

# VHF·UHF DIGEST



**CFCN 4 TV**  
CALGARY

# VHF-UHF DIGEST

is the official monthly publication of the WORLDWIDE TV-FM DX ASSOCIATION. Published about the first of each month at Milwaukee, Wisconsin (USA). Address all correspondence and make checks payable to the club at HQ:

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For foreign rates or air mail, write HQ.

We wish to thank Bill Heusmann and Morrie for our cover design this month. They felt our cover was rather drab and needed an artistic touch. So they made a special trip to Milwaukee to work on it.

With the approaching F2-skip season again, there will be some special F2 articles beginning with this issue, and we shall resume publishing of sunspot counts, courtesy of Henry Gac of Detroit and the Swiss shortwave service.

Latest word on the sunspot cycle is that it may or may not have reached its peak already. There are conflicting theories on this. Last Winter, as reported in VUD #4, was very poor with numerous audio openings to Europe but not a single decent video report. More later.

Gary Olson will begin a CCI column soon, publishing unided DX reports of the members, similar to Bedford Brown's column in the AIPA.

I am often asked at HQ to recommend antennas and/or receivers for DX. I hope we can have some kind of detailed report by the end of the year but it is hard to get such reports because there is very little call for such information from the manufacturers, and no clear-cut consumers organization to test for DXing ability of the products. I could recommend "Consumers Reports" however, which I am informed rates receivers and antennas periodically for their quality vs price. If a set is to be good for DX it must also be a good quality, well performing product also, so this is some standard to go on at least.

You can't expect an \$80 b&w portable to perform as well for DX or mere entertainment as a \$200 b&w receiver. The same goes for color TV or FM receivers: you get what you pay for. Generally, Zenith has always been rated by DXers as the top b&w TV for DX and etc. In color, Consumers Reports rates in overall scoring on a 10-point system these as the top color TV receivers: Magnavox, Motorola and Sylvania, Zenith.

## THIS MONTH'S COVER:

The cover shows the 515-ft tower and coverage map of CFCN-TV, channel 4, in Calgary, Alberta, Canada. CFCN operates with a visual power of 100 kw and an aural power of 50kw. Transmitter is located northwest of Calgary.

## PUBLISHER'S NOTE:

Occasionally I hear that someone has not received a VUD or 2 or 3, but I hear it indirectly because the person has not written HQ directly. If you should EVER not receive A VUD by the end of the month, PLEASE write HQ about it promptly!!

--fsd

## OUR STAFF:

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Propagation	Dennis Smith
Tech-Notes	D. Janowiak
Eastern TV	M. S. Goldman
Western TV	Dennis Smith
ANARC-Scope	Ambrose Maxim
Public Relations	Curt Webber
CCI column	Gary Olson

## STATIONS OPERATING (AUG. 29, 1968)

UHF ETV	83
UHF Com	149
VHF ETV	74
VHF Com	506

TOTAL AUTHORIZED STATIONS ON THE AIR 812

### New Stations Reported On Air:

WBLG-TV, ch. 62, Lexington, Ky., took air June 2nd, 1000kw. (ABC)

WXTV, ch. 41, Paterson, N.J., took air late August (Spanish oriented)

### New Target Dates Reported:

WSNS (TV), ch. 44, Chicago, Ill., fall 1969 (on Hancock Bldg. completion)

WUAB, (TV), ch. 43, Lorain, O., September 15, 1968

\*WTIU (TV), ch. 30, Bloomington, Ind., September, 1968 (ETV)

KMST (TV), ch. 46, Monterrey, Calif., Fall, 1968 (43.3 kw. ant. 2500')

Atlanta, Ga., ch. 46, 801 kw. - ant. 740', late Fall 1968

KSEL-TV, ch. 28, Lubbock, Tex., 550 kw. - ant. 730', October 1968

WXIX-TV, ch. 19, Newport, Ky., 436 kw., August-September, 1968

KFIZ-TV, ch. 34, Fond Du Lac, Wis., September, 1968

KRIV (TV) ch. 36, Palm Springs, Calif., September, 1968 (NBC)

KPLM-TV, ch. 42, Palm Springs, Calif., September, 1968

WXON (TV), ch. 62, Detroit, Mich., 700 kw., September, 1968

## FCC COMPLETED ACTION

### New Grants:

Elmira, N.Y., ch. 36 (WENY Inc.) 186 kw.

Fort Myers, Fla., ch. 20 (Broadcast-Telecast Services) 630 kw.

San Francisco, Calif., ch. 38 (Bay Broadcasting) 720 kw.

Sacramento, Calif., ch. 15, (Hercules Broadcasting) 493 kw.

Cleveland, Ohio, ch. 19 (Community Telecasters) 572.8 kw.

West Palm Beach, Fla., ch. 25 (Ch. 25 Inc.) 721 kw.

Anderson, Ind., ch. 67 (Anderson TV Corp.) 4.864 kw.

Gainesville, Fla., ch. 20, (Minshall Broadcast) - "initial Decision"

Honolulu, Hawaii, ch. 20 (UHF-Hawaii) 251 kw.

\*Garden City, N.Y., ch. 21, (Long Island ETV) 715 kw.

Hagerstown, Md., ch. 25 (Regional Broadcasting) 324 kw.

### Call Letter Changes:

WEEE-TV, ch. 45, Albany, N.Y., granted WOVE-TV

KMBY-TV, ch. 46, Monterrey, Calif., granted KMST-TV

KZUZ (TV) ch. 15, Phoenix, Ariz., granted KLUZ (TV)

KTVM (TV) ch. 5, Medford, Ore., granted KOB1 (TV)

### New Call Letters Issued:

Palm Springs, Calif., ch. 36, granted KRIV (TV)

San Francisco, Calif., ch. 38 granted KUDO (TV)

Houston, Tex., (Crest Broadcasting) granted KVRL-TV

La Crosse, Wis., ch. 25, granted WKOW-TV

Washington, D.C., ch. 50, granted WGSP-TV

Baton Rouge, La., ch. 33, granted WRBT (TV)

Rochester, N.Y., (Phillip Hahn) granted WPYH (TV)

Dallas, Tex., (McLendon Corp.) granted KLIF-TV

Cleveland, O., ch. 19, granted WCTF (TV)

\*Hastings, Neb., (Neb. ETV Com.) granted KHNE-TV

Aurora, Ill. (S. Kendall-Kane Broadcasting) ch. 60, granted WLXT (TV)

Chicago, Ill., ch. 50, granted WCFL-TV

Atlantic City, N.J., (S. Jersey Radio) granted WOND-TV

\*Morrison, Nebraska, (Nebraska ETV Commission) granted KRNE-TV

Other Changes Allowed:

WBMG (TV) ch. 42, Birmingham, Ala., ERP to 1070 kw. - ant to 1150'  
WOML-TV, ch. 15, Florence, Ala., ERP to 230 kw.  
WLEX-TV, ch. 18, Lexington, Ky., ERP to 1000 kw.  
WDKS-TV, Toledo, Ohio, ERP to 524 kw., - ant to 1010'  
KVET-TV, ch. 24, Austin, Texas, ERP to 9.3 kw - ant to 1290'  
\*WGTV (TV) ch. 8, Athens, Ga., allowed transmitter move to 45 miles west of Athens - change antenna height to 1080'  
WTOG (TV) ch. 44, St. Petersburg, Fla., ERP to 828 kw.  
WCTB-TV, Macon Georgia, ERP to 692 kw. - ant to 780'  
WKHA (TV), ch. 35, Hazard, Ky., ERP to 417 kw. - ant to 1260'  
WKHM-TV, ch. 18, Jackson, Mich., ERP to 1084 kw. - ant to 1050'  
KHNE-TV, ch. 29, Hastings, Nebraska, ERP to 75.9 kw. - ant to 1280'  
WKBF-TV, ch. 61, Cleveland, Ohio, ERP to 930 kw.  
WUAB (TV) ch. 43, Lorain, Ohio, ERP to 1030 kw.  
Durham, N.C., ch. 28, ERP to 1,080 kw. - ant to 1040'  
KMTC (TV) ch. 27, Springfield, Mo., ERP to 392 kw. - ant to 1690'  
\*WNED-TV, ch. 17, Buffalo, N.Y., ERP to 955 kw. - ant to 720'  
\*KSPS-TV, ch. 7, Spokane, Washington, ERP to 194 kw.  
WOLO-TV, ch. 25, Columbia, N.C., ERP to 871 kw.  
WCCB-TV, ch. 18, Charlotte, N.C., ERP to 298 kw. - ant to 1290'  
WKAB-TV, ch. 32, Montgomery, Alabama, ERP to 813 kw. - ant to 830'  
KLOC-TV, ch. 19, Modesto, Calif., ERP to 2 kw.  
WOME-TV, ch. 45, Albany, N.Y., ERP to 456 kw. - ant to 1036'  
KLNI-TV, ch. 15, Lafayette, La., ERP to 832 kw. - ant to 490'  
Fayetteville, Ark., ch. 36, ERP to 1450 kw.  
WKYT-TV, ch. 27, Lexington, Ky., ERP to 1406 kw., - ant to 970'  
WYEA-TV, Columbus, Ga., ERP to 525 kw. - ant to 590'  
WKRC-TV, ch. 12, Cincinnati, Ohio, ERP to 303 kw.

ACTION APPLIED FOR OR REQUESTEDApplications For New Stations:

Dubuque, Iowa, ch. 40 (Dubuque Communications) 630 kw.  
Tyler, Texas, ch. 14 (Festival Broadcasting) 112.8 kw.  
Komomo, Indiana, ch. 29 (Booth American) 240 kw.  
\*State College, Miss., ch. 2 (ETV Authority of Mississippi) 20 kw.  
\*Des Moines, Iowa, ch. 12 (State Educational R-TV Facility) 316 kw.  
Reading, Pa., ch. 51 (Reading Pa. Broadcasters) 269 kw.  
New Orleans, La., ch. 38 (New Orleans Broadcasting) 1007 kw.

Channel Reservations Requested:

Channel 33 has been requested for educational use in lieu of channel 67 at Huntington, W.Va.  
FCC has proposed to add ch. 9 to Glendive, Montana  
Request made for ch. 2 and 11 to be added to Flagstaff, Arizona, with channels 9 and 13 deleted  
FCC has proposed to reserve ch. 61 at Rochester, Ny. for education  
FCC has proposed to delete ch. 27 and substitute ch. 43 for ETV use at Bay City, Texas  
Ft. Smith, Ark., (KPFV Broadcasting) requests addition of ch. 40 to the town of Fort Smith  
Marquette, Mich., (Northern Michigan Univ.) has requested that the ETV reservation for that area be changed from ch. 19 to 13

TIDBITS AND MISCELLANEOUS ITEMS OF INTEREST TO TV DXERS

# WBBM-TV, ch. 2, Chicago, is reported to be operating a 1-watt repeater on ch. 13 in Gary, Indiana. The signal is directed at Portage City. The repeater will apparently stay on until WBBM-TV gets its new antenna on the Hancock Bldg. in Chicago.  
# Aben E. Johnson, permittee for WGMI (TV) ch. 56, Gary, Ind., and WAXN (TV) ch. 62, Hammond, Ind., has been denied applications for transmitter and facilities moves. According to reports he feels the stations can't be competitive unless they operate from Chicago.

- # The FCC has told the following 17 UHF applicants that they must "get on" with construction and commence operation or they will lose their construction permits: WRIV-TV, ch. 55, Riverhead, N.Y.; KTOV-TV ch. 31, Denver, Colo.; WROA-TV, ch. 25, Gulfport, Miss.; KWID-TV, ch. 41, Tulsa, Okla.; KWIG (TV) ch. 63, Des Moines, Ia.; WTML (TV) ch. 39, Miami, Fla.; WFNT (TV) ch. 66, Elgin, Ill.; WPNG (TV) ch. 55, Springfield, Ill.; WONH (TV) ch. 43, Syracuse, N.Y.; WCCT (TV) ch. 40, Fayetteville, N.C.; WDNB-TV, ch. 65, Defiance, Ohio; KPVC-TV, ch. 24, Portland, Oregon; KHER (TV) ch. 16, Longview, Tex.; WNET (TV) Providence, R.I.; WMLK (TV) ch. 57, Janesville, Wis.; WPDT (TV) ch. 15, Florence, S.C.; and WPCT (TV) ch. 31, Melbourne, Fla.
- # Reports indicate that the State of New Jersey is apparently stalling on providing an allocation of funds for a four-channel state ETV network.
- # Ch. 49 in Red Lion, Pa., (not on air) has been designated for hearing. The Red Lion case has been quite controversial for several years.
- # WURD (TV) ch. 40, Lawrence, Indiana has been given FCC permission to change the principal community it will serve from Lawrence to Indianapolis. When the station takes the air it will be mainly dedicated to religious programming.
- # FCC has denied a petition for rulemaking which requested that ch. 27 be assigned to San Diego, Calif., for commercial use.
- # FCC has recommended WLBT (TV) ch. 3, Jackson, Miss. for a standard license renewal after several years of hearings over discrimination complaints.
- # For Midwest DXers: WFLD-TV, ch. 32, Chicago, Ill., is now running their test pattern from the morning to afternoon sign on two days a week (Tuesday and Thursday). The test pattern has call letters across the top which are fairly readable black on white.
- # Two TV DXers in the Chicago area have reported a mysterious pick-up. Reportedly they have received a channel 15 station which announces itself as being in Elgin, Ill., and carries NBC programs. (There is no allocation for Elgin except for ch. 66; according to reports the two DXers picked up the station on two different nights -- all I can say to that is that I saw no sign of any such station while at my old Barrington residence this summer during military duty; I saw much great DX and WMTV and WICD on 15 were in a great deal, but I saw no strays like this -- and Barrington is about 8 miles from Elgin).
- # The FCC has granted two experimental rule waivers to allow aural background music to accompany visual transmission of teletype news at KPAZ-TV in Phoenix and KUTV, ch. 2 in Salt Lake City. The stations are required to report viewer reaction to this service to the FCC.
- # The FCC has denied a petition by WCOV-TV, ch. 20, Montgomery, Ala., to re-assign ch. 8 to Tuscaloosa-Birmingham or Birmingham alone from Selma, Ala. (WSLA-TV, Selma, Ala. currently operates on ch. 8).
- # FCC has assigned ch. 19 to Jacksonville, N.C., for commercial use.
- # FCC has extended the RKO-General Test of Pay TV in Hartford, Conn., for three more years over WHCT (TV) ch. 18.
- # FCC has granted educational WNYC-TV, ch. 31, New York City, a ch. 77 translator license for a 90-day special test. They will test the feasibility of translator use in NYC during World Trade Center Construction (to see if translators can improve temporary bad service).
- # WSLA-TV, ch. 8, Selma, Ala., burned to the ground in August. The station will be rebuilt by new owner WCOV-TV which will operate WSLA-TV as a CBS affiliate and WCOV satellite. WSLA was ABC affiliate.
- # Stations carrying exclusive daily stock market reports are WCIU-TV Chicago; KMHY-TV, Los Angeles; KDTV, Dallas; KVVV, Galveston, and WAJA-TV, Miami, Fla.; In the near future WREP (TV) Boston; WXON (TV) Detroit; and KLUZ-TV Phoenix will also be carrying them.

- # The 2000' foot tower of KELO-TV and KSOO-TV in Sioux Falls, S.D., went down recently. Both stations are back on the air with shorter towers. They plan to rebuild another big one soon.
- # Some short notes on some new stations coming on the air: WXON-62 in Detroit will emphasize Eds programs when they take the air shortly; WJMY-20 Allen Park - Detroit should return to the air soon -- they will share the WKBD-50 tower; Fond Du Lac's KFIZ-TV, ch. 34 will run from 5:30 - 10:30 P.M. daily and will be listed in TV Guide as well as the Milwaukee Journal TV section; Palm Springs, Calif., new ch. 36 will operate 4½ hours of local shows daily and will be full color -- KPLM ch. 42 in Palm Springs will be independent featuring local news and special events.
- # DXer Tom Mann has asked about WCAN-TV, ch. 24 in Milwaukee. The construction permit was sold to Field Communications last year -- Field which operates WFLD-TV in Chicago, indicated that the station would be on in 1968 and would carry the best shows of WFLD-TV (among other things). No word has been heard regarding ch. 24's progress since a management shuffle took place at WFLD-TV. (Tom also reports that the QTH for Milwaukee's new ch.30 is 725 Sutton Pl. Wichita, Kan.) No word on the progress of that station either!

That's the report for this month - a bit bulky, but chock full of DX news. Thanks go to the following: Dennis Smith, Tom Mann, Stu Grade, Frank Merrill, Mort Meehan, and Morrie Goldman, among others, for the contributions to this column either via their editors or directly to me.

yao

end

HQ column-contd:

CONSUMERS REPORTS (contd from HQ page):

CR did not rate Heathkit's color TV which is the best from every source I have ever heard in the industry. My electronics instructor said Heath uses the best patents of all the manufacturers and does so without paying royalties because their receivers are not ready-made for the consumer.

In antennas, Winegard use to be the DXers favorite with their CL4X ColorCeptor. However, in recent years the log-periodic has appeared & is considered superior to the CL4X by many people. Dave Janowiak, our Tech-Notes editor says that one is better in the high-band and one in the low band, so neither antenna is perfect. (He has the CL4X and the biggest JFD-LPV). Morrie Goldman swears by single-band (or single-ch.) yagis, and no one denies that cut-to-channel yagis (for EACH channel) are best; however, with 12 VHF and 70 UHF channels, that is an awful lot of antennas! So the multi-channel antenna is a cheaper compromise.

By the way, steer clear of the V/U 82 channel antennas, and the advertising claims of so many miles that an antenna is capable of receiving; a set of rabbit-ears can get out to 1500 miles some days, whereas a CL4X won't get out 200 miles on other days! (I have both).

In UHF, the outboard Blonder-Tongue BTX-11A converter is superior to ANY built-in UHF tuner that ANY TV receiver now uses. Receiver manufacturers have been grossly negligent in this respect, in the USA.

Pre-amplifiers are very helpful in UHF and VHF DX, but they may overload in metro areas with strong locals, so don't buy unless you can try it out first to check for overload, or if you have \$ to burn.

# EASTERN TV DX

Editor: Morrie Goldman  
8046 S. Euclid Avenue  
Chicago, Illinois 60617

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This column is for all television reporters east of the Mississippi River-OCTOBER-  
Deadline: 10 th of each month

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This year's Es indeed was an improvement over last year. The season started somewhat early and provided a number of very strong openings. Double hop was reported on several occasions. Unfortunately, for most, DX tapered off yielding a disappointing beginning to season. This is one thing we can blame on the weather! Hi!

The month was not totally devoid of action tho, several Es openings were reported along with some good trop openings and one fantastic aurora which no members have reported scoring on. The opening occurred on the evening of September 7th. On that evening, WBKB-7 Chicago was received by a radio amateur in Thule, Greenland, a distance in excess of two thousand miles! WBKB-TV news was notified of the reception of this super DX via another amateur in Oak Lawn Illinois who set up a phone patch between the Greenland viewer and WBKB. The signal was received at approximately 10:15PM CDT.

For those interested in F2 reception, try to locate the September 1968 copy of QST. That month's VHF column features a summary of this summer's F2 activity along with some interesting conclusions. I might add that our "VHF Radio" column editor, Bob Cooper K6EDX had a hand in the preparation. If you can't locate a copy at this late date, try obtaining one from: The American Radio Relay League, 225 Main Street, Newington, Conn. 06111. Be sure to specify the September 1968 issue and include 75¢.

A correction on the note regarding WUSI-16: They broadcast the film starting at 4:30PM CDT, not 3:30PM. WUSI also is verifying reports of reception. Verie signer is Mr. John Monroe.

Starting with this month you will notice this column no longer includes FM reports. In the future, please send all FM reports to our new FM editor Roger Winsor continuing to send all TV reports to the appropriate TV DX columns. All FM reports sent to me for this issue have been transferred to Roger.

The new addition of an FM only column should be a definite boost for FM DXers. Since Roger is an avid FM DXer as well as a TV DXer he will be able to devote greater attention to FM reports than I have. Support your new FM editor, I know he'll do a fine job.

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Frank Wheeler WPE3DX, 6589 Wattsburg Road, Erie, Pa. 16509 (EST)

August wasn't a very good month for TV DX for me. Skip and tropes was low and far between. The only unusual tropes was on the 21st (Aug? MG) when WWTW ch 9 Mich 0600 showed poorly (310 miles). Skip was received as follows: Aug. 8 KLNE ch 3 (Neb.) 1700 1016 miles, KCKT CH 2 1725 Kans. 1015 miles, KRLD ch 4 Texas 1758 1117 miles, WBAP ch5 Texas 1800 1143 miles. Aug 21 KLNE again at 2100. Aug 22 WESH-2 Fla. 1700 902 miles. After a good June and a fairly good July, August sure came up with a poor month. Sure hope tropes are good in September and maybe an occasional Es now and then. My totals are now 215 rcvd with 186 veries.

Bob Astmann, 191 Louwaine Drive, Kenmore, N.Y. 14223 (EDT?)

8-4 WFMJ-21 Youngstown, Ohio like a local all night; WKBN-27 also noted; WVIZ-25 Cleveland, strong. Then I had to surrender the TV to the family use, but got back DX after 11:30PM. 11:43PM WAKR-23 Akron, Ohio; got ID with "the clearest picture in Northeastern Ohio". Later on rcvd WNEM-5 (#50) Saginaw, Mich at 1:35 AM. 8-6 WNBH-12 slipped in between WICU-12 QRM for an ID at 9:13PM. 8-15 logged my 13th state on TV

when WTRF-7 Wheeling, W.Va. tp was seen at 6:28AM just before local WKBW-7 s/on at 6:30. 19 NEW on TV. 73 to all. (Thanks for your first report, Bob. Your FM and other data should be in the FM column.MG)

Mark Lewis, 224 Honiton St., Downsview, Ontario

(JEDT)

A new member of WTFDXA, I have been DXing for well over a year on UHF and for about 3 years on VHF.... My antenna set up is unique for this country as so few people have UHF installations, let alone a 6' dish. The tower which I use is about 45' high. At the top there is a Channel Master automatic rotor which turns a Channel Master 3610G Deep Fringe VHF antenna (the back 2 elements lost in an ice storm last Jan.) and mounted on the pole of mast just above it is a Jerrold Jup-4 UHF Cylindrical Parabolic dish which measures over 6' in height and over 3' in width. For both antennas I use 300 ohm foam lead in. These antennas are fed to the family color set. On the tower I also have 2 antennas for 2-13, they feed splitters which supply 4 bedrooms and last but not least, I have a 4 bay bow tie which is aimed towards Buffalo and feeds my own room. Currently I have a Channel Master Blue Star amp which should increase VHF by about 15 db, but as yet I don't have the power supply. I hope to start using it before next month..... The color set is a 1968 Clairtone 25" set which seems to have the UHF tuner I've seen. 95% of my UHF loggings are in color. My own room has a Philco 19" portable set. The set is fairly new, but since the Gov't law requiring sets to have UHF doesn't go into effect here until July 1, 1969, it's still VHF only. I have a vast assortment of converters which I hope to sell at a fantastic profit in two weeks. I also have 2 other B&W sets in standby in the basement..... For me Es has been very disappointing this summer. All too often I have logged KCKT Great Bend or WTHS. Unfortunately my log this year is very poor and exams at school fell around Es time. However 5-28-68 brought in KVOO-2, KOAA-5, WBAP-5 (all in color) and others from that area. Also seen this summer were WO-2 Casper Wy., KUSD Vermillion SD., KNOP-2 N. Platte, Nebr., KTVS-3 Sterling Col., WEDU-3 Tampa, WEAR-3 Pensacola, KTBS-3 Shreveport La., WKY-4 and KOCO-5 Oklahoma City (logged at the same time using two different sets). One of my strangest items is a Station (don't have the call) in Mary's town Nfld. Last summer through local CBLT-6. (NEAREST Canadian-6 to Mary's town is CJON St. John's. I have no listing of any Tv in Mary's town. Could this be a repeater? MG) Boy the "New-fies" were strong that night, however not one of them verified. I have however resolved to keep a better log from now on..... The latest UHF opening came in Aug. 8, when I woke up about 9:30 AM and found WCDC-19 Adams Mass strong as a Toronto local. Also strong was WSYE-18 Elmira Ny. By about 1030 AM things were starting to change; WTPA-27 (NEW) Harrisburg Pa. was starting to come in and by 11:00 AM I had logged WHP-21 Harrisburg also new although WFMF-21 Youngstown was offering stiff opposition. Things cooled off somewhat until about 12 noon when I logged WKBS-48 in color. According to their logs, I am the furthest to report reception of their signal and the only Canadian. Also WIBF-29 (new) (my first log on 29), also WPHL-17 in color at 1207 (new). By 1230 things had died down again. Another of my better trop openings was on July 24 when a Michigan opening started at 10:30 PM and by 11PM I was getting fantastic pictures from WUCM-19 Bay City and WKNX-25 Saginaw and a fair picture from WCMU-14 Mt. Pleasant (new and 1st ch 14 logging). Unfortunately I had to hit the sack early and probably missed some of the festivities. On Aug. 31 things were getting interesting at about 1130 PM EDT when WDHO-24 Toledo was starting to break up WJET-24 Erie and WKBF-61 Cleveland was socking in a great color picture. I heard some QRM on the sound of WNYP-26 Jamestown, and at their s/off at 11:35 PM there were offset bars. By the time they were off however, the tropes had diminished and the QRM was gone. I'm sure that it was WSWO-26 Springfield Ohio since WTOL-11 Toledo was also in strong and murdering local CHCH-11 Hamilton. That would be a new logging for me. My best UHF opening so far was July 22-23 1968 when there was an opening to Indiana, and Illinois. On the 22nd I logged : WANE-15 Ft. Wayne (new), WNDU-16 South Bend. (new), WAND-17 Decatur, Ill., WTVO-17 Rockford, WFLD-32 Chicago (new), WKJG-33 Ft. Wayne and WSJV-28 Elkhart, Ind. at 1031 PM.... Another great opening was Thurs July 18, 1968 and the next morning when tropes over the Wisconsin area brought in WKOW-27 Madison at 9:28PM. I also logged WMTV-15 Madison poorly at that time, but the next morning I saw their tp in color. Also logged that night were WWTW-18 Milwaukee at 10:45PM with a "Powerful 18" ID; also in color. At that time I occasionally saw WFLD-32 Chicago. On the morning of July 19th, I rec'd really great signals from Traverse City, WWTW-9 with a color tp at 7:01-7:04AM (at times through CFTO Toronto!) and a great s/on and tp of WOC-6

Davenport Iowa tropes - not skip in color and a fantastic tp from WMTV-15 from 7:55 AM to 7:59AM. Also the tp of WTVO-17 Rockford Ill. Anyway, that's about all of the DX so far this summer. My UHF total is now 54 stations since UHF start on July 7, 1967. Not bad for a kid in the Northland..... I might as well clear up a few things now. My exact location is in the north central part of metro Toronto. This gives me about 5 miles more on most DX than old friend Wayne Plunkett as he lives south and west of me. For Northern and eastern DX he has the mileage edge.... From looking over recent records, it seems that I may hold many of the records for UHF channels, but more of that in my next report..... Look for WNED-17 Buffalo, NY. They should have a power increase by the time you read this. Power should go from 150kw to over 1 megawatt supposedly using WGR's old 2065 ELMWOOD antenna. That will temporarily end my low channel UHF fun..... We now have the distinction of one of the highest CATV systems in the world. The antennas of Rogers Cable Vision (Rogers of CHFI AM & FM) are located on top of the 55 story Toronto Dominion Center, about 800' above ground and 300' above sea level. They plan on having North America's first 24 channel CATV system very soon..... Has WXON-62 come on the air yet? I can't get a clear story and WNYP has been carrying CFTO's CTV feed lately with giant yagis aimed at Toronto. I suppose that opposition from area stations will end this when they air US shows a week earlier up here..... If I didn't mention it earlier, I'm 17 years old and attend grade 12.... I hope to build some sort of converter for F2 skip. I'm primarily interested in the video signals. That's about it from here. I hope to participate in the club actively in the future, esp. in UHF. You will probably hear the name Mike Levstein in the future, he is my best friend and we often work as a team alternating one another on trop openings at any time of day or night. He holds the record for channel 70 tentatively receiving Bowling Green on a 4 bay bow tie from an apartment balcony. Mike hopes to join soon. Goodbye for now, (Sounds like you've really caught a number of good UHF openings and have some fine equipment. I have no information on WXON. Can anyone else help? MG)

Jerry Pulice, 143 Gibson Ave., Staten Island, New York 10308 (EDT?)

A technical high school majoring in electronics in electronics, I've been TV-DXing since 1963, my best catch was WXEX-8, Petersburg, Va. Present records are as follows: Es CBWFT-3 and CBWT-6, Winnipeg, 1260 miles. On Atlantic Coast tropes, WRAL-5 Raleigh, NC 420 miles with such a strong signal that local 5 could be knocked off the channel with the rotor setting! On inland tropes WICU-12 Erie, Pa. 325 miles. MS, ch 5, positive ID on WLAC Memphis and WPTV, W. Palm Beach, Fla. This is not the best location for DX, since all channels except 8 and 10 are covered by New York and Philadelphia transmitters 20 and 60 miles from here.... My equipment includes a 1960 17" portable admiral, 20 element Lafayette VHF only antenna, Alliance U-100 rotor with a Winegard booster..... 3-26-68 0540 - Philadelphia stations very strong, local 4 double, WITN-7 Washington, NC Tp weak, 0604 WBAL-11 color bars. 0613 WTOP-9 tp. 0940 3, 4, 5, 7, 9, 11, 13 strong doubles, blanking bars of other stations visible. WNNH and WGAL-8, WHYY-12 good. 3-27-68 - 0550 WTIC-3 tp over KYW, WHDH-5 weak. 4-10-68 - 2214 Philadelphia at local quality. WAVY-10, blanketed local WCAU-10. WVEC-13 beating against local 13's carrier. 4-10-68 0550 WNAC-7 tp, 0645 WTEV-6 (new) tp, QRM from WFIL. 4-1-68 - 0550 WNNH-8, WAVY-10, WJZ-13 all with tp. 4-19-68 - 1930 first Es, strong 10kc beat on ch 2. Other station broke through the local 2 at 1940, no id. 4-21-68 0618, WRVA-12, WXEX-8 tp. 0650 WGAL-8 washed out WXEX. 5-10-68 1600, WTHS-2 Miami with ID card and clock. 5-28-68 0950, KLNE Lexington, Neb. (new). 6-7-68 0557, WDBJ-7 tp (NEW) 0600, 10KC beat on WDBJ, WTOP-9 Washington, D.C., and WBAL-11 Baltimore. (New York not on yet, QRM must be from North Carolina) 0615, WTVR-6 Richmond, Va. thru WFIL, Phil. 0640 WTTG-5 tp Washington, DC. 0657 WMAL-7 Wash., DC, WXEX-8 tp. Petersburg, Va. 6-20-68 1900 WWL-4 and WDSU-6 both New Orleans and new. 1918 WKRG-5 (new) Mobile, Ala. 1930 WEAR-3 Pensacola, Fla. 2021 WEDU-3 Tampa, Fla., 2250 WESH-2 Daytona Beach, Fla. 6-24-68 0845 WNNF-12 Binghamton, NY. 7-8-68 1830 KSTL-3? at 1900 with tp and s/on, KTCA-2 St. Paul, Minn. 1930 KTIV-4 Sioux City, Iowa. 2130 KTCA-2. 7-15-68 2000 WCIX-6 Miami, Fla. 7-17-68 1030 WRBL-3 Columbus, Ga. 1100 WREC-3 Memphis, Tenn. 7-18-68 1000 KTWO-2 Terra Haute, Ind., 1030 KFEQ-2 St. Louis, Mo. 7-24-68 1950 Un-ID-4 Mannix, 2000 CBC panel, CBHT-3 Halifax, Canada ID card, butterfly CBC color card, (only skip to north and shortest skip logged), 2004 Un-ID-4 Mission Impossible. 7-27-68 0605 WHDH-5 Boston, Mass. tp. WXEX-8 Petersburg, Va.

0616 WNAC-7 Boston, Mass. tp, 0628 WTEV-6 New Bedford, Mass. tp, 0633 WTIC-3 Hartford Conn. tp, 0649 WITN-7 Washington, NC tp, 0712 WMAR-2 Baltimore, Md. tp, WRC-4 Washington DC tp, WMAL-7 tp Washington, DC, 0750 WPRI-12 Providence, RI. 8-15-68 0613 WAVY-10 tp Norfolk, Va., Un-ID-6 at 0620 with color bars, 0630 WSyr-3 Syracuse, NY (NEW), Un-ID tp on ch 9 very weak, WNYS? 0645 Un-ID tp on ch 6, WRGB Schenectady? 8-22-68 1730 WEAR-3 Pensacola, Fla., 1756 WTVJ-4 Miami, Fla. over local ch 4, 1808 WLBT-3 Jackson, Miss., 1900 WESH-2 Daytona Beach, Fla. 9-3-68 0605 WNAC-7 Boston, Mass., 0620 WTEV-6 New Bedford, Mass. tp, WJAR-10 Providence, RI and at 0638 WPRI-12 also Providence. In the August issue Randy Miltier mentioned receiving KSTL on ch 2. It must have been an add for the St. Louis radio station, because on 7-8-68 I saw on ch 3, "The Professionals Report, KSTL News", followed by an ID panel. However, the call letters on the panel were unreadable, so so no ID was possible. The closest ch 3 to St. Louis is about 120 miles, so what good would an add do out of their range do? I am considering a new set with UHF. I would like to know if I can expect the same kind of range on UHF tropes as VHF? I'm now up to 76 stations identified, most photographed. Best of DX! (Before considering buying a new set with UHF, have you considered a UHF converter? They are very easy to install and sell for a lot less than a new set! Hi! As for what tropes to expect, the reports in this column and the WDX column speak for themselves. Just look at some of the reports of UHF DX. Good luck and welcome to the club, MG)

Bill Grant, 16 Goulding St., Worcester, Mass (EDT)

8-10: 1530 WESH-2 Daytona Beach, Fla., 1540 WTHS-2 Miami, Fla., 1600 WUSN-2 Charleston, SC All were Es. 8-11 MS 1030 WSB-2 Atlanta, Ga. 8-21 2000 WEDU-3 Tampa, Fla., 2005 WESH-2 Daytona Beach, Fla., 2005 WDBO-6 Orlando, Fla., 2030 WUSN-2 Charleston, SC, 2230 KTCA-2 St. Paul Minn., 2230 KDAL-3 Duluth, Minn. 2300 KUSD-2 Vermillion, SD., 2300 KGLO-3 Mason City, Iowa. All were Es. 8-22 Es 1730 to 2100 WESH-2 Daytona Beach, Fla., 1730 to 2100 WEDU-3 Tampa, Fla., 1740 WBRC-6 Birmingham, Ala., 1830 WDSU-6 New Orleans, La., 1930 WJXT-4 Jacksonville, Fla. The DX openings of the 21st and 22nd were very strong for so late in the season. In fact it seems to have been an extra long season for TV DX. On the 22nd WESH and WEDU were seen for  $3\frac{1}{2}$  hours with co-channel interference from time to time. I hope to have some tropes to report next month. Bill (I hope you do too Bill. It looks as though I tuned in too late on the Aug. 21 opening. As I noted last month, I flipped over to VHF at 9:45 and noted Es to NE and south until about 10:07PM when all went out. MG)

Gary A. Olson, 5901 W. Brown Deer Rd., Apt. 107, Brown Deer, Wisc. 53223 (CDT)

8-19-68 WWTW-9, WPNB-7, WLUK-11, WFRV-5 (new), WBAY-2, WISC-3 (new). All were tropes. 8-21-68 9-9:30PM Un-ID Es on ch. 2 & 3. 8-29-68 evening tropes WSJV-28 (new), WCIU-26 (new), WFLD-32 also un-id UHF on ch 15, 17, 22, 23, 27.

Bill Draeb, Ellis Street, R.R. #2, Kewaunee, Wis. 54216 (CDT)

Aug 6 KMEG-14, WICD-15, WLFI-18, WKEF-22 all at 1233; 1836 KTCI-17 (new), 1901 KMEG-14, 1948 WCMU-14, WUCM-19, WKNX-25, WICD-15, WLFI-18. Aug 10 0620 WKNX-25. Aug 12 1829 WCMU-14, WUCM-19, WKNX-25, 2030 WLFI-18, WICD-15 at 2037. Aug 13 2000 WICD-15, WLFI-18, 2008 WCMU-14, WUCM-19, WKNX-25, WTVS-56, WKBD-50, 2025 WKIX-19, WIZ-25. Aug 15 0550 WKNX-25, 1748 WKTR-16, 1850 WICD-15, WLFI-18 2000 WANE-15, WPTA-21, WKJG-33, 2030 WCMU-14, WUCM-19, WIZ-25, WKIX-19, 2057 WKBD-50, WTVS-56, 2103 WAKR-23, 2206 WEEQ-35, 2212 WEEK-25, WMBD-31, 2220 WAND-17, WIRL-19, WICS-20, 2226, WIMA-35. Aug 15 0455 WJW-8, 0530 WKYC-3, WBNS-10, WFBG-10, WTIC-11, WCIA-3. Aug 17 2200 WICD-15, WLFI-18, 2302 WAND-17, 2313 WICS-20, WEEK-25, WMBD-31. Aug 18 0600 WJW-8, 0630 KHQA-7, 0640 WGEM-10, 2100 WICD-15. Aug 20 2125 WCMU-14, WUCM-19, WKNX-25, 2131 WTVS-56, 2133 WDHO-24, WKTR-16, WKEF-22, 2147 WKIX-19, 2152 WANE-15, WPTA-21, WKJG-33, Aug 21 0525 WKYC-3, WTRF-7, WJW-8, WBNS-10, WTIC-11, WFMJ-21, 0600 WKNX-25, WKBD-27, 1900 WCMU-14, WUCM-19. Aug 22 2135 WCMU-14, WUCM-19. Aug 23 2000 WUCM-19, 2004 WCMU-14. Aug 28 2100 WCMU-14, WUCM-19, WPTA-21, WKNX-25, WKYT-27, WKTR-16, 2210 KMEG-14, 2215 WKEF-22, 2125 Un-ID-70 translator to SW, 2138 WEEK-25, WMBD-31. Aug 29 1625 WLFI-18, WICD-15. Sept 3 2115 WCMU-14, WANE-15, WLFI-18, WUCM-19, WPTA-21, WKJG-33, WKBD-50, WTVS-56. Sept 12 KFTZ-34 (new) Fond du lac, Wis. at 1622 testing with color bars & various slides. UHF total now at 97 and overall total is 385 stations. That's all for now, 73's and good DX. (15 to go! MG)

Bill Heusmann, 3116 Sangamon Street, Steger, Illinois 60475 (CDT)

Things have slowed down considerably. Part of it might be due to the fact that I now am working and don't feel like getting up at 0500 when I can't return to bed! On the mornings I have looked, conditions haven't been very good. Aug 13 0533 WICU-12 Erie, Pa. with weak CBS type tp (new), 0900 WKNX-25 Saginaw MI. (new) Thanks to Morrie for telling me of the opening! 1000 WKBD-50, WTVS-56, Detroit. August 21 0500 un-ID carrier on 28 from SE, WKYT-27 Lexington, Ky. ??? 0506 WKYC-3 Cleveland s/on (new). 0511 tent WJW-8 Cleveland with color bars and unreadable writing at bottom of screen, 0554 WTRF-7 Wheeling, W.Va. with tp and music (NEW), 0615 WTAE-4 Pittsburgh, a surprise with ID then resolution chart, (new), 0629 Un-ID-7 west with blank carrier, probably KWWL Waterloo, Iowa wiped out local WBKB s/on. 2145-2215 Es to east. Un-ID-2 over local WBEM - occasionally strong. Fellow where my mother works IDed CBFT, Montreal, but I couldn't. Ouch! Aug 24 0455 WCBS-2 NYC tp via MS. Local WBEM was only running audio carrier. 0615 WKY-4 Oklahoma City tp via MS. 0617 WLWT-5 Cincinnati, s/on with tp. Sept 5 around 2100: WLWI-13 Indianapolis with almost local quality. Weak WTAF-31, Marion, Ind. with White Sox Game and 2130 ID. Haven't seen them in a long time. Sept 7 MS 0549 WOAI-4 San Antonio. Noticed Aurora QRM on WTMJ-4 Milwaukee in late afternoon, but no ID's or programs. Later heard Ottawa mentioned on ch 3 newscast: only thing I made out. Strong to SE. Tried video carrier injection for the first time. Fun, but no help. Noticed some weaker aurora QRM next couple of nights. WJBK-2 Detroit on Sept 14 with tp at 0449 and later s/on (new). 0517 small, RETMA tp with writing in center by MS on 4 from SE. WHNT finally verified with a second request and rec'd a quick negative reply from CKCO-13. They suggested WAST Albany, NY or WOKR Rochester NY. That's it for this month. Sure hope that aurora on the seventh was the vanguard of many more!

Morrie Goldman, WA-RAQ, Editor (CDT)

This last month was for me quite a dud. No notable tropes were logged and as I mentioned last month, I came up with a blank on the Es opening of Aug. 21. Strong aurora was noted on Sept. 7 to ch 6 till 2AM when I hit the sack. Unfortunately no IDs. About 6:18PM that same day, short lived Es to the east appeared and vanished yielding no ID's. Sept 12: More aurora but weaker, with Un-IDs on ch 3 & 4 at 8:30PM. Trop openings were also noted on Sept 2nd and 5th. I hope next month shows more life.

73's and best of DX, Morrie

### NOTICE

This is admonition to the fact that this vellum bears atramentous denotions which admonishes the verity of the forthwith ojaculation. It is therefor derived that in view of this, the peruser of this text has completed the rendition of the anterior script. This in brief signifies nihility. If you can yield assistance pertaining to the above proclamation please contact your nearest psychiatric institution.

MISTAKES: if you find a mistake in this bulletin, please consider it was put there for a purpose. We publish something for everyone and some people are always looking for mistakes.

ende

# CCI

Gary A. Olson  
5901 W. Brown Deer, Brown Deer, Wis 53223 \*\*\*\*\*

On an experimental basis your Worldwide TV-FM DX Club initiates a new column. Your participation and interest will govern whether it will continue to appear (and if it captures your fancy how often it shall appear).

Unidentified stations (commonly abbreviated UNIDs) are always a problem for DXers. Through a centralized location, such as this column, it is often possible to get assistance in getting your UNID stations identified. DXers in other areas of the country (or world for that matter) may be able to guide you in determining a mystery station.

The CCI column (CCI = Co-Channel Interference) makes the exchange of UNID information possible. You are encouraged to assist your fellow station chasers by dropping them a card or short note or by contacting the CCI column if you have any idea as to the source of the mystery stations listed each month.

When submitting UNIDs to the column please use the following format:

NAME + COMPLETE ADDRESS.....

DATE OF RECEPTION

TIME OF RECEPTION

CHANNEL

MODE OF PROPAGATION

MATERIAL RECEIVED

DIRECTION MATERIAL RECEIVED FROM

MISCELLANEOUS INFORMATION

When indicating the information received please provide only information which can be pinpointed (such as advertising, names of station personalities, program names, etc.) since it would be virtually impossible to find out who was, for example, carrying a CBS soap operat at 11:50 AM from the east" or "had war movie on at 10:45 P.M."

For openers I will list my UNIDs for this summer. Your help is appreciated: (all times CDT)

7/20/68 - ch. 12 - 10:25 P.M., Wisconsin news sponsored by "Bob's" to direction N or NW via tropes (Man behind desk was reading news - sponsor logo for "Bob's" was in front of him) WAEQ? KEYC?

7/22/68 - ch. 16 - 11:15 P.M., tropes - "Adventures in Paradise" overrides WNDU-TV for about 40 seconds - direction east

7/23/68 - ch. 14 - tropes - 9:25 A.M. IHTP without call letters, at 9:55 station switched to RETMA TP without call letters. ID slide was displayed briefly at 10 A.M. then RETMA TP was put up again - direction north east

7/25/68 - ch. 14 - 9:55 P.M., - tropes - appeared to be a war documentary or war movie, was interrupted by a slide for about 20 seconds at 10 P.M., then film was resumed - direction was north east

8/13/68 - ch. 5 - tropes - 11:30 A.M. - ABC station in station break gives ad for 7-Up with dealer tag for Midcontinent Bottlers and then Healthknit T-shirt ad - direction west (WOI ?)

8/15/68 - ch. 4 - tropes - 6:25 A.M., station breaks from NBC today show and presents Michigan weather. Promo at 6:27 A.M. for "TV Sports on 4" and Jim Bloom sports - direction north east - (WTOM ?)

The above should be enough for starters. We'll list more next month. Send your puzzlers to me for listing.... and good DXing in October!

Conducted by  
David T. Janowiak

October  
TECHNI/CORNER

3661 South 46 Street  
Greenfield, Wisc. 53220

The previous two Techni/Corner columns described the use of ordinary transmission line as a tuned stub for reducing the signal strength of a station on a given frequency. This topic was selected as a starter because, in my opinion, it is of great interest to most DXers. (I would appreciate hearing from any DXer who tried to build these stubs. The tuned stub principle, although old, is very effective. If it didn't "work" for you, it was because you "blew it", not because the idea is N. G.)

While writing the stub article, it was decided that the subject of the first series of articles would be the transmission line. The idea of developing a key subject (antennas, UHF converters, transmission lines) into associated construction projects, theory, buying hints, etc, does seem logical, and I hope will prove satisfactory to the readers.

However, both Ferdie and I have received a few requests for info about what types of DXing equipment to buy. I would appreciate it if all readers address their requests to me personally. If a DXer wants info on a particular piece of equipment that will not be discussed in the near future, I will give that DXer all the help I can via a letter.

Remember, this is your column. It is up to you to let me know what subjects are of interest, although I will eventually discuss all phases of our hobby. But I cannot discuss, for example, the merits of various antenna manufacturers or what boosters or receivers are best etc. in four or five columns.

#### PART I: ALL ABOUT TRANSMISSION LINES

Unquestionably, the transmission line (T-line) is the most misunderstood and misused component in the average DXers' receiving set up. When upgrading an existing receiving system -- or installing an entirely new system -- most attention is given to high-gain antennas, tall masts, boosters, etc. The poor neglected T-line is usually taken for granted.

But one fact cannot be ignored: As much as 50% of the useable signal at the antenna may be lost due to an incorrect choice and/or installation of the T-line. Improvement of any receiving system should begin with the T-line.

What T-line is best for me? Why is installation so critical? What about velocity factor, impedance, etc?

Hopefully, these questions and others will be answered in this series.

#### WHAT IT DOES

A T-line in a receiving system transfers power from the antenna to the receiver. Simple, but then not so simple.

The ideal T-line would transfer this power to the receiver (1) without loss and (2) without introducing other signals not received by the antenna. Point (2) can almost be achieved, but point (1) can never be achieved. Selection and installation of a T-line, however, should be based on how close you can come to the above two points, that is, how much of the original signal is left at the receiver and how "pure" it is. Sometimes, a compromise is necessary. But first, let's look at how a T-line is constructed.

HOW IT'S BUILT

Conventional T-lines for VHF/UHF reception consist of two parallel conductors separated by an insulating material. Power is transmitted from one antenna terminal down one conductor to the receiver and back through the second conductor to the other antenna terminal. (In this case, the antenna acts as a power generator, and the receiver is the load.)

The two conductors are not always of the same material. Coaxial T-line (coax) might consist of two different conducting materials as shown in Figure 1. A center wire of copper or steel forms one conductor. This is surrounded by the first insulating material (or materials). Many types of material, all with high RF resistance, may be used. The second conductor, actually a shielded or braided material usually made of copper, surrounds the first insulating layers. The outer insulator completes the coax. Note that coax actually consists of "layers" of concentric insulators and conductors.

Coax for TV/FM applications, which can be purchased from most large electronic warehouses, usually has an impedance of 72 ohms. However, coax is often designed for any impedance needed for a particular application.

Figure 2 is a cross-sectional view showing the construction of flat 300 ohm line. Only two materials are used: (1) The identical parallel conductors made of steel, copper, or a combination of steel and copper, and (2) the insulating jackets, usually polyethelene.

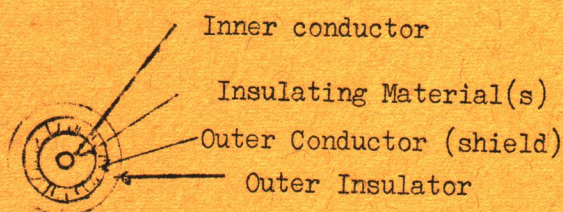


Figure 1.  
Cross Sectional  
View of Coax

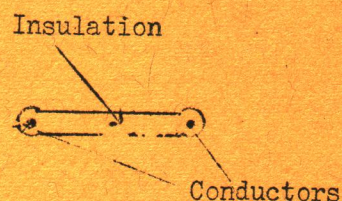


Figure 2.  
Cross Sectional View  
Flat Wire

This series continues next month with part II. Upcoming topics include: T-line characteristics important to DXers, choosing T-line for particular cases, installation.

73's

Dave

Dennis Park Smith  
Music Department  
University of California  
Santa Barbara CA 93106 USA

# WESTERN DX

OCTOBER 1968

For TV reports west of the Mississippi River  
Deadlines: 12th of each month

We have just returned to Santa Barbara for another school year as of this writing in mid-September. I gave address of 321 Santa Barbara St., S.B. 93101 last month; although mail will be received at either place, the address at top of page will be more convenient. Also note the slight change in deadline

There are both TV and FM reports in this month's column; however, I understand that Roger Winsor is now in charge of FM-DX, so those with FM can now write to Roger at his address.

The excellent Es conditions which built up at the end of July continued into August, then tapered off before mid-month with only isolated loggings through the rest of the month. Es dates reported here in August (FM underlined): 2, 3, 4, 5, 6, 7, 10, 11, 12, 16, 22, 25, 27.

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

Here is my report of DX from last report to date (9/4). I leave for Ames tomorrow, so DXing will be nil from now on. Times CDT/EST.  
8/5 KTSB-27 Topeka KS (230mi) @ 2302; 8/13 KVFD-21 Fort Dodge IA (120) @ 0700, K78AW-78 @ 0714 translating KRNT-8 at Carroll IA (80) -- my first translator DX; 8/14 WDAF-4 @ 0008, KCMO-5 @ 0018, both Kansas City (245), KAUS-6 Austin MN @ 0942 thru WOW-6 (200), KMNE-7 Bassett NB (Neb. ETV Net.) (160) @ 1509; 8/16 WISC-3 Madison WI (350) @ 0034 -- sent tentative report which they vfd., WMC-5 Memphis TN (600) Es @ 2200; 8/19 KXAB-9 Aberdeen SD (xmtr Conde SD) (200) @ 0721 before KCAU s/on; 8/23 KOMU-8 Columbia MO (315) @ 0713; 8/28 tentative KHQA-7 Hannibal/Quincy MO/IL (315) @ 0700 with "Education Today," tentative report out. Veries received from KORN-5, WZZM-13, WKBT-8, WSAU-7, WEAU-13, & KSTP-5 (for tent. rpt. 8/4) in addition to those underlined above. All in all, a very good season, 22 new loggings for a 122/94 total on TV.

KHNE-29 Hastings NB, 8th link in the Neb. ETV network, will probably be operational in late October '68. KHNE-TV will have ERP of about 1.5 MW directional to NW/SE. KXNE-19 Norfolk has ERP of 2.86 MW and is slightly directional to NW, NE, & SW. Anyone reporting reception of a NETVC station should report to Nebraska ETV Network, c/o Mr. Wm. R. Ramsay (Director of Engineering), 1600 R Street, Lincoln NB 68508. The network is very interested in DX reports and Mr. Ramsay has verified all of my reports of its stations. All for now. 73's and best of DX.

(Thank you for your report, Stu, and for your info on the Nebraska ETV Network. Good luck in another year with industrial engineering at Iowa State University. dps)

Glenn Hauser, 1312 West Oak Avenue, Enid, Oklahoma 73701

(First, a FLASH from Glenn that just missed the September column:)

My third highband Es catch has just been verified to my satisfaction by Mrs. Charlene Murphy of SC ETV. In a letter dated 14 August she says, "I believe we can verify your reception of Channel 7 (WITV), Charleston on Friday, June 21, 1968. In checking with the director of the JUNE BUGG program, he did present a safety puppet show on that day and the closing credits do feature children singing." This raises my Oklahoma total to 342 TV stations received. WITV-7 is 1040 miles away and runs 27kw visual ERP. Previous highband Es catches were WITN-7-NC, 1155 miles, and WCKT-7-FL, 1270 mi.

(Once again, congratulations, Glenn. Now to his DX in August.)  
Aug CST Call MHz Prop Location Comments (New if distance given)  
2 0527 WJFM 93.7 E GrandRapidsMI \$(stereo), TC (time check): 27:30; ID. 790mi

(Aug)

- 4 0912 KFMB-100.7 E San Diego CA mil'y pgm, 0916 CBS, 0948 "From Tabernacle"  
 0914 KPRI-106.5 San Diego CA? \$ folk  
 0917 KSEA- 97.3 San Diego CA? \$ mx; McMaster?  
 0917 KID-? 96.1 Idaho Falls ID? \$ light mx  
 0918 XHW-? 90.0? La Paz BCS? mx, 0939 M (mono), ID, weak mod-AM? list 90.1  
 0920 KBOI- 97.9 Boise ID M, Ada County, Idaho; 1075 mi  
 0926 XESS- 88.8 Ensenada BGN M, Motores y Refacción Rivera 9-15-61  
 1105mi- 0932 relg "Voz de la Verdad"; nx: 91.3, 92.9  
 0927 KACE- 92.7 Riverside CA M, ID "Kay-Ace." news; 2.1kw, -90'; 1105mi  
 0928 KDHI- 95.7 29 Palms CA? M, "Bible Speaks to You"  
 0931 KNOB 97.9 Long Beach CA "\$KNOB" "opposite Disneyland" 0959 LA ad  
 0952 KOWN- 92.1 Escondido CA \$ synd mx, ID  
 0958 KDUO 97.5 Riverside CA \$ ID  
 0959 KNAC 105.5 Long Beach CA \$ HEmlock 5-1161, ID by YL; 0.33kw; 1150mi  
 1000 KSDO-103.7 San Diego CA M, ID, "Classic stn over southern CA"  
 1002 KPFK? 90.7 Los Angeles CA? M "Inhale, exhale"  
 1002 KCHV? 93.7 Coachella CA? M net nx, weak mod (AM-MBS)  
 1006 KARL- 95.9 Carlsbad CA \$ "R. Carl bulletin board" "PO Box 1277"  
 1007 KFMX 96.5 San Diego CA \$ "...in La Jolla"  
 1015 KFAC-? 92.3 Los Angeles CA? M choral clas  
 10 0508 KWKI 93.3 G Kansas City ID, "Mid-American Country Giant" ex KCMK  
 0551 WDSU- 93.3 MS New Orleans LA ad mention Louisiana State  
 0910 KRFM 95.5 Phoenix AZ "nix" weather  
 1430 KFLA 94.5 G Scott City KS \$ mx, no ams until 1600 wx, 1606 ID;  
 c. 1605 improved by lightning bursts; 220 mi  
 11 0453 WMDE 98.7 MS Greensboro NC London House ad 882-xxx6 ( point)  
 0745 WKPT- 98.5 Kingsport TN Tennessee traffic facts  
 0759 WQSB 105.1 Albertsville AL "WQSB Radio News" w/drums; 670 mi  
 0923 WOOD-105.7 Grand Rapids MI "...in living \$ on WOOD-FM" 790 mi  
 1827 KSBY- 93.3 E San Luis Obispo CA station promo, \$ synd, surprise  
 opening; nothing on TV till later; 1265 mi  
 1828 KERN- 94.1 Bakersfield CA M, Billy Graham via Mutual, 1829 WAC-  
 Bakersfield promo; 1175 mi  
 1853 KDB- 93.7 Santa Barbara CA Land Office Eqpt, S.B. 966-2266; distorted;  
 antenna -1000'; 1225 mi  
 1855 KXFM? 99.1 Santa Maria CA? \$ mx o/KMAG  
 1858 KFAC- 92.3 Los Angeles CA M mx, 1859 Café de Paris, Hollywood,  
 1904 news by local  
 1900 KNJO 92.7 Thousand Oaks CA M, YL vcl, ID 1904 nx of CA; 3kw, -20'; 1175mi  
 1906 KPFK? 90.7 Los Angeles CA? lecture on Israel & Jordan  
 1906 KNX-? 93.1 Los Angeles CA? \$ rock  
 1907 KVFM? 94.3 San Fernando CA? \$ upbeat, again 1915  
 1907 KPOL- 93.9 Los Angeles CA southern California ment; o/KSPI  
 2359 WJFM 93.7 MS Grand Rapids MI ID in Dolly Holliday intro  
 12 0059 KVEG- 92.3 Las Vegas NV casino ad "on the strip"  
 0101 ? 94.5 ? Holiday Inn Nighttime (ant NW)  
 0130 WEBH 93.9 Chicago IL "...EBH broadcasting around the clock  
 from the ... Hotel overlooking Lake  
 Michigan..."; 660 mi  
 0201 WEAU-105.1 Evanston IL "WEAU-FM News": 665 mi  
 0203 WHKY-102.9 Hickory NC s/on msg: "KY-FM, 14800 watts..."; 920 mi  
 0212 WJBI 94.1 Cincinnati OH ID, mx bg; 750 mi  
 0216 WWW 106.7 Detroit MI "double-you four"  
 0229 CFCA-105.3 Kitchener Ont "This is CKKW and CFC..." (First Can. MS)  
 1075 mi  
 0300 WOOD-105.7 Grand Rapids MI "operated by Time-Life Broadcasting Inc"  
 0323 WBT- 107.9 Charlotte NC Zimmerman's, 110 N. Main, Salisbury; 950mi  
 0338 WSTP-106.5 Salisbury NC ID (taken as WSPT): 965 mi  
 0401 WOMC 104.3 Detroit MI s/on; 885 mi  
 0414 WKEE-100.5 Huntington WV WV news

(Aug)

(2) 0417 CFCA-105.3MSKitchener Ont Kitchener-Brantford score  
 0453 WBTM-103.3 Danville VA HFC in Danville, 121 S. Union; 1015mi  
 0503 KTXR 101.5 G SpringfieldMO ID; 260 mi  
 0528 WLAC-105.9MSNashville TN "WLAC-FM Weather Outlook"; 610 mi  
 0557 KYSM-103.5 Mankato MN ID in passing (taken as KYSL); 575 mi  
 0559 WMJR 100.7 FtLauderdaleFL Florida Power & Light ad by Jim  
 Harper; x-Tampa x-Pensacola  
 0657 WRED 101.1 Youngstown OH Youngstown news; 975 mi  
 1248 WAPL-105.7 Appleton WI "one of few stns in WI.."plugwx;735mi  
 1259 WBAW-105.1 Evanston IL Epileptic League, Chicago 726-6391  
 (? above indicates tentative loggings. Glenn's TV-DX follows.)

Loggings on TV prior to this report were made on the usual antenna but stuck in direction of Dallas; hereafter my CT90 was available on rotatable FM mast, 25 feet high, with a knife switch to choose between TV antennas. Distances are given for new loggings.

Aug	CST	Call	Ch	Prop	Location	Comments
2	0405	WBBM	2MS		Chicago IL	old standby; TP. again 0409
	0501	WUSN	2		Charleston SC	ID slide
	0909	XEW/O	2E		México/Guadalajara	ID, 1045 dubbed Dick van Dyke
	0909	XEZ	3		El Zamorano Qro	//2 "Puente de Cristal"
3	2116	WESH	2		Daybeach FL	FL nx
4	0859	KUTV	2		Salt Lake City UT	USU Extension pgm; again 1829, ID
	0859	KCPX	4		Salt Lake City UT	ID
	0901	KSL	5		Salt Lake City UT	CBS, offset
	0902	XETV	6		Tijuana BCN	TP. ID-photoed, 0930 Plymouth, 0951 local quality
	0928	KID	3		Idaho Falls ID	promo w/ID, 0929 plug KID-FM 96.1
	1059	KBOI	2		Boise ID	PPA ment Ada Cnty; again 1629
	1129	KLEM	3		Lewiston ID (WA)	ID, CBS-delayed
	1728	KHQ	6		Spokane WA	local dentist ad as sponsor of wrestling. How appropriate.
	1728	KREM	2		Spokane WA	live colour coverage of boatrace accident
	1730	KXLY	4		Spokane WA	"Great Music," 1746 KXLY-TV addr
	1858	KRTV	3		Great Falls MT	ID
	1858	KOOK	2		Billings MT	ID
5	0900	WWAY	2		Wilmington NC	Bowling Center ad
	0932	WUSN	2		Charleston SC	"30 country hits," WUSN-TV addr
6	1629	KTVN	2		Reno NV	ID
7	1914	WESH	2		Daytona Beach FL	ID
9	0428	WLWD	2MS		Dayton OH	TP; several bursts; another regular
10	1659	WESH	2E		Daytona Beach FL	ID; thunderstorm QRM
11	0512	WLWD	2MS		Dayton OH	TP; "blanketing" burst for many sec seconds—characteristic of Perseids
	1857	KEYT	3E		Santa Barbara CA	Your Remnant Store ad in Sunday Matinee
	1905	KNXT	2		Los Angeles CA	CBS-delayed "XXI"; 2100 ID
	2033	KBOI	2		Boise ID	ID in Mission: Impossible
	2059	KTVN	2		Reno NV	ID
	2132	XHBC	3		Mexicali BCN	ID
	2352	KOOK	2MS		Billings MT	slide "Kook Weather"; newbyMS; 19th state
12	0402	WBBM	2		Chicago IL	TP
	0454	unIDs	7			definitely MS bursts, but no IDs, sob.
	1629	WEDU	3E		Tampa FL	promo "Firing Line," ID
	1640	WDIQ	2		Dozier AL	"Ham Operators Club," 1700 ID.
						Unfair! Unfair!
	1656	WRBL	3		Columbus GA	CBS News, 1659 ID
						DX slackened off quite a bit after mid-August, but I still had one notable catch.
22	1059	KORK	3E		Las Vegas NV	local ad, ID: again 1459 w/PPAs
	1159	KUTV	2		Salt Lake City UT	ID; strange QRM possibly de own xltr A first?

(Aug)

(22)1159K03--?3 Utah? Nevada? Wyo- during time KUTV-2 ID slide on  
 ming? translator. screen, switched to 3 and saw  
 identical slide, then //NBC. Seemed too far west  
 for KRTV MT, altho possibly KUTV ID got sent on  
 network to another station. Seemed offset plus.  
 Live net so not CA or NV stations. Inquiries out.  
 Similar instance occurred 1 July 1963, but no ID.

1359 KNXT 2 Los Angeles CA CBS O&O ID slide: PDT  
 1411 KBOI 2 Boise ID Boise fair ad  
 1429 KNBC 4 Los Angeles CA ID  
 1559 KTVN 2 Reno NV ID  
 1933 KHQ 6 Spokane WA Q6 on mike in interview, 2002 local  
 quality in local news  
 1959 KXLF 4 Butte MT ID; pix of it at last  
 1959 CKCK 2 Regina Sask Regina ad  
 25 0929 KFSA 5 T Fort Smith AR audio o/KOCO, ID. First time able to  
 log since September 1962!

1204 XEFE? 2 E Nuevo Laredo Tams dubbed Top Cat  
 1206 KIII 3 Corpus Christi TX ID slide like Goldman's foto in Feb VUD  
 1216 XEFB 3 Monterrey NL local ad, program promo in colour  
 1240 XHQ 3 Culiacán, Sinaloa dim TP, mx; pixed; new, 975mi. Anyone  
 else DXed it yet? #343

That wraps it up from Enid—perhaps for quite some time, at the  
 whim of the USAF. Until the next, 73 de Glenn.

(See Roger's column for Glenn's last FM-DX and wrap-up. You surely  
 did have a brilliant season before heading off to the Air Force. Hope  
 you survive basic training there in San Antonio. dps)

Dennis Smith—for the last bit of this summer's DXing from Wasco,  
 California, the only Es noted this time was 27 Aug: 0859 PST KCKT-2  
 Great Bend KS w/ "KSN" ID, and at 0925 WKY-4 Oklahoma City with Danny's  
 Day program; there was skin most of the afternoon but not good and no  
 IDs--at 1335, had ch 2 "CBC NEWS." Also on 27th, heard KLBS-FM LosBancos  
 CA (135mi) on again--they were on only briefly in Fall 1967; still dupl  
 KLBS-1330 but FM freq changed from 95.9 to 95.5, but they still announce  
 95.9--somebody's confused. 9 Sep: a bit of morning tropes from KRCR-7  
 Redding CA (local ads, IDs, NBC) and KRFD 99.9 Marysville CA (background  
 type music after s/on apx 0800); they remain my farthest tropes at 390 &  
 275 mi respectively. Thus ends my summer; my TV total seen is 126 and  
 FM heard 169 (I think). Future FM from me will of course appear in FCC  
 News section or in Roger's FM-DX column.

My sister and brother-in-law in Walnut Creek CA bought a new Mag-  
 navox color TV set and sold me their 15" Zenith portable, Model L1620-3  
 Chassis 14L20 (apx-1965-VHF only) so I finally have a TV rx that I can  
 carry around. The previous set in use in Wasco has been a 1954 Zenith  
 21" console, Chassis 19L28, with which I have done all of my TV-DXing  
 since I first started in January 1954. I will report its Santa Barbara  
 results next time, which will include use with UHF converter.

I have located the transmitter of the ch 8 translator for KEYT 3  
 Santa Barbara. It is on the Mar Monte Hotel on East Beach in Santa  
 Barbara, a mile or less from where I am living. It is the regular 1-  
 watt transmitter, with two 10-element yagi antennas pointed in two dif-  
 ferent directions, to fill in a couple of problem shadow areas of KEYT.

Perhaps it may be of some interest that before taking the portable  
 from Walnut Creek, I compared its performance to the new color set.  
 Sensitivity on the B&W portable was slightly better than on the Magnavox  
 and the Magnavox's UHF tuner seemed very shoddy and unsuitable, whereas  
 the Blonder-Tongue BTX-11A UHF Converter hooked to either set did work.

Best of DX to all

Dennis

ROGER BUNNEY  
Trelawne, Cupernham Lane  
Romsey, Hants, England  
SO5 8JH (zip)

# THE EUROPEAN SCENE

In the coming Winter season, it is expected that more F2 will occur, and if this reaches the frequencies used by television, the low-band stations used by the BBC on ch. B1 are the most likely to be received. Accordingly, I am going to give details of the modifications which can be carried out to an FCC receiver, to enable it to receive the positive-going video. In the past various methods have been tried to resolve our + signals; one way was to reverse the cathode and grid connections on the picture tube itself. A more satisfactory way of achieving our aims is to make these modifications at the detector. It is assumed that the person modifying the receiver is using an alternative receiver to the normal DX set, so the mods. can be made permanent, and the set made to operate efficiently at 405 lines. Usually, the video detector is a small germanium diode, situated in the last IF can, and this is simply reversed in polarity, and soldered back in its original position. Now the video amp. is next for attention. Some simple re-biasing is necessitated; often this requires the doubling of the existing cathode bias resistor. At present in the FCC set, this is most likely to be low in value, such as 100 ohms or so. The + bias is increased by doubling this resistor. To increase the bias a little more, a feed is taken to the cathode pin, via a high value resistor from the high voltage. This value should be around 33k, and should be rated at least 4 watts and be a carbon. Attention should be paid to the AGC feed from the detector line. Often on negative going sets, an additional feed is taken from the actual rectified signal, via a stand-off resistor such as a 30k  $\frac{1}{2}$  or  $\frac{1}{4}$  watt, through another crystal diode and to the AGC line. This is to prevent overload on strong negative signals, and for + signals this should be removed to maintain gain. This completes modifications for the actual vision signal in the receiver.

As all DXers will know, the British system on Band I uses 405 lines, with a 50-cycle frame. The frame speed should present no problem as this is most likely to be covered on the vertical hold control. If not, a check can be made on a weak 60 cycle signal, (to see how much control there is over the range of speeds), the value of the grid bias resistor, in series with the vertical hold should be increased. The line frequency of 10125 cycles/sec. is not likely to be on the range of the horizontal hold control, and the speed of the horizontal oscillator can be dropped by again increasing the value of the resistor in series with the horizontal hold control, in the grid circuit of the horizontal oscillator. Remember that when the set is on 405 lines, there may be excessive width, and this must be reduced. Another way of decreasing the horizontal frequency is by increasing the value of the horizontal charging capacitor, by shunting it with another. With the set operating at different boost voltages, due to the change in line frequency, this may alter the setting of the optimum focus point, and these will have to be adjusted accordingly. The extent to which these modifications will affect the set will depend on how well the set is made and performs.

As a point of interest --- the sets which I use for DX work are all standard 405-line models, and these run well at 625, (indeed, one has been running on 625 since 1963 with little trouble).

I can remember that one American manufacturer exported turret tuners to the United Kingdom and that this was an American unit. I recall it was made by Standard-Killsman, Inc. Undoubtedly, anyone in the TV trade will know the firm, and applications could be sent to the firm explaining ones needs; this inquiry may result in their supplying coils for our ch. B1 and 2. This is assuming that you have one of their turrets in your set of course. The coils are undoubtedly interchangeable. Then you have the coils, it is a simple matter to peak them to other channels such as E2, O1, etc.

I hope this column was of some use, and if you have any queries, let me know them,

Good f2 dx

*Roger*

## DX AT DEADLINE:

The following FCC News and DATA newsnotes received at publishing time: WBKB-TV, channel 7 in Chicago (owned by ABC) will change its call letters on or about October 7th to WLS-TV to match the call letters of its sister AM and FM stations; a new Fort Lauderdale UHF station, WSMS-TV, is due on the air in late October according to recent reports; long awaited KFIZ-TV in Fond Du Lac, Wisconsin, went on the air in mid-September and are now broadcasting daily from about 5 P.M. to 10:30 P.M. with 680 kw. ERP., on ch. 34.

Word has just been received that Television magazine with be combined with Broadcasting magazine as of the October issue. For those of you who subscribe to both, your Television subscription will be tacked onto your Broadcasting subscription.

An article in the September, 1968, Popular Science ("YourTV Antenna May Be Out Of Date") lists various types of antennas available with list prices. Those of you who have done much with UHF antennas will note that JFD lists the UCL-22 at \$28.50 as their "big gun" for UHF. The UCL series is a line which was under experimentation for several years at the JFD testing lab in Champaign, Illinois. It is a long antenna with a series of disks stretching out over its length. Preliminary reports received a couple of years ago indicated that this model would outdo the popular ZU-20 (two bay zig-a-log) by a couple of db. No reports have been received as of late, however, any of you who have purchased any of the new UCL series -- be sure to let the Worldwide TV-FM DX Club know of your success (or failure) with this model.

Still no word and no bulletins received from the CDXC (Canadian DX Club) for several months. Indications are that a quarrel between their overworked publisher and a member of their executive branch may have caused the demise of the organization.

A 3-page flyer was received here (no doubt some others among the membership also received it) from the Radio Listeners of America -- the "nation's fastest growing DX club" according to their information. Published out of Tallahassee, Florida, the club is presided over by Ken Hopkins, a DXer of over seven years who is a radio program director for station WOMA. The club says it is primarily concerned with AM-FM-TV DXing and will expand to other fields later.

This announcement is your headquarters' first notice of the existence of RLA. We have not heard of it before, but will certainly watch for its future progress.

# PROPAGATION = f2

by Dennis Smith

The mode of propagation under discussion this time is F2 skip. The F2 layer of the ionosphere is up to 150 miles above the earth's surface while the E-region is about 50 miles. So a single F2 hop is about 2000-3000 miles as compared to about 800-1500 for E reflections.

In contrast to sporadic-E, it is definitely known that the sun has a direct influence on the F-region. F2 skip is the mode responsible for much regular shortwave reception. Many of you know that winter is better for SW reception, especially on upper frequencies, because the earth is closer to the sun. Winter and early spring are particularly good in peak times of the 11-year sunspot cycle. This is F2 skip, a daytime condition, which can be noted above the usual 30-MHz limit of SW in these seasons and cycle times, opening up unusual areas of spectrum for DXing. It peaked in 1957-8 and winter-spring 1969 is the next peak.

In the Americas, the low VHF region between 30 and 54 MHz has many kinds of specialized communications such as industrial two-way, police, paging, and amateur. TV channel 2 is 54-60. England's ch 1 and France's ch 2, however, start at about 41, and these lower frequencies will be the first to watch for TV-DX by F2 skip.

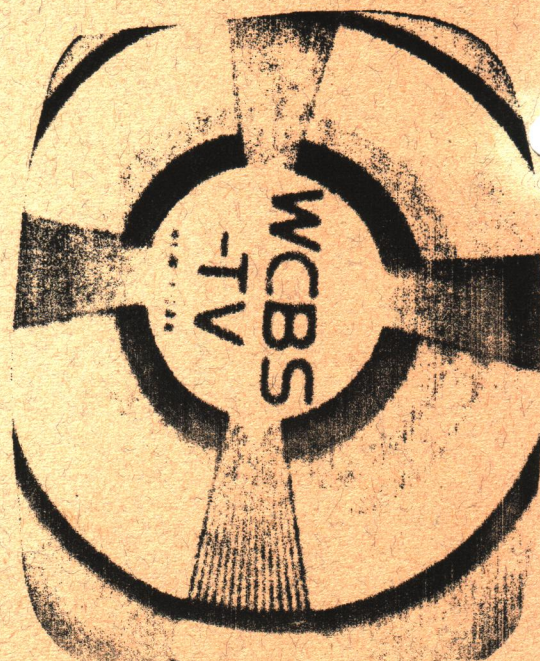
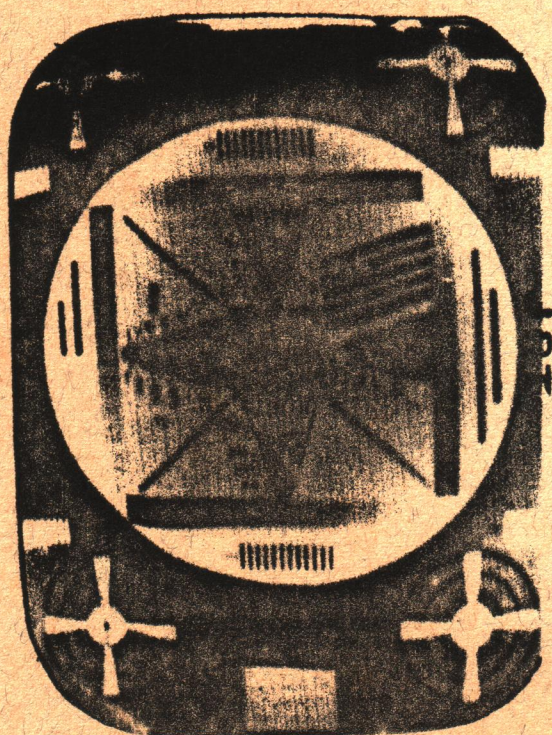
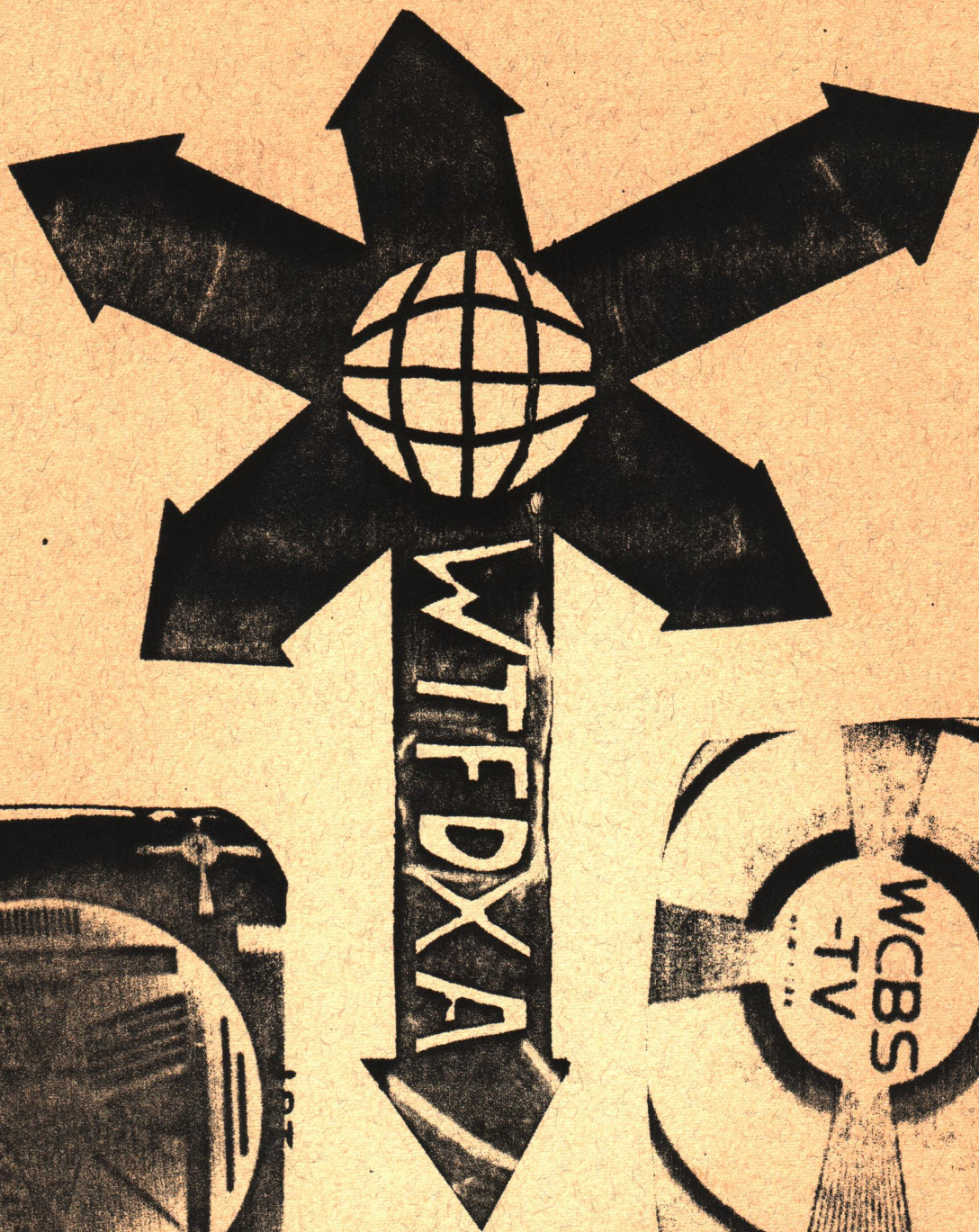
How can one determine that F2 skip is on the move into areas of VHF? Probably the best way is to use a radio receiver tuning above 30 MHz such as a 30-50 radio. If citizens and 10-meter ham band (27-30) are full of skip, listen for two-way and paging. Virtually all two-way in 30-50 is FM in the U.S. while paging is AM. If AM is heard on an FM receiver, or vice versa, tune to a sideband for intelligibility. Paging stations are on the air continuously on 35.22, 35.58, 43.22, & 43.58, so they are particularly good indications of improving F2. If 35-MHz paging shows long-range skip, 41-MHz TV-DX may be just around the corner, particularly in eastern half of North America. Then listen for British ch 1 audio (41.5) and French ch 2 (41.25), both AM sound. If it improves further, you may hear Br ch 1 video on 45.0 which will sound like a raspy 50-Hz buzz. If you are already set up with modified video gear or European TV receiver, you know what to expect or hope for. If conditions improve (and it may not) to the point where it goes into the 6-meter ham band (50-54, largely AM-voice & CW-code), other European channels may be noted, and you may then find some weird video signals on your TV receiver on ch 2 (54-60) or slightly below, evidenced by lack of synchronization and negative picture. It is then that TV may be seen in Europe from the Americas, too. European F2 may be noted by double-hop in western North America, and Australia and New Zealand may be a possibility there, also.

F2 skip can offer strong signals, as strong or stronger than Es, so even a dipole cut to 40 MHz will be useful. Multipath is very evident on F2 video signals, however, by much ghosting and smearing.

Following is a list of some low TV channels, with ch number (underlined) and video & audio frequencies in MHz.

W. Hemisphere (A), FM audio	2: 47-54 (V48.25 A53.75)	*E2A is 1½
2: 54-60 (V55.25 A59.75)	3: 54-61 (V55.25 A60.75)	MHz above
Gr. Britain (B), AM audio	Soviet (R), FM audio	E2.
1: 41-48 MHz (A41.50 V45.75)	1: 48.5-56.5 (V49.75 A56.25)	Red China
2: 48-53 (A48.25 V51.75)	2: 58-66 (V59.25 A65.75)	uses R ch.
3: 53-58 (A53.25 V56.75)	Australia, FM audio	except R2a is
4: 58-63 (A58.25 V61.75)	0: 45-52 (V46.25 A51.75)	1½ MHz below
France (F), AM audio	1: 56-63 (V57.25 A62.75)	R2 in China.
2: 41.15-55.15 (A41.25 V52.40)	New Zealand, FM audio	
4: 54.30-68.30 (A54.40 V65.55)	1: 44-51 (V45.25 A50.75)	
Europe (E), FM (Belgium AM) audio	2: 54-61 (V55.25 A60.75)	

Look to other columns such as VHF Radio for further details on the approaching F2 season. (E-system includes Africa and Asia, too.)



WTFDXA emblem  
 designed by Bill Heusmann, Steger, IL.  
 JRT, (Jugoslovenska RadioTelevizija),  
 test card sent by Roger Bunney.  
 WCBS-TV, ch.2, New York City, courtesy  
 of publisher Ferdinand Dombrowski.

## ANARC Convention:

Last month I presented the official ANARC report sent by ANARC-HQ but I thought an unofficial account from WTFDA-HQ would be in order since I was one of the last people to leave Omaha and there was much excitement after as well as during the convention.

As mentioned last month, after the tour of Offutt Air Force Base most of the convention-goers went to KFAB-AM and FM, but 4 of us from WTFDA, (same four in the group picture last month: publisher Ferdie Dombrowski, eastern editor Morrie Goldman, statistics editor Glenn Hauser and contest editor Bill Heusmann), went instead to visit KMTV-3 and KETV-7. At channel 3 we roamed around for nearly an hour unescorted and Bill took a number of fotos. The photographer who had filmed convention highlights the previous night was especially helpful to us. Then we went across the street to KETV-7 where we had a 15 minute tour by a station employee. Then we rushed back to the motel to see ourselves on the evening newscast of KMTV-3.

ANARC exec Gerry Dexter left the next morning (Sunday) but most of us stayed until after the noon luncheon. After lunch, the convention ended and most guests left within a couple hours. Ernie drove 3 of us remaining guests to Boys Town, SAC antenna farm and other places in the greater Omaha area. Shortly after we returned to Ernie's home for supper, a tornado was sighted near Boys Town, and virtually every other place he had shown us was also hit by tornadoes in the next half hour. We sweated it out but were lucky. As Ernie drove me to the railroad station the tornado was at the airport. My train was delayed another hour, (it was stopped outside Omaha to await the tornado's passing), and the train was again stopped about an hour later in Iowa.

An interesting sidelight: while waiting for the train in Omaha depot, I met 2 girls also going to Milwaukee, and later discovered they work the same place I do, too!

Before Glenn Hauser left Sunday, he drove me to the depot to drop off the FM antenna I had won at the banquet, but they informed me that it was too long and I couldn't take it on the train as personal baggage and they wouldn't ship it by train either. So I took it to Ernie's and his father sawed it in half for me. Three years ago my UHF-LPU antenna broke in half and was very easy to fix so I wasn't worried about this.

--fsd

## HEADQUARTERS LATE NEWS:

At press time 30 September, some columns had not been received so that is why they are not in this Digest.

During the recent visit of Bill Heusmann and Morrie Goldman, Bill volunteered to be our contest editor. First on his docket is to write manufacturers to obtain prizes so there will be a delay before the 1st contest is scheduled; but we will have them. Anyone who has had contest experience or has suggestions please write :

Bill Heusmann, 3116 Sangamon St., Steger, Illinois 60475

I received recently a special article about horiz vs vert polarization from Joe Gragg, but did not have time to edit and type it for this issue of the Digest. As Joe knows, it needs a lot of editing.

The last sunspot count we published in the May issue showed that altho the cycle was approaching its peak, this peak would be nowhere near the peak of the last cycle. January and March, 1967 had a hi average of 108 and in June the low for 1967 was reached, (62). Since then the count has steadily increased again, with an average of 92.4 in March, (1968), 81 in April, 128.5 in May, and 115 in June. We'll have the July and August counts next month in VUD. Watch for it.

Special help from Gary Olson on publishing date is much appreciated this 2nd month in a row. Bill and Morrie 10 days earlier, too. (fsd)

WORLDWIDE TV-FM DX ASSN.  
Box 5001, Harbor Station.  
Milwaukee, WI. 53204

THIRD CLASS--  
news matter....  
return requested.