 21 and 27 from Youngstown were poor. April 6 opened the area to the South (around 10pm when I caught it). Good in color was WLKY-32 Louisville at about 310 miles. Heavy CCI on WTOL indicated that WHAS-11 was back there fighting, but couldn't cut through. New WSWO-26 Springfield, Ohio and WXIX-19 Newport KY put in fair signals along with WKTR-16 Dayton, WIMA-35 Lima. Good to excellent video was seen on WAKR-23, WUAB-43, WVIZ-25, WKBF-61, WEWS-5, WKYC-3 and WJW-8 from the Akron and Cleveland areas. Youngstown and Erie, PA UHFers were fair to very poor. UHF total is now 78 and 102 on VHF.

Bill Heusmann, 3116 Sangamon Street, Steger, Illinois (CST)
 The past two months have been the nadir of the DX season. Last month there was absolutely nothing to report. Now, finally there is a little tropes activity. Having logged most of the more common MS stations, I haven't had the ambition to get up early, except for a shower, which is rather rare around now. The best thing that happened recently was the long delayed installation of my "Transcoupler" yagis. The installation consists of ten element high band and low band antennas, stacked, with an eight bay UHF antenna between them. The UHF antenna undoubtedly impairs the yagis performance, but putting it above would have put quite a bit of mast above the rotor. Still, I'm quite satisfied with the performance. Gain is better than the old Knight 3-Star. With weak or no tropes, something is always there from cities like Indianapolis, Milwaukee, Champaign, etc. Conditions have been so poor, that I really haven't had too much chance to check the performance. Directivity is definitely better. The usual odd lobes of a Yagi are readily apparent, but they seem to be less numerous and more predictable than those of the 3 star. I'm still, of course, using a Jerrold "Powermate and Winegard AP-220 N booster for UHF and VHF respectively. The powermate

overloads something awful from the locals, but when I'm facing away from Chicago, or the locals are off, it certainly helps. All of this is feeding into the usual old RCA CTC-12, color set. Now, though, it's unofficially mine; my father having bought a new Magnavox TV stereo combination and donating the RCA set to me for a token 98¢. DX noted recently is as follows: 4-6: 11:30 KFVS-12, Cape Girardeau, MO. UnID CBS audio on 13, KCRG??? 2230 WHO-13 Des Moines, IA with vry hvly CCI at times; WHAS11 Louisville, KY and what surely must have been WKRC-12 Cincinnati. 4-11: Fairly good trop. 1950 WMKG-54 Muskegan, MI, 1953 WLFI-18 Lafayette, Indiana, WMTV-15 Madison WI and WICD-15 Champaign, Ill., 2040 WICS-20 Springfield, IL. 2045 WPTA-21 and WKJG-33 fair. 2050 WTVT-36 Milwaukee, WI Best in ages. Tent. KFTZ-34, Fond du Lac, WI just barely synced. 2231 WAND-17 Decatur, IL. 2256 WUSI-16 Olney, IL w/ RETMA tp, soon off. 2335 MS burst on 11???? Sync bars popped in for 1/4 second - possibly trop conditions or quirk of tuner. 2253 WILX-10 Onondaga, MI. 4-13: WLUK-11 Green Bay, WI w/s/off. WKOW-27 Madison, WI fairly good. Thats all. Maybe next month will be better. It can hardly be worse!

Morrie Goldman, WA9RAQ, Editor (CST)

3-23: Strong aurora noted, with some sign of Es... No IDs. 4-6: trop 11:25pm noted -0- offset on WKZO-3 SE; WHAS-11 Louisville; KPLR-11 St. Louis; WKRC-12 Cincinnati; KFVS-12; 11:45PM WICS-20 Springfield, IL; WIRL-19 Peoria; WEEK-25 Peoria; 11:53pm WQAD-8 Moline, IL. 4-7: 12midnight KFVS-12 s/off; WMBD-31; 12:50AM very weak ch. 5 signal to SW -- no data; 7:00AM KFVS-12 and WTOL-11. 4-11: 11PM to 12:05 AM WICD-15 Champaign, IL; WMTV-15 Madison, WI, both very strong; WLFI-18 Lafayette, Ind.; WICS-20 Springfield, Ill.; WMBD-31 Peoria; WAND-17 Decatur, IL; WTVT-36 Milwaukee. 4-16: 11:00PM to 11:30PM un-id ch 14 SW (WJZY???? - if they're on yet?). 4-20: 12:25AM Same pgming as WNDU but on about 43 ESE --could have been a harmonic-- anyone know if they have a repeater?; 1:20AM W71AE-71 La Salle, IL. running same pgming as WMBD-31. My thanks go out to Bill Heusmann for this one for pointing it out to me in a phone call. Signal was very weak. Also seen from about 11:30PM to 1:30AM were the following: WMTV-15, WICD-15, WANE-15, WNDU-16 (much stronger than usual); WAND-17; WLFI-18, very strong WTVT-18, WIRL-19, WPTA-21; WCEE-23, WEEK-25, WMBD-31, WEEQ-35, UnID-50 east - probably Detroit and an UnID s/off at 1:18 ESE on ch 21 - didn't look like WPTA-21.

That about wraps up another month. One late note tho, Es was reported on April 25 with good strength. Details next month.

73 and best of DX to all, Morrie WA9RAQ

WTFDA SPECIAL NOTICE!!!

We at headquarters sincerely regret the lack of a Canadian Station News column and an FCC News and Data FM column this month. Apparently Wayne Plunkett's stenils did not penetrate the mails from Canada as at deadline they were not received here.

Next month there will be an FCC News and Data column for FM -- we promise!!!

ATTENTION FM DX FANS

We would like to see the FM section of our VHF-UHF Digest expand in the future. Those of you who would like to see more FM news, reports, records, or what have you are encouraged to write WTFDA headquarters with your ideas and suggestions. Most of all, those of you who would be willing to write or edit a column for the club are strongly urged to let us know of your willingness to help improve the coverage of FM in the bulletin. Please send comments to Gary Olson or Ferdinand Dombrowski at headquarters.

Bill Bens 5575 Spruce Wood Drive Cincinnati, Ohio 45239

Hello again. I sure hope everybody has better luck in March than I did. Only recent activity here was the week before Easter. Worst of all, I missed the big aurora opening of 3/23. All I caught was it tapering off around 2200. On 3/31 I noticed unkn WDSW 97.5 Champaign, Ill. in like a gangbuster so I figured something was up, but only newie was WRBR 103.9 South Bend, Ind (3kw @187 mi) @1858 EST w/sports o/WHEM. No other activity until 4/4 @0029 when WYDD 104.7 Pittsburgh, Pa. in weak, WONE off. At 0700 I finally caught WKNT 100.1 Kent, Ohio (3kw @218 mi) w/ABC nx in briefly o/WVCM. I've noticed semi-local WOXR 97.7 Oxford, Ohio off quite a bit lately. I guess they're in the process of moving studios and xr across the state line to highest point in Indiana. Totals now at 310. All FM DXers feel free to write--I'll answer. 73.

Now more from the wit and wisdom of Bill Bennis, with this later report. Hi. FLASH! Another big trop opening here even bigger than the 1/20 biggie, although it didn't last as long. Distance almost up to 600 miles was heard! It all started around 1900 on 4/6 but wasn't able to get to the FM rig until past 2300 EST. All I can say is wow!! FIVE Wis. State Net. stns. were hrd right off the bat: WHRM 91.9 Wausau (468 mi) @2329 w/ID and nx, WHHI 91.3 Highland (396 mi) @2345 catching beginning of s/off, and then some quick work caught the end of s/off of WHKW 89.3 Chilton (377 mi). Also hrd. were unkn WHA 88.7 Madison and WHAD 90.7 Delafield. Unkn WOC 103.7 Davenport, Iowa was taped again @2334 at the end of nx w/fantastic signal. WWTW 92.9 Cadillac, Michigan (352 mi) @2358 s/off. 4/7 WKFR 103.3 Battle Creek, Mich @0000 w/progressive rock. Unkn WIAL 94.1 Eau Claire, Wis. (520 mi) was in great w/cw mx again for 5th time. Also hrd some St. Louis unkn KMOX, KRCH. And the biggest surprise and disappointment of the opening was the following: At 0003 I tuned to 99.1 and hrd wx and sports for Minn. After this they went straight into mx w/no ID. I know I had KEYC 99.1 Mankato, Minn at 590 mi! I waited impatiently until 0015 for an ID, but all there was in the mx break was a PSA for USO. I could tell it was starting to get weaker and I really got desperate because this would have been my best catch, so I called KEYC hoping maybe I could get the announcer to ID before they faded out. I got through only to find out the station is completely automated! I told the guy I talked to what I heard and he checked the log and confirmed it was them. He even told me when the next ID WOULD BE, but they were gone by then. So it won't go in my log since I have a policy that all DX logged must be accompanied by a taped ID. Totals now at 315 and rising. 73.

AIC Glenn Hauser Box C 8638 Lowry AFB, Colorado 80230

Greetings again. I noted the discussion on format. I would prefer to have extensive DX listed in tabular format, line by line, rather than in paragraph. It is too hard to dig info out of paragraphs. Actually, I think we'd all be better in reporting however we want to, and having it show up in the column in that particular way. No use forcing everything into the same old mold. (amen RWW) Here's an abbrev. that would probably throw some of you if I didn't explain: CPC stands for Courtesy Programs Committee. MW clubs have long been active in arranging "DX TESTS" on hard to hear stations, particularly daytimers at night. This has seldom been done on VHF because of the unpredictability of openings. I think it should be done to a limited extent in certain cases, ie college stns and meteor showers. A great many FM stns. in the 88-92MHz band close down completely during the summer, thus they rarely have a chance to skip out during

NOTABLE QUOTE:

'California has the San Andreas Fault, among others.'
'First Tuesday' HBC-TV

FM DX deadline 10th of each month

Editor: Roger W. Winsor
718 N. Fremont Road
Valparaiso, Indiana
46383

FM DX

Things have been picking up a bit as warm weather is now starting to set in. Ye editor hasn't had too much time to DX, what with many hours of overtime at the EJ&E Railroad, tnx to their extra board, but the \$\$\$\$ sure help. Maybe I will be able to buy a tuner in the near future. Items of midwest interest: WPOK-FM 103.1 Pontiac, Illinois will be going on the air soon w/3kw, per phone conversation with CE. Their antenna is side mounted on the 1080 AM tower, and they're killing local WINWI daytime as close as Gary. Also, WOPA-FM 102.7 has gone stereo, plays old rock records from the 50's and early 60's, and plan to change call letters to WGID. WZZM-FM Grand Rapids, Mich. 95.7 is now RR and is up to 50kw per phone conversation. Now to DX:

Gil Morgan 133 South Hardwood Street Orange, California 92667

Hi everyone! This is my first report to the FM section. I've been DXing the FM band for a year and a half. The equipment used here is a Lafayette LT-425T tuner and TV rabbit ears. DX is as follows: all times PST, 3/22 KUOR 89.1 Redlands, Cal. @1831 w/pop mx, KUCR 88.1 10 watts Riverside, CA @0121 on 3/23 and about 31 miles. 3/24 KBBY 107.9 Bakersfield, CA @13:09 128 miles over mtns w/cw mx. 3/28 KXFM 99.1 Santa Maria @15:19 thru KBBL 170 miles, only 3.2kw? (1969 VJ #5 says yes Gi. RWW), KSDS 88.3 San Diego 830 watts @1600 83 miles w/good signal. Two call changes also hrd, KWST 105.9, ex KBMS and KGRV 98.3 ex KBOB. Totals now 75 logged. 73 and good DX.

Hank Holbrook 7211 Chestnut Street Chevy Chase, Maryland 20015

All DXing done from our cottage at Fair Haven, Maryland overlooking the Herring and Chesapeake Bays 15 miles below Annapolis, Maryland. FMwise the 1969 season is off to a good start here with the best opening noted on February 21st. 2/21 WDYL 92.1 Chester, Pa. 3kw @0937 @110 miles. New stn and verie by letter. WWDB Philadelphia, Pa., ex WHAT 96.5 12kw @13:27 @120 miles. Verie by letter. WHHS 89.3 Havertown, Pa. 115 miles 8 watts @1433 by far their furthest report. Good sig. for over 3 hrs, lowest powered QSled here. WHOV 88.3 Hampton, Va. listed as 10 watts @1629 @130 Miles rpt. covered 1 hr reception. No answer yet. Finally on 2/21 WTJU 91.3 Charlottesville, Va. @2011 w/750 watts @125 mi., verie by letter already. 3/21 WLPL 92.3 Baltimore, Md. ex WSID @2229. 3/22 WDWL 92.1 Vineville, NJ 3kw @1015, 95 miles, verie by letter already.

Bob Astmann 191 Louvaine Drive Kenmore, New York 14223

This is my first FM or TV report since last November. I finally got back to FM DX this week since I am home from college for a short vacation. Only 1 new stn. logged, that was WOTT 97.5 (170 Mi) Watertown, N.Y. Others noted, but hrd. before: CKWW 88.7 Windsor, Ont. (220 mi), WNOB 107.9 Cleveland, Ohio (180), WRRN 92.3 Warren, Ohio (90 mi) and a few more not worth mentioning. All DX was done in the afternoon when the dial is crowded with many many locals. Local WYSL 103.3 has gone underground & AN. WBFO 88.7 has expanded their schedule, but still are off until 2PM Sat. PM. Totals so far 85 logged, 61 verified. Rx is RCA AM/FM/TV combo w/outdoor antenna and rotor and GE 15 trans. AM/FM w/Rembrandt stereo king phones.

WESTERN DX

May 1969

Dennis Park Smith
Music Department
University of California
Santa Barbara, California 93106
Deadlines: 12th of each month

Believe it or not, we have some DX to report this time, both from tropics and Es propagations. Not a great deal, but some. As reported to this column, Es occurred on these days in March: 1, 20, and 25.

Stanton K. Wigh, 2165 14th, Kingsburg, California 93631

Can't say there was a lot of Es this month; some is better than nothing, though. On 3-1 I logged KNOP-2 Nebraska, 3-20 KMID-2 Texas, 3-25 at 1827 PST I logged XHCH-2 in Chihuahua, Mexico interspersed with KMID.

Trops: 3-29 @ 2300 PST had a fair opening on hi-band V. Logged: KXTV-10 Sacramento, KSBW-8 Salinas, KNTV-11 San Jose, KOVR-13 (these stations usually 20% snow, all were solid, no snow, and wiping out a channel on each side!), KQED-9 and KGO-7 San Francisco were also in but obliterated with adjacent channel.

Departing from the TV-DX scene for a moment if I may, it has been noted by a number of reliable observers that the level of solar activity over the past two months has been on the increase. The predicted peak for cycle 20 was thought to have occurred last summer. It doesn't look that way now, however, with the level of solar activity as it is.

The current theory, as reported in "The World Above 50 Mc." column, March QST, is that cycle 20 MAY be acting like cycle 17 which had two peaks coming some 12 months apart. The same article goes on to give a rather optimistic prediction as far as smoothed sunspot counts go also (200). While I won't be so bold as to say that there will be an enormous number of sunspots, cycle 20 has made a turn for the better. Undoubtedly more information will be made available at a later date so those who are interested in cycle 20 should keep their eyes open.

F layer activity, observed here in March, had the MUF above 50 MHz on the 2, 16, 24, and 30 to such places as Hawaii, Chile, Argentina, Uruguay, and backscatter to most states in the southern U.S. and the Dominican Republic. There was also an aurora, felt as far south as Kingsburg, on the 23 of March. I didn't see anything on TV here but maybe someone further north did. 73.

(Yours was the only Es this time, Stan. Thanks for the info on VHF activity; possibly Bob has made note of this also but don't know as of this writing. dps)

AIC William G. Hauser, AF 15935294, Box C 8638, Lowry AFB, Colorado 80230

This spring I became active in BCB CPC work, i.e. arranging DX tests, and discovering how satisfying it can be to help other DXers pick up a station normally difficult or impossible for them.

And I think the idea of DX tests should be applied to VHF and UHF as well. It would be particularly useful during meteor showers, when burst after burst may reach the high band...but no stations are on during the wee hours to get "bursting." In the AIPA's heyday, a few such tests were arranged; I think it's time again.

It's hard for a hot MS DXer to sacrifice a local channel (or 3), so why not write to faraway stations you'd like to get, say in a rare state, hopefully not near any other active MS TVDXer. I suggest we concentrate on the high VHF band, and the lower edge of UHF. There has been some MS observed on UHF; the more stations we can get to test, the better the chance for more. Emphasize the scientific value of such observations. Don't bother with low powered stations.

I suggest that we concentrate our efforts on the early morning of Tuesday, 12 August 1969, when the Perseid shower will peak. Stations should run either a TP or ID slide, with large, easily legible, high-contrast call letters. The audio portion, to be most effective, should be a continuous cartridge giving NOTHING but the call letters, over and over. Thus on a single burst lasting a second or two, an ID is possible, even likely. Try to persuade the station to remain on for the longest period possible--perhaps never leaving the air between evening and morning programming. We also might limit ourselves to certain channels, so we will not needlessly switch all over the band, say 7 and 8, 14 and 15.

NOW is the time to get started--as soon as you read this. Info on which stations will test should be in the JULY VUD, to reach everyone in time, so you've got about a month to confirm arrangements. I hope those with experience in BCB CPC work will try their hand at this, during the BCB "off season." As well as everyone else who would like to. If you're not equipped for highband/UHF MS DX and would have nothing to lose if your local stays on all night, by all means contact them personally and see about a test for the rest of us! Please write me on how your efforts turn out or for any advice on how to go about arranging tests. Until the next, 73 de Glenn.

(Anyone interested in arranging such tests could have info to WTFDA headquarters by late June to be in the July VUD in time to reach all for the August shower. dps)

Stu Grade, 2828 So. Cornelia, Sioux City, Iowa 51106

Good conditions and Easter break teamed up to provide a short vacation from studies in the first part of April. The evening of 4/5 saw KTVH-12 and WIBW-13 breaking through the snow with a good South path opening up. These conditions prevailed through Easter Sunday. At 0745 CST, KTVH-12's TP was 90% clear with no QRM. Later on @ 1652 new *KHNE-29 Hastings made it (parallel to other Nebr. ETV stations except KYNE-26 which wasn't on). The evening brought KTSB-27 Topeka very good @ 2200. Surprisingly, the KGIN/KELO complex on 11 gave up dominance of the channel @ 2100 as new *KTWU-11 Topeka broke through with a 70% picture and KGIN audio. I knew it was just a matter of time until I would get KHNE, but KTWU has been eluding me since 1965. Other stations noted on 4/6: WIBW-13, KHOL-13, KHPL-6, KDLO-3, KHAS-5, KOLN-10, KVFD-21. Back at Ames, I have a different room in the dorm that faces south and my FM reception is much improved. In Des Moines, KDIN-TV is the new call for the Iowa ETV Network. Channel 12 at West Branch will be on by 1/70. ETV KRNE-12 Merriman, Nebraska is also on the air now. 73's and Best of DX.

(Thanks, Stu, for your early April VHF-UHF tropo results. dps)

Dennis Smith--like Stu, your editor was home between school terms, from 25 to 31 March in Wasco, California. A mild spring with moist air, apparently with a dry layer above it, produced some ducting (tropo) from the 25th (possibly before) to the 29. VHF TV and FM were slightly above normal and UHF was much above normal as is typical. The following of interest was seen during this time.

KTXL 40	Sacramento	215 mi.	Fair-good V/clear A
K73-- 73	Exeter	48 mi.	Fair/clear Translator of KQED-9
K76-- 76	Hanford	54 mi.	Poor/fair Translator of KQED-9
K79BU 79	Porterville	38 mi.	Fair/clear Translator of KQED-9

These translators were even better on eve of 28 March along with another KQED xltr, probably K82BM Coalinga, apx 65 mi, very poor V, no audio. Transmitter locations to the above three (73,76,79) have been determined--so from Stan Wigh in Kingsburg, they are about 30, 15, and 40 miles respectively.

In addition, KAIL 53 Fresno (95 mi, fair/fair) was seen on 25th eve, KLOC-TV 19 Modesto (170 mi, very poor/very poor) on 26th eve, and new CBS station KMST 46 Monterey (145 mi, poor/fair) was noted for less than a minute at a time on 26th at 0802 and 27th at 0735 & 0758 PST.

As expected, when tropo conditions died down after the 29th, 76 disappeared; 73 and 79 remained consistent--though weaker--because of hill locations.

These were seen on my 1965 Zenith 15" B&W portable with Blonder-Tongue BTX-11A UHF Converter and 1954 Walsco 2-bay VHF-UHF Stacked V antenna 46 feet above ground. Two new loggings raise total to 137.

Back here in coastal southern California, the winds and rain have finally quit for the season, and the inversion condition is returning as of 17 April (for the same reason smog is now building up in Los Angeles) with resulting increasing VHF-UHF strengths from as far as San Diego and Tijuana at 200 miles.

Best of DX to all

Dennis

STATISTICS

EDITOR: Glenn Hauser
 Box C 8638, Lowry AFB
 Colorado 80230, USA.

MAY
 1969

New reporter. Jeff Kadet. Thanks, Jeff! At this rate, next month we'll have only half a new reporter, which could prove rather painful. Why not reverse the trend?

CHANNEL 9 SKIP TVDX RECORDS

Call	Location	Prop	Miles	DXer, Location	Comments
WLOF	Orlando FL	MS	1020	John Cody, Middletown CT	now WFTV
WSOC	Charlotte NC	MS	790	Bill Draeb, Kewaunee WI	
CMGQ	Matanzas Cuba	Es	1440	Ed Sparks, Odessa TX	(CMBF)
XEQ	Paso de Cortes Mex	Es	830	Richard Lowry, Temple TX	
YVLV	Maracaibo Venezuela	Es+	2130	Bedford Brown, Hot Springs AR	also tropes(?)
TOTAL for 5 stations			6210		

CHANNEL 9 TVDX RECORDS (Trops, groundwave, unknown)

WTVY	Dothan AL		565	B. J. Bingham, Festus MO	now ch 4
KGUN	Tucson AZ		230	Glenn Hauser, Langmuir Lab NM	
KHJ	Los Angeles CA		115	Dennis Smith, Wasco CA	
KIXE	Redding CA		195	Dennis Smith, Walnut Creek CA	
KQED	San Francisco CA		220	Dennis Smith, Wasco CA	
KBTV	Denver CO		495	Carl Dabelstein, Omaha NB	
WTOP	Washington DC		1010	Ed Rugel, Independence KS	
WLOF	Orlando FL		685	Ray Foster, Monroe LA	now WFTV
WTPM	Columbus GA		415	Ray Foster, Monroe LA	was ch 28
WVAN	Savannah GA		380	David Cox, Carrollton AL	
WGN	Chicago IL		685	Robert Cooper, Oklahoma City OK	
KCRG	Cedar Rapids IA		555	Robert Cooper, Oklahoma City OK	
KVTV	Sioux City IA		635	Bill Meers, Lagrange KY	now KCAU
WAFB	Baton Rouge LA		565	Glenn Hauser, Enid OK	was ch 28
WWTV	Cadillac MI		400	Frank Hill, Gallipolis OH	was ch 13
KMSP	Minneapolis MN		605	Bill Meers, Lagrange KY	was KEYD
KMBC	Kansas City MO		820	Robert Seybold, Dunkirk NY	
KETC	Saint Louis MO		270	Gary Olson, Barrington IL	
K09HY	Glasgow MT		0	Dennis Smith, mobile	of CKCK-2
WMUR	Manchester NH		390	Robert Seybold, Fredonia NY	
WOR	New York NY		805	Barney Rauch, Peoria IL	was in NJ
WNYS	Syracuse NY		390	Frank Merrill, Milan MI	
WSOC	Charlotte NC		675	Carlton Howington, Homestead FL	
WNCT	Greenville NC		750	Barney Rauch, Peoria IL	
W09AD	Waynesville NC		0	Dennis Smith, Waynesville NC	of WSPA-7
WCPO	Cincinnati OH		615	Ed Rugel, Independence KS	
WXEL	Cleveland OH		575	Richard Baker, Moberly MO	was ch 8, WJW
WSTV	Steubenville OH		830	Ed Rugel, Independence KS	
KWTV	Oklahoma City OK		1070	Robert Seybold, Fredonia NY	
KEZI	Eugene OR		95	Michael B. Northam, Beaverton OR	
KXAB	Aberdeen SD		275	Fred McCormack, Des Lacs ND	
WTVG	Chattanooga TN		700	Glenn Hauser, Enid OK	
KRBC	Abilene TX		445	Ray Foster, Monroe LA	
KLRN	Austin TX		165	Jack Keene, Houston TX	
KTSM	El Paso TX		155	Glenn Hauser, Langmuir Lab NM	
KVKM	Monahans TX		420	Glenn Hauser, Enid OK	now KMOM
KVOG	Ogden UT		20	Elwood Walter, Roy UT	now KOET
WAOW	Wausau WI		360	Ken Butterfield, Plymouth MI	
CKX2	Melita Man		80	Fred McCormack, Des Lacs ND	properly CKX TV 2
"CBOFT"	Ottawa Ont		230	Richard Nieman, Buffalo NY	
"CBFOT"	Timmins Ont		460	Frank Merrill, Milan MI	

CFTO	Toronto Ont	410	Bill Draeb, Kewaunee WI	
CKLW	Windsor Ont	380	Ivon Harris, Ararat PA	
CKBL	Matane PQ	210	Ghislain Girard, Arvida PQ	
CHRE	Regina Sask	210	Fred McCormack, Des Lacs ND	
(CMAB)	Camagthey Cuba	355	Carlton Howington, Homestead FL	now CMFE
TOTAL for 46 stations:		19915	+ 6210 (skip) =	26125 miles

Analysis. By skip distance, Bedford Brown is the clear leader with his fantastic 2130 mile catch from Venezuela. Ed Rugel leads non-skip records by distance, with 2455 miles; then Seybold, 2280; Hauser, 2070; Rauch, 1555; Foster, 1545; and Cooper and Meers tied with 1240. By number of records held, Hauser has 5; Smith, 5 (but two are "zeros"); and Rugel, Foster, Seybold and McCormack each has 3. Still up for grabs are stations WTWW Tupelo MS, KPNE North Platte NB, KTRE Lufkin TX, KCTS Seattle WA, XERV Reynosa Tams,i.a.

CHANNEL 22 TVDX RECORDS

KWHY	Los Angeles CA	90	Dennis Smith, Santa Barbara CA	was KPOL
WSIL	Harrisburg IL	440	Bill Draeb, Kewaunee WI	now ch 3
WSBT	South Bend IN	385	David Kanaar, Buffalo NY	
WWLP	Springfield MA	405	Dennis Smith, Little Creek VA	
WKEF	Dayton OH	365	Michael Levstein, Downsview Ont	
		tie	Bill Draeb, Kewaunee WI	
WDAU	Scranton PA	625	Bill Draeb, Kewaunee WI	was WGBI
KVDO	Corpus Christi TX	465	Ray Escoffier, New Orleans LA	now off
WVNY	Burlington VT	360	Vincent Palmer, Hamilton Ont	
TOTAL for 8 stations:		3135		

CHANNEL 23 TVDX RECORDS

WMSL	Decatur AL	685	Bill Draeb, Kewaunee WI	now ch 48, Huntsville
KERO	Bakersfield CA	45	Dennis Smith, Mt. Piños CA	was ch 10
WGBS	Miami FL	735	Robert Weems, State College MS	now off
WCEE	Rockford IL	495	Mark Lewis, Downsview Ont	
WKZT	Elizabethtown KY	470	Dave Pomeroy, Kansas City KS	
WAKR	Akron OH	385	Gary Olson, Bloomington IL	
WCVE	Richmond VA	95	Hank Holbrook, Fair Haven MD	
		tie	Larry Vogt, Springfield VA	
TOTAL for 7 stations:		2910	(ties are counted but once)	

CHANNEL 24 TVDX RECORDS

KMJ	Fresno CA	190	Dennis Smith, Walnut Creek CA	
KVCR	San Bernardino CA	25	Eric Norberg, Claremont CA	
WEDH	Hartford CT	385	Dennis Smith, Little Creek VA	
WDAN	Danville IL	485	David Kanaar, Buffalo NY	now ch 15, WICD
WMET	Baltimore MD	160	Joe Fela, Newark NJ	
WHTV	Meridian MS	70	David Cox, Carrollton AL	
WCNY	Syracuse NY	175	Wayne Plunkett, Weston Ont	
WDHO	Toledo OH	635	Dave Pomeroy, Lawrence KS	
WJET	Erie PA	410	Gary Olson, Barrington IL	
TOTAL for 9 stations:		2535		

CHANNEL 25 TVDX RECORDS

WEEK	Peoria IL	550	Mark Lewis, Downsview Ont	
KCTY	Kansas City MO (KS)	0	Dave Pomeroy, Overland Park KS	now off
WEHT	Evansville IN (KY)	455	Bill Draeb, Kewaunee WI	was ch 50
WKNX	Saginaw MI	230	Gary Olson, Barrington IL	was ch 57
WJTV	Jackson MS	205	Mrs W. C. Breithaupt, Little Rock AR	now ch 12
WNYE	New York NY	0	Dennis Smith, New York NY	
WVIZ	Cleveland OH	360	Bill Draeb, Kewaunee WI	
KOKH	Oklahoma City OK	70	Glenn Hauser, Enid OK	
KTVQ	Oklahoma City OK	5	Glenn Hauser, Oklahoma City OK	now off more

WCOS	Columbia SC	330	R. W. Walker, Daytona Beach FL	now WOLO
WCAN	Milwaukee WI	255	Carl Lupton, Shelbyville IL	now off
TOTAL for 11 stations:		460		

Analysis. Draeb captures channel 22 honours with 3 records at 1430 miles. On 23, the all-time UHF record is held by Robert Weems at 735 miles. On 24, Pomeroy is first distancewise, at 635 miles; Smith has 2 records at 575 miles. Draeb also leads on 25 with 2 records at 815 miles, while your editor has two at only 75 miles.

ADDITIONS AND REVISIONS TO CHANNEL 7 TVDX RECORDS

WMAL	Washington DC	380	Jeff Kadet, Needham MA
WITN	Washington NC	580	Jeff Kadet, Needham MA
CMBF	Ciego de Avila Cuba	Es 1650	Ed Sparks, Odessa TX
XEX	Altozomoni Mex	Es 800	Richard Lowry, Temple TX

ADDITION TO CHANNEL 8 TVDX RECORDS

KHQL	Albion NB	365	Glenn Hauser, Enid OK
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Comments on Standards. Hank Holbrook brings up a number of points, the main one of which stems from his devotion to QSL collecting. Hank proposes that priority be given to verified loggings in any rank listing, and he presents his reasons for valuing them over non-verified loggings. Unfortunately this is 180° contrary to my own philosophy. I am quite willing, however, to compromise by having separate but equal "heard" and "verified" rank listings. DXers may participate in either, or both. This might either be on an alternating month basis, as Frank Wheeler suggests, or both the same month. Hank also says "no" to counting a station again when it changes channels or frequencies. On the other hand, he feels "a change in call letters does indeed constitute a new station". Unfortunately, new call sign is usually applied to the same set of studios and transmitters; this is what we have meant by considering it the same station. The standards as expressed previously are based more on a technical/operational standpoint than on superficial things such as call signs. May we have comments from others on this? Naturally, Hank also feels sharetime stations should be counted separately. Now for a point of agreement between Hank and me...rule 6 should be expanded to cover mobile DXing. This omission was an oversight on my part. How about some more of you speaking up? I must assume that those who say nothing are either satisfied or don't care!

LOOKING BACK AT THE LOWBAND

After many meters of adding machine tape, I've compiled some info I hope will be of interest. There may be a few errors, but no large ones, I hope. The following reflects records published in the last few months for channels 2 thru 6. Obviously, virtually all are Es. Updatings thru April are included. The top DXers of lowband in 3 categories:::

By total distance		By # records held		By average distance	
1.	116840 Cooper	51	Cooper	4230	Lupton
2.	94145 Johnson	50	Johnson	4125	Hasperue
3.	49300 Hauser	44	Hauser	3112	Lowry
4.	31055 Brown	18	Nordquist	2389	Brown
5.	25335 Seybold	13	Brown	2291	Cooper
6.	18920 Smith		Seybold	2008	Hepp
7.	18665 Nordquist		Smith	1980	Hill
8.	14275 Foote	10	Aiken	1949	Seybold
9.	12555 Aiken	9	Draeb	1910	Harvey
10.	12070 Erint		Foote	1900	Brooks
1.	10090 Dillon	8	Dillon	1883	Johnson
2.	10035 Ruland		Erint	1881	Boyd
3.	9030 Draeb		Dombrowski	1837	R. Nieman
4.	8710 Dombrowski	7	Ruland	1788	Olson

Until the next, 73 de Glenn

 * TV GUIDE AND TV PROGRAM LISTING EXCHANGE -- ADDITIONS AS OF MAY *

Since our last list was published several people have written expressing interest in exchanging their local and area television program listings with other WTFDA members. In fact even some non-WTFDA members have indicated an interest in exchanging program guides; for those on the outside looking in let it be known that we are most happy to have you participate (and let it also be known we'd like to have you as active members!!!

<u>name and address</u>	<u>tv guide edition or local listing</u>
Michael Wojcieszak..... 119 Maple Grove Ave. Tonawanda, NY 14151	Western NY edition of TV Guide
Mark Kozlowski..... 306 Riverside Ave. Buffalo, NY 14207	Western NY edition of TV Guide
Stewart MacKenzie..... 16182 Ballad Lane Huntington Beach, Calif. 92647	Los Angeles area TV Guide <u>also</u> Herald Examiner TV Weekly <u>also</u> Santa Ana Register TV section
Fred Nordquist..... 104 G Kings Park Dr. Liverpool, NY 13088	Newspaper schedule for: Syracuse, Rochester, Plattsburg, Binghamton, Watertown, etc.
Fred McCormack..... 1021 17th St. N. Fargo, N.D. 58102	North Dakota edition of TV Guide

Within the next couple of months a complete list of all those wanting to participate in the exchange will be published.

For those new to WTFDA, the program listing exchange operates as follows: DXers desiring to exchange their local listings with others notify headquarters what edition they would like to exchange. When a person's name appears in VHF-UHF Digest in the exchange column any interested person may initiate an exchange by sending a copy of his own local edition to the desired person on the list or by writing the particular person and requesting the edition and providing 3rd class return postage (approximately 6-12 cents). The person receiving the edition from another DXer is obliged to send a copy of his edition or area program listing in return.

Please do not send excess copies of your local edition to WTFDA headquarters; HQ does not function as an exchange center for these listings.

Hopefully the 1st Annual WTFDA Convention, which is coming up shortly, will be a good place for mutual exchanges of various program listings. If you intend to attend the convention, save your old TV Guides and program listings and bring them along.

HELP US FIND THESE PEOPLE - VOL. 1

WTFDA is attempting to reach as many known DXers from the past as possible. Many people from our lists of past active DXers have vanished from sight leaving no forwarding address. In order to try to reach them, each month WTFDA will publish a few names with former addresses; if you know where these people can be reached, please drop a card with the person's name and address to headquarters!!!

- Richard Miller, 823 Wyandotte, Royal Oak, Mich. (as of 1960)
 - William C. Moser, 2610 Eighth Ave., Pueblo, Colo. (as of 1965)
 - Clarence Rareshide, 1923 Milan St., New Orleans, La. (as of 1957)
 - Ed Rugel, 304 North Park Blvd., Independence, Kan. (as of 1961)
 - Gordon E. Simkin, 1599 Austin Ave., Idaho Falls, Id. (as of 1960)
- *****

BOB'S
TECH NOTES

BOB'S
TECH NOTES

BOB'S TECH NOTES
May - 1969

A MUCH BETTER COAX ...

...has been developed for the "82 channel" home (consumer) installations. This is an RG-59/U cable (ie. it is the small diameter type), but it has loss figures that make it very comparable to RG-11/U (the larger .75 ohm coax), even at UHF.

I still do not recommend (this) coax for UHF, excepting when used with a quality (CATV type) UHF pre-amplifier. But at VHF, it compares very-very favorably with the shielded 300 ohm twin lead. If coax loss figures escape your memory, check our April TECH NOTES.

There are two firms manufacturing this new form of coax, Belden and International Wire and Cable (1300 W. Fletcher, Chicago, Illinois 60657 - Atten: Dick Salam). For reasons that I won't cover here, the International cable is superior.

INTERFOIL (International) 750 Series Coax

Loss Per 100' - 1.6 db at channel 2; 2.1 db channel 13; 5 db Ch. 14; 7 db Ch. 83

This cable has a solid aluminum foil shield (replacing the earlier braided copper shields). Fittings required are the F-56 'f' style fittings, F-59 fittings will not work. Price is \$27.00 per 1,000 (2.7 cents per foot) to dealers.

Anyone who uses any other type of small diameter coax at VHF should have his head examined. Oh yes - the 100 percent shield makes it virtually immune from local noise pick up.

A REPLACEMENT FOR THE JERROLD TRAP EASE

We've talked about the tuneable trap including the old (no longer available) Jerrold Trap Ease unit(s) which allowed you to tune out interference from an adjacent local channel and bring through weak DX, even right up next to locals.

We all bemoaned the fact that the Trap Ease was no more. Bemoan no longer - Channel Master has come to our rescue.

The model 7008 (low band) and 7009 (high band) tuneable wave traps are "custom" made for DXing. These are intended for MATV installations, but they are priced low enough that any serious DX'er will want one or a set.

The units have two calibrated, vernier dials on the front. Adjustment procedure follows. In tests run here in Oklahoma City, I cut the local undesired carrier (audio or video) by up to 60 db. By comparison the Trap Ease units were good for 20 db of attenuation. 60 db is a bunch!

Channel Master's instructions may scare you, for they tell how to use a scope and/or field strength meter (FSM) to set them up. No need to panic, simply follow these set up instructions. Once you get the 'hang' of the unit, tuning will be duck soup.

- (A) The trap is a 75 ohm device, with F fittings. It goes in the antenna line just ahead of the receiver (note: do not attempt to use it with an AC-DC - transformerless power supply - receiver). Tune the TV set to the desired channel, one adjacent to a local signal. Set the TV set fine tuning to the point where you would get a signal from a weak, distant, station, if the slop over crud from the local station was not present.

- (B) Tune the top vernier knob slowly until you see a decrease in slop from your local station. This is a sharp adjustment, so tune slowly.
- (C) The first null point found, adjust the second knob for the same result; a minimizing of the slop. Now re-adjust the top knob, playing the two back and forth until the slop is at a minimum.

If your receiver has pretty fair adjacent channel rejection, you may find that the slop disappears completely with the first knob adjustment. Don't stop there - re-tune your fine tuning into the slop again, and then finish your trap adjustment. This will insure maximum selectivity for the receiver, as well as maximum sensitivity.

The average TV receiver has much poorer adjacent channel rejection on high band, than low band. Using a 9 inch Sony portable, on channel 12, I am able to view a channel 12 station 190 miles distant with a twin lead dipole in the shop, right next to a local channel 13 (6 miles away). Without the trap, on an outdoor yagi, I don't even know the channel 12 station is there!

Check your local Channel Master distributor. The pricing seems to vary between \$20. and \$26.00 in different areas, per unit.

Since the vernier dial is calibrated, once you find the proper point for a given channel, you can jot down the vernier dial readings and retune quickly to a channel by using the dial markings. Recommended highly.

DXing ANTENNAS

Write to Swan Antennas, P.O. Box 1122, Stockton, California (95201) for full details on their MATV antenna line.

Here are the first honest to goodness CATV quality antennas, at reasonable prices, I've seen yet. Swan has a very nice work up on specifications which you will enjoy reading even if you don't intend to buy just now. Their gain figures are very honest, even conservative. The antennas are very flat, excellent for color. I've tested the complete line and find it very interesting.

Here are some typical (abbreviated) specs on just part of the line:

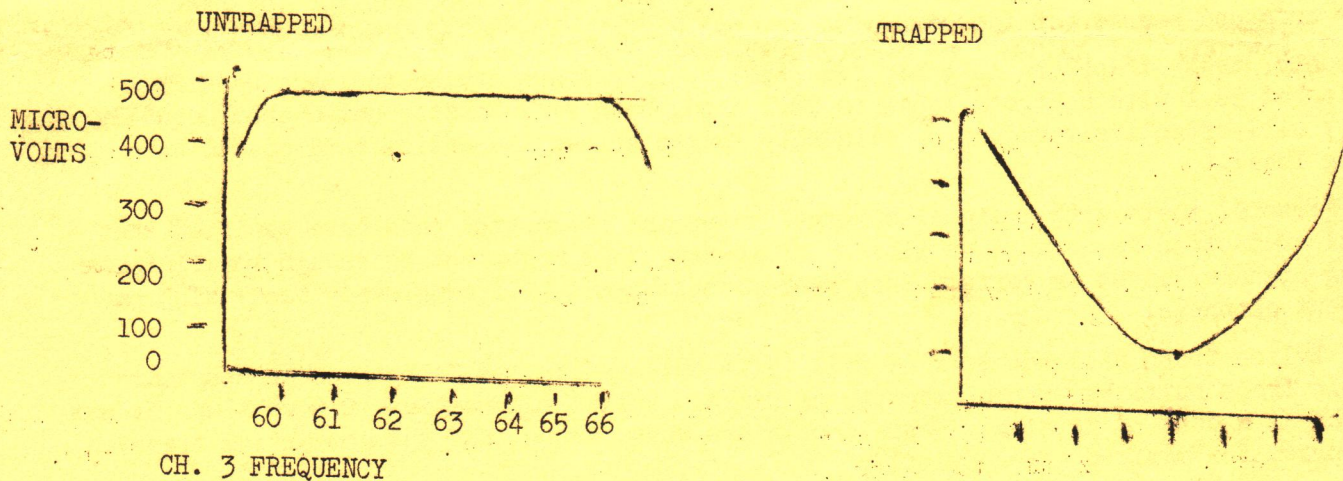
Channel	Antenna	12 elements	7 db gain	300 ohm	120 " boom	
2-3	FM	9	9 db	"	"	\$30.00
2-6	"	9	10 db	"	"	25.00
7-13	"	12	12 db	75	"	25.00
FM	"	10	11 db	75	"	36.00
2	"	8	12 db	75	170	40.00
6	"	8	12 db	75	130	49.00
7	"	9	12 db	75	90	45.00
13	"	9	12 db	75	78	36.00
						30.00

Yes, the antennas can be stacked, and Swan will supply stacking kits. I rate these antennas FAR AND AWAY the best on the market at this time.

Open Line Mast Standoffs I stated recently that open line mast standoffs were not available in large electronic warehouse catalogs. (In fact, I hadn't seen them offered even by "fly-by-night" outfits) But Amateur Radio Supply -- a rapidly rising Milwaukee based outfit -- offers them in their catalog. They are made by Saxton, the same company that makes the open line and roof standoffs offered in Allied, etc. Why the mast standoffs aren't listed also in Allied, etc. I don't know. Cost is 20¢ each from Amateur Radio.

Amateur Radio specializes in ham gear, offering as wide a range of equipment as found anywhere. Used equipment is abundant also. All prices are discount, the same as Allied, etc. on identical equipment. Address is: 4828 West Fond du Lac Avenue, Milwaukee, Wisconsin 53216.

Consumer Reports Ratings My request for permission to use Consumer Reports ratings in my proposed equipment evaluation articles has been denied. In C-R's words, "while we will lend assistance to any non-profit group, it is against our policy to permit the blanket use of our ratings." I did intend to draw heavily from their findings, since it is impossible for the "little man" to evaluate all the types and sizes of available DX equipment. However, I will note next month all recent C-R articles on related equipment and offer my opinion as to their value. Evaluation of some equipment by C-R is not always worthwhile.



Sketch shows tuner voltage at ch. 3 (for discussion only) untrapped at the left and trapped at the right by a T-line stub cut for 63 megahertz. Voltage is reduced about five times at the center, but only slightly at the ends of each channel.

73's

Dave

FOLLOW UP

This month's column contains additional info about topics discussed in previous TECHNI/CORNER articles.

T-Line Wavetraps. . . . Bill Heusmann -- CCI editor -- mentioned recently that a club member had had no luck with the T-line wavetraps described recently in the VUD. Bill himself had not tried the traps, but he certainly needed them to fight images from Chicago UHFers.

A five minute demonstration at Headquarters with open T-line quickly convinced Bill that this "cheap and dirty" technique is indeed effective. Images from local WTV 18 two miles away and low band and high band slop from WTMJ 4 and WITI 6 five miles away were reduced or eliminated. The traps, Bill noted, should work OK in Steger.

It occurred to me, however, that skeptics might pose three questions about these traps: (1) Is this a "hit and miss" technique? (2) Are other channels also affected? (3) Will attenuation (signal rejection) be great enough?

(1) Trapping radio frequency signals with T-line stubs is a basic phenomenon that will work in all cases when properly built and connected. A T-line stub cut to a $1/4$ or $1/2$ wavelength of a specific frequency and connected in parallel with the antenna is a simple tuned circuit that prevents a good portion of that frequency from reaching the receiver. There's no "maybe it will work, maybe it will not".

(2) The curve shows the approximate bandwidth of a T-line trap cut for the center of ch. 3. Note that if cut to the center of a TV channel, only a little of the adjacent channel is attenuated. The user, however, might want to cut the trap for the exact video or sound carrier of the offending channel.

Obviously, these traps are no good, for example, if you are trying to log a weak FM station at 98.1 with a strong local on 98.3 since both will be attenuated about equally. But it will effectively reduce or eliminate images across the entire band caused by a strong local.

(3) Personal tests with a signal strength meter and attenuator pads have verified that signal reduction is about five times. Of course, this might not be enough to eliminate strong signals. Even my Jerrold Trap Ease tunable can't kill completely local slop on adjacent channels.

Also, T-line traps will not work as well (less attenuation) as CATV traps or consumer tunable traps built by Channel Masters or Finco. But an attenuation of five times is not too bad at a cost of nothing! Where locals are very strong, buy the commercial traps, of course, for maximum attenuation.

If you're still skeptical, just connect a 100 inch length of open line, short it at different points, and note the results. Five minutes of trial and error is worth a thousand words.

RCA's Favorite TV/Trap In the April, 1969 Radio Electronics magazine, "RCA's favorite TV/Trap" for FM is described on page 74. A 2-15 picofarad capacitor is connected to a 4.5 inch length of 300 ohm line, the other end shorted, the line taped to the antenna lead in near the tuner, and the capacitor tuned for maximum signal rejection. I built it, and it works! It should; it's the same as the T-line wavetraps just described, except that the 2-15 capacitor and stray capacitance in the line plus the stray inductance form a tuned circuit. Attenuation and bandwidth are the same as the T-line wavetraps. Of course, tuning is simpler since a knob can be attached and calibrated for different frequencies. I did note that hand capacity affected tuning; that is, with capacitor apparently set for maximum rejection, attenuation was reduced when the hand was removed from the capacitor.

LET'S TALK

DB

by: Bob Cooper, Jr. (W5KHT)
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"UNDERSTANDING USE OF THE DECIBEL MAKES SELECTION OF EQUIPMENT EASY!"

You can't smell it, feel it or taste it. Yet the decibel (usually abbreviated db) is just about the most important tool of the TV reception trade.

Few understand it completely. And since, without a mathematical background it seems illogical in practice, most of us assume (in error) that to understand the db we'd have to go back to school for refresher courses in math, physics and electronics.

The term db is tossed about glibly, and by many who don't understand its true usefulness. The newcomer to TV and FM DXing soon figures out for himself that db's are good when they mean antenna 'gain', pre-amp 'gain' and total system 'gain'; but not so good when they mean the loss in a transmission line.

We want lots of db's in our antenna, a useable amount in a mast mounted or set mounted (pre)amplifier and a whole bunch of negative db's in a single channel trap designed to 'knock-out' an unwanted local channel. But we don't want any in our transmission line!

So how can something so good also be so bad, in the same 'system'?

The confusion lies in the mathematical background of the db. Properly expressed, the db is a unit of measurement. But it is not an exact term of measurement in the sense that the foot or pound are, or the 38-24-36 measurements of our favorite gal are.

The db measurement scale was originally popularized, I believe, by Bell Labs as a convenient method of measuring the difference between two levels of sound. Let's explain how it was first put to work at Bell, as this may assist us in understanding how we use it today in TV.

Bell engineers place you in an acoustically perfect room at Bell Labs. When the door closes there is complete silence. I mean complete silence. It is so quiet that you think you will go stark raving mad if you have to stay there any length of time.

In another room an engineer turns a knob, and in your test chamber you hear a sound; an audio tone or note. The tone breaks the silence and you are glad for its' company. Now the engineer increases the volume of the tone, by turning up (very slowly) an audio gain control knob. As he slowly advances the knob you suddenly realize that the loudness of the tone has increased; it is now louder than it was when first turned on.

And that is what a db is!

How's that again? The difference in loudness that you first recognized was a one db increase in volume. The non-technical explanation of the db is that it is "the smallest increase, or decrease, in vol-

Let's Talk db...(page two)

ume that the human ear can detect" ... (as change). Now your ears are not identical to mine (lucky for you!). No two sets of ears are exactly alike. What I may detect as an increase in volume, you may not. And a third party may insist that the volume increased (in our Bell Labs test) before I said it did.

So how can the db be an exact thing if it affects three different people in three different ways?

Well, Bell figured this one out too. They sampled the hearing of several million people. And the average of all of these tests became their tool for the db format. It is surprising how closely you and I and everyone else hears, when our individual hearing traits are averaged in with about a million or two others!

Now while you are I and millions more were obliging Bell by listening for a change in volume (or sound intensity) - this all took place in the 1930's - the Bell engineering types were measuring the electrical power output of their test sound system with the usual array of electrical and electronic test equipment. While they measured and kept track of voltage and current and watts, we measured change in volume (both up and down).

When the testing was completed, Bell had an exact set of figures which they could then duplicate forever. An increase in power output from a generator (such as an audio tone generator, a power generator or a radio frequency transmitter-generator) could be measured in the conventional electrical/electronic ways, and these changes in power directly translated into the handy working tool - the decibel or db. A certain increase at the 'generator' would always bring a known increase in volume, to the average listener-user.

And so the decibel (deci-bell) was born. The unit of change.

The mathematicians then went to work and found that the db was a logarithmic function. That is, not linear. If you are not a math buff, you probably think this is a good point to give up and go check channel 2. Don't stop now - I'll explain.

Let's install us a sound system. Our electronic measurement equipment tells us the system is delivering two watts of audio power to the speakers. We sit back, noting how loud the sound 'sounds' to us. Then the sound output of the sound system is increased from two watts to four watts. Twice as much as before.

If our ears are properly tuned (ie. we have an average set of ears), how much louder would you say the 4 watts will sound than the 2 watts sounded?

Twice as loud? (After all, it is twice the power.)

Bad guess. The sound would now be 50% louder. Not 100%.

And that is logarithmic function. Our ear's response (and that of our entire hearing system) is logarithmic. In log type measurement situations, it is necessary for the power source to be multiplied by four

Let's Talk db ... (page three)

to reach a point where our ear 'says' - now it is twice as loud.

What is a linear increase then? One where when you double the power of something, it becomes twice as powerful as before. A 100 percent increase in results with a 100% increase in starting power. A 1 for 1 relationship.

What in the world does any of this have to do with TV reception?

Just this - once Bell people had developed the db as such a handy measurement device for sound, other facets of the electronic industry climbed aboard the bandwagon.

The TV world soon discovered that as the human ear perceives changes in loudness, so too apparently does the human eye to increases of intensity (on lighted scenes) to what we see. A 100 watt floodlight in a studio, on a performer in front of a TV camera produces a scene of such and such brilliance. To double the effective brilliance of the scene - we need a 400 watt floodlight. Those logarithms again!

Which is perfectly logical if you look at it this way. The little electrons that run around making up the TV signal we see on our home TV screen are just like the little electrons running around in our audio (sound) system. The electron is not partial to whether it helps make up a picture, or part of sound.

Remember now that the db is a logarithm (method of expressing changes in number relationships, in math) type of measurement. Math is mostly figures and figures are numbers. And the smallest school child learns to subtract and add numbers.

Given a set of numbers from 1 to 1,000, we place them along a arc line draw across the meter face on an electrical meter. We do this in a linear fashion - so that the distance on the meter face between 1 and 2 is exactly the same physical distance as the space between 888 and 889, or 965 and 966. Now we connect our meter and its faceplate to a TV field strength indicating device - which is nothing more than some type of electronic circuit designed to make electrons flow in the direction we want them to go.

As the electrons from the TV signal flow through the meter circuit, their flow is reflected (or shown) on our faceplate. The more electrons moving through the circuit, or the faster the electrons go, or the stronger the electron-flow, the further up from zero (towards the top scale of 1,000) the meter pointer reads. Let's say that when we first connect our antenna to this field strength meter, the meter faceplate scale reads 200. Now as we rotate the antenna, and the antenna picks up more of the TV signal electrons, we see the meter scale pointer climb from 200 to 400, on our scale of 0 to 1,000. Now we have twice as much signal (electron flow is doubled) as before.

But - just as with our experiment at Bell with sound measurement, the TV signal electrons are not twice as strong (on the TV screen). At least not as far as our eyes are concerned. Certainly the electron flow doubled in power, but our logarithmic eyes saw only a 50 % increase in picture clarity, and our logarithmic ears heard only a

Let's Talk db ... (page four)

50 % increase in TV sound volume.

So it is established that you can build a meter - a field strength meter - which will give us a linear reading of electron flow - on a linear meterface scale.

However, since the human eye and ear do not react in a linear fashion - for they are truly log devices - wouldn't it be more convenient to simply calibrate the faceplate in db's? If we do this, and we have a meter pointer that rests, at no electron flow, against the left hand edge of the meter faceplate, we will have the early db numbers (1,2,3,4, etc.) fairly well spread apart on the left hand side of the scale, but moving closer and closer together (ie. not evenly spread apart as in our linear 0 to 1,000 scale) as the db numbers increase towards the right hand side of the scale. This gives us a meter faceplate, that reads directly in db's, that is similar to the way the standard broadcast band dial divisions are presented on most inexpensive AM radios. The 500,600,700,800 etc. numbers have lots of tuning room on the dial, but as you get closer to 1200,1300,1400 and 1500, the dial space is pinched closer and closer together. If you can picture this type of radio dial, you can picture in your mind a db scale faceplate.

Keep in mind through all of this that when the math boys at Bell got their hands on the hearing test results, they converted the results into a set of numbers. Log (decibel) charts, as it were.

Numbers can be added, and subtracted. And herein, finally, lies the truth behind this tale - how the db numbers affect your TV DXing equipment.

Let's look now at how this works in the trade.

Antennas

The usual practice in antennas is to rate an antenna as having 'X db gain'. Let's imagine an antenna here that has 10 db gain; 10 being X. Now since we know the db is a relative thing - ie. it means in the case of an antenna that our 10 db antenna has 10 db more gain than something else that we are comparing it to - we need to know what the standard of comparison is.

Most reputable antenna manufacturers adopted the practice, by joint agreement in the 50's, of rating their antennas against a reference dipole. The dipole is a simple one-half wave antenna, which you can fashion yourself out of a piece of standard 300 ohm twinlead. See diagram one at the end of this article.

In antenna measurement talk, the dipole has 0 db gain. It is the starting point, and we refer the gain of every other type of antenna to the 'gain' of a dipole. (If our test antenna has 10 db gain, and the dipole is rated at 0 db gain, it follows that a 'wet piece of string' of random length (!) would probably have negative gain; or minus db gain. This is one of the nice things about db's; you can subtract them, go minus, just as easily as you can add them. This is because 0 is always a reference point. All you have to know, really, is what the '0' reference point is!)

PLANNING THE ULTIMATE TV DXING INSTALLATION

(Part Four - Conclusion)

Receivers

To wind up this series on Planning Your Ultimate DXing Installation, we will talk some about receivers, include the promised glossary of DXing equipment, and provide an information data sheet for those who would like to have their own present or planned installations critiqued.

What about receivers? Is one brand hotter than others? Is there a super-hot TV DXing receiver on the market today?

Surprisingly enough - there is no such receiver. Years ago - in the 50's - when every year brought startling new advances in tube designs, one brand was hot one year, and another brand hot the following year. It all depended upon which manufacturer had access to the hot new tubes coming out for the coming year, and designed his next year set around the hot new tubes.

Now the swing is to transistors, and other solid state devices, and performance has pretty much standardized. This is not to say that any one receiver is just as good as any other receiver. There are considerable differences, to be sure. We'll try to point out some of these differences here and provide a check list against which you can shop for a DXing receiver.

(A) Color or Not Color ?

A color receiver has, because of its color circuit requirements, generally less overall sensitivity to

" A FOUR PART SERIES FEATURE DEALING WITH TV DXING-TECHNIQUES AND EQUIPMENT TO ASSIST YOU IN PLANNING YOUR OWN EQUIPMENT REQUIREMENTS"

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Frederiksted, St. Croix
U.S. Virgin Islands 00840

weak signals than a purely black and white receiver - of the same design philosophy. Unfortunately, there is the rub. The super-deluxe 1969 multiple stage, high gain receivers are color. Most, if not all, black and white receivers are aimed at the low priced market - portables and the like. So today's 1969 black and white receivers are apt to be designed, on purpose, to be lower in performance on the theory that they will be moved from room to room, or left with the kids where performance is not so important. To the manufacturer and consumer, price is all important in the new black and white receivers.

So it is virtually impossible to buy a 1969 black and white super/duper receiver. It almost has to be a color set to have the best i.f. gain, best tuner, best AGC and so on. Super/duper black and white sets just don't sell anymore - so they just are not built anymore.

It takes nearly 4 times as much received signal to produce an acceptable color picture as it does to produce an acceptable black and white signal. But unfortunately a color receiver set up to produce good color does not make a good receiver for weak black and white.

Now DXing in color is great sport, but not all that exciting. I'd rather identify a weak-weak-weak station in black and white than a weak station in color.

So what to do?

The best black and white receivers built (and therefore the best DXing receivers) were manufactured in 1961-62-63, before all of the color craze hit. With some manufacturers the change over to cheapy black and white sets was earlier than others. Zenith was about the last to give in, for example.

So the best thing to do (and your family should appreciate this) is to go out and find the best 1962-63 black and white only receiver you can locate. In that era Zenith was hard to beat, several others were good.

The best set for DXing will have the following features:

- (A) A minimum of three (video) i.f. amplifier stages. Four is better.
- (B) A good, low noise tuner. The RCA Nuvistor tuners of this era were good.
- (C) A double-tuned adjacent channel sound trap (to knock down the sound interference from the next lowest channel)
- (D) A good, wide range (and I realize this is a generalization but being specific is impossible here) AGC system with AGC dis-able switch (ie. to allow the set to run at full gain), sometimes marked the 'local-Distant' switch.
- (F) A wide range but sharp tuning fine tuning control. You should be able to (for example) set your tuner to a low band channel such as 3, and tune in a good picture. Then rotate the fine tuning control one direction and you should be able to pass off of three and see (but not hear) channel 4, and go the other direction and hear (but not see) channel 2. However channel 3 should be almost

critical in tuning, and the best channel 3 audio and video should appear together at the same spot with the fine tuning dial.

(F) Controls - there should be up-front controls for both vertical and horizontal hold, contrast, brightness, channel selection, fine tuning, on-off and volume. If some of the controls are around to the side or behind the set, this makes DXing that much more complicated. The AGC 'local-distant' switch should also be up-front, but if it is not, this can be easily corrected by moving the switch to the front, or adding a new switch in parallel with the existing one on the back apron.

Once you have found your perfect DXing receiver (and from the search for same, hopefully prompted by this series, individual members should be able to contribute data through the bulletin to all other members, allowing others to then look for particular brands and chassis model numbers), spend some time locating the very best servicing shop in your locale. Go in and speak to the shop manager, and explain your interest. You want your receiver peaked up for long distance reception. You want the i.f. stages peaked for maximum gain, you want the adjacent channel sound trap(s) set for maximum attenuation of the adjacent channel sound, you want the tuner contacts cleaned, and all tubes checked and replaced where necessary. In short you want the receiver to operate the way it did when it was brand new - maybe even better. If the service gent doesn't show genuine interest in putting your set in this condition, look further for a service shop. Otherwise they will consider you as just some kind of nut and you will end up as simply another job ticket number and be given the usual mass produced rush job - with sub-standard results.

Let the fellow know that you will want your set gone through every six

months or so (which it should be if you run your receiver almost continuously as most do), and he may get the hint that you are both serious and will mean repeat business. But don't leave the set with just anyone - know in your own mind that you have found someone who will take extra care in setting up your receiver for your particular purpose, before you bring it in for work.

You might explain to the service shop manager that your interest is in identifying weak, fading signals. You don't really care if your receiver produces mirror perfect pictures and studio sound on the local stations. This is important because there is a way to align the i.f. stages, for additional gain, when you are willing to sacrifice high definition pictures in the process. A picture that has high definition (ie. good resolution) is not always compatible with a receiver that will lock into sync and produce pictures on very weak signals. The trick is to narrow up the i.f. amplifier stage(s) response to the point where the gain of the stage(s) improves, but you still have adequate resolution to make out the objects (and small letters) on the screen. What you want is a happy medium - a narrower i.f. response than the set had when it left the factory, for more gain, but still wide enough to make the picture useable. The additional gain, gained, in each of the i.f. stages in this manner is small, but when added together through all of the video i.f. stages, it can amount to as much as 6 db - which is the same difference you get by adding (and stacking) your existing antenna system so that you end up with an antenna with four (4) times as many elements. And that is a substantial difference!

Each receiver mass produced for sale in the U.S.A. has a complete set of alignment instructions and

trouble shooting details in a publication called 'Photo-Fact'. This is published by the Howard W. Sams company, and through your local electronic distributor you should be able to order the 'Photo-Fact' that applies to your own DXing receiver. It will cost you a couple of dollars, but it will be very useful in understanding what is in that super-super chassis.

A used receiver of this vintage should cost you no more than \$50. and probably less. Look for one with as 'clean' a chassis as possible - ie. not one that has an under-chassis that looks like the Super-Bowl game was played with it on the 50 yard line, up-side down. A clean, not dusty-direty chassis, will indicate that the set was operated in a home where more than casual attention was payed to cleanliness and it follows that the set probably had reasonably good care while there.

If acquiring a used receiver of this ilk is out for now, and your family has pressure on to go the color TV route, consider carefully the Heath(kit) series of sets.

COPS - I detect a note of terror from some of you. "A color TV kit?"

Right - a color TV kit. The finest color set built, bar none, is the Heath GR-295 receiver. You can't buy a better receiver today - for any money, under any label, in any type of fancy wood case. Period.

If you are not an electronics buff - building a kit rightfully scares you. And a color TV kit probably sends chills down your spine.

No need - if you have just enough knowledge to recognize a resistor, capacitor, tube, and the other basic electronic parts for what they are - the Heath color TV kit will not be your waterloo.

The kit is easy - honest. Heath knows more about making kit build-

ing simple than anyone else around. It is tedious - 25 hours to put it together is fast, 30 hours is more like it. Another 5 to align the set. Yes - you can align it too. Believe me.

All of the controls are up front. This includes AGC, color killer, sync level controls - the works. The set has extremely good sensitivity and if it is weak anyplace, it is in adjacent channel rejection. I won't swear to that - the adjacent channel rejection is probably excellent (measurements indicate that it is) - only the gain is so high that sometimes you think it is not up to par.

And, the Heath set(s) is less expensive (without their optional cabinets) than all but the low-end cheapy color sets. Heath will give you 18 months to pay for it also, at very reasonable terms.

If you are bound and determined to buy a ready-built color set, a few recommendations. The best electronics are usually reserved for the top of the line sets. The same sets that have the fancy cabinets. So you are shopping for a \$700.00 up package. The trick is to find out what chassis is in the best (most expensive) set in the brand line, and then backtrack down in price until you find the cheapest set that uses the same chassis as the most expensive model. This will be your best buy - if you aren't under family pressure to go into hock for a fancy cabinet also.

A few general thoughts, then, about color TV sets for DXing.

- (A) Don't buy one - unless you have to.
- (B) If you have to - buy the Heath series, 22 or 25 inch tube.
- (C) If that is out, look at the Zenith and RCA receivers.

From Zenith and RCA they go downhill rapidly. Sears sets are at about the bottom of the pile, for DXing purposes. (Even if much of the Sears circuitry is RCA - it just doesn't come out the same when Sears has it assembled.)

A few words to get me off the hook with Sears (and other) brand owners, and who find their receivers entirely satisfactory.

A fine electronic instrument (ie. a television receiver) is very much like a competition automobile. It must be tuned correctly, and either stay in tune or be kept in tune, or it just does not provide top performance. In this regard some TV receivers are like the Chevrolet Corvette - once tuned, and not mis-handled, they will usually go 10,000 miles before they need a tune up again. Other TV sets are like the Jaguar XKE - tuned they may be on Saturday, but un-tuned they will probably be on Monday. In other words, they are just not stable machines.

Of course who works on a receiver, how talented he may be, and whether he was of good frame of mind or not when he worked on your receiver is important too.

Finally, the type of antenna installation, the condition of the feedline, and so on, all drastically affect how well, or poorly your receiver performs.

The simple truth of the matter is this. The worst Sears chassis, properly tuned, connected to a proper antenna, will run rings around the best Zenith or RCA, improperly tuned and/or connected to a malfunctioning or badly designed antenna system.

If you regard TV DXing as a competition (even if you are competing

only with yourself), evaluate your own system capabilities. If your antenna system, feedline, amplifier(s), filters, traps, receiver and other accessories are all in top notch condition - then you can only blame yourself and the conditions that produce DX if you miss out on some choice catches.

And that is what this series has been all about - to put you and your equipment in top shape

for some real DXing!

GLOSSARY OF AVAILABLE EQUIPMENT

Throughout this series specialized reception equipment has been mentioned. The following information lists the equipment by function, brand, model number, price and gives details on where you can find the equipment available.

Good luck!

Antennas

UHF-

7' Parabolic	Allied Radio, catalog 280 (1969) page 400. Order 11 C 1706UW.	\$27.95
5' Parabolic	Same. Order 11 C 1015XW.	16.95

VHF-

Single channel yagi-10 element (*)	Allied, Cat. 280, page 401	(Ch. 2) 15.30 to (Ch. 13) 5.44
Broadband Yagis (**)	Allied, Cat. 280, page 401 -Channel 2-6 (model L26) -Channel 7-13 (model Y10-713)	16.21 7.00

(* - This is not the MATV quality single channel yagi mentioned in the text, as the pricing suggests. For quality yagi antennas, ask your distributor for MATV antenna catalog from Winegard, Channel Master, Jerrold-Taco or others. These antennas are about 70% as effective as a MATV yagi, although considerably cheaper.)

(** - Same story as single channel yagis. Low band model only six elements. High band model 10 elements but cheaply made and not rugged.)

Stacking Kits	Allied, Cat. 280, page 401	2.10 to 150
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LPV-
(VHF Only)

Allied, Cat. 280, page 396 - LPV-TV190 (19 elements) - <u>Best</u>	52.67
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Converters

UHF to VHF	Allied, page 401, Cat. 280 -Blonder Tongue BTX-11A - <u>Best</u>	29.95
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Amplifiers

6DJ8 Type	Winegard Dealer, your area. Try to find WBC-4 if he has one lying around on the shelf (probably dusty!)	unknown
UHF	Blonder-Tongue model CMA-U mast mounting. Specify channel grouping (14-50,40-83) and 300 ohm input. Output is 72 ohms for coaxial line. Also order model 1514 remote power supply.	\$65.00 (*)
VHF Antenna Mounting	To add to <u>existing</u> antenna, non-amplified versions. Jerrold SPC-132AL is best. Allied, Cat. 280, page 407. 300 ohm input, 72 ohm coaxial output. Transistor - see text.	65.50
Distribution type-4 outputs.	Transistor unit provides 4 db gain at each of four outputs. Coaxial cable in and out. If you <u>must</u> split output of antenna for several sets, this is way to do it. Allied, Cat. 280, page 406. Blonder-Tongue 4569.	16.50

(* - Approximate pricing including power supply. Price will vary depending upon discount you receive from distributor. Usually special order item, 4 week or more delivery.)

Traps-Filters

Single channel traps	Blonder Tongue model MWT-2 (low band) and MWT-3 (high band). Model numbers may be different by the time this reaches you due to B-T re-numbering now going on. Low band covers 2-6 and FM, high band 7-13. 72 ohms in and out. See text.	35.00 (*)
Cut of TV band interference (from transmitters below 52 MHz)	Allied, Cat. 280, page 411. - R.L. Drake TV-300-HP	3.97

Coaxial Cable

50', under	RG-59/U, in coils with prepared connectors; 50' coil recommended for VHF, non-amplified antenna;	-50'	4.49
	100' coils amplified antenna, VHF. 50' coils UHF, amplified antenna. Allied Radio, Cat. 280, Page 403.	-100'	8.95

DX MAIL BAG

P.O. Box 5001, Milwaukee, Wis. 53204

A hearty welcome to all the new members who have joined WTFDA this past month. It's been great hearing from many of the old AIPAers again -- many have replied to our recent mailing to say they are no longer active, but many others have indicated they are still "station chasin".

Bill Eckberg, RR 2, Walnut, Ill. is the most recent addition to WTFDA. Bill writes to say that he has been pretty much inactive since the demise of AIPA. Says his TV DX log stands at around 230. Bill, we hope you'll get back among the active members again; with all the new U's on the air and that great area you live in, you'll hit 300 in no time.

Our old friend Tom Hidley writes from Crystal Lake, Ill., that his TV DX log is at the 271 mark. Although Tom has not yet joined our ranks, we hope he will be doing so shortly. Among Tom's more recent catches were ch. 7 MS receptions of KVII, Amarillo, Texas, and WCKT, Miami.

One of our current members has some kind words this month. Paul Ciceri, 10733-73 Ave., Edmonton, Alberta, writes "I really enjoy reading your magazine. I can hardly wait so I can get home where my antenna set-up is so I can do some TV DX-ing again." Paul we can't wait either -- that is until you're able to start reporting some record skip and tropo to VHF-UHF Digest. We'll look forward to your summer reports from Windsor. And -- thanks for your renewal check too!

WTFDA's good friend Curt Webber writes that he won't be able to renew membership -- medical bills are cutting into spending money so it may be awhile before he gets back in the fold. Curt -- we hope you'll be back with us soon; your aid to our club has been so valuable we can never hope to express our thanks.

Richard Clark, 144 N. Dithridge St., Pittsburgh, Pa. 15213, is another addition to the WTFDA clan. Richard is interested in TV, FM, and VHF radio DX so I am sure you will be reading about his results on the bands in the coming months. Richards CB call is KRP 3532.

Whoops! Randy Miltier of Campbell, Calif., writes "sorry about not paying my dues on time, I completely forgot when my membership was up." Randy also asks if VUD is published on the same date each month as in the past he has gotten his copy on many different dates at many different times of the month. In reply: Randy, we generally publish between the 28th of the month and the 3rd of the next month depending upon how much assistance we have at HQ and what dates are best on everyone's schedule; the reason your bulletin comes at strange times is because the post office sometimes abuses 3rd class mail and leaves it sit around awhile. A number of DXers are now requesting first class postage (at an extra charge) so they don't have to wait for days and sometimes weeks for their VHF-UHF Digest to show up.

Michael B. Northam is still planning for DX contests for the season ahead he reports in a letter dated April 5. If any of you have experience in running a contest or have ideas to help Mike, drop him a line at P.O. Box 605, Beaverton, Ore., 97005.

Well, gang....that's all we have room for in the mailbag this month. Expect we'll be back with more news from all of you out there in DX-land in the future.....

73s..... P.O. Box 5001

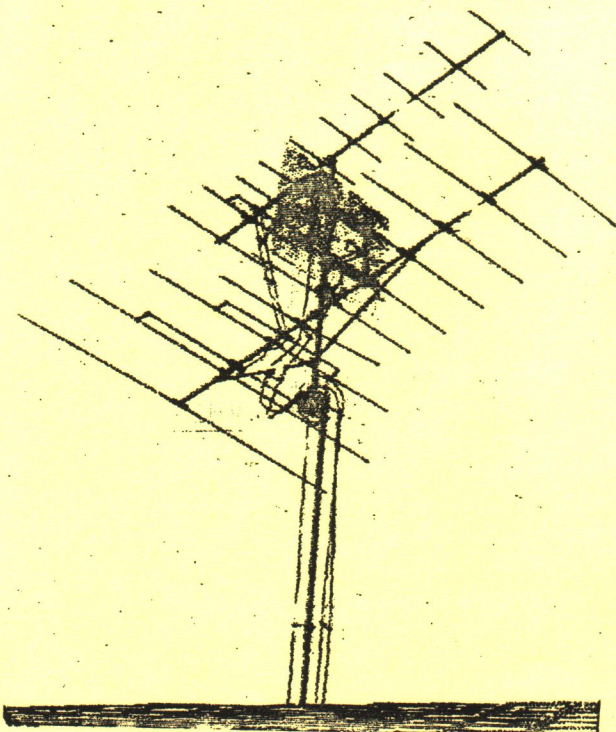
G. Hauser (cont'd.)

the height of the Es season. I visited one such station recently, KCSU 90.9 in Fort Collins, Colorado, and talked with their new GM, Bud Elliot. They have extremely nice modern studios and are now on the air daily at 1200-0100 MST/MDT. They're pretty well blocked by mountains to the west, but plains lie to the N,S and E. ERP of 800 watts doesn't go far on GW, but is plenty during a good Es opening. Bud will be at the station most of the summer on Friday, Saturday and Sunday during the late afternoon and evening, and he's interested in getting some skip reports. He's agreed to run an ID tape when he's there during June and July, although he may wait for a phone tip from me when skip is occurring. So when you're getting Colorado/Wyoming on FM/TV weekends, give a listen to 90.9 and do report.

Perhaps we don't need a formal committee, but I would urge all of you living near such a college station normally dead in the summer, to contact them before school ends, and try to make similar arrangements....and report it is soon as possible to this column, so we can all be on the lookout for it.

Most of you know of my rather unprecedented (apparently) success with FM MS DX last year during the Perdeid shower. Think how much more MS DX we could get on FM if we could persuade stations to run a continuous ID tape all night August 11-12 this year. This is another project to get started on now. I'd be glad to co-ordinate such projects for the club and answer questions you may have re how to go about it. It would really be great if some of you experienced BCB CPCers would try your hand at FM this summer. I suggest you emphasize the scientific value of MS observations.

Still no actual DX, but snagged a couple more nearby stations. on 3/31 KFBC 9719 Cheyenne, Wyo. was heard at 1155 CST duplicating AM 1240 until 1200, with an announcement re program tests on FM, and then off. Still, as of April 6, not yet on RS (regular schedule). On April 1 KFTM 101.7 Ft. Morgan, Colorado was hrd @1800 weakly with an ID. Until the next, 73 de Glenn.



The photo at left is of the new antenna set-up of Bill Heusmann in Steger, Illinois, co-host of the first annual WTFDA Convention. Hopefully, we may see some good DX during the convention, possibly even over-riding the Chicago locals. The antennas pictured are Bill's new Winegard Transcoupler yagis which he purchased months ago thru a local dealer, (with a great deal of delay and trouble.) These antennas have never been too easy to get, especially lately. The TC yagis are broadband models, one high VHF and one low VHF. The group of 8 bo-ties with reflector constitutes the resr of this set-up, altho not so easily distinguishable in this photograph.

ATTEND 1969
CONVENTION WTFDA
ILLINOIS

ULTIMATE DXING - continued

100', over VHF,
'50-100' UHF

Use RG-11/U foam type only, with appropriate adapter connectors. All coaxial cable TV amplifiers use 'F' style fittings, which is an RG-59/U fitting. To match RG-11/U and RG-11/U, you must use adapter fitting. See your local electronic distributor for cable, fittings.

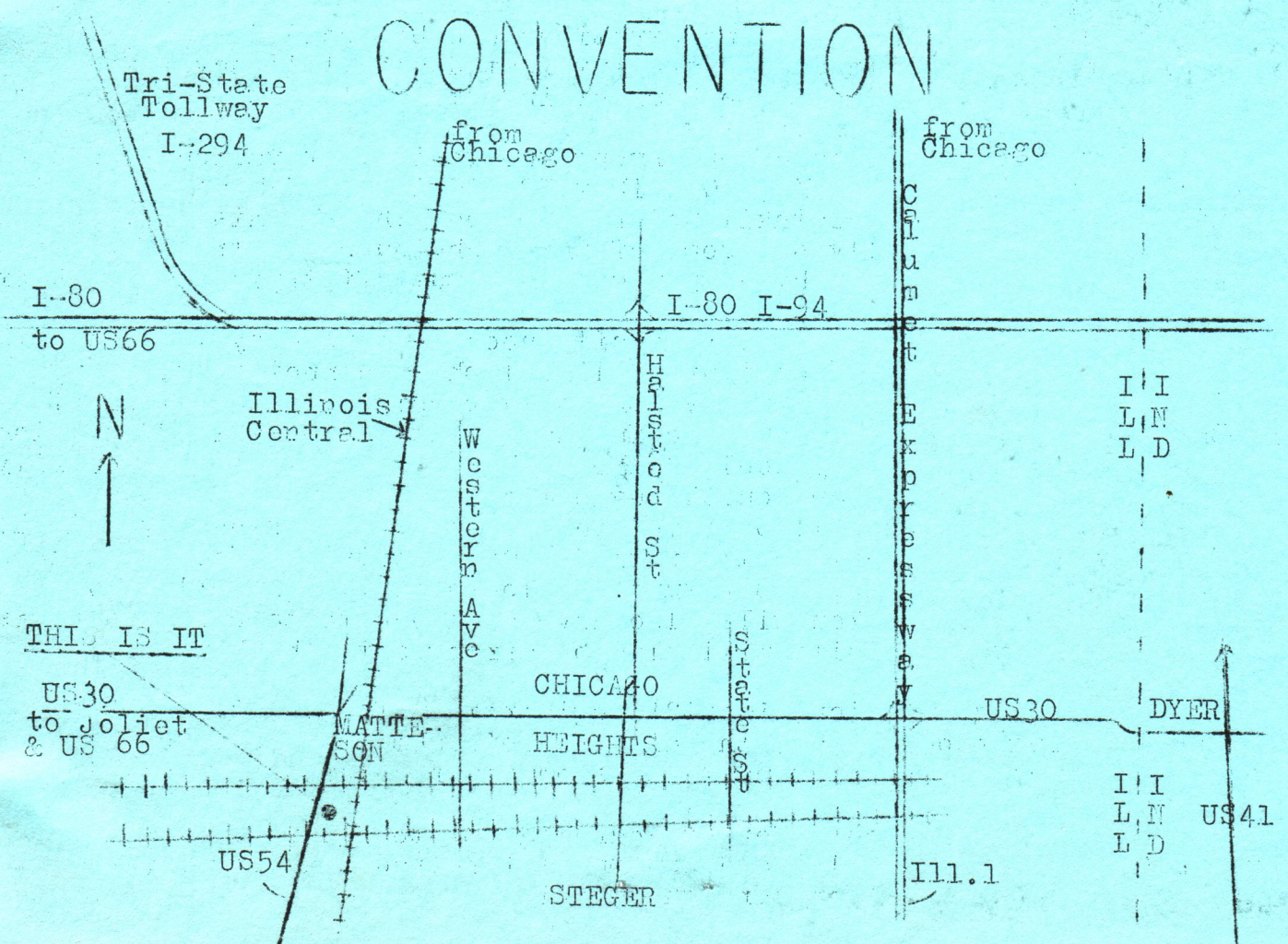
75 Ohm (coax) conversion kit

VHF ONLY - to convert existing 300 ohm non-amplified antennas (only) to 72 ohm coax, for run to set, and to re-convert 72 ohm line to 300 ohm receiver antenna terminals at set. Allied, Cat. 280, page 392. A kit consisting of indoor and outdoor matching transformers.

\$5.95

***** End Of Series *****

HOW TO FIND THE CONVENTION



CONVENTION NEWS

The 1969 WTFDA convention is slowly, but surely taking shape. It is not too late to think about coming if you haven't made any plans yet. To recap, the convention will run from Friday afternoon May 30 (that's Memorial Day) to that Sunday afternoon, June 1. Place- the Covert Motel, in Matteson, IL, about 25 miles south of Chicago's Loop. The convention is planned to be a chance to expand your knowledge of DXing techniques and a place to meet other DXers, those whom you've never met, or those old friends you haven't seen in ages.

Now to specifics. All room reservations should be handled through the motel. A letter addressed simply to Covert Motel, Matteson, IL, 60443 should reach the right place (we don't have the street address on hand). If you care to phone, try (312) 748-8000. Room rates range from about \$12 to \$15 nightly, depending on number in room and which section you're in.

The exact schedule of events is still being laid out, but right now, it looks something like this:

FRIDAY

12:00-17:00 Registration and greeting

18:30-19:00 Official opening

19:00-22:00 Talks and demonstration (to be decided)

SATURDAY

09:30-11:30 Open discussion-'Improving Our Club and Bulletin'
Afternoon To be decided. Any suggestions?

18:00-19:30 Formal dinner

19:30 on Get together. Show movies, slides, photos, games, possibly door prizes, etc.

SUNDAY

09:30-11:30 Talks and demonstrations (to be decided)

After lunch For those who are interested and still have time, visit to Hamfest in Ottawa, IL, about an hour's drive away.

A few words of explanation: Among the topics for various talks are 'Photographing Your DX', 'Get That ID', 'Using a VTVM as S-Meter', 'Building and Using a Heathkit Color Set' and others. This will give you a chance to actually see some of the techniques and tricks mentioned in the 'Digest', things you may have put off trying for lack of information.

That big blank space Saturday afternoon is caused by the lack of a suitable guest speaker or tour. Bell Telephone cannot provide anything over a weekend and holiday; the only possibility is a tour of WBBM-2. But, since most people coming have seen, or work in TV stations, we feel that there really wouldn't be much of interest to the majority in such a tour. Again, any quick suggestion?

Other activities will be going on all the time. Bring any and all old equipment you wish to sell or trade. Over forty manufacturers have been written, requesting literature. It looks as though we'll have a very good response. You will also have a chance to tape record a message for posterity. Visits will also be arranged to the homes of the local DXers.

And the big question, 'Cost?' Registration fee is \$7.50. This covers meeting room rental, the dinner, refreshments and odds and ends. How much else you spend depends on how regularly you want to eat and sleep.

See you there! Don't forget your log, photos, veries, movies, tapes (cassettes or reels) and equipment for trade. Remember (to perpetrate a cliché) 'the more the merrier!'

"SOMETHING TO CROW ABOUT"

Some would call it a miracle. Others would say "I told you so". But to most of us at the publishing end of WTFDA -- we think the developments made by this organization in recent months have certainly been remarkable (especially in light of the inauspicious debut VHF-UHF Digest made a little over a year-and-a-half ago).

When WTFDA began, it started as sort of a desperation maneuver based on the efforts of a handful of hopeful individuals at the 1967 ANARC convention. In the period since a lot has happened to our club and our bulletin -- we think it's "something to crow about".

Reviewing a bit of history, late 1967 found the flailing WMRC (Worldwide Monitors Radio Club) converted into WTFDA with a membership made up of 26 WMRCers and a few TV-FM DXers. An initial bulletin was published which was unspectacular to say the least. At that point it looked as if there was little promise for any substantial bulletin improvement or club growth. Most of the TV-FM DXers of the past had been out of contact with one another for years, the club itself lacked a treasury and a decent mimeograph machine, and club leadership and organization was unstable.

However, almost everything must start small before reaching any degree of success. WTFDA was a case in point. Through mid-1968 WTFDA membership exhibited a steady growth. Bulletin size and quality improved with continued member support. As the months rolled on, the club began to reach a plateau -- one of those "go no-go" points that most every organization reaches. Heading WTFDA was no longer a one-man job. Responsibilities for handling correspondence, controlling the treasury, organizing materials, and publishing the growing bulletin had become an immense, full-time task.

At this point further development might have been stymied. But the support and enthusiasm of the members carried this organization over the hump. First, yours truly coincidentally moved into the Milwaukee area at this time and was able to provide much needed assistance on publishing day each month. Then Chicago area DXers Morrie Goldman and Bill Heusmann volunteered to make periodic trips to Milwaukee -- at their own expense -- to assist with getting the bulletin out. Milwaukeeans Dave Janowiak and Ed Semrad in turn offered timely help. And more recently John Hansen has provided another able pair of hands to aid WTFDA.

As a result your club today is stronger and better organized. Responsibilities have been divided so that your club publisher/president is no longer terribly overburdened with club responsibilities. Most important to you the members -- your monthly bulletin, VHF-UHF Digest, has improved spectacularly in both size and quality. For those of you who were members of the AIPA -- the only other TV-FM DX club to exist in North America -- I am sure you will agree that our bulletins have far surpassed the AIPA bulletins in almost every area of consideration (including size, consistency of columns, overall neatness, quantity of information, quality of reproduction, etc.).

(Continued on following page)

WTFDA

EDITORIAL
(Continued)

In summary, thanks to avid support (and this includes those who have made voluntary contributions, sponsored ads in our behalf, offered to write columns, and those who have merely supported regular bulletin features) WTFDA has become a strong and well-respected organization at a time when DX clubs are coming and going at a phenomenal rate.

This is certainly not to say we have reached our highest peak. We can do much greater things and we plan to. We have come a long way in the past year-and-a-half and we can go much further. At headquarters we are truly excited over the endless possibilities for providing a better and more active club for the membership. The future has never been brighter.

If you have ideas or suggestions to assist in the expansion and improvement of your club by all means forward them. With your continued support we will in turn continue on the path upward.

900
Gary Olson
WTFDA Publishing Staff

EUROPEAN SCENE

Roger Bunney
Trelawne, Cupernham Lane
Romsey, Hants, SO5 8JH

A DXer returning from Cyprus last Summer provided some information on stations of the near-Eastern area. As usual, only band I covered:

LEBANON: no test-card proper, just test-grid (like Spain.Ø) GMT times then were: 1500-1615 Mon-Sat for test-grid, Lebanese scene slides until 1625, clock until 1630. Programs begin with ID in Arabic as a rule, but sometimes they slip up and show the French ID from band III. Saturday programs may start at 1615; on Sunday the grid is shown from 1500-1555 followed by the clock for 5 minutes. Programs end at approximately 2100 on weekdays, and 2130 weekends. Sign-off with stn ID. Xtr at Fih on ch. E2 1100 w., and E4 at Maasser el Chouf with 60 kw.

SAUDI ARABIA: station HZ22-TV operated by the Arabian-American Oil Company on channel A2 with 12kw video. The country has no standard time so programming time varies but roughly about 1600-2300, GMT. Two test-cards are used, the American CBS and indian-head, (latter common).

JORDAN: There is a 100kw stn at Amman on channel E3. Hours of programming are roughly 1600-2100. During the 1967 "Six Day War" the Jordanian stn was used for anti-Israeli propoganda, which virtually forced Israel into starting its own TV system to counteract. The Israeli system will be on the high band and therefore will not be covered. (An Israeli test-pattern was published in the January, 1968 "VUD".)

CYPRUS: There was a stn on E2 in Cyprus but it ceased operation 15 Sept., 1966. Despite its 1500 watts, it was seen in the UK on two ~~ppp-~~ occasions. One DXer didn't ID it until a yr later due to unusual card.

IRAN: There are 2 xtrs, in Teheran and Abadan respectively. Both operate on channel A3 with relatively low power, (4 and 12kw). As of late 1967 no test-card was used; programming ran from approx 14-1930.

ADEN: there is one low-powered stn in band I on E4 at Al Aineh, with 400 watts. Programs from 1500-2000. This has only been seen in the Aden area, and its low-power insures it will stay there!

Good TV/DX,
Long

VHF

RADIO

"Devoted to the world of VHF Radio and in particular the region of 30 to 54 MHz"

Conducted by
Bob Cooper, Jr. W5KHT
4007 North Pennsylvania
Oklahoma City, Oklahoma 73112

FEATURES: Additions to Radio Pagers, Reports May '69

Radio Pagers

Pat Dyer, Austin, Texas reports the following changes/additions to the February 1969 listing of radio pagers.

Alabama

Colorado

Birmingham	35.58	KIF 663	Denver	35.58	KAQ 606 (*)
Montgomery	35.22	KIY 757			

* - Pat reports the call of the 35.58 Denver station as KAQ 606. Last month Glen Hauser reported the call as KAA 276. It would seem likely that if the station has used two sets of calls, that only one is in use at this time. The question is 'which one'. Anyone know?

Regarding our 35.58 mystery station 'Tellisco Radio Call Station', or KCB 891, Pat suggests that this may be the current KCC 266, which is Springfield, Mass. Pat last copied KCB 891 in the spring of 1968, and finds KCC 266 know fades in and out at about the same time KCB 891 used to.

Finally, Pat notes that he has heard a KIN 645 traffic light control that identifies on A2 CW. Add this unknown to our February reported KIY 726 of the same ilk. How would you like to get a QSL card from a traffic light? (!)

A word here about Mr. Dyer would be in order. I've known Pat for about a year now; he wrote to me after reading a March 1968 article of mine in QST, dealing with 50 MHz propagation on the six meter amateur band. Pat has just about the top record system on extra-ordinary VHF reception in the 30 MHz UP region of anyone I've ever met. He can tell you what the 'state of the ionosphere' was, at his location, for any date and anytime back several years. His main interest is the six meter amateur band (he is WA5IYX) but his records are spotless for the 30-50 MHz region and for low band TV DX as well. He tabulates at the end of each month the openings observed, where they were to, how long they lasted, when they started and when they quit. This goes onto permanent file for future reference and for direct comparison between years.

Austin, Texas is an excellent location for Es reception since he can 'see' most of the USA proper on single hop Es. He is also well located for F2 to South America, Es to the Caribbean and to central America.

He also tabulates the number of dates each calendar year that a particular state was copied at his location on six meters. By reference to past years, he has quick tabulation of the type and direction

of the openings observed throughout the year. If this sounds like a great deal of work - it is! However, the rewards are worthwhile too since when Pat tells me (or others) that '1965 was the top Es year in terms of total hours of Es, but 1968 had just as many open days', I know this is accurate analysis from records that are hard to dispute. Pat's tabulations would fill a book, and there are more coming out every month. I will pick a few now and then to include in this column, and to hopefully encourage others to take up the keeping of similar data.

What follows is Pat's overall tabulation of 50 MHz (six meter) Es data for the years 1964 through 1968.

<u>50 MHz Es</u>	<u>1968</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Days Open	153	96	153	111	143
Minutes Open	24,770	14,830	28,155	18,505	21,875
No. Openings	280	140	268	201	263
Double Hop:					
No. Days	17	7	20	9	11
No. Openings	19	7	22	9	14

In addition to the six meter data, Pat records 'TV EXCESS', which are openings observed (Es) when TV signals were received, but no six meter amateur loggings were made. His records in this department for 1964 did not begin until September so the year is not complete.

<u>TV EXCESS</u>	<u>1968</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Dates TV in, but not 50 MHz	13	1	7	23	10
Minutes TV in, but not 50 MHz	4,310	445	7,980	5,900	5,700

With the 1969 Es season now underway, wouldn't it be a good time to resolve that your record keeping system be overhauled too?

'THE HAUSER LIST'

Glenn Hauser has got to be one of the most devoted members of this Association. On 24 February Glenn took his day off to visit the FCC's Denver office, and to beg, plead and cajole them into allowing him to pour over their official records of 35.33, 35.58, 43.22 and 43.58 MHz radio paging stations. As Glenn notes '...I don't DX in this range - yet - but in answer to your plea for information ...'. Greater love hath no DX'er than Hauser

The Hauser-FCC list was current in June of 1967. Glenn learned that effective June of '69 (next listing due out for FCC personnel) the listing will be on microfilm and that '...it will not be available for public inspection'. Without getting into the fairness of this FCC act-let's just all thank Glenn for getting while the getting was good.

The listing that follows includes AM and FM operations (see our April column), and the power and the type of emission when other than AM/FM. It is assumed that this information may help us to pin down some of the 'MCW' (modulated audio note CW identification) stations that we hear in the 35 MHz range.

In the interest of saving Ferdie lots of extra work, we'll compress this listing space-wise as much as possible and leave for some slacker month a consolidated listing of all known stations in this region in a useable, plenty of white space, format.

<u>ALABAMA</u>				<u>FLORIDA</u>				
Birmingham	35.58	KIF650	AM 50 watts					
Montgomery	35.22	KIY757	AM 400	"	Ft. Lauderdale	35.58	KIF651 AM 575	
<u>ARIZONA</u>					Jacksonville	35.58	KIQ510 AM 50	
Phoenix	35.22	KCH280	AM 40	"	Largo	35.58	KIY736 AM 400	
	43.58	KOE257	AM 500	"	Miami	35.22	KIN645 AM 500	
Tucson	35.58	KCF328	AM 400	"		43.22	KIN645 FM 500	
<u>ARKANSAS</u>						43.58	KIE367 AM 575	
Little Rock	35.22	KKX708	AM 420	"	Orlando	35.22	KIY508 AM 575	
<u>CALIFORNIA</u>					Pensacola	35.22	KIY719 FM 180	
Bakersfield	35.58	KMD349	AM 500	"	Tampa	35.22	KIQ516 AM 500	
Costa Mesa	35.22	KME438	CW 400	"	W. Palm Beach	35.22	KIJ345 AM 500	
Cypress	35.22	KME438	CW 400	"	<u>GEORGIA</u>			
El Modena	35.22	KME 438	CW 400	"	Atlanta	35.58	KIE953 AM 50	
Eureka	35.58	KMD684	AM 500	"		43.58	KIG300 AM 500	
Fresno	35.22	KMD342	AM 420	"	Augusta	35.58	KIG844 AM 400	
	43.22	KMD342	FM 500	"	<u>HAWAII</u>			
Lodi	35.22	KMD998	AM 700	"	Honolulu	35.58	KUA217 AM 500	
Long Beach	35.58	KMD344	AM 493	"	<u>IDAHO</u>			
Mt. Wilson(LA)	43.22	KMB309	AM 500	"	Table Rock	35.22	KOK344 AM 420	
	43.58	KMB309	AM 500	"	<u>ILLINOIS</u>			
Mt. View	43.22	KMM640	FM 525	"	Bannockburn	35.22	KSD316 FM 525	
Murray Lake	35.58	KMA829	CW 400	"	Champaign	35.22	KSJ811 AM 500	
Oakland	35.58	KMB309	AM 500	"	Chicago	35.58	KSC645 AM 50	
Palm Springs	35.22	KMM581	CW 400	"		43.22	KSC644 FM 500	
Pt. Loma	35.58	KMA829	CW 400	"		43.58	KSC644 AM 500	
Sacramento	43.58	KMD986	AM 500	"	Peoria	35.58	KSC864 AM 500	
San Diego	35.22	KMD691	AM 50	"	<u>INDIANA</u>			
San Francisco	35.22	KMB305	AM 50	"	Evansville	35.58	KSD322 AM 500	
	43.58	KMB305	AM 50	"	Ft. Wayne	35.22	KSA623 AM 400	
Santa Cruz	35.58	KME437	AM 500	"		35.22	KSJ815 CW 400	
San Rafael	43.22	KMM960	AM 400	"	Gary	35.22	KSD315 FM 526	
Stockton	35.58	KMD347	AM 40	"	Indianapolis	35.58	KSD326 CW 400	
<u>COLORADO</u>					*Ft. Wayne	43.58	KSJ816 AM 400	
Colorado Spgs.	35.22	KDN407	CW 400	"	South Bend	35.22	KSD320 AM 500	
Denver	35.58	KAQ606	AM 400	"	<u>ICWA</u>			
<u>CONNECTICUT</u>					Des Moines	35.22	KAI934 AM 500	
New Haven	35.22	KCI299	AM 400	"	<u>KANSAS</u>			
Waterbury	43.22	KCC802	FM 525	"	Wichita	35.58	KAD927 AM 40	
<u>DISTRICT OF COLUMBIA</u>					<u>KENTUCKY</u>			
Washington	43.58	KGA806	AM 40	"	Louisville	43.58	KIF656 AM 500	
<u>DELEWARE</u>					<u>LOUISIANA</u>			
Wilmington	35.58	KGA473	CW 400	"	Baton Rouge	35.22	KLB760 AM 400	

LOUISIANA (continued)

New Orleans 35.22 KKT407 CW 400
 Shreveport 35.22 KLB399 AM 400
MARYLAND
 Baltimore 35.22 KGA807 AM 575
 35.58 " AM 500
 Cumberland 35.22 KGC402 AM 500
MASSACHUSETTS
 Boston 35.58 KCB891 AM 50
 43.58 KCB890 FM 50
 W. Springfield 35.58 KCC266 AM 500
MICHIGAN
 Detroit 35.22 KQD303 AM 400
 Flint 35.58 KQD601 AM 400
 43.22 KQK772 FM 120
 Highland Park 43.58 KQC884 AM 500
MINNESOTA
 Minneapolis 35.22 KAH661 AM 500
MISSOURI
 Kansas City 35.58 KAD931 AM 50
 43.58 KAF245 AM 400
 St. Louis 35.58 KDN396 AM 500
 43.58 KAA893 AM 50
NEBRASKA
 Omaha 35.22 KBM513 AM 400
NEW HAMPSHIRE
 Manchester 43.22 KCI295 AM 400
 Pembroke 35.22 KCC482 AM 50
NEW JERSEY
 Newark 35.58 KFC935 AM 400
 Trenton 35.58 KED352 AM 400
 W. Crange 35.58 KEC935 CW 400
NEW YORK
 Bronx 43.22 KEC745 AM 400
 Brooklyn 43.22 KEC745 AM 500
 Buffalo 35.22 KFC925 AM/CW 500
 43.22 KEC521 AM 500
 43.58 KEA777 AM 50
 New York 35.22 KEA860 AM 500
 (**) 43.22 KFC745 AM 500
 43.58 KEA627 AM 500
 Niskayuna 35.22 KED364 FM 120
 Lafayette 43.58 KFC516 AM 500
 Rochester 35.58 KFC519 AM 500
 43.58 KFC518 AM 500
 Troy (Utica) 35.58 KFC515 AM 500
NORTH CAROLINA
 Ashville 35.22 KIY779 AM 160
 Charlotte 35.22 KIM905 AM 500
 Raleigh 35.22 KIY409 AM 400
 Greensboro 35.58 KIY775 AM 400
 Winston Salem 43.22 KIY792 AM 400
OHIO
 Cleveland 35.58 KQK593 AM 400

OHIC (continued)

Cleveland 43.58 KQC881 AM 400
 Columbus 43.58 KFJ891 CW 400
 Mansfield 35.22 KQD600 CW 400
OKLAHOMA
 Oklahoma City 35.58 KKM248 AM 400
OREGON
 Corvallis 35.22 KCP319 AM 400
 Portland 35.58 KGA796 AM 50
PENNSYLVANIA
 Chester 35.58 KGH861 CW 400
 Corry 35.22 KGH860 AM 100
 Mountain Top 35.22 KGC397 AM 500
 Philadelphia 35.22 KGC 223 AM 575
 43.22 KGC223 AM 575
 43.58 KGA804 AM 500
 43.58 KGA805 AM 575
 35.58 KGC400 AM 500
 Pittsburg
 Scranton 35.58 KGC400 AM 500
SOUTH CAROLINA
 Greenville 35.22 KFL880 AM 400
TENNESSEE
 Memphis 43.58 KIF653 AM 50
 Nashville 35.58 KIG837 AM 500
 Tannery Knob 35.58 KFJ903 FM 500
TEXAS
 Abilene 35.58 KLB716 AM 400
 Amarillo 35.58 KKV688 AM 500
 Dallas 35.22 KKJ460 AM 500
 35.58 KKQ344 AM 500
 43.58 KKJ460 AM 500
 Houston 35.22 KKG561 AM 400
 35.58 KKI445 AM 400
 Lubbock 35.58 KKQ965 CW 50
 San Angelo 35.58 KLB578 AM 500
 Wichita Falls 35.58 KLB323 FM 500
UTAH
 Coons Peak 35.22 KCF341 AM 500
VIRGINIA
 Norfolk 35.58 KIG297 AM 50
WASHINGTON
 Seattle 35.22 KCP253 FM 500
 Tacoma 43.22 KQP258 AM 400
WISCONSIN
 Madison 35.58 KSD318 AM 500
 Milwaukee 35.58 KSC373 AM 50
WYOMING
 Cheyenne 35.22 KGN908 AM 420
PUERTO RICO
 Hato Rey (San Juan) 35.22 WWA335 AM 400

Brief Summary

The FCC list answers quite a few questions, and poses a few more for us.

Not listed here are multiple transmitter locations utilized by some licensees. New York City on 43.22 is shown only as NYC; whereas in truth the licensee operates 400 or 500 watt transmitters simultaneously at locations in Bronx, Brooklyn, Far Rockaway, Flushing, Glen Cove, Long Island City, N. Wantagh and of course NYC itself. Without some pretty fancy receiving equipment, these will all sound like one super power transmitter at a distant point, where in truth they are 8 transmitters. The usual practice is to key (ie. transmit over) all units in the system at the same time. There are other situations similar to this, and in each case only the primary city of license is shown in our listing here.

The 'mystery' of KCB891, Tellisco Radio Paging, on 35.58 is answered. This is a 50 watt station in Boston. The reason it is seldom heard anymore is the addition of KCC266 in Springfield, a 500 watter on the same channel; which would of course dominate the channel on skip, from the Massachusetts area.

We have picked up a few news states (ie. Arkansas, Utah) and lost a few (ie. Alaska, New Mexico), from our February listing of 'old'.

We note two that we missed, from Glenn's list, in double checking after typing. They are as follows:

Taylor Mountain, California 43.22 KMM660 AM 400
Cincinnati, Ohio 43.58 KQC877 AM 500

The FCC lists are by frequency, with alphabetical listings by city and state under each of the four frequencies. We have re-arranged this (at some effort) into state by state listings, operating on the premise that this is a more useable format. However, before we do a final tabulation later this year, we would appreciate hearing which method you would prefer. The majority rules.

The 'power listing' (ie. 50 watts, 400, etc.) is the maximum authorized power (transmitter), current to the FCC's June '67 record keeping. This does not necessarily indicate this is the full power actually being utilized by the station, and there is always the chance that a 50 watter has applied for and been granted higher power since this list was made up.

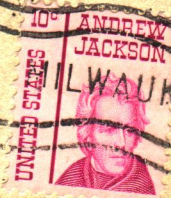
During the summer, please keep a log of stations actually heard, by city and state. We will ask for this data later in the year so that we can indicate in our final listing for 1969 those stations that someone has 'verified' the operation of during the year. This will help clear the air about those stations authorized, and those actually in operation, since both Pat Dyer and I suspect strongly that some of the stations listed here, and in February, are 'on paper' only!

The summer Es season will be here as you read this - let's start keeping a close ear to the radio paging channels - the DX is coming through!

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