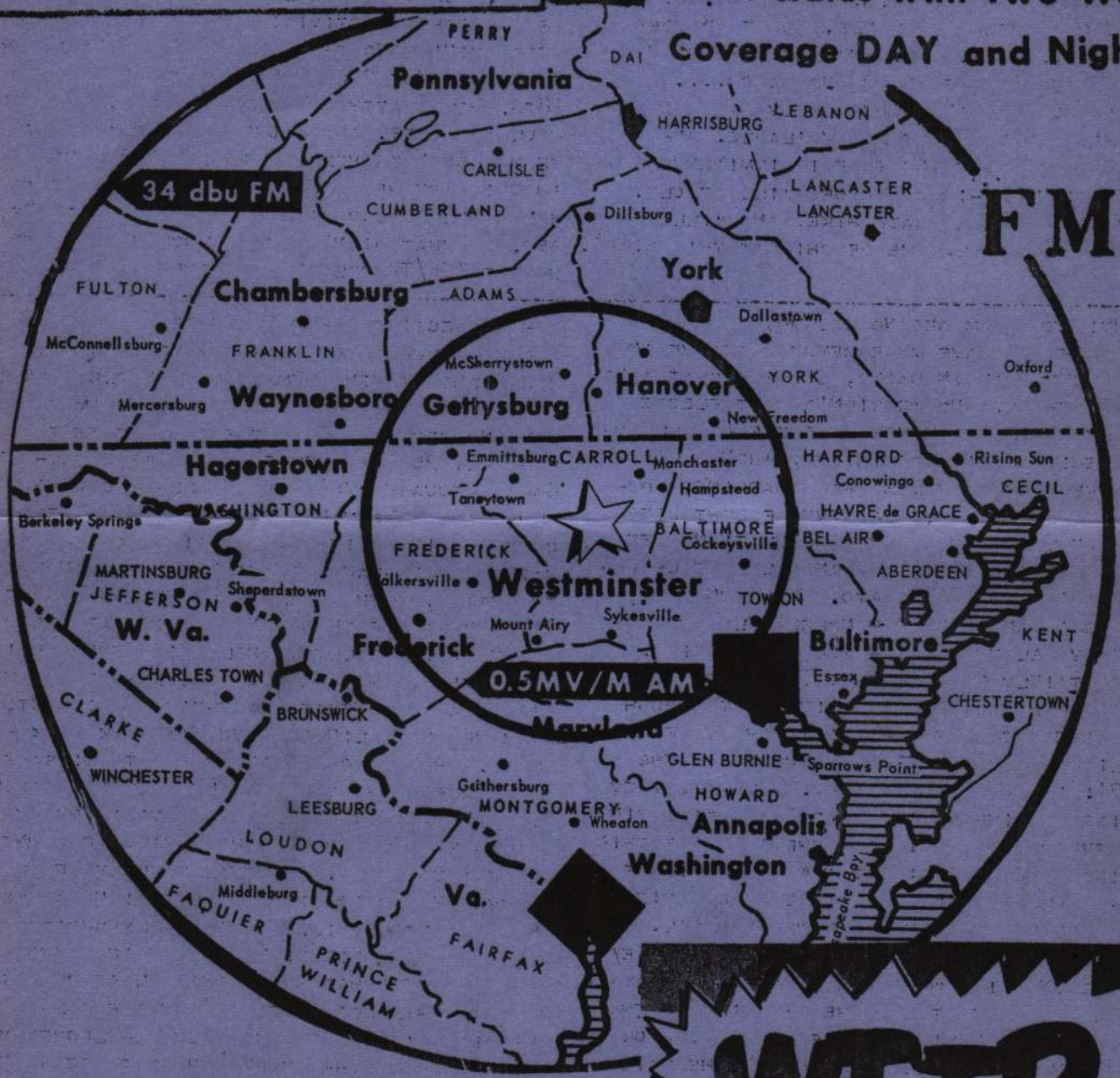


VHF-UHF DIGEST

JAN. 72

The Stereo and Vertipower Regional Voice of Quality Covering important portions of 4-states with Two-Way Coverage DAY and Night



WTR

AM-1000 Watts 1470 KC
FM-20,000 Watts 100.7MC

FM STATION LIST: SEE NOTE AT END OF CTV COLUMN.
TV STATION LIST: AVAILABLE FROM HQ-MILW: \$2.00.
TV MAP BOOKLET: PUBLICATION DELAYED UNTIL SPRING.
FM ATLAS & STATION GUIDE: SEE END OF CTV COLUMN.
STATIONERY AND CLUB EMBLEM, RUBBER STAMP:

BOTH HAVE BEEN OUT OF STOCK FOR SOME TIME BUT SHOULD BE IN STOCK AGAIN BY TIME YOU READ THIS. IF YOU HAVE ALREADY ORDERED, IT THEY WILL BE SHIPPED VERY SOON. EMBLEM IS \$2, AND STATIONERY 45 SHEETS FOR \$1.

VERIFICATION FORMS (TO BE SENT TO STATIONS):

SAME PRICE AS STATIONERY, 45 FOR \$1.00.

BACK-ISSUES CURRENTLY AVAILABLE, 35¢ TO MEMBERS:

FEB., AUG., SEPT, OCT, AND DEC...1970

ALL 1971 EXCEPT FEBRUARY AND MARCH....

SOME ISSUES ARE IN SHORT SUPPLY SO ORDER

NOW WHILE THEY ARE STILL AVAILABLE. AN-

OTHER POSTAL RATE INCREASE IS IMMINENT &

A RAISE IN BACK-ISSUE PRICES WILL RESULT.

(THATS A 3RD CLASS RATE HIKE, AND WILL

NOT AFFECT REGULAR MEMBERSHIP AT THIS TIME).

(CONTINUED FROM SECOND COLUMN)

SOME CLUBS SEEM TO HAVE MORE MEMBERS ACTIVE IN CLUB GOVERNMENT THAN IN DXING, SO WE DIDN'T WANT TO BE ONE OF THOSE. AND WE DIDN'T WANT ELECTED BUT POSSIBLY UNWILLING MEMBERS SCATTERED ALL OVER NORTH AMERICA MAKING DECISIONS, WHEN ALL OR MOST HAD NEVER SEEN A MEMMOGRAPH MACHINE, ADDRESSOGRAPH, OR COLLATOR, HAD NEVER FOUGHT WITH IGNORANT POSTAL EMPLOYEES OVER REGULATIONS AFFECTING THE BETTER USE OF OUR ANNUAL POSTAL BUDGET OF APPROXIMATELY \$500, ETC. UNFORTUNATELY, ALL THESE ASSISTANTS AT HQ HANDLED ONLY ACTIVITIES DIRECTLY RELATED TO THE VUD PUBLICATION, WHICH IS CERTAINLY NOT ALL THAT I HAVE TO DO; WHEN I DECIDED A YEAR AGO THAT IT WAS TOO MUCH FOR ME, I GAVE THE STAFF THE DIRECTIVE TO FIND A NEW PUBLISHER BECAUSE I WOULD QUIT IT BY THE END OF 1971; IT WAS AN ULTIMATUM. SOMEHOW, THEY GOT THE MISTAKEN IMPRESSION THAT I WAS DIVESTING MYSELF OF EVERYTHING; THIS WAS THE FARTHEST THING FROM MY MIND BECAUSE I DIDN'T WANT TO RESIGN FROM THE CLUB--I ONLY WANTED TO SPLIT UP THE DUTIES SO I COULD DEVOTE MY SELF TO ANSWERING MAIL. IN 1971 WE FINALLY PUBLISHED A NEW MEMBER PACKAGE/BASIC COURSE IN DXING WHICH HAS CREATED A TREMENDOUS MAIL LOAD, ADDED TO BY THE OFFERING OF THE FM ATLAS, TV STATION LIST, RUBBER STAMPS, BACK-ISSUES, ETC WHICH ARE ALL INVOLVED IN THE MAIL LOAD AS WELL.. GARY AND MORRIE VOLUNTEERED TO TAKE OVER PUBLISHING MONTHS AGO, AND NOTHING MORE WAS HEARD UNTIL LATE NOVEMBER. THEY HAD VERIFIED THEIR INTENT PERIODICALLY BUT HAD NOT OFFERED ANY PLANS, ASKED FOR SPECIFIC INFORMATION, ETC. AS ANNOUNCED LAST MONTH, THE HQ OPERATIONS WILL MOVE TO ILLINOIS SHORTLY SO BEGIN SENDING MOST CORRESPONDENCE THERE IMMEDIATELY. EDITORS, MAIL YOUR STENCILS THERE BY 20 JANUARY. MAIL FOR F. DOMBROWSKI SHUD STILL GO TO BOX 5001 BY ADDRESS-ED SPECIFICALLY TO FSD.

OUR NEW FM-QSL EDITOR POINTED OUT THAT HE HADN'T RECEIVED ANY MAIL BECAUSE I NEGLECTED TO MENTION LAST MONTH THAT HE HAD BEEN APPOINTED FM-QSL EDITOR. RIGHT ON, SO HERE IS HIS ADDRESS:

DENNIS MOE, Rt. 2, Box 32, ST. ANSGAR, IOWA
ZIP CODE 50472. SORRY ABOUT THAT, DEN.
FOLLOW GUIDELINES OF THE TV QSL CORNER.

WE HAD REQUESTED EDITORS TO GET THEIR COLUMNS TO MILWAUKEE BY THE 18TH IF POSSIBLE, THIS MONTH, DUE TO THE HOLIDAYS AND SCHEDULED MOVE OF PUBLISHING ACTIVITIES TO ILLINOIS RIGHT AFTER FINISHING THE JANUARY VUD, AND THANKFULLY ALL BUT 2 COLUMNS ARRIVED ON OR BY THE 18TH. BILL MATTHEWS PHONED THAT HIS COLUMN WOULD BE LATE, AND CHUCK DOBBINS WROTE THAT HE HAS BEEN TRAVELLING THE PAST 2 MONTHS AND THAT IS WHY HE HASN'T HAD A COLUMN. HE WAS HOME ONLY 4 DAYS IN NOVEMBER AND 5 IN DECEMBER, SO THAT DIDN'T LEAVE MUCH TIME TO TYPE UP THE FCC/TV COLUMN FOR DECEMBER & JANUARY.

I HAVE RECEIVED SEVERAL LETTERS ASKING ABOUT HOW THE CLUB IS RUN, WHAT VOTE IF ANY THE AVERAGE DUES-PAYING MEMBER HAS IN CLUB AFFAIRS, ETC. WHEN WMRC CHANGED NAME AND FORMAT 4 YEARS AGO AND BECAME WTFDA, THE CLUB AT THAT TIME HAD ONLY 26 PAID MEMBERS, WHO WERE ALL-BAND DXERS BECAUSE WMRC WAS AN ALL-BAND CLUB. THE CLUB WAS A ONE-MAN OPERATION AT HQ WITH A FEW CONTRIBUTING EDITORS. THE SITUATION AT HQ REMAINED A ONE-MAN OPERATION FOR FOR ANOTHER TWO YEARS, ALTHO BILL HEUSMANN AND MORRIE GOLDMAN HAD BEGUN COMING TO MILW AT THEIR EXPENSE PERIODICALLY TO HELP WITH THE PUBLISHING ACTIVITIES. WHEN GARY OLSON MOVED TO MILW HE BECAME A MUCH NEEDED PART-TIME ASSISTANT, AND WHEN MOVED TO ILLINOIS DAVE JANOWIAK TOOK HIS PLACE. WHEN BRUCE ELVING MOVED TO MILWAUKEE HE BECAME A THIRD ASSISTANT. ALL THIS WHILE BILL AND MORRIE CONTINUED TO VISIT EVERY 3-4 MONTHS FOR VUD PUBLISHING ACTIVITIES, UNTIL ABOUT A YEAR AGO. EVENTUALLY THESE PEOPLE INSISTED ON A VOICE IN CLUB DECISIONS AS WELL, AND I GRANTED THIS. WE HAD EARLY DECIDED NOT TO HAVE A CONSTITUTION AND ELECTED OFFICIALS WHICH WE FELT HAD HURT OTHER CLUBS MORE THAN THEY HAD HELPED: PARTICULARLY THE AIPA WHOSE OFFICIALS WERE AUTOMATICALLY RE-ELECTED YEAR AFTER YEAR WHETHER THEY WANTED TO BE OR NOT. NO ONE ELSE VOLUNTEERED SO THEY CARRIED ON. AT MILWAUKEE, WE FELT THE PEOPLE BEST QUALIFIED TO GOVERN WERE THOSE WHO VOLUNTEERED ASSISTANCE WITH PUBLISHING ACTIVITIES WITHOUT PAY; THEY WERE FAMILIAR WITH HQ PROBLEMS UNKNOWN TO OTHER MEMBERS. THEY WERE ALSO IN CLOSE CONTACT FOR FAST DECISIONS WHEN NECESSARY, SINCE ALL LIVED IN CHICAGO-MILWAUKEE. AND ONE LONG-DISTANCE PHONE CALL COULD SOLVE EVERYTHING IF ONE LETTER WAS TOO SLOW.

(CONTINUED IN PREVIOUS COLUMN)

[UNIDENTIFIED-DX]

Leslie J. Prus
1615 Pierre Street
Manhattan, Kansas 66502

deadline: 12th of month

JANUARY 1972

C.C.I.

At times it may be necessary to eliminate some unIDed reports sent to this column, but the only reason for doing so will be to weed out those loggings that have virtually no chance of being identified. There should be sufficient information included for an unidentified logging so that only one station will eventually answer the description. If more than one does, it is unlikely that a positive identification can ever be made without going through the whole reception report/verification request process.

As much relevant information as possible about each logging should be included in a report to this column, as this will increase the chances of the logging being identified. The following summary is intended as a guide (both to new members and old-timers) indicating what kind of information is usually of value in IDing an unknown station, and what is not.

DATE - also include the day of the week

TIME and TIMEZONE - the use of the 24-hour system is preferred

CALL LETTERS - if only one, two, or three letters of a call are understood, indicate in your report the letters you are sure of, and those you are not. Keep in mind that misreading of calls is common both visually (WCIV-TV seen as WCN-TV) and aurally (KXCV, Maryville, Mo. heard as KXCB).

FREQUENCY - if not sure of the frequency of an FM station, or UHF-TV, indicate the approximate range of uncertainty, if possible. (Taping the millimeter scale of a transparent plastic six-inch ruler over your receiver's slide rule dial will aid in reading the frequency more accurately. Make a table of equivalence - 62.5 mm - 92.7 MHz, etc. - for known semilocal stations and then graph it. Accuracy with my Sony AM/FM \$35 table radio using this method is never worse than .1 MHz to .2 MHz of error, though most of the time I am correct in assuming what frequency I am tuned to.)

PROPAGATION MODE - indicate whether E-Skip, Tropo, MS, or Undecided. (if E-skip, those stations received within an hour prior to and following an unIDed logging can often provide a clue to the station's general location.)

NETWORK and PROGRAMING - In television unIDs, program data is important since such information can easily be traced with a TV guide. With FM stations, program data other than network and a general description (Rock, Classical) will be virtually useless, since there is no easy way to check up on musical selections, weather conditions in a particular town or city, or the names of sportscasters and disc jockeys.

ADVERTISING - A commercial break can be of considerable value, but only if it is local in nature and mentions the name, address, and/or telephone number of a particular store. These can then be traced by consulting phone directories or calling directory assistance in the suspected city. National advertisements are of no value, since they can originate from any of hundreds of stations.

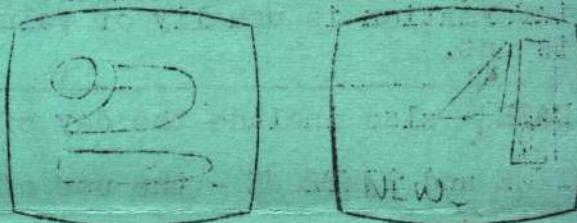
OFFSET INTERFERENCE PATTERN - (Television only)

The co-channel interference pattern (CCI), if properly interpreted, is useful in reducing the number of possible stations to choose from. (An explanation of the process can be found in the TV DX Article in the New Member Pack.

LOCATION - This can often be approximated through the use of such clues as antenna direction, the characteristics of the DX "opening," the station's time zone, slogans or announcements mentioning cities in the vicinity, and local news, weather, and sports reports.

IDENTIFICATION SLIDES - ID slides

often have some unique feature making it possible to ID the station even if the call letters are not shown. At right: WESH-2 Daytona Bch. Fla. WDAF-4 Kansas City, Mo.



TEST PATTERNS - A knowledge of the various types of test patterns used by stations is invaluable in MS (meteor scatter) DXing, and very useful in IDing stations (by any propagation mode) when the call and city cannot be made out. An excellent 6-page guide to test patterns can be found in the MAY 1, 71 issue of the VUD. Copies of the TP Guide are available from Headquarters - see CCI page 3 for details.

All these factors are important, and they should substantiate each other. Remember not to be too hasty in assuming things about the stations that are not necessarily so. If you see a station carrying "Sesame Street" it probably is an ETV station, but not always! Many commercial stations broadcast "SST." (KQTV-2 at 0900 CST, for one) Stations of one network may use programs of another to fill out their schedule if that city is not served by the "other" network, as when KTSB-27 Topeka, "NBC for Eastern Kansas" plays the ABC Tuesday Night movie.

Unidentified loggings begin on page 3. Abbreviations used in the column are "PTA" which stands for probable target area, and "TV" which stands for television. When an FM frequency is followed by one or more question marks ("?"), it signifies the degree of uncertainty. One "?" means an error of up to 1 FM channel on either side of the indicated frequency (0.2 MHz.), while two "??" indicates an uncertainty of 2 channels on either side. Thus 94.5 ?? means (94.1 to 94.9) The absence of question marks indicates that the frequency is exact.

UNIDENTIFIED LOGGINGS

Pat Dyer, 327 Solar Drive, San Antonio, Texas 78227

— TV DX from Boulder, Colorado (MDT) 1971

- Sat Jul 31 Es Ch. 2 2015 -Program: "Minority Report"
PTA: Pacific Northwest (KATU-2)
- Sun Aug 1 Es Ch. 3 1300 -Discount Ad w/ Houston address
PTA: Texas (KIII-3, KBTX-3 ?)
- " " " " Ch. 3 1457 -Program: "The Plainsman", Ad for
Shrine Circus. PTA: Central U.S!
- Fri Aug 13 Tr Ch. 10 0620 -Program: "Good Neighbor Hour"
PTA: Western Kans. or Neb. (KSTF?)

— FM DX from Boulder, Colorado (MDT)

- Fri Jul 30 Es 96.9 ?? 1140 -"Paul Harvey Comments," Ad for the
Red Coach Inn. PTA: Great Lakes
- " " " " 88.5 ?? 1148 -mentioned the Wild Rose Medical
Center in Wisc. PTA: Great Lakes
- Sat Jul 31 Es 94.1 ?? 2046 -Ad for movie "Yellow Submarine"
PTA: Pacific Northwest

— TV DX from San Antonio, Texas (CST) 1971

- Tue Nov 2 Es Ch. 2 1945 -PBS Program: "The Advocates", loss
of network video. Suspect four etv
stations: WDIQ, WDCN, WSJK, WUND.

Henry Jones, 14941 E. State Fair, Detroit, Michigan 48205 (FM, CDT)

- Thu Sep 30 Tr 89.1 ?? 2150 -Opera Music, announced as being in
"Mid-Pennsylvania."
- Fri Oct 1 Tr 107.1 ? 0054 -Ballad music with s/off at 0100
Call sounded like "WPA-" and power
either 2 or 10 kw.
- Sun Oct 17 Tr 104.1 ?? 0550 -"Showers of Blessings" suspect
WWOL, Buffalo.
- " " " " 102.9 ? 0600 -"Personality Doll of the Week"
Award, contemporary music. Thinks
call sounded like WCCO-FM.
- Thu Oct 28 Tr 90.9 ? 1745 -Jazz music, detailed weather rpt.
from 1800-15. Suspects WHAD in WI.
- Mon Nov 1 Tr 90.9 1730 -(CST!) Stock market reports from
"the Michiana Univ. Campus" in Mich
(There is a Michiana in SW corner
of Michigan--but I could find no
college by that name. LJP)
- " " " " 90.5 1754 -Announcement: "W--- presents Concerts
of Great Music." Also heard on same
frequency: WKAR-FM. Suspect WCBE
in Columbus, Ohio.

PUBLISHER'S NOTE: RE PAGE 1 COMMENTS ON PROGRAMMING, SOME FM STATIONS PUBLISH PROGRAM GUIDES LISTING MUSICAL SELECTIONS, NAMES OF LOCAL PERSONALITIES CAN SOMETIMES BE FOUND IN THE STATION'S ADVERTISING IN TV GUIDE, LOCAL NEWSPAPERS, SRDS, TV FACTBOOK, ETC. BIG CITY LIBRARIES AND UNIVERSITY LIBRARIES, AND SOME NEWSSTANDS HAVE OUT-OF-TOWN NEWSPAPERS WHICH CAN BE OF HELP; REGARDING LOCAL PERSONALITIES, A DXER/WTFDAER MAY KNOW THE NAMES OF PEOPLE NOT ONLY IN HIS AREA BUT ALSO IN OTHER CITIES HE GETS ON DX FREQUENTLY OR FAIRLY OFTEN--WHETHER TROPS OR SKIP.

MAY VUD WITH TEST PATTERN GUIDE: A FEW COPIES STILL AVAILABLE. REPRINT IN 1972 SOMETIME.

EASTERN TV

Dave Pomeroy
Channel 19
1211 McGee St.
Kansas City, Mo. 64106
Deadline: January 14

Well, it's 1972 and another DX year has gone--one which was disappointing in many ways DX-wise, but one which has had its high points as well--including some record-breaking UHF DX by such people as Bob Cooper, Robert Seybold, and Fred McCormack. Here's hoping 1972 will produce more recording-breaking DX. 1972 should also be an interesting year for the WTFDA as publishing moves from Milwaukee to the Chicago area. (best wishes Gary; and thanks for a job well done, Ferdie) 1972 also will bring new developments in the cable TV industry--an industry which could in future years bring a halt to our hobby. I'll close by presenting the first "Eastern TV-DX Reporter of the Year" award to Ronald J. LeBlanc for his excellent reports which are always neatly typed and include all essential information including VAFT and distances. Thanks, Ron.

Ronald J. LeBlanc, 2524 Arizona Drive, Marrero, Louisiana 70072 (CST)

11-10 Tr	1715 KTHV-11 Little Rock 4444R350	11-11	0930 KHOU-11 Houston, TX 5555R321
	1730 KATV-7 Little Rock 3333R350		1800 WSRE-23 Pensacola 4555R138
	1830 KHOU-11 Houston, TX 3544R321		1801 WEIQ-42 Mobile, AL 3555R138
	1930 WAAY-31 Huntsville 3235R375		1830 WTOG-44 St. Pete, FL 3555R488
	1935 WMAB-2 College Stn. 3042R258		2215 KVRL-26 Houston, TX 2031R321
	2000 KVUE-24 Austin, TX 3345N460		(through WWOM-26 New Orleans)
	2030 WMSL-48 Huntsville 4345R375		2225 KVUE-24 Austin, TX 2235R460
	2100 WHIQ-25 Huntsville 3455N375		2245 W70AU-70 Biloxi, MS 3345R70
	2101 KHTV-39 Houston, TX 3345R321		2415 KZTV-10 Corpus Christi 3455R
	2130 WHNT-19 Huntsville 4445R375		2440 WTVT-13 Tampa, FL 4455R488
	2200 WFIQ-36 Florence, AL 3235N360		2405 WLCY-10 Largo, FL 3455R472
	2201 WIIQ-41 Demopolis, AL 5545R220		2445 KSAT-12 San Antonio 3343R510
	2230 WBMG-42 Birmingham 4545R320		Others seen: WMAA-29, WAPT-16, KLNI-15,
	2410 KPRC-2 Houston, TX 4455R321		WRBT-33, KHTV-39, WEAR-3, WALA-10
	2412 KZTV-10 Corpus Christi 4445R	11-12	1900 KTHV-11 Little Rock 3335R350
	2420 XHX-10 Monterrey, NL 3355R700		1955 KTVE-10 El Dorado, AK 3434R285
	2435 WYEA-38 Columbus, GA 3455R337		2205 WMAB-2 College Stn. 3042R258
	2437 WHBQ-13 Memphis, TN 3453R366		2438 KATV-7 Little Rock 3335R350
	2443 KTRK-13 Houston, TX 4555R321		2440 KWTX-10 Waco, TX 3335R441
	0100 KBMT-12 Beaumont, TX 4555R244		2450 KSLA-12 Shreveport 3345R289
	0102 WBRC-6 Birmingham 3455R320		0105 KTEN-10 Ada, OK 2223N527
11-11	0600 WTVM-9 Columbus, GA 3454R337		0115 KBMT-12 Beaumont, TX 3333R244
	0605 WJKS-17 Jacksonville 4555R503		0145 KTKS-12 Sweetwater 3444N641
	0606 KNOE-8 Monroe, LA 4543R213		0150 WBAP-5 Dallas, TX 3335R485
	0615 WCOV-20 Montgomery 3345R289		0200 KTBS-3 Shreveport 3335R289
	0615 W70AU-70 Biloxi, MS 3355R77		0201 KTVT-11 Ft. Worth, TX 3335R485
	0625 WCWB-41 Macon, GA 3345R442		0210 KTRK-13 Houston, TX 3445R321
	0630 WSFA-12 Montgomery 5555R289		0215 WFAA-8 Dallas, TX 3345R485
	0635 WTCG-17 Atlanta, GA 4445N406	11-13	0550 WFTV-9 Orlando, FL 2235R510
	0640 WYEA-38 Columbus, GA 4555R337		0551 WTVT-13 Tampa, FL 3343R488
	0645 WBMG-42 Birmingham 3245R320		0555 WSB-2 Atlanta, GA 3334R406
	0648 WJSP-28 Columbus, GA 3345R337		0600 KNOE-8 Monroe, LA 4555R213
	0700 WETV-30 Atlanta, GA 3455N406		0645 KTVE-10 El Dorado 4442R285
	0730 WABW-14 Pelham, GA 4345N395		0655 KTVH-12 Hutchinson 3322N726
	0731 WACS-25 Dawson, GA 3445R365		November has been one of the best
	0800 WCFT-33 Tuscaloosa 3345R263		months in a long time for tropics, I
	0830 WIIQ-41 Demopolis, AL 4555R220		broke my old record by seeing 60 stns.
	0840 WDHN-18 Dothan, AL 4555R305		on Nov. 11. (Ron's total log is now
	0850 WXLT-20 Sarasota, FL 4555N503		217--incl. some not yet listed, dp)

Robert Seybold, Bennett Road, Dunkirk, New York (EST)

I hope some others got in on that late October opening. All those Alabama stations really surprised me. Got photos of some good distance stations. Had a lot of satellite (translator, dp) stations, too, unidentified at present on channels 70-83. Alabama stations were in for hours--not just in, then out.

9-7 to 10 Tr WCIU-26 WFLD-32 WSNS-44 Chicago (That must have been interesting--see Dec. 11-17 copy of TV GUIDE, dp) WCAE-50 St. John, IN WICD-15 Champaign, IL WNDU-16 WSBT-22 WSJV-28 South Bend-Elkart, IN WPTA-21 WKJG-33 WANE-15 Ft. Wayne WUHQ-41 Battle Creek, MI WGTU-29 Traverse City, MI WUCM-19 University Center WCMU-14 Mt. Pleasant, MI WTVO-17 Rockford, IL WJAN-17 Canton, OH WDHO-24 OH WEEK-25 WMBD-31 Peoria, IL WLFI-18 Lafayette, IN WUTR-20 Utica, NY WKNX-25 MI WICZ-40 WSKG-46 WBJA-34 Binghamton, NY WBGU-70 Bowling Green, OH WGTE-30 Toledo WENY-36 Elmira, NY WNEP-16 WDAU-22 Scranton, PA VHF to 400 miles+

9-29 Tr 0700-1000 WKZO-3 Kalamazoo, MI WMAQ-5 Chicago WJIM-6 Lansing, MI WFBM-6 Indianapolis, IN WOOD-8 Grand Rapids, MI WWTU-9 Cadillac, MI WILX-10 WJRT-12 Flint, MI WANE-15 WJAN-17 WDDU-16 WUCM-19 WPTA-21 Ft. Wayne, IN WDHO-24 WGTE-30 WUHQ-41 WLFI-18 WKBD-50 WTVS-56 WXON-62 Detroit, MI WBGU-70 1900-2400, general run of the above--all signals good to excellent

9-30 Tr excellent morning signals from most stations received on the 29th with conditions improving by evening. VHF drops into Pennsylvania, West Virginia, Kentucky, Illinois, Ohio, and Michigan to about 500 miles. Additional UHF stations: WICD-15 WTAP-15 Parkersburg, WV WQEX-16 Pittsburgh WLYH-15 Lebanon WKTR-16 Kettering, OH (thought they had gone off, dp) WNEP-16 WDAU-22 WBRE-28 WLEX-18 WKLE-46 WKYT-27 Lexington, KY WVTU-18 Milwaukee WKPT-19 Kingsport, TN WSYE-18 Elmira, NY WFYI-20 Indianapolis, IN WKEF-22 Dayton, OH WIMA-35 Lima Woub-20 Athens, OH WLKY-32 Louisville, KY KDNL-30 St. Louis, MO WOSU-34 OH WHIZ-18 Zanesville, OH WKON-52 Owenton, KY WKMR-38 Morehead, KY WCAE-50 IN WCET-48 Cincinnati, OH WICZ-40 WBJA-34 Binghamton, NY WENY-36 Elmira, NY

10-1 Tr terrific opening early AM till 1200 with little letup. All stations seen on 29th and 30th seen again, plus VHF in all directions to 500 miles with such as: WBZ-4 Boston WNEW-5 New York WCAU-10 Philadelphia WDTV-5 WV WLWT-5 WCPO-9 WKRC-12 Cincinnati WTTG-5 Washington, DC WSAZ-3 Huntington, WV WAVE-3 WHAS-11 Louisville, KY WDBJ-7 Roanoke, VA WPSD-6 Paducah, KY On UHF: WMUB-14 Oxford, OH (perfect) WKPC-15 Louisville, KY WNPE-16 Watertown, NY -18 Norwich CN (do you mean WNPI-18 in Norwood, NY? dp) WKIX-19 Cincinnati WMHT-17 NY WCDC-19 Adams, MA WUTR-20 Utica, NY WVTB-20 St. Johnsbury, VT WHP-21 Harrisburg, PA WKPI-22 Pikeville, KY WKZT-23 Elizabethtown, KY WCNY-24 Syracuse, NY WKAS-25 Ashland, KY WSMW-27 Worcester, MA WTPA-27 WVER-28 Rutland, VT WKSO-29 Somerset, KY WKGB-53 Bowling Green, KY WSBK-38 WGBX-44 Boston WTAF-29 WKBS-48 Philadelphia WGSF-31 Newark, Oh (4.6 kw) WRLP-32 Greenfield, MA WETK-33 Burlington, VT WLVT-39 Bethlehem, PA WHYN-40 Springfield, MA WVTA-41 Windsor, VT WEDW-49 Bridgeport, CN WVIA-44 Scranton WBLG-62 Lexington, KY WKMJ-68 Louisville, KY WHNB-30 Hartford, CN UNID-72 or 73 (could either be W73AR-73 Arcade, Delevan, & Yorkshire, NY or W72##-72 Great Valley Township, NY--both are translators of WNED-17 dp) Also unidentified translators on channels 71, 76, 82, and 83.

10-2 Tr WANE-15 WPTA-21 Ft. Wayne WKBD-50 WTVS-56 WXON-62 Detroit, MI WUHQ-41 Battle Creek, MI WBGU-70 Bowling Green, OH WDHO-24 WGTE-30 Toledo WKNX-25 Saginaw, MI WNDU-16 WSBT-22 WSJV-28 WJAN-17 WLFI-18 Lafayette, IN

10-3 Tr WJAN-17 WDHO-24 WGTE-30 Toledo WUHQ-41 WKBD-50 WTVS-56 WXON-62

10-15 Tr to 10-25 mostly evening or early morning--frequent reception of: WANE-15 WNDU-16 WSBT-22 WJAN-17 WUCM-19 WDHO-24 WGTE-30 WUHQ-41 WBGU-70 WKBD-50 WTVS-56 WXON-62 WPTA-21 signals above normal for this time of year

10-25 to 10-29 Tr WBRA-15 Roanoke, VA WTAP-15 Parkersburg, WV WQEX-16 PA WLEX-18 Lexington, KY WHIZ-18 Zanesville, OH WKPT-19 Kingsport, TN WKYT-27 WFYI-20 Indianapolis WKMU-21 Murray, KY WKPI-22 WKZT-23 WKAS-25 Kentucky ETV WHIQ-25 Huntsville, AL (800 mi) WAIQ-26 Montgomery, AL (continued on page 3)

Bob Seybold (continued)

10-25 to 10-29 Tr WTVK-26 Knoxville, TN WETV-30 Atlanta, GA (700 miles)
 WHNT-19 Huntsville, AL WAAY-31 Huntsville, AL (snowfree) WLKY-32 Louisville
 WOSU-34 Columbus, OH WIFQ-36 Florence, AL WKMR-38 Morehead, KY WUTV-29
 WDXR-29 Paducah, Ky WKSO-29 Somerset, KY (both over WUTV in Buffalo, NY)
 WUNJ-39 Wilmington, NC WHMA-40 Anniston, AL WURD-40 Indianapolis, IN
 WRDB-41 Louisville, KY WBNG-42 Birmingham, AL (first ch. 42 for Bob)
 WKLE-46 Lexington, KY WBVN-47 Norton, VA WMSL-48 Decatur, AL WKON-52 KY
 WKGB-53 Bowling Green, KY WBLG-62 Lexington, KY WKMJ-68 Louisville, KY
 WNFE-16 Watertown, NY WNPI-18 Norwood, NY WCDC-19 Adams, MA WUTR-20 Utica
 WCNV-24 WSMW-27 WVER-28 WVTB-20 WETK-33 WSBK-38 WHYN-40 WVTM-41
 WKBG-56 Boston, MA UNID-71 & 82 or 83 (translators for WNED-17) (couldn't
 find either of these two channels listed for WNED translators, dp) WANE-15
 WICD-15 WNDU-16 WSBT-22 South Bend, IN WAND-17 Decatur, IL WTVO-17 Rockford
 WJAN-17 WCEE-23 Freeport, IL WCIU-26 WFLD-32 WSNS-44 Chicago WGTU-29 MI
 WUHQ-41 Battle Creek, MI WCMU-14 Mt. Pleasant, MI WPTA-21 WKJG-33 On VHF:
 WAPI-13 WBIQ-10 Birmingham, AL WSLA-8 Selma, AL

Jerry Pulice, 143 Gibson Avenue, Staten Island, New York 10308

8-14 Tr WHNB-30 New Britain, CN WHDH-5 Boston, MA WRC-4 Washington, DC
 WNBF-12 Binghamton, NY WHP-21 Harrisburg, PA 6,7,10,12,38,56 MASS
 8-15 0041 WGAN-13 Portland, ME 0148 WXEX-8 VA (WGAN-13 finally photographed)
 8-16 Tr 2245 WGR-2 Buffalo, NY 2315 WROC-8 Rochester, NY 2330 WHEC-10 NY
 8-17 0115 WOKR-13 Rochester, NY 0135 WSYR-3 Syracuse, NY wedge-type TP
 0255 WBEN-4 Buffalo, NY 0304 WKBW-7 Buffalo, NY 0545 WNBF-12 Binghamton
 (slept through Kansas tropo--I do it every day dp)
 1230 WENY-36 Elmira, NY WNRJ-12 WSBK-38 WKBG-56 Boston, MA
 2200 WSYE-18 Elmira, NY WICU-12 Erie, PA (tent tive)
 8-18 0630 WJZ-13 Baltimore, MD WNBF-12 Binghamton, NY WJAR-10 Providence
 WHDH-5 Boston 0900 WMPB-67 Baltimore, MD WFBG-10 Altoona, PA
 8-22 2330 WSBK-38 WKBG-56 Boston, MA
 8-26 0300 WBZ-4 Boston, MA WRC-4 Washington, DC 0800 WVEC-13 Norfolk, VA
 WWBT-12 Richmond, VA WCTI-12 WTVD-11 Durham, NC--through ch. 11 NYC
 WNCT-9 WXEX-8 and UNID-3,6 (probably Wilmington, N.C.)
 0845 WJPM-33 Florence, SC WRLK-35 Columbia, SC (South Carolina ETV)
 0900 WHRO-15 Norfolk, VA WCVW-57 Richmond, VA WCVE-23 Richmond, VA
 0930 WNOK-19 Columbia, SC WOLO-25 Columbia, SC WRDU-28 Raleigh, NC
 WCCB-18 Charlotte, NC
 8-28 2130 WWBT-12 Richmond, VA WVEC-13 Norfolk, VA
 9-3 2345 WGAN-13 Portland, ME
 9-5 2300 WGAN-13 Portland, ME WVEC-13 Norfolk, VA WDCA-20 WETA-26 Wash.
 9-6 2230 WWBT-12 Richmond, VA WFBG-10 Altoona, PA
 9-7 0715 WLYH-15 WHP-21 WNEP-16 WBRE-28 WSBA-43 WDAU-22 Pennsylvania
 9-8 2230 WVEC-13 Norfolk, VA WAVY-10 Norfolk, VA WYAH-27 Norfolk, VA
 9-9 0555 WTVR-6 Richmond, VA WXEX-8 Norfolk, VA WRGB-6 Schenectady, NY
 0222 WEDW-49 Bridgeport, CN WEDN-53 Norwich, CN--CCI on W53AA
 9-10 Pennsylvania UHF's in good
 9-11 0550 WFBG-10 Altoona, PA WNAC-7 Boston, MA WHDH-5 Boston, MA WHNB-30
 9-15 2345 WBFF-45 Baltimore, MD WRGB-6 Schenectady, NY WMPB-67 Baltimore
 9-22 Rhode Island, Massachusetts, Pennsylvania good tropo
 9-23 0615 WFBG-10 Altoona, PA WHDH-5 Boston WTEV-6 WPRI-12 Providence, RI
 9-28 0330 UNID-58 (carrier or blip--possibly New Jersey ETV
 2315 K4 on 2 meters--Alabama
 WCVE-23 WCVW-57 Richmond, VA
 9-29 0630 WHEN-5 WWBT-12 WVEC-13 0930 WITF-33 Hershey, PA 2038 Connecticut
 channels 18,20,24,30,49,53 Massachusetts channels 10,12,27,56
 2200 WYAH-27 Norfolk, VA WCMC-40 Wildwood, NJ (continued in Feb. VUD)

Conducted by
David T. Janowiak

TECHNI/CORNER
January, 1972

3661 South 46 Street
Greenfield, Wisc., 53220

TV AND FM RECEIVING ANTENNAS:
FANTASIES, FADS, AND FACTS
PART III

YAGI

Since yagi type antennas are the most popular among top TV/FM DXers, it is fitting that we look at yagis first.

Yagis typically have high gain, narrow beamwidth, and narrow bandwidth (i.e., their usefulness is concentrated over a small part of the band). Impedance match should be excellent. However, characteristics vary greatly when you distinguish between single and multiple channel types.

Basically, a yagi usually has one reflector, one driven element (point where T-line connects), and several directors, as shown in Figure 5. This can vary, however. The simplest yagi has one driven element and one reflector or director only. Broadband yagis use two or more driven elements. Some even use three reflectors.

Single-Channel Performance -

For its physical size, the performance of a single channel yagi is difficult to beat. (When properly designed, gain increases and beamwidth narrows as you add director elements correctly (see Figure 5). F/B and F/S ratios can be great (20 to 30 db), and good impedance match is quite easy since only one channel is involved.

Now the rub. You cannot get optimum performance (i.e., maximum gain, narrowest beamwidth, and highest F/B and F/S ratios) simultaneously. Physical spacing of elements and, to a lesser extent, element thickness effect most characteristics. For example, wide director element spacing broadens the bandwidth and increases gain up to a point. However, maximum F/B and F/S ratios occur with directors spaced less than the spacing yielding maximum gain. So you just can't have your cake and eat it too!

However, there are certain spacing distances that provide a good compromise. The home brew HB yagis described in Bob's Technotes about a year ago used a 0.2 wavelength element spacing. This compromise provides close to optimum gain and F/S ratio but considerably less than optimum F/B ratio. Since most of us are interested in maximum gain, the design is probably best for most applications.

An accepted "rule of thumb", therefore, when evaluating yagis is the amount of director spacing. A 0.2 wavelength director spacing is considered an excellent compromise, with emphasis on gain. Wider spacing is just plain uneconomical. A 0.15 wavelength spacing is as low as you should go if gain is important, and 0.1 wavelength spacing is just too poor if gain only is considered.

However, a ny DXer contemplating a super single-channel array using home brew yagis must evaluate his own case. For example, if a local exists about 70 miles away and you are interested in logging stations 300 to 900 miles away, you had better think about reducing the local signal first. Here, 1 db or so less forward gain is well worth a 15 db improvement in F/B and F/S ratio. Unfortunately, optimum F/B and F/S ratios are difficult to achieve in yagi designs because slight spacing and length changes greatly influence these characteristics. Unless you make several models, have decent test facilities, and possess the virtue of patience, you may never achieve a mix of F/B and F/S ratios that is best. It is next to impossible to evaluate consumer yagis based on F/B and F/S ratios. You often must trust their specs.

The exact (or close to it) director spacings that yield maximum antenna characteristics are given in several antenna manuals, the ARRL Antenna Handbook being quite popular. No data will be listed here, as there are just too many "ifs". Also, much of this data includes the effects of antenna impedance, Q, etc., items that only a designer might worry about.

Foremost to remember about a yagi's is that the number of elements doesn't count. It's number plus proper spacing. A 5-element yagi with wide director spacing may have better overall characteristics than a 10-element type on the same sized boom.

Trends in Available Yagis: Virtually every major antenna manufacturer (Winegard, Finco, Jerrold, Channel Masters, JFD) makes single-channel yagis. Catalogs show what's available. Typically, most manufacturers play the element number game (more elements the better), resulting in much less performance than you would expect.

You'll need detailed spec sheets giving electrical data plus physical lengths before you can make a judgement. Quite probably, these detailed spec sheets give honest data with polar plots (unlike the usual advertising rot with distorted data). Some manufacturers are happy to release detailed spec sheets; others either don't have them or are afraid to release them because of some "revealing" data.

If you know boom length and have a picture or scale model drawing, you can easily determine element spacing and guess as to the performance expected. For example, if a channel 10 5-element yagi has a 48 inch long boom and elements appear to be spaced equally (see Figure 6), you can compute element spacing in terms of wavelength using the following steps:

- 1) Wavelength (inches) = $\frac{11,784}{\text{frequency in megahertz (mhz)}}$
- 2) At channel 10, center frequency = 195 mhz
- 3) Wavelength = $\frac{11,784}{195} = 60$ inches
- 4) Since four spaces exist between each element in our 5-element yagi, distance between elements = $48/4 = 12$ "
- 5) Wavelength spacing = $\frac{12}{60} = 0.2$

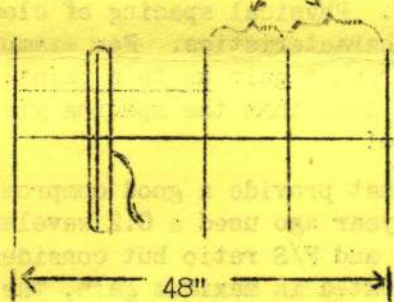


FIGURE 6

This antenna, therefore, if it is matched correctly, should yield close to maximum gain (9 db) and F/B and F/S ratios of about 15 and 20 db, respectively. Antenna bandwidth would be adequate; in fact, gain may be as high as 4 to 6 db on adjacent channels and 1.0 to 4 db two channels removed, even if directors are cut for channel 10.

Often, HB directors in widely spaced yagis are equal length because director length is not critical when length is slightly less than a true 1/2 electrical wavelength. (This latitude makes the building of home-brew yagis for high gain quite easy.)

At LB, we have a few more considerations. Spacing even for compromise performance involves a very long boom. For example, a 5-element channel 2 yagi with 0.2 wavelength element spacing would be about 14 feet long; 10-element type would be about double. That's huge.

For economy and ability to withstand winds and icing, most LB single-channel yagis use 0.1 to 0.15 wavelength director spacing. This reduces gain a little. However, less spacing also reduces bandwidth. Consequently, equal length directors spaced at 0.1 wavelength might not cover the entire 6 mhz channel.

To solve this problem, element length is sometimes tapered, resulting in better bandwidth and impedance match, but at the expense of lower gain. Consequently, LB single-channel yagis often have (1) less gain than HB types, (2) better F/S and F/B ratios, and (3) poorer VSWR. LB single-channel yagis seldom have decent gain on adjacent channels.

Yagis with very close element spacing and no director taper on LB give poor results. Gain may vary as much as 50% across the LB channel, and VSWR must be high at some points within the channel.

Most companies use the same boom length for all LB and HB antennas of equal element number. For example, maker "A" might build 10-element LB yagis on 14 foot booms and HB yagis on 8 foot booms. They just space elements accordingly, regardless of the effect of vital antenna characteristics. Consequently, a channel 6 yagi, for example, may show greater gain across the channel, narrower beamwidth, and lower VSWR than a channel 2 version in the same family, just because element spacing on the channel 6 type is closer to a compromise value.

Similarly, but not to as great an extent, the performance of yagis in the same family often improves as you go the the higher channel types. Note this in Table 2, data on Finco HB MATV antennas.

<u>CHANNEL</u>	<u>MODEL #</u>	<u>BOOM LENGTH</u>	<u>GAIN OVER DIPOLE</u>	<u>HPBW</u>
7	Y16-7HD-MGC	118"	9.9 db	50°
8	Y10-8HD-MGC	118"	10.4 db	49°
9	Y10-9HD-MGC	118"	10.9 db	49°
10	Y10-10HD-MGC	118"	11.0 db	48°

TABLE 2

It would seem that impedance match for single-channel yagis would be no sweat. And, if done correctly, this is true since a designer works toward whatever gain, F/B, F/S, etc., characteristics are desired and then designs the driven element to produce a net antenna impedance of 300 or 75 ohms.

As sloppy as the design may be, a good match can yield decent overall results. But a bad match can give us a monster. And some single-channel yagis have a terrible match. These you can sometimes spot easily.

Since the folded dipole is, by itself, a 300 ohm device, a perfect match is achieved by connecting 300 ohm T-line to it. But addition of reflectors and directors to form a yagi greatly lowers the feed impedance. The result may be a true impedance of 30 to 50 ohms across the folded dipole terminals that started out as 300 ohms. (Close element spacing lowers feed impedance faster than wide spacing.)

Unless a matching network is provided, or a driven element used that starts out having a very high impedance, your VSWR has got to be ridiculously high (and, therefore, impedance match poor). So if you see something like that shown in Figure 7, beware.

Commonly used matching networks are shown in Figure 8. In A, a 600 ohm or higher driven element is used so that the added elements drag the actual feed impedance down to near 300 ohms. In B, an impedance transformation occurs so that the low actual antenna impedance is raised to 300 ohms. The gamma match in C is an easy way to elevate impedance to an unbalanced 75 ohm feed. This method is popular among builders because of its ease of adjustment.

The nuts and bolts of all this is that you can spot a probably poor impedance match by noting what matching considerations were taken (if any). Next month, we'll look at (1) types available and (2) broadband yagis.

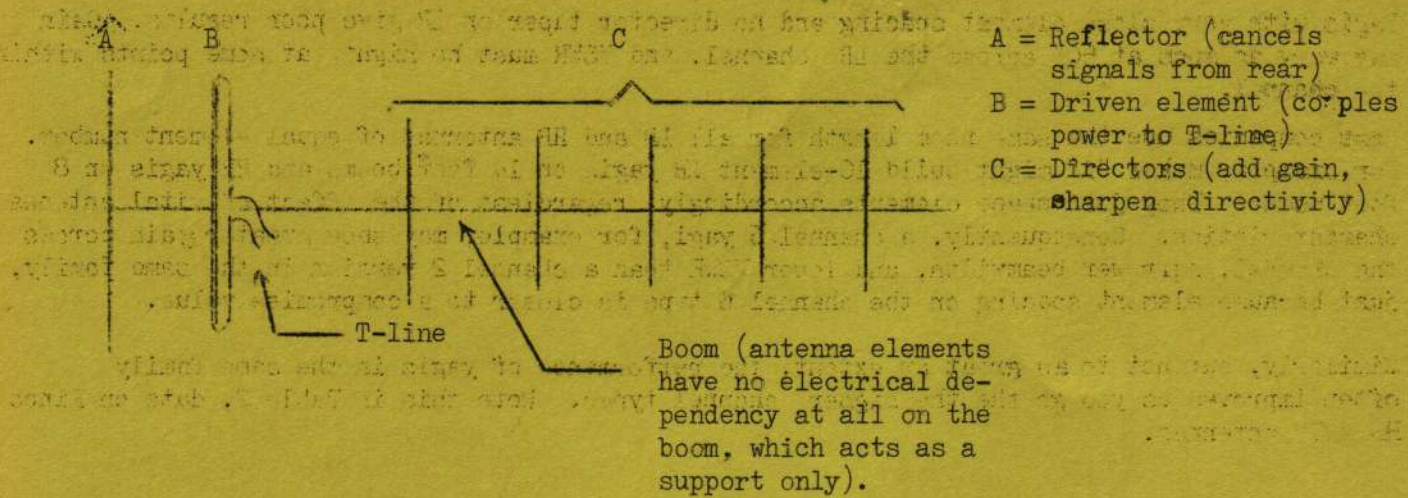


FIGURE 5

SWR	Gain (dB)	Directors	Reflector	Driven Element
1.0	0.0	0	1	1
1.1	0.2	1	1	1
1.2	0.4	2	1	1
1.3	0.6	3	1	1

No match network; impedance less than 300 ohms

Directors lower 300 ohm folded dipole impedance

300 ohm line

RX

FIGURE 7

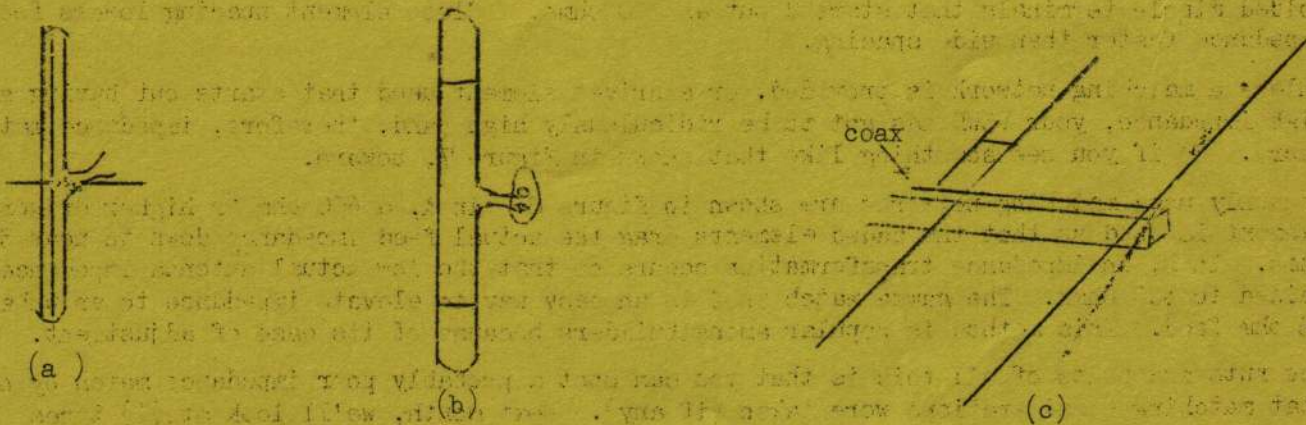


FIGURE 8

VHF RADIO DX

Pat Dyer
327 Solar Drive
San Antonio, Texas 78227
Deadline: 12th of month

JANUARY 1972

Hank Holbrook, 7211 Chestnut Street, Chevy Chase, MD 20015 QSLed, GMT

<u>7-9:</u> 1641, KAD 546	37.10	Forest City, IA (police)
<u>8-2:</u> 2306, KIP 859	37.10	Gastonia, NC (county rural police, 300 w)
<u>9-26:</u> 1657, N4291G	122.1	Staunton, VA (Genesco, Inc.; Leer Jet 24B)
<u>10-3:</u> 1733, N9601J	122.8	4 mi east Baltimore, MD (W. Alton Best; Piper Cherkoe; 3500 feet)
<u>9:</u> 2127, N5674P	122.8	over Annapolis, MD (Fairfield Veterinary Hospital; Piper Commanche; 2000 feet)
<u>10:</u> 1149, N3199	126 apx	near Baltimore, MD (Southern New Jersey Airways, Inc.; Twin Beech)
1732, N223M	128.3	over Greensboro, MD (Floordynamics; Beech M-35; 5000 feet)

Now, my loggings. Allied A-2586 with built-in whip and 30-ft indoor random wire antenna; Only Spanish over 40 MHz noted; New underlined; CST used; Nov 22-23 all F2, rest are Es.

<u>11-22:</u> 1325, 41-Spanish	<u>29:</u> 1313, <u>KCG 651</u>	<u>5:</u> 1221, Long Beach
<u>23:</u> 1128, KCC 482	<u>30:</u> 1233, KAQ 611	1226, KIM 905
1200, KCA 591	1237, KAI 927	<u>9:</u> 2000, KIN 645
KCA 695	1510, KMA 829	<u>13:</u> 1312, KIM 905
1203, Eugene	<u>12-2:</u> 1553, KIN 645	1315, KTY 508
1223, Portland	1704, KIY 508	1338, KIG 300
1253, KEJ 451	<u>3:</u> 1836, KIM 905	1351, OK City
1258, KCE 579	1907, KIQ 999	1508, KIQ 999
1304, KCD 392	2030, KSJ 815	1617, KOE 257
KCF 801	2051, KIG 300	1930, KFL 936
KCB 217	2105, KIY 757	
1310, <u>KEE 909</u>	<u>5:</u> 1221, KFL 943	

KAI 927	35.34	Denver, CO	KIG 300	43.58	Atlanta, GA
KAQ 611	35.54	Rochester, MN	KIM 905	35.22	Charlotte, NC
KCA 591	33.74	Boston, MA-f	KIN 645	35.22	Miami, FL
KCA 695	33.78	Manchester, NH-f	KIQ 999	35.34	Mobile, AL
KCB 217	33.90	East Lyme, CT-f	KIY 508	35.22	Orlando, FL
KCC 482	35.22	Concord, NH	KIY 757	35.22	Montgomery, AL
KCD 392	33 /	S Norwalk, CT-f	KMA 829	35 /	San Diego, CA
KCE 579	33.78	Westmoreland, NH-f	KOE 257	43.58	Phoenix, AZ
KCF 801	33.70	New Haven, CT-f	KSJ 815	35.22	Fort Wayne, IN
KCG 651	33.70	Derby, CT-f	-	35.26	Eugene, OR-mp
KEE 909	33.78	Verona, NJ-f	-	35.58	Long Beach, CA
KEJ 451	33.78	Toms River, NJ-cf	-	35.58	OK City, OK
KFL 943	35.58	Las Vegas, NM	-	35.26	Portland, OR-mp

c-county; f-fire; mp-mobile phone; rest are pagers

A2 ID's by: KAI 927, KAQ 611, KFL 936, KIN 645, KIQ 999, KMA 829, and KSJ 815

Again the lack of F2 is apparent, with the Nov 23 loggings being due to magnetic storm effects.

EUROPEAN SCENE

The past 4 weeks have again produced an excellent spell of Tropo, with signals from Central Europe. The spell 22nd-24th Oct., and again on the 2nd. November gave conditions similar to the earlier openings of October. Reports from a contact in Holland also indicated that there also signals were 'in' from as far East as Czechoslovakia and Austria. My own log for the period is as follows:

- | | |
|---|--|
| <p>Oct. 16 DFF(East Germany)E4 (Es); BRT(Belgium) E2(trops)
 17 SR(Sweden) E2,4 (MS)
 20 SR E4; WG(West Germany) E4; (Both MS); BRT E2
 21 BRT E2
 22 ORTF(France) F7 Le Havre; F8a Lille, F10 Rouen, F12 Cherbourg; F9 Bourges, F4 Nantes, Brest 21, Lille 21, Caen 25, Nantes 29, Rouen 33, Rennes 45; Luxembourg E7; BRT E2, 8, 10, 11; WG E8, 9; Eire B7,H; Teletype was also noted this day during the afternoon within Band 3, to the SE. All Tropo.
 23 WG E6, 9, 10, 11, 31; BRT E8, 10, 11; NOS(Holland) E4, 6; ORTF Band 3 as above + 2Lx2, 22(Paris), 25, 29, 43(Le Havre), 56 (Vannas), 59(Cherbourg), 34(Metz); Luxembourg E7.
 24 NOS E4; ORTF Band 3 as above + 21x2, 25, 33. A sporadic E opening also occurred this day into Eastern Europe, altho I missed it.
 25 BRT E2</p> | <p>26 TVP(Poland) 01(MS)
 28 CT(Czech) 01 (MS)
 29 TVP 01 (MS)
 30 CT 01; NRK(Norway) E3, 4; RAI(Italy) 1B; (all MS) NOS E4 (trops)
 31 WG E4 (MS). A simultaneous burst was noticed on ch R1/6 this day, and thought to be CT.
 Nov. 2 CT 01; BRT E8, 10; ORTF 21x2; 25, 29, 43 Tropo
 3 CT 01; ORF(Austria) E2a, E5 (MS), NOS E4 (Trops)
 4 WG E9 (trops)
 5 TVP 01 Es
 6 BRT E2
 8 NOS E4, WG E4 (MS)
 9 CT 01
 10 NOS E4
 11 WG E4 (MS)
 12 Switzerland E2 MS/E
 13 NRK E3</p> |
|---|--|

Some News Items—I have heard that the Belgium TV will be changing the transmission system at Wavre in a couple of years, and going from the present + video of system C to the - video of system B (as in WG). This will allow colour to be transmitted in Band 3 (at present only UHF has a colour service). It is likely that Luxembourg will also then change to this system; only recently they have changed from the 819 line service on E7 to a 625 line service. I gather that only the Wavre transmitter on ch. Ex, 8, 10 will be initially concerned with this change, but probably will be extended to other transmitters in due course.

Recently I mentioned that Tele-Monte-Carlo was contemplating a service to Italy, and now it has apparently started. The transmitter is located near the Col de Tende on the French/Italian border about 25 km from Monaco. Test txns are now being carried on ch. 35 from 1500-2100, with a view of determining the coverage in the Plain of Lombardy. It appears that Secam colour is being used, which means that no receiver can decode same in the area, due to it being a PAL area. However, if Pal is used, then a large number of French viewers will not be able to view the programmes (in colour). There are available dual standard colour receivers decoding either Pal or Secam, but these tend to be expensive, and at present used in parts of Switzerland.

The sunspot details for the month of October are as follows:

1	74	12	39	23	78
2	58	13	32	24	77
3	48	14	25	25	87
4	33	15	17	26	80
5	53	16	24	27	79
6	40	17	24	28	63
7	43	18	39	29	57
8	45	19	40	30	50
9	38	20	64	31	59
10	40	21	73		
11	23	22	72		

The smoothed mean value for the month was 50.8.

Predictions for the next 6 months—

November	50	February	45
December	48	March	43
January	47	April	42

STATISTICS

Glenn Hauser, editor
 PSC Box 42309
 Kelly AFB TX 78241
 January 1972

CHANNEL 10 TROPO TVDX RECORDS

Call	Location	Miles	DXer, Location	Comments
WBIQ	Birmingham AL	730	Robert Seybold, Dunkirk NY	
WALA-	Mobile AL	975	Art Collins, Buffalo NY	
KOOL-	Phoenix AZ	285	Glenn Hauser, South Baldy Mtn NM	
KTVE	El Dorado AR	485	Terry L. King, San Angelo TX	
KERC-	Bakersfield CA	820	Cecil Morrow, Elma WA	now ch 23
KBET-	Sacramento CA	260	Ed Albright & Chas. Wood, Mt Ashland OR	NOW KXTV
KFSD-	San Diego CA	400	Robert Cooper, Modesto CA	now KOGO
KLQ	Santa Ynez CA	30	Jim Pizzi, Santa Maria CA	of KCOY-12
WLCY-	Largo FL	470	David Cox, Carrollton AL	
WJW-	Miami FL	685	David Cox, Carrollton AL	now WPLG
WALB-	Albany GA	565	Bedford Brown, Hot Springs AR	
WGEM-	Quincy IL	975	Ron Boyd, Truro NS	
WTHI-	Terre Haute IN	600	Glenn Hauser, Enid OK	
KLOE-	Goodland KS	450	Bill Heusmann, Des Moines IA	was KBLR, KWHT
KAKE-	Wichita KS	1000	Robert Seybold, Dunkirk NY	
KLFY-	Lafayette LA	555	B. J. Bingham, Festus MO	
WCBB	Augusta ME	180	Roy Barstow, Teaticket MA	
NJAR-	Providence RI (MA)	605	Frank Hill, Gallipolis OH	now WPRI
WILX-	Jackson MI	635	Marv Garber, Lincoln NE	shares with WMSB
WWUP-	Sault Ste Marie MI	435	Dave Swanson, Romulus NY	
KWGM-	Appleton MN	125	Fred McCormack, Fargo ND	
WDIO-	Duluth MN	870	Dave Egan, Valleyfield PQ	
KROC-	Rochester MN	675	Art Collins, Buffalo NY	
KTTS-	Springfield MO	815	Robert Seybold, Dunkirk NY	
KOLN-	Lincoln NE	940	Norm Erint, Kenmore NY	
		tie	David Nieman, Buffalo NY	
KSTF	Scottsbluff NE	1115	Clarence Rareshide, New Orleans LA	
KBIM-	Roswell NM	835	Ron Le Blanc, Marrero LA	
WTEN	Albany NY	690	Bill Draeb, Kewaunee WI	
WHEC-	Rochester NY	525	Bill Heusmann, Steger IL	was WVET
KMOT	Minot ND	230	Fred McCormack, Fargo ND	
WBNS-	Columbus OH	665	Bedford Brown, Hot Springs AR	
KTEN-	Ada OK	730	Dave Janowiak, Milwaukee WI	
KLQFR	Fargo OK	75	Glen Neal, Sayre OK	of KWTV-9
KMED-	Medford OR	15	Michael B. Northam, Ashland OR	
KOAP-	Portland OR	50	Michael B. Northam, Salem OR	
WFBG-	Altoona PA	895	Bedford Brown, Hot Springs AR	
WCAU-	Philadelphia PA	1045	Bedford Brown, Hot Springs AR	
WIS-	Columbia SC	675	John Cody, Middletown CT	
KTSD-	Pierre SD	140	Fred McCormack, Watertown SD	
WBIR-	Knoxville TN	775	Glenn Hauser, Enid OK	
WKNO-	Memphis TN	495	Frank Hill, Gallipolis OH	
KFDA-	Amarillo TX	775	Ron Le Blanc, Marrero LA	
KZTV	Corpus Christi TX	1010	Don Ruland, Holly Hill FL	was KSIX
KWTX-	Waco TX	1365	Richard Italiano, Binghamton NY	
		tie	William Hider, Binghamton NY	
WAVY-	Norfolk VA	785	Bill Draeb, Kewaunee WI	
WSLS-	Roanoke VA	800	Carlton Howington, Homestead FL	
WMVS	Milwaukee WI	360	B. J. Bingham, Festus MO	
KWRB-	Riverton WY	200	Gordon Simkin, Idaho Falls ID	
"CBWGT1"	Fisher Branch Man	265	Fred McCormack, Des Lacs ND	of "CBWT"-6
CFPL-	London Ont	580	B. J. Bingham, Festus MO	
CHEX-2	Minden Ont	295	Harold Cooper, Westland MI	of CHEX-12
CKGN-	North Bay Ont	490	Carter Bays, Culver IN	now CHCH

STATISTICS

CFTM-	Montreal PQ	420	Roger Gravelle, Saint Thomas Ont	
ZAZ-	Saint Johns Antigua	205	Robert Cooper, Frederiksted VI	
CMTV	Habana Cuba	705	Ed Bourgeois, Norco LA	
XHX-	Monterrey NL	690	Ron Le Blanc, Marrero LA	of XEW-2
XHAI-	Las Lajas Ver	665	Pat Dyer, San Antonio TX	of XETV-4
WBNB-	Charlotte Amalie VI	40	Robert Cooper, Frederiksted VI	
K10BJ	Silt CO	5	Bill Heusmann, mobile	of KREX-5
K10EC	Shelby MT	0	Dennis Smith, mobile	of KFBB-5
K10AF	Troy MT	0	Dennis Smith, mobile	of KXLY-4
K10CT	Salina UT	0	Bill Heusmann, mobile	KCPX-4 of
K10AZ	Emery County UT	20	Bill Heusmann, mobile	
K10FQ	Tie Siding WY	10	Bill Heusmann, Laramie WY	of KOA-4
CKRD-2	Banff Alta	0	Bill Heusmann, Banff Alta	of CKPD-6

UIF TROPO TVDX RECORDS

24	KMJ-	Fresno CA	190	Robert Cooper, Mt Tamalpais CA	
	KVCR-	San Bernardino CA	25	Eric Norberg, Claremont CA	
	WEDH	Hartford CT	385	Dennis Smith, Little Creek VA	
	WMFE-	Orlando FL	520	Ron Le Blanc, Marrero LA	
	WDAN-	Danville IL	485	David Kanaar, Buffalo NY	now ch 15, WIGD
	WMET-	Baltimore MD	255	Robert Seybold, Dunkirk NY	
	WHTV	Meridian MS	70	David Cox, Carrollton AL	
	WTVE	Elmira NY	115	William & Richard Nieman, Buffalo NY	now off
	WCNY-	Syracuse NY	585	Bill Draeb, Kewaunee WI	
	WDHO-	Toledo OH	865	Robert Cooper, Oklahoma City OK	
	WJET-	Erie PA	420	Tom Hidley, Crystal Lake IL	
	KVUE-	Austin TX	360	Glen Neal, Sayre OK	
			tie	Robert Cooper, Oklahoma City OK	
	WWVU-	Morgantown WV	510	Bill Draeb, Kewaunee WI	
25	WHIQ	Huntsville AL	655	Robert Seybold, Dunkirk NY	
	WACS-	Dawson GA	475	Dick Clark, Fort Lauderdale FL	
	WEEK-	Peoria IL	785	Fred McCormack, Des Lacs ND	
	KCTY	Kansas City KS	0	Dave Pomeroy, Overland Park KS	now off
	WEHT	Evansville IN (KY)	570	Robert Cooper, Oklahoma City OK	
	KTAG	Lake Charles LA	170	Ed Bourgeois, Norco LA	now off
	WKAS	Ashland KY	325	Robert Seybold, Dunkirk NY	
	WHAG-	Hagerstown MD	345	Harold Cooper, Westland MI	
	WKNX-	Saignaw MI	230	Gary Olson, Barrington IL	was ch 57
			tie	Robert Seybold, Dunkirk NY	
	WJTV	Jackson MS	205	Mrs W.C. Breithaupt, Little Rock AR	now ch 12
	WNTE-	New York NY	295	Guy Prevost, Massena NY	
	WVIZ-	Cleveland OH	405	Bruce Metzner, Madison WI	
	KOKH-	Oklahoma City OK	120	Glen Neal, Sayre OK	
	KTVQ	Oklahoma City OK	235	Richard Lowry, Temple TX	now off
	WOLC-	Columbia SC	540	Dick Clark, Fort Lauderdale FL	was WCOS
	WCAN-	Milwaukee WI	255	Carl Lupton, Shelbyville IL	now off
26	WAIQ	Montgomery AL	790	Robert Seybold, Dunkirk NY	
	KMPH	Tulare CA	135	Jim Pizzi, Orcutt CA	
	WCIU-	Chicago IL	685	Robert Cooper, Oklahoma City OK	
	WCBC-	Anderson IN	40	Larry Vehorn, Speedway IN	now off
	WWOM-	New Orleans LA	665	Dick Clark, Fort Lauderdale FL	
	KYNE-	Omaha NE	405	Robert Cooper, Oklahoma City OK	
	WNYP	Jamestown NY	445	Bill Draeb, Kewaunee WI	now off
	WSWO-	Springfield OH	365	Bill Draeb, Kewaunee WI	
	WATU-	Augusta GA (SC)	455	Larry Vogt, Springfield VA	now off
	WTVK	Knoxville TN	615	Bill Draeb, Kewaunee WI	
	KVRL	Houston TX	455	Glen Neal, Sayre OK	
	WETA-	Washington DC (VA)	465	Roger Carriere, Buckingham PQ	

27	KCOK-	Tulare CA	185	Robert Cooper, Lafayette CA	now off
	KTSB	Topeka KS	880	Mark Lewis, Downsview Ont	
	WKYT-	Lexington KY	1105	Fred McCormack, Des Lacs ND	
	WSMW-	Worcester MA	400	J John Rosenberg, Downsview Ont	
	KMTC	Springfield MO	650	Glenn Hauser, Von Ormy TX	
	WKBN-	Youngstown OH	415	Bill Draeb, Kewaunee WI	
	WTPA	Harrisburg PA	265	Mark Lewis, Downsview Ont	
	WYAH-	Portsmouth VA	595	Roger Brown, East Lansing MI	
	WRFT-	Roanoke VA	355	Robert Seybold, Dunkirk NY	
	WKOW-	Madison WI	685	Fred McCormack, Des Lacs ND	

ADDITIONS AND REVISIONS

3	WJMN-	Escanaba MI	Tr 285	Ron Hade, Rockford IL	Goldman TIE
	WWAY-	Wilmington NC	Tr 560	Dick Clark, Fort Lauderdale FL	Yingling 360
	WPSX-	Clearfield PA	Tr 280	Frank Merrill, Milan MI	Lewis/Rosenberg 185
4	KXJB-	Valley City ND	Tr 505	Robert Zoller, Sturgeon Bay WI	Grade 315
	WCIV	Charleston SC	MS 915	Dave Egan, Valleyfield PQ	Draeb 905
	CJCB-	Sydney NS	MS 1330	Bill Draeb, Kewaunee WI	new
	"CBOT"	Ottawa Ont (PQ)	MS 695	Ron Hade, Rockford IL	Heusmann 650
5	WCVB	Boston MA	Tr 585	John Robertson, Crosswell MI	new
	WDTV	Weston WV	Tr 285	Jim Hayes, Wilkes-Barre PA	Nieman 280
6	KCEN-	Temple TX	MS 1220	Robert Williams, Twin Falls ID	new
7	KATV	Little Rock AR	(Tr) 770	John Parillo, Girard OH	Ruland 745
8	WSLA-	Selma AL	805	Robert Seybold, Dunkirk NY	new
	WDSE	Superior WI	260	Robert Zoller, Sturgeon Bay WI	Addison 125
	CJSS-	Cornwall Ont	365	Roger Gravelle, Saint Thomas Ont	Pizzi 205
9	"CBOFT"	Ottawa Ont (PQ)	325	Roger Gravelle, Saint Thomas Ont	Nieman 230
12	WMEB-	Orono ME	240	Roy Barstow, Teaticket MA	Kadet 215
	CFCF-	Montréal PQ	420	Roger Gravelle, Saint Thomas Ont	Pizzi/Kadet 255
13	CJOH-	Ottawa Ont (PQ)	325	Roger Gravelle, Saint Thomas Ont	Niemans 225
17	WPHL-	Philadelphia PA	515	Roy Stilwell, Lansing MI	H Cooper 455
19	CICA-	Toronto Ont	260	Roger Brown, East Lansing MI	Robertson 160
20	WCOV-	Montgomery AL	790	Robert Seybold, Dunkirk NY	Stryker 680
	WUTR-	Utica NY	460	Roger Brown, East Lansing MI	H Cooper 405
21	WKMU	Murray KY	630	Robert Seybold, Dunkirk NY	Neal 615
	WHP-	Harrisburg PA	425	Roger Brown, East Lansing MI	Lewis/Rosenberg 265
30	WHNB-	New Britain CT	585	Roger Brown, East Lansing MI	Kureth 570
39	WUNJ-	Wilmington NC	555	Robert Seybold, Dunkirk NY	Kureth 100
	WLVT	Bethlehem PA	485	Roger Brown, East Lansing MI	Howington 315
40	WHMA-	Anniston AL	695	Robert Seybold, Dunkirk NY	Cooper 675
45	WBFF-	Baltimore MD	460	Rober Brown, East Lansing MI	Rosenberg/Lewis 330
48	WKBS-	Philadelphia PA	515	Ray Stilwell, Lansing MI	H Cooper 455
52	WNJT	Trenton NJ	525	Roger Brown, East Lansing MI	Rosenberg 340
62	WXON-	Detroit MI	305	Ron Hade, Rockford IL	Draeb 250
70	K7ØBI	Big Lake TX	300	Glen Neal, Sayre OK	of KOSA-7 new
	W7ØAO	Fond du Lac WI	110	Gary Olson, Deerfield IL	Draeb 65
73	W73AL	Towson MD	25	Joe Kureth, Westminster MD	new
	K73BU	Big Lake TX	300	Glen Neal, Sayre OK	KMOM-9 new
76	K76AP	Big Lake TX	300	Glen Neal, Sayre OK	KMID-2 new
78	K78BK	Seiling OK	70	Glen Neal, Sayre OK	KOCO-5 new
82	K82BB	Seiling OK	70	Glen Neal, Sayre OK	WKY-4 new

Comments: "How about a /scoreboard/ column for aurora reception, as this is in a class by itself?"-(Ebeling) And MS, and tropo?-ed. John has 52 by aurora. "Deleted DC from Enid totals, as both my catches xmit from MD"-(Hauser) "My FM totals are unknown, as I've several tapes that haven't been edited going back to last summer."-(Janowiak) Yes, it doesn't pay to overrely on tapes. Another leading FMDXer has the same problem.-ed. Contributors of 92 MHz record candidates are: Bishop, Bolin, Cooper, Dorner, Ebeling, Fela, Hauser, Hobday, Howington, McCormack, Merrill, Moe, Nordquist, Pizzi, Remington, Smith, Vogt, Wood. Cain a few, lose a few, tho waited for 13 Dec mail deliveries.-ed.

92 MHZ FM DX RECORDS

MHz	Pr	Call	Location	Miles	DXer, Location	Comments
92.0	Es	XEBJ-	Cd Victoria Tams	895	Glenn Hauser, Enid OK	
92.1	Es	WING-	Sag Harbor LINY	1405	Robert Cooper, Oklahoma City OK	
	Tr	WRLS-	Hayward WI	790	Robert Cooper, Oklahoma City OK	
	MS	WFNY	Racine WI	715	Robert Cooper, Oklahoma City OK	now off?
	Au	WTTV-	Bloomington IN	520	John Ebeling, Bloomington MN	now 92.3
92.15	Es	CMBC-	Habana Cuba	1330	Glenn Hauser, Enid OK	
92.3	Es	KBEK-	Boise ID	1380	Glenn Hauser, South San Antonio TX	
	Tr	WDBO-	Orlando FL	1065	Glenn Hauser, Von Ormy TX	
	MS	KVEG-	Las Vegas NV	955	Glenn Hauser, Enid OK	
	Au	WCUY	Cleveland Heights	440	Shelby Remington, New Haven CT	
92.5	Es	CFCF-	Montréal PQ	1420	Glenn Hauser, Enid OK	now CFQR
	Tr	KYND	Houston TX	785	Andy Bolin, Charleston IL	
	MS	WIFI	Philadelphia PA	1105	Richard Wood, Baton Rouge LA	
	Au	CFQR	Montréal PQ	550	Frank Merrill, Milan MI	
92.7	Es	KMFB-	Mendocino CA	1260	Fred McCormack, Des Lacs ND	
	Tr	CKSO-	Sudbury Ont	610	Dennis Moe, Saint Ansgar IA	
92.9	Es	KFYR-	Bismarck ND	1435	Waldo Bishop, Tallahassee FL	
	Tr	WZGC	Atlanta GA	890	Glenn Hauser, Von Ormy TX	was WGKA
	MS	KITY	San Antonio TX	1235	Carlton Howington, Uniontown OH	
	Au	WBOS	Brookline MA	630	Frank Merrill, Milan MI	

FM SCOREBOARD

DXer, Location	Stns	88-92	Es	States	Prov	Lands	YB	As of:
Bruce Elving, Duluth MN	1001			39+DC	3	2	48	3 Dec
Carlton Howington, Uniontown OH	800	127	94	33+DC	3	5	67	11 Sep
Robert Cooper, Oklahoma City OK	704			43+DC	4	5		9 Nov
*Frank Merrill, Milan MI	649						65	8 Aug
John Ebeling, Bloomington MN	598	49	229	37	4	3	48	1 Dec
Andy Bolin, Charleston IL	594	83	22	31	2	2	70	3 Nov
Glenn Hauser, Enid OK	513	28	275	39	4	4	65	27 Nov
Al Kopeć, Himrod NY	426	50	35	31+DC	2	3	57	31 Oct
Larry Vogt, Springfield VA	394	98	93	35+DC	2	4	68	7 Nov
Waldo F. Bishop, Tallahassee FL	374	53	80	30+DC	3	3	69	9 Dec
*Joe Fela, Newark & S Plainfield NJ	364			32+DC	1	2		12 Jul
Fred Nordquist, N Syracuse NY	339	60	38	28+DC	2	3	69	6 Dec
Shelby Remington, New Haven CT	286	39	15	23+DC	2	2	70	1 Dec
Fred McCormack, Des Lacs ND	275	22	132	34+DC	3	2	65	6 Dec
Frank Merrill, Toledo OH	258						71	6 Oct
Dennis Moe, Saint Ansgar IA	228	15	2	14	1	2	70	29 Nov
Richard E. Wood, Baton Rouge LA	224	16	0	18	0	1	71	26 Nov
Glenn Hauser, San Antonio area TX	222	58	68	30	1	4	71	13 Dec
John Ebeling, Addison IL	187	23	4	11	0	1	63-65	1 Dec
Dennis Smith, Wasco CA	186	17	40	9	0	2	52	8 Dec
John Parillo, Girard OH	185	33		15+DC	1	2	58	4 Dec
Peter Hobday, Canandaigua NY	184	29	10	9	2	2	68	11 Sep
David L. Brown, Farmville VA	152	18	4	17+DC	0	1	70	1 Nov
Mike Dorner Jr, Metairie LA	150			15		2		19 Sep
*Gil Morgan, Garden Grove CA	105	23	3	6	0	2	69	9 Aug
Joe Kureth, Maryland	104		0	8+DC	0	1	71	18 Nov
Jim Hayes, Wilkes-Barre PA	90	4	17	15+DC	1	2		8 Sep
Pat Dyer, San Antonio TX	90	10	11	12	0	2	70	13 Oct
*Paul Luchter, Oceanside LINY	85	16	0	7+DC	0	1	68	8 Aug
Frank Wheeler, Erie PA	79	2	0	4	1	2	64	26 Aug
Dennis Smith, Santa Barbara CA	74	8	0	1	0	2	51	8 Dec
Les Prus, Manhattan KS	67	11	6	12+DC	0	1	70	7 Sep
Bill Migley, Lancaster OH	58	9	0	6	1	2	68	31 Aug
Pat Dyer, Gunbarrel Hill CO	38	8	16	10	1	2	71	7 Sep

*=Update required by 11 February. May 1972 be a rewarding DX year for you! 73 de Glenn.

TECH-NOTES

BOB'S TECK NOTES

Conducted by ...
Bob Cooper, Jr.
2609 Chaucer Drive
Oklahoma City, Oklahoma 73120

SIX MONTH PROPAGATION TABLE (Phase 2)

In our June 1971 Teck Note column, we listed a synopsis form Propagation Warning Table for the six month period July 1 through December 31. The purpose of this list was to provide an "outline" in tabular form of DX conditions which could be "expected" in that annual period. You, in turn, could adjust your DX watching habits to fit into the expected DXing patterns for the forecast period (or current month).

TV and FM DX is a 1% and down type of thing. That is, we are dealing with abnormalities in the troposphere and ionosphere; we are counting on the unusual to bring us unusual reception. Predicting the unusual by specific dates, months in advance, is impossible. There are simply too many unknowns and variables involved. But we can go back into our DX history (as I have done) of 22 years or so and find trends; and normalize these trends into averages so that we can at least be aware of the potential DX for any period of the year, based upon past reports of DX.

Add this six month synopsis together with the first installment and you have a 12 month table to work from.

JANUARY

The month of January is a mixed bag for DX. In spots, January can be flashy for Es and tropo. It is noted for neither, however, on a regular (ie. annual) basis.

The winter Es season usually begins between December 5 and 15. By January, it is swinging pretty good but mostly south of the Mason-Dixon line (or an area south of an imaginary line drawn from San Francisco to Norfolk, Virginia). December-February Es (the so-called minor Es season) runs in much more clearly defined 27-28 day cycles than the summer (major) Es season. That is ... a good Es opening on December 20th stands an excellent chance of repeating in some form on January 16-17 (27-28 days later) and even a fair chance of being repeated again an additional 27-28 days (February 12-13). If you catch, or know of, Es openings in December, look for them to repeat and watch the 27-28 day cycle closely. This is especially true of openings down into Mexico from the southern and southwest USA.

Tropo is unpredictable in January. However, it has been known to produce (A) excellent UHF in the upper mid-west (usually associated with a slight warming trend and generally foggy conditions), (B) ducting on VHF and UHF in the lower mid-west and mid-south (usually associated with a slow moving, non-violent cold front pushing south over the top of "unusually mild" warmer weather). Distances seldom exceed 700 miles in January tropo, but then there are still a few of us who have a few stations to log in the 700 mile and down region!

One of the best ANNUAL (daytime) meteor showers occurs in January, as we shall note.

TROPO - Generally bad unless something comes along to cause a drastic change in the normal weather patterns. Watch for unseasonal fog in the upper mid-west and Great Lakes region, and unseasonably warm weather being crowded south by a slow moving cold front

in the south and lower mid west. Over the past 22 years, 3 out of 5 years have produced some type of noteworthy tropo session in these regions; usually between the 10th and 25th.

Es - DX'ers south of the afore mentioned Mason-Dixon line have the best shot at January Es. Most of it will occur in the late afternoon (4 PM to 8 PM normally) peaking around 6-7 PM local standard time. The most common openings are southern USA and southwest into Mexico, with 2-4 day stretches not uncommon, and usually starting and ending at about the same time. 27028 day repeats are also not uncommon, from early January into early February. Channels 2-4 are most common, and FM Es is rare in January.

MS - The Quadrantids Shower, due January 1 to 5 and predicted to peak in 1972 around 1000 LST January 4th, is a dandy. North south or NE/SW paths are best during the peak period and the burst count often climbs to over 100 per hour for the well equipped FM DX'er. Because this shower is in mid day, TV DX'ers are usually out of luck due to local interference, unless you can find a clear (low band) channel to work on. FM DX'ers even with modest equipment should find many bursts of up to 30 seconds from stations in the 600-1000 mile range with 700-800 miles the most common.

There are a couple of random (ie. non-shower) dates worth mentioning also. NOTE: (A) means 5-7 AM period peak; (B) means 5-9 AM period peak; (C) means 5-11 AM period peak; (D) means 9 PM to midnight peak; (E) means midnight to 3 AM period peak.

January 2,3,4 (C plus 11AM to 1 PM LST); 9 (A); 12 (A).

..... FEBRUARY

February is a carbon copy of January through the 15th or so, as far as Es and tropo is concerned. There is only one MS date worth noting. From the 15th to end of the month there may be the slightest hint of the spring Gulf Coast area tropo season with a few good breaks across the Gulf. There may also be weak Es from the Gulf area south into Mexico and surrounding regions.

TROPO -The big January tropo break MAY come as late as the first two weeks in February; it has happened before. Watch for the same symptoms suggested for January. From the 15th on, don't expect much unless you are right ON the Gulf.

Es -Likewise, watch for the 27 day repeat cycles from January. The most likely paths are still south of the Mason-Dixon line and heavily accented to Mexico for Gulf and southwestern DX'ers. 5 to 8 PM is still the best time.

MS -One-one date worth mentioning, and it is a random (non-shower) date; February 1 (A).

..... MARCH

March is usually the slowest month of the year for DX. There have been a few isolated (although rare) instances of Texas to Nebraska tropo in March (usually early mornigg type, and usually late in the month). Es, if there is any, is almost always associated with auroral disturbances (occurring during or just after an aurora). There is but one MS date, and it is random.

TROPO -Little expected, unless north-south stuff breaks for the plains states and mid-south from Texas-Louisiana-north. Watch for early season warm air masses pushing north out of the Gulf of Mexico to trigger off fog or low overcast related north-south openings.

By late in March, DX'ers from Texas east to Florida, along the Gulf Coast, should be seeing the first of the fabled spring tropo openings. Ducting is usually across the range from low band VHF to UHF and there is the added flavor of being able to log much needed Mexican coastal stations.

Es -Slowest month of the year for Es. If it occurs, it will probably be at the start, during or just the day after a major auroral display. It can come in any time of day, although the evening of the disturbance and the morning after are generally most productive. It can also hit anyplace in the USA and Canada, and for once the southern DX'ers are at the least-likely end of the ladder.

MS -One random date worth losing sleep over; March 14th (B).

.....
APRIL

Now things start to happen again. By the 10th of April you had better have your antennas and towers in shape again! Tropo improves by leaps and bounds this month and it seems as if everything starts to the south and moves north as the month goes along.

TROPO -This is the BIG month for the Gulf Coast area. The annual Texas-Florida openings may last for days at a time, and seemingly drift from one to the next with only a few days in between. A good session from Texas-Louisiana north to Iowa/Illinois may also occur by mid-month. After the 15th or so, or when general warming really sticks with us, virtually all of the USA tropo paths regain their summertime levels and 300 mile reception becomes common again. By the end of the month (or very early May) there should be one dandy tropo session that eventually includes everyone from Texas-Louisiana north to southern Minnesota and Wisconsin and east to Ohio. This (latter) tropo session usually starts over the southwest and expands first to the north (Nebraska area) and then east, with general tropo and ducting combined.

Es -The summer Es pattern may get underway as early as April 10th, although that is only about 25 % likely. On or after the 20th is more likely, and by the 30th everyone should have had at least one good Es session. Openings follow the general summer trends; 8-10 AM, 12-1 PM and 4-8 PM. The 4 to 8 PM period is usually the most productive however.

MS -Not your bang-up MS month, but a few breaks are due. The Lyrids ANNUAL shower runs April 19th-24th and is forecast to peak (1972) around 1800 hours (6 PM LST) on the 21st. There are NO random dates worth mentioning however.

.....
MAY

Now we are rolling into summer. Everything is back into swing and there should be enough DX for everyone.

TROPO -The first week of May is traditionally the end of the spring tropo season. It will linger along the Gulf coast a little longer, and may shoot north on a date or two into the mid-west from Texas,

usually in the early morning period. By mid-May we have the potential for ducting and general tropo conditions all over the USA and southern Canada. Large, extended tropo openings in May are rare but ducts are very common; especially over the region between the Rockies and the Smokies.

Es -Es, if it began in April as we would hope, is in good forkm by May. If it started late (witness 1970), it may NOT get underway until around the 15th. In any case, the 1st to the 20th is usually concentrated in the 8-10, 12-1 and 4-8 PM stuff, and then after the 20th we are into the June type of Es openings with late evening openings quite common. Good periods, again based upon history only, are May 4-7; 10-14; 20-22 and 25-31st.

From May 1 to 15 is an excellent time of the year to catch Caribbean area stations on Es if you DX from the upper mid west and the east. Es from your location south or SE into the Gulf coast area should be closely watched for signs of SS (Spanish Speaking) double hop stations, that are possibly NOT Cuba or Mexico. The best period for this type of thing is 3-5 PM and 4 to 7 PM local time.

MS -The Aquarids Meteor Shower runs May 1 to 8. It is not a big shower as showers go, but it is worthwhile. This year (1972) it is predicted to have a lazy peak across the 4th to 5th, 0500-1000 on east-west paths.

Random dates are as follows: May 11 (A); 12 (B); 30 (B).

.....
JUNE

What can be said about June that hasn't been said already? June is a transition month. Both tropo and Es patterns change in June, and interestingly enough, both about the same time. Between the 10th and 20th.

TROPO-There are usually several good periods of extended tropo in June for DX'ers in the mid-west and east. The southeastern DXer fare badly as a rule. Good north-south (Texas to upper mid-west) tropo is not uncommon between the 1st and 15th. Colorado-Wyoming may make it down into Texas, Arkansas and Louisiana between the 10th and 25th; usually early morning. Oklahoma north and NE is common from the 15th to the 30th, usually on ducting. The Atlantic coastal people have it good most of the month, as weather patterns drift back and forth, but DX'ers located in the region of the eastern mountain chain (pennsylvania south to Tennessee) seldom do very well (but don't give up - there are always the exceptions!).

After the 15th of June, the Gulf Coast DX'er finds tropo conditions slipping.

Es -The first to the 10th is usually quite good, with a slow tapering off (transition) period from the 10th to 20th. If the Es season bounces back on schedule around the 20th, excellent openings are common through the end of the month. This is the best period of the year to catch high band Es; usually in the 4 to 8 PM period. Be especially wary of Es openings that seem to last on until (or after) midnight; they may well not quit at all and still be productive in the morning again.

MS - Random dates: June 20 (B), 23 (B).

23
Editor: Roger W. Winsor
718 N. Fremont Road
Valparaiso, Indiana
46383

FM DX

Deadline 10th of month

Fred Nordquist 302 Sandra Lane N. Syracuse, New York 13212

Very little DX to report this period. Only 1 new sta. logged w/WLBR 100.1 Lebanon, PA w/Ac NX at 1900 on 11/23. WCNY 91.3 Syracuse NY is now ON as of 12/5 w/NPR net prgng, in MPX. Still no sign of WSOQ 100.9 yet. Most of time now spent on BCB DX (yeah, me too. Great stuff hrd this year huh? RWW) so my FM total of 339 will probably not change until next spring. WSYU 90.5V bootleg is on again between 7pm and midnite w/nonstop UG rr...must be 50w. 73.

Bruce Elving Box 24 Adolph MN 55701

While in the Duluth area for Thanksgiving, I added only one new station to my log: KCCM 91.1 Moorhead MN which recently began broadcasting in stereo, with the same programming as KSJR/KSJM. WKZN 96.9 was received identifying its new city of license: Zion IL. Since I go exclusively by city of license, and not XR location, the removal of WKZN from Kenosha WI reduced my Wisconsin log totals to 97, and increased my Illinois total to 100....the first state to be represented in my log with 100 stations. Verified, 940/hrd 1001.

Dick Clark 4110 Bayview Drive Ft. Lauderdale FL 33308

WRYZ Jupiter FL 96.7 is still testing and WIOD is now WAIL 97.3 Miami for the highway that runs from north to south on this side of Florida. WSAF 102.5 Sarasota has been off the air for the past 2 years, tnx to Richard Barth info. I did log some new stations: WMOP 93.7 Ocala @1130P 11/28; WPDQ 96.9 Jville @7:15PM 11/27, WWPS 105.1 Orlando @1PM 12/1 o/super power WYOR 160kw to null out. WTRS 102.3 Dunnellon over WYRL for the first time on 12/1 @11PM. 73's.

Fred McCormack Des Lacs, ND 58733 CST

Very little FM DX has been noted during the past two months. I have been hearing new KCCM 91.1 from Concordia College in Moorhead MN on a regular basis since it came on the air. Signals are comparable to other Fargo/Moorhead stns. on Nov. 30, I logged WDMJ 95.7 Marquette MI @12:29 via MS. On Dec. 4, KVSR 97.9 Rapid City SD was hrd in the morning and evening via tropo scatter. At 11:26 new KKLS 93.9 Rapid City was heard by the same mode. It was in very well for about one minute, then faded completely, weaker than KVSR at same time.

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

Nothing new to report here except that WYEN 106.5 Des Plaines is now on RS, in \$ w/50kw. Their programming is ala WWEL/WKFM/WFMP, the usual glut of MoR syrupy string mx w/few commercials. What Chicago really need is a solid gold FM hi. hi. Oh yes, WLJE is now on until midnight local time now, rather than 2200 s/off. This year has really been a bummer for me, no Es, naturally no MS, and few tropo catches due to increasing locals. Things must improve over this year next. On to BCB and FM sometime in the spring. 73.

NOTE: RAN OUT OF STENCILS AND THEREFORE THERE IS NOTHING ON WHICH TO TYPE RICHARD WOOD'S FINE LONG REPORT. IT WILL APPEAR NEXT MONTH, HOWEVER..RICHARD NOTES AN OUTSTANDING TROPS OPENNING ON DECEMBER 8TH, 1971: SEE YOU ALL NEXT MONTH.....

Shelby Remington 291 Whitney Avenue New Haven CT 06511

I had an awful skip season, with just 15 stations on 3 dates, May 26 to the Gulf coast up to 98.5, June 23 with only KMWV 89.1 and July 12 to MO/IA/NE up to 93.3 And I read in the Nov. VUD about the two big openings in Sept., also which I missed. I did manage to catch a good tropo on 10/20 and 21, w/ rock steady signals from nearly all the Buffalo/Rochester stns for over 24 hrs, and then curving down to Pittsburgh @0630 10/21 w/107.9 by far the strongest, and I heard WDVE 102.5 w/a stuck record for 3'! Altogether, a poor year, which I can see is my fault. Total now at 286 after exactly one year, with 206 of those stations within 200 miles, hi hi. I heard WWRJ 95.3 in Southampton LI NY testing on 10/15....verie sez they began RS on 10/27 w/progamming "done on automated tapes and cartridges", very strong \$ signal. WSUB 105.5 Groton CT is now on the air w/MoR and rock in stereo, first heard 11/23. Would you believe that my main source of interference is the Yale accelerator across the street, running 24 hours with varying harmonics across the VHF spectrum,,,tötally destroying ch. 4. Some notes: The new digital Sherwood SEL 300 tuner was reviewed in November Audio Magazine, setting new standards for sensitivity, selectivity and distortion. The AR 1500 Heathkit was then reviewed in December's issue, and equalled the SEL 300 in a few respects, though not in quieting and distortion. Both had 1.5uV IHF sensitivity. Glad to see Heath themselves obsoleting the AR 15. I recommend Len Feldman's book "FM From Antenna to Audio" pub. by Sams to any one interested in the circuitry of FM tuners; very up to date info plus detailed alignment instructions. Also, to anyone who isn't yet using the FM atlas: I doubt I would have heard half of the skip stations I did during those short duration skips without the atlas. Excellent work by Bruce Elving, who is an inspiration to us beginners. Bye for now. (Well said Sheldon, glad to see you reporting again. RWW)

Glenn Hauser Von Orm y TX (PSC 42309, KELLY AFB TX 78241

More Gulf tropo, this time surpassing 1000 miles, a scattering of MS, and a winter Es opening providing my fourth FM country here, Guatemala, add up to a very productive month. WUSF 89.7 Tampa became the first FM station received here by 3 different propagations; at just under 1000 miles, it was in for many hours at a time. I don't recall anybody reporting FMDX from Guatemala before; is my catch a first? 11/9 2229 94.5 KLBK TX (345) wx, promo for jazz pgm Sentimental Journey; 2251 93.7 KSEL TX local ad o/KTBC. 11/10 0053 KLLL TX 96.3 (350) local spots, ID Kay triple L; 0627 99.5 KWGO TX ID KWGO FM in Lubbock, formerly Abernathy, gospel mx; 1733 98.5 XHPL Ciudad Acuna, Coah (140) local ad for Del Rio, no IDs ever heard. 11/11 1854 96.9 KULP El Campo TX (145) to 1900 ID. 11/13 0555 WKTZ Jacksonville FL (1020) via tropo, 0645 coastal wx other to 0929 ID; 0659 94.9 WOMA Tallahassee (865) ID CBS nx, 0714 51kw cy giant WOMA. 0709 WIAC 105.9 TN (830) ID, CST local ad; 0722 KFMC 96.1 Provo UT via MS (1050) "///final day of BYU homecoming..." ant E; 1807 88.5 WRAS Atlanta GA (890) EST TC, remote f/Municipal Aud; ment. GSU, Atlanta, 2029 Stereo Odessa, WRAS ID w/Dave Anderson until 2AM. 11/14 0218 93.7 KRLY TX (200) local annt; 0229 94.1 WPEX FL (695) local armt, ID; 0231 94.9 WLCY FL (990) local ad, Tampa Bay wx, 0329 ID; 0233 94.7 WKXI MX (535) powerful, soul; 0245 94.5 KSMB LA (400), local ad; 0259 WFIA 93.3 FL (990) "The surrounding sound of WFIA \$ FM", BSA, etc; 0401 92.3 WDBO FL (1065) wx, ID; 0406 101.1 LA (515) local wx, o/KLOL. 11/27 1300 93.3 KTEN ADA OK (110) logged mobile nr Hennessey OK (How can you count that one Glenn? RWW) Date unk. @806 88.9x TGRT Guatemala City "La Fabulosa" overmodulated M&W ad for Tonic Tres Eses, CST TC "en la Fabulosa", gone by 1814. (Was it //to TGRT 664 RWW). This report was edited severely, as I am out of stencils. Only new stuff was in except for 11/14, to give me some filler to the end of this stencil. RWW

NEW FOR 1972!

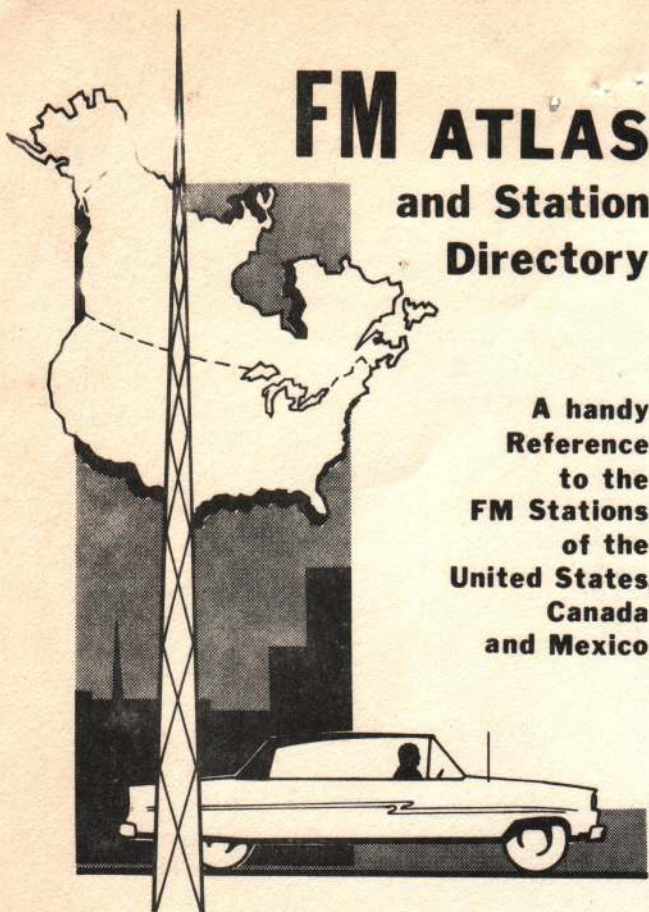
FM ATLAS and Station Directory

It's the FM ATLAS AND STATION DIRECTORY -- thoroughly revised and expanded successor to the FM STATION ATLAS, which sold out its two 1971 printings. Here's what you get in two information-packed sections:

I. FM ATLAS -- 30 pages of detailed regional maps, completely redrawn and improved, with extra-large scales of miles to compute inter-city FM distances easily. Shows over 100 new stations not appearing on printing II and over 200 stations not shown on printing I of the FM STATION ATLAS.

II. STATION DIRECTORY -- a geographical listing of over 3000 stations of the United States and Canada showing: call letters; frequency; city of license; stereo and vertical polarization information; coverage radius in miles for each station and how to convert this figure for DX purposes; program format information (showing stations which specialize in classical, rock, jazz,

A handy Reference to the FM Stations of the United States, Canada and Mexico



soul, religious, and country music, with major "public" stations differentiated from other educational outlets).

OTHER PLUS FEATURES: Map and station list of the FM stations of Mexico, and tips on improving FM reception at home or in the car.

READY NOW! A large printing has been scheduled for December, with distribution to begin early in January, 1972. Because several thousand are being printed, it is expected that this will be the only 1972 printing of the FM ATLAS AND STATION DIRECTORY, so if you want a copy while it's fresh, now is the time to order.

To order this 48-page [8 1/2 by 5 1/2"] information-packed guide to FM, send \$2.50 per copy to Bruce F. Elving, 3000 North Oakland Avenue Milwaukee WI 53211, U. S. A. Shipped third-class mail [For first class mail add 25¢]. Canadian or Mexican customers send \$3.00 per copy [all foreign orders are sent by first class mail].

ORDER FORM Send to Bruce F. Elving
3000 North Oakland Avenue
Milwaukee WI 53211, U. S. A.

Dear Bruce,

Please send _____ copies of the new FM ATLAS AND STATION DIRECTORY, for which I've enclosed \$2.50 per copy [\$3.00 U. S. funds for foreign orders]. Send it third class (); first class () and find enclosed 25¢ extra for first class service.

Name _____

Address _____

City, State, ZIP _____

FCC FM NEWS

Bruce F. Elving
3000 North Oakland Avenue
Milwaukee WI 53211

FM activity at the FCC [and even in Mexico] has picked up over what it was last month. And there have been plenty of fine responses from WFDMA members who've sent news about new stations, stations off the air, and changes in existing stations. Powers given are effective radiated in watts (except for 10-watt stations, in which case transmitter power is given) and antenna heights are above the average terrain in feet; v is vertical effective radiated power; otherwise it is h, horizontal ERP. * noncommercial, educational FM station. This month, I am starting to list the powers and antenna heights of stations coming on the air, even though such information may be redundant, as it was given when the station's original construction permit was listed.

New Construction Permits

Merced CA	*89.1	10 w
West Frankfort IL	97.7	3000 h, v; 165'
Jeffersonville IN	95.7	50000 h, v; 360'
[" is a Louisville, Ky. suburb]		
Pikeville KY	*90.7	1450 ; 1380'
Port Huron MI	*91.9	10 w
Crookston MN	*91.7	10 w
Lebanon MO	103.7	25500; 251'
Rensselaer NY	103.9	3000 h,v; 82'
[" is an Albany suburb]		
Central City PA	101.7	500 h,v; 650'
Pittsburgh PA	*89.3	43000; 500'
Washington PA	*88.3	10 w
West Chester PA	*91.7	10 w
Sturgis SD	93.1	25000 h,v; 1060'
Spokane WA	*91.1	10 w
Weston WV	102.3	940 h,v; 490'

On the Air -- Good prospects for off-season DX:

KPRA	Paso Robles CA	94.3	3000 h,v; 53'
KAPX	San Clemente CA	107.9	28500 h,v; 486' 6 am-Mid. MOR.
WSUB-FM	Groton CT	105.5	3000 ; 275'
WYEN	Des Plaines IL	106.7	50000 ; 300' Stereo. Live MOR.
WCCI	Savanna IL	100.1	3000 h,v; 300'
WTKY-FM	Tompkinsville KY	92.1	3000 ; 240'
WQWQ	Muskegon MI	104.5	50000 ; 499' Stereo. Variety.
KQAD-FM	Luverne MN	100.9	3000 h,v; 240' Calls, too.
WALF	Alfred NY	*89.7	10 w
WKVO-FM	Havelock NC	104.9	3000 h,v; 180'
WLSW	Scottsdale PA	103.9	325 h,v; 781' Calls, too.
WRHY	Starview PA	92.7	720 h,v; 560'
KWYR-FM	Winner SD	93.7	100000 h,v; 563'
WCUL	Culpeper VA	103.1	730 ; 550'
WJMA-FM	Orange VA	96.7	3000 ; 170'
WSHS	Sheboygan WI	*91.7	10 w
XHIS	Tijuana, MEXICO	90.2	100000 24 hours rock - English automated.

Facilities Changes

WKLS	Atlanta GA	96.1 to 95.0
WEFM	Chicago IL	99.5 to 6000 h,v; 1170'
WDDD	Marion IL	107.1 to 270' (3000 h,v)
WRTL-FM	Rantoul IL	95.3 to 275' (3000 h,v)
KFMG	Des Moines IA	94.9 to 100,000 h,v; 310'
KFLA-FM	Scott City KS	94.5 to 100,000; 360'
Brookline MA, WBOS		92.9 to 12,000 h,v; 890'
KADI	St. Louis MO	changes from 96.5 to 96.3
KPTL-FM	Carson City NV	97.3 to 51600 h, 30700 v; 2240'
WRNW	Briarcliff Manor NY	107.1 to 2995; 285' and moves from Mt. Kisco NY.
WSOQ-FM	North Syracuse NY	100.9 to 170' (3000 h,v)
Oneida NY, WMCN-FM		106.3 to 500 w; 650'
WDBS	Durham NC	107.1 to 3000 h,v; 295'
WFMC-FM	Goldsboro NC	102.3 to 3000; 275'
WDCC	Sanford NC	*89.5 to 10 w.
WVUD	Dayton (Kettering) OH	99.9 to 25,000; 220'
WEEC	Springfield OH	adds V (77200; 281') on 100.7
WLQR	Toledo OH	to 11200 (810') on 101.5
WFSM	Harrisburg PA	99.3 to 235' (3000 h, v)
KQXT	San Antonio TX	101.9 to 100000 h, 50000 v; 670'

Call letter assignments:

Little Rock AR	KLAZ	98.5
Los Angeles CA	KXTZ	104.3 (formerly KBIG-FM)
San Francisco CA	KPOD	*89.5 (" KFPR)
San Jose CA	KFLP	106.5 (" KPLX)
Jacksonville FL	WFAM	*91.1 Jones College
Palm Beach FL	WJNO-FM	97.9 (from WJUN)
Paoli IN	WVAK-FM	95.3
Henderson KY	WKDQ	99.5 (from WSON-FM)
Natchitoches LA	KDBH	97.7 (from KNOC-FM)
Omaha NE	KFMX	92.3 (from WOV-FM)
Exeter NH	WKXR-FM	107.1
Albany NY	WNNY	100.9
Dayton OH	WTUE	104.7 (formerly WONE-FM; years ago, their FM adjunct's calls were WTWO [AM: WONE])
Tamaqua PA	WZTA	105.5 (formerly WSVB)
Nashville TN	WAMB-FM	92.9 (formerly WSET)
Charleston WV	WBES	96.1 (formerly WCHS-FM)

Deletions [too late to DX any of these!]

Del Rey Oaks CA	KPLN	107.1
Los Angeles CA	KUSC	*91.5 [This frequency will probably go fast -- perhaps another Tijuana station will claim it]
Redding CA	KEWB	104.3
Palm Bay FL	WPBA-FM	107.1
Johnstown PA	WARD-FM	92.1 -- officially deleted by FCC.
Borger TX	KBBB-FM	104.3

Dual-City Identifications Granted:

WBIE-FM	Marietta GA	101.5 to Marietta-Atlanta
KOAX	Dallas TX	105.3 to Dallas-Ft. Worth
KYND	Pasadena TX	92.5 to Pasadena-Houston
WEZM	Wauwatosa WI	103.7 to Wauwatosa-Milwaukee

On Dec. 16, WMOT *89.5 Murfreesboro TN went stereo and 50,000 h,v; 238'. On the air 9 a. m. to 1 a. m. (midnight Sunday).

News from Members and other sources

Gil Morgan, Garden Grove CA, sends information on XHIS Tijuana, B. C. N.: "'Radio 90 or 'His Radio' 100 kw [Billboard says 200 kw; this may be 100 kw v and 100 kw h--BE] 90.2, 24 hours rock and roll music, came on the air Sept. 18, 1971, all English. Off the air Monday morning." This differed somewhat with the information Dennis Smith sent by way of Jim Pizzi that it is "XHES" on 90.3, which identifies as "His Radio, at the end of the wharf in San Diego." Perhaps the call letters are given in Spanish and the Spanish way of saying I sounds like an E to a speaker of the English language; thus I am convinced it is XHIS and the frequency is the more precise 90.2, rather than 90.3. National Public Radio has recently received complaints of interference caused to Los Angeles area public FM stations from a high-powered Tijuana FM station. At that time, KEDC *88.5 Northridge and *KPFK 90.7 Los Angeles were NPR affiliates; these and a host of others [KCRW *89.9 Santa Monica, a host of ten-watters, and others] could have hollered about real or alleged interference emanating from the new high-powered Mexican operating within the American reserved-for-education portion of the FM dial. In Detroit, CJOM-FM 88.7 Windsor, Ontario, is a commercial station also using the educational part of the FM dial.

The only comment received after last month's publication of a long letter concerning DXing Guidelines or Constitutions came from Dennis Smith, Chico CA, who conjectured that "perhaps in time, some sort of club policy regarding DXing 'guidelines' can be further discussed and established. Perhaps this question can be raised again in the future, even though some of the original 'guidelines' were not sufficiently challenged or not enough members bothered to comment at all [the apathy syndrome--BE]. Certainly, WTFDA's approach to club policies (and perhaps that of many other DX clubs) is better than ---- radio club's, which seems to discourage comments from its members -- such as their promotion of the "almighty QSL," in which even the logging itself is not as important as the verie which follows. . . I have no criticism or comments about the format of the FCC-FM News Column. I know you are somewhat qualified to handle it reasonably accurately (perhaps even more so than Vane Jones or even Broadcasting magazine). I'm afraid that with my less than constant activity in DXing, due to my settling into a teaching situation when I have been a student all of my life up to this time, I have gotten a little fuzzy and not quite as able to digest the amount of DX material I could before." [Dennis, I took the liberty of using some of this material which was a bit personal and, in the interest of modesty, changed it in parts. Dennis also reports the fact that KPRA 94.3 Paso Robles is on the air. He will note that KEWB 104.3 Redding bit the dust. Now I wonder if KCER 92.9 Redding and KPAY-FM 95.1 Chico are also on the air or not.]

In response to my question concerning "Leisure City" FL and where it is, Waldo Bishop sent along a beautiful Gulf Florida road map [he also reports that WGLF Tallahassee and WPEX 94.1 Pensacola are stereo FM stations that are experimenting in four-channel or quadrasonic broadcasting. Perhaps later we can have an article about four-channel broadcasting, except suffice it to say for now that there is a controversy over the direction 4-channel FM should go. It is now a compromise, "matrix" system and not the ideal, although some manufacturers, notably Sansui, are enthusiastically promoting it. Others, such as KIOI (FM) San Francisco, are pushing the FCC to adopt standards for discrete four-channel broadcasting; meantime, two-channel, or even good monophonic, broadcasting should give most of us all the FM thrills we need--BE]

Richard Clark, Ft. Lauderdale FL, also wrote saying: "Leisure City is five miles north of Homestead. WIOD-FM 97.3 Miami is now WAIA. WRYZ-FM 95.7 Jupiter is still testing. WSAF-FM 102.5 Sarasota has been off the air for the past two years (thanks to Richard Barth [I will check this out with the FCC--BE]), WJUM 97.9 Palm Beach is now WJNO-FM with MOR music, and WIGL 107.5 Miami is still off the air." [Some valuable tips here, Richard. Keep us informed.]

Speaking of testing, Dennis Moe, St. Ansgar IA, reports that the unidentified FM which has been testing since the beginning of November on 92.3 was identified as KOEL-FM Oelwein IA December 1 at 2130 CST. No tests have been heard since that date. KOEL-FM, a veritable powerhouse in Iowa, will have 100000 h,v; 370'. Dennis also sends along a news item of interest, since it may result in longer operating hours for some FM stations: FCC proposes rules to provide for the licensing of all [commercial] FM stations for unlimited time operation and to require them to maintain minimum operating schedule of at least eight hours between 6 a. m. and 6 p. m., local time, and at least four hours between 6 p. m. and midnight, local time, each day of the week except Sunday. Action Nov. 3, 1971. Right now, FM stations need operate only 36 hours a week, with a minimum of 5 hours per day (except Sunday) any time between 6 a. m. and midnight local time. It is also expected that the FCC will extend the rule that forbids more than 50 percent program duplication between commonly owned AM and FM stations in cities of license of 100,000 and over to include smaller towns.

Richard A. Miller, Harrisburg PA, writes that WYZZ 92.9 Wilkes-Barre PA has a new antenna and tower (the old one being destroyed in gale winds last Dec., 1970). This is a tremendous station--exceptional fidelity and stereo separation with an all classical evening format and a light classic and show tunes schedule daytimes. They are 24 hours and a family-run outfit. WMSP 94.9 Harrisburg, a noncommercial station, 1700 watts from the church steeple of Mkt. Square Pres. Church, and will go 50 kw stereo from the site to which WSEF 99.3 is moving. WITF-FM 89.5 transmits from a mountain just North of Harrisburg, but their studios are in Hershey./// Thanks to Robert Eddy for his fine comments in RWW's column of last month. 73 for now.

MAILBOX



As you read this, no doubt the new year will be well underway, so let me add my best wishes for a happy and prosperous 1972.

Helping make it a happy year for the WTFDA are these new members:

David L. Brown, Route 1, Box 514, Jackson Heights, Farmville, VA 23901;
Alan Denmark, 37 Trent Street, Sudbury, Ontario
Robert E. Fischer, Box 94, Federal Station, Newark, DE 19711;
Gordon P. Nelson, 19 Irma Avenue, Watertown, MA 02172;
Richard Peary, 216 Acadia Circle, Fairfield, AL 35064;
John Zondlo, 6617 Maryland, Hammond, IN 46323;

and the latest addition to the ranks of our overseas members--Matti Karinen, Kiika 38300 Finland.

Only one renewal this time--John Parillo, 400 S. Market St., Girard, OH 44420, --who asks the question, "Do you recall the location of the old CMAB-2 in Cuba? Any help?" (PUBLISHER'S NOTE: TWAS IN HAVANA.)

In addition, there are these address changes:

Mike Bugai, 925 W. LaPlama #8, Anaheim, CA 92801;
Paul B. Ciceri, 10741 Atwater Cres, Windsor 17, Ontario;
Mike Dorner, 1409 Hymelia Ave., Metairie, LA 70003;
Dennis Glenn, Box 532, Lake Zurich, IL 60047;
Stuart Grade, 110 S. 35th St., Apt. 19, Council Bluffs, IA 51501;
AIC Barry Jackson FR401/72/9678, Det. 6, 1961 Comm. Gp., APO San Francisco, CA 96277;
Douglas Johnson, 308 Normal St., Apt. 20, Denton, TX 76201;
C. K. O'Donnell, 624 Audubon St., New Orleans, LA 70118;
Richard Saeta, 6234 Lemona Ave., Apt. 203, Van Nuys, CA 91401;
G. Somerton, 993 Pelissier, Apt. 2, Windsor 12, Ontario.

Mail for the Midwest DX Club should be addressed to M/DXC, Box 8522, Univ. Miami Branch, Miami, FL 33124.

Now, on to the news!!!!

TV DXer Bob Williams, Twin Falls, ID, reports receiving his first station via MS--KCEN-6--after erecting a 5-el single-channel yagi.

Dave Brown, Farmville, VA, passes on the following tip for verifying Cuban TV stations: address reports to the Cuban Broadcasting Institute, Calle 23#258, Vedado, Havana, Cuba. Dave also had a good ch. 2 opening to south Florida and Cuba on 17 July, which presented an interesting problem. He reports receiving a Havana station running the standard I.C.R. TP on video, while transmitting a regular program of musical selections with announcements on audio, and wonders if "...they weren't simply feeding a relay of an AM or FM Cuban station through their transmitter?" He has a five minute tape if anyone is interested in listening to it.

Alan Denmark, Sudbury, Ontario listener, comes to us from Communications World, is 21 years old, and works for Bell Canada. He DXes AM, FM, and TV, of which TV is his favorite.

Robert Fischer, Newark, DE, listens to the TV and FM bands on a Sony 12" color set and a Sony CRF150 portable radio. Bob plans to upgrade his shack by purchasing a Heath AR-15, and either a HQ-180A or SPR-4 in the next year. Who says money's tight?

Gordon Nelson, Watertown, MA, heard about the WTFDA through the "grapevine", and brings with him experience as a geophysicist and electrical engineer. His prime interests are TV, DX and auroral propagation, having conducted research for the USAF and other government agencies.

Richard Peary, Fairfield, AL, lists his best TV catches as XEFB and CFBT, with others from the west and south.

Matti Karinen has been DXing TV for almost two years using a Phillips receiver with a twin-lead dipole, and a Sabora with a Band III yagi. Matti's best DX is RAI at 1250 miles. (MATTI LIVES IN FINLAND, BY THE WAY.)

Books!?!?! Although I am not a book reviewer, from time to time, books cross my desk which merit mention. The first, The Invisible Resource: Use and Regulation of the Radio Spectrum by H. J. Levin, details problems of spectrum congestion, examines the economic characteristics of the radio spectrum, and discusses procedures and institutions that might be feasible to bring about needed changes. For further information, request Announcement P/214 from Resources for the Future, Inc., 1755 Massachusetts Ave., N. W., Washington, DC 20036.

Police Telecommunications Systems, available from the U. S. Government Printing Office (Washington, DC), discusses the entire range of simplex and duplex radio networks, teletype, facsimile, operating procedures, radio specifications, propagation, and antennas. At \$3.75, it's well worth the money as a basic introduction to public safety radio.

Action Radio Information Systems, Inc., (817 Silver Spring Ave., Silver Spring, MD 20910) has acquired the Radio Data Book series mentioned in the VHF-Radio column in September. Separate books, ranging from \$25.00 to \$35.00, cover individual public safety services (fire, police, etc.), business radio, and taxi cab and automobile emergency stations.

A publication that might not be especially useful, but should be interesting is Tuning in on Rural Louisiana: A Survey of Adult Radio Listening and Television Viewing Habits, by D. W. Darden and A. L. Bertrand, available on request from the Cooperative Extension Service, Louisiana State University, Baton Rouge.

Your editor has available a public service information sheet which is sent with all VHF-radio reports. The one-page sheet explains DXing and QSLs in simple language. If anyone wants one, just drop me a SASE at 1233 Kansas Avenue, Atchison, KS 66002.

That's all for this month, let's hear from YOU next month!

73, Terry

TWO OTHER PUBLICATIONS WORTH NOTING HAVE TV DX ARTICLES BY GLENN HAUSER IN THE CURRENT EDITIONS; THE 1972 COMMUNICATIONS HANDBOOK PUBLISHED BY POPULAR ELECTRONICS IS AVAILABLE ON MOST NEWSSTANDS. HOW TO LISTEN TO THE WORLD PUBLISHED BY WORLD RADIO HANDBOOK IS AVAILABLE FROM GILFER ASSOCIATES, Box 239, PARK RIDGE, N.J. I DON'T KNOW THE PRICE OFFHAND, NOR ZIP.

WESTERN TV

Dennis Park Smith
1200 W. Sacramento Ave., Apt. 15
Chico, California 95926

Deadlines: 12th of each month

Both the above address and Music Dept., Chico State College address are valid. Though I'm not certain, the Sacramento Ave. mailing may cause less delay in delivery.

Es has followed an approximately monthly pattern. We had reports here for late Sept/early Oct (29, 8), late Oct/early Nov (23, 29, 30, 2, 3), and now, late Nov/early Dec dates: 24, 27, 30, 2, 3, 4, 5--with some of these openings quite good. As indicated last month by one report, tropo in the south was indeed coming up on 10 Nov--and it increased to a peak on the 13th and 14th with some 1000-mile Gulf loggings. Texas DXers reaped most benefits, with some activity noted in Oklahoma as well.

Frank Aden, Jr., 215 S. Curtis #71, Boise, Idaho 83705 (July, August) (MDT)

Receiver: Arvin 9-inch. Antenna: 17-element VHF TV-FM with rotor at about 18 feet.

Summer E reports.

J10 Es (Ant. SE)

2015 WKY - 4 Oklahoma City OK

2104 KFDX- 3 Wichita Falls TX (weak)

2110 KXJB- 4 Valley City ND

2140 KAUZ- 6 Wichita Falls TX (weak)

2149 KGNC- 4 Amarillo TX

11 Es (Ant. E)

1700 KMTV 3 Omaha NE.

1830 KYTV 3 Springfield MO

12 Es (Ant. E & SE)

1330 KDFW- 4 Dallas TX

1330 WBAP- 5 Ft Worth TX

1350 WKY - 4 Oklahoma City OK

1359 KLNE- 5 Lexington NE

1450 KTIV 4: Sioux City IA

(12)Es 1530 KOTA- 3 Rapid City SD (excellent)

1600 WCCO- 4 Minneapolis MN (exc. Id)

1615 KSTP- 5 Minneapolis MN (good)

1630 KDLO- 3 Florence SC (exc. Id)

1630 KGLO- 3 Mason City IA (exc. Id)

1730 KDAL- 3 Duluth MN (good Id)

28 Es (Ant. on 19-inch SE only)

1435 KEY-T 3 Santa Barbara Ca (weak Id)

1435 KNBC 4 Los Angeles CA (weak Id)

A13

1723 XETV 6 Tijuana BCN- (excellent)

(burst, lasted about 5-6 sec.)

16 Es (Ant. SE)

2100 KOTV 6 Tulsa OK (good Id)

2100 WKY - 4 Oklahoma City (tent.)

2100 KFSA- 5 Ft Smith AR (tent.)

2100 KFDX- 3 Wichita Falls TX (tent.)

I have also seen KTVK 13 which comes in quite often but never too strong.

KAID-TV 4 Boise should be on 1 Jan. Ch 6 Nampa & Ch 6 Pocatello (new, no calls yet) plan to be on Sept 1972. KTLB is gone; the new Pocatello station is building everything new. 73s.

Glenn Hauser, Von Ormy, Texas (PSC Box 42309, Kelly AFB TX 78241) (5Nov-5Dec) (CST)

Not a bad month, for the "off" season; bagged my first highband M3, thousand mile plus Gul tropo on VHF, and finally saw Guatemala as winter Es opening up in early December. All this despite some time out to log visits with Wayne Plunkett, Morrie Goldman, and Bob Cooper, which were very much enjoyed.

N9 Tr 1842 KREC- 9 Abilene TX (s/off/KLRN) 220 (10)(Tr) 0010 KSWB- 8 Roswell NM N410

2201 KSEL-28 Lubbock TX 345

("KSEL news television")

2205 KMNN-34 Lubbock TX N345

(bilingual bingo; 2228

s/off--all in Sp?, SSB)

2215 KCRF-11 Lubbock TX 4554N345

(2400 bistate nx; 0008 s/off,SSB,RTMA TF)

2235 KAUZ- 6 Wichita Falls TX N315

(Paul Harvey; 2246 "Musical Scoreboard")

2348 KACB- 3 San Angelo TX 3543 185

2352 KLBK-13 Lubbock TX 4554 345

(Italian movie dubbed; no ads noted;

end "Nightcap Theatre!" West TX TV Network)

10 Tr 0004 KREC- 9 Abilene TX (s/off) 220

0006 KMOM- 9 Monahans (movie//ch 4) 305

0006 KWAB- 4 Big Spring (movie//ch 9) N260

(SSB // KCBD-11)

0012 KBIM-10 Roswell NM ? T

0014 KFDA-10 Amarillo TX 450

(0026 "Tri-State Scene!" nx by phone from

MTO, KFLW; 0038 chart of intercity relays)

0014 KVII 7 Amarillo TX N450

(delayed Cavett; 0116 HiFlite,

KLG28 STL, 0119 1/2 off)

0014 KOSA- 7 Odessa TX (CB, tone) 285

0016 KMID- 2 Midland TX N290

0040 KFDO-28 Sayre OK ? T

0634 KWTW 9 Oklahoma City OK 435

(Sunrise Semester; 0647 Id, devotional;

0649 KLRN cr; some MG CRh at 0638:50...)

MS 0638:50 KPNE- 9 North Platte NE 3354N820

(slide w/KPNE-TV in large letters)

10	Tr	0650	KCBD-11	Lubbock TX (RTMA TP)	345	(13)	Tr	0546	WFGA-12	Jacksonville FL	N1020					
		0656	KLBK-13	Lubbock TX (TX wx)	345					(s/on, 316,000 watts; 0549 CL & logo keyed over CB)						
		0759	KCTV	8 San Angelo TX	180			0548	WINK?11	Fort Myers FL ?	T					
		0829	KSEL-28	Lubbock TX	345					(Ø CCI to KHOU)						
		0859	KDTV	39 Dallas TX (s/on)	250			0656	KSWO- 7	Lawton OK	325					
		0911	KVUE	24 Austin TX	80			1942	WTOG?44	Tampa FL ?	T					
		1710	WAFB- 9	Baton Rouge LA	455					(at WUSF-89.7 peak; brief audio snatches)						
		1715	WRFT	33 Baton Rouge LA	455			2215	KLFY-10	Lafayette LA	390					
				(ABC rx; 1728 Id "Television 33," Lassie; 2400 s/off, power 1014/200kw)						("Eyewitness News" w/ circle 10 logo)						
		1858	KLNI-15	New Iberia LA	405			14	Tr	0223	WAPI-13	Birmingham AL	N 755			
		2017	WWOM-26	New Orleans LA	N 515							(Ø CCI to KTRK at its s/off; 0339 end movie, spcn. by Pargain Town USA)				
				(Ø CCI to KVRL!, 2359 "The new channel 26 in New Orleans"; begin Late Show)				0228	WYES-12	New Orleans LA	515					
		2059	WAPT	16 Jackson MS	535			0238	WBRC- 6	Birmingham AL	N 755					
				("WAPT Jackson--an American Public Life station")						(0423 Sacred Heart Hour (only VHF visible exc. AN WFAA-8))						
		2210	WMAA	29 Jackson MS	535	D2	Es	1655	YSR - 2	San Salvador, El Sal.	1205					
		2334	KNOE- 8	Monroe LA (Id)	435					(color bars/grayscale, 1725 cartoons in Edg; Hitler-era; 1755 ads for Duarte, Id, precisely 1800: "Black Arrow")						
11	Tr	0030	WYES	12 New Orleans LA	N 515			1658	TGV - 3	Guatemala, Guatemala	N1130					
				(ending auction, s/off STL KLB84)						(Zona-1 ment. in ad, world rx in Sp; 1706 guat. PSA; 1707 Id CANAL 13/ GUATEMALA; MUF reached 89 MHz)						
		0035	WAPI-13	Birmingham AL ?	T			3	MS	1728	KUSD-?3	Vermillion SD ?	T			
		0045	WISU- 6	New Orleans LA	520							(huge dash dom. by PBS stn north; lasted about 5 min.)				
		0055	KBMT-12	Beaumont TX	295			Es	1829	WDIQ	2 Dozier AL	745				
		0123	WVLE	8 New Orleans LA	4555							(AL ETV Net slide w/foreshort- ened outline map; 2028 slide showing AL ETV Comm. ad. in Birm.)				
		0559	WJTV	12 Jackson MS	N 530					1930	WESH- 2	Daytona Beach FL	1050			
				(s/on after distinctive TP)									1930	WEAR-?3	Robertsdale AL ?	T
		0625	WAFB- 9	Baton Rouge LA	455			4	Es	2050	unId	2 (CBS NW: live net)				
				("Morning News")								2050	unId	3 (CBS NW: live net)		
		0717	KMID- 2	Midland TX	290					2155	KUTV	2 Salt Lake City UT	1090			
				(closely framed IHTP during Today Show breakup; 0829 Id mentioning 3 xtrs)				5	Es	0755	KUTV	2 Salt Lake City UT	1090			
		2200	KNOE- 8	Monroe LA	435							(AP Radio wire printout; 0806 Id slide & auto pan of weather dials just like CATV; 0846 color bars, keyed CL)				
		2215	WWOM-26	New Orleans LA?	T					0811	KID-? 2	Idaho Falls ID ?	T			
		2220	KLNI-15	New Iberia LA	405					0845	KTWC- 2	Casper WY	1020			
		2223	WRBT	33 Baton Rouge LA	455							(cut on 2-level CB, mx, go to TP; 0858 s/ on incl. 3-net logos on one slide, SSB)				
		2227	WAPT	16 Jackson MS	535					1200	KOAI? 2	Flagstaff AZ ?	T			
				(2358 s/off 1047/158 kw)								1201	KORK- 3	Las Vegas NV	1060	
		2230	WMAA	29 Jackson MS	535							(FB // ch 2)				
12	Tr	0056	WISU- 6	New Orleans LA	520					1240	KNXT	2 Los Angeles CA	1185			
				(rx heads after Star Trek; s/off STL KKZ 96)								(Face Nation; CBS delayed, Id) Until the next, 7B de Glenn.				
13	Tr	0529	WFBO- 6	Orlando FL	N1065											
				("WAVE"--Welcome All Visitors Enthusiastically to Orlando)												
		0536	WFTV	9 Orlando FL	N1065											
				(c/on; logo grid about 3hi, 5 wide; "9" w/WFTVs above them; 0559 Id "ABC for all of central Florida, WFTV")												
		0545	WTVT? 13	Tampa FL ?	T											
				(Ø CCI to KTRK)												

Glen R. Neal, 1005 N. 5th, Sayre, Oklahoma 73662

(1 Nov - 5 Dec) (CST)

Equipment: UHF dish, LVL VHF, both 25', two pre-amps, 75 ohm, Zenith F&W TV.

N1	Tr	2014	K78BK	Seiling OK	1043N 100	(14)	Tr	0045	K76AP	Big Lake TX	3554N 300
			K8ØBT	Seiling OK	1043N 100	24	Es	1816	XEW - 2	Mexico DF	5534R1200
			K82BB	Seiling OK	1043N 100			t/in	XHTV	4 Mexico DF	5534R1200
2	Tr	1005	KFPW	40 Ft. Smith AR	4545N 295				XHGC- 5	Mexico DF	4534N1200
14	Tr	0045	K7ØBI	K73BU Big Lake TX	3554N 300				unId	3 (Spanish)	3533

(Glen Neal's report, continued) I've been keeping poor track of condx lately; these are only the new tropo loggings and what Es I happened to see.

It's "maintenance" time around here; I'm waiting for the first warm spell to take down the antennas and check them, etc.

Pat Dyer, 327 Solar Drive, San Antonio, Texas 78227 (11 Nov - 9 Dec) (CST)

Receiver: 1971 9-inch B&W Penncrest (* 1968 RCA color GJ721W). Antenna: 6-element hi-low VHF Yagi 12 feet, aimed NE (* 11-el. VHF Yagi, 15 feet up, aimed SE).

<u>N11</u> Tr	OC25*WVUE	8 New Orleans LA	510 D2 Es	1740-	2	?	
<u>12</u> Tr	OO40*WAFB-	7 Baton Rouge LA	450	1820 unIds	3	?	
	*WVUE	8 New Orleans LA	510	3 Es	2000 WEAR-	3	Pensacola FL 675
	O100 KNOE-	8 Monroe LA	450		2028 WDIK	2	Andalusia AL 725
<u>13</u> Tr	O143 KTXS-	12 Sweetwater TX	N 245		2129 KNXT	2	Los Angeles CA (tent) 1190
<u>24</u> Es	1900-20 unId	2 (Mexico?)		5 Es	1230-	2	(both with Oakland-
<u>27</u> Es	1820 unId	2 (Mexico?)			1245 unIds	3	Atlanta game)
<u>30</u> Es	1430*KNXT	2 Los Angeles CA (tent) 1190		8 Tr	OO03*KMID-	2	Midland TX N 280
	(several unIds between 1215 & 1500)				OO20 KMOM-	9	Monahans TX 295

Some winter-season Es has appeared with a few good openings. MUF Dec 3 evening was touching channel 6 with the local Ch 4 getting a pile of CCI. Tropo have also been good for this time of year. The KMID logging was a bit of a shock after all these years. 73, WA5IYX/5.

Bob Cooper, Jr., 2609 Chaucer Drive, Oklahoma City, Oklahoma 73120 (9 Nov- 8 Dec) (CST)

Immensely enjoyed twin-visits from Glenn Hauser and single visit by Morrie Goldman during month. We hashed and rehashed the state of the hobby for hours on end, aligned some discarded CATV gear at the CADCO plant for both to take home for DXing, and generally decided to do it again at an early date.

Conditions for DX, typically, were something less than desirable.

Nov 11 Tr 0910 tune-in, KHNE-29 (345 mi) KXNE-19 (475) NE, KCSD-19 MO (297); 2230 t/in; KCSD-19 and KHNE-29.

Nov 12 Tr 0735 t/in, KDNL-30 MO (458), KHNE-29, KETV 7 NE (405), WAND 17 IL (556), WICS 20 IL (523), KDIN 11 (471), KCSD-19, K18AA KS (240), KMEG 14 IA (485), KVFD-21 (507), KYNE-26 NE (405), K7ØEK, K71BO (230), K78CO Fairbury NE (350) (repeats KHNE-29), K8ØCP Beatrice NE (350) (repeats KUON-12), the latter two my first Nebraska translators and translator state number 8.

Nov 14 Tr 0900 t/in, KMID-2 TX (330), KOSA-7 TX (350); 1909-2050 tropo ducting, KNOP-2 (430) and KHNE-29 (345) both NE.

Nov 15 1840, brief bursts of WNDU-16 IN (742 mi).

Nov 17 MS 0825 t/in to 1100, heavy MS activity (3-10 minutes each), ch 2, mostly weak, to NE with heavy Es-type fading.

Nov 20 Tr 0830-0930 K66AB K68AD Perryton TX (190), K7ØAQ Boise City OK (190). Glenn Hauser was here this day, with excerpts from 1971 TV Factbook. Careful study indicated a considerable list of UHF translators within 400 miles still not logged. They have been noted and will receive due attention.

Nov 21 Tr 1845 t/in, KCTV 2 MO (325).

Nov 23 Tr 1722-1725 WNDU-16 IN (742) over KUHI-16 MO.

Nov 24 Es 1800 t/in to 1905, to old Mexico with KEW-2 DF (1225) and XEZ-3 (210). Tr 1910 t/in, KVUE 24 KHFI-42 TX (350); 2115 t/in, KHTV 39 TX, KVRL 26 TX (420); 2216 t/in, KDNL-30 MO (458).

Nov 25 Tr 0900-1030 WNDU-16 IN (742) in & out.

Nov 27 Morrie Goldman and Glenn Hauser here.

Dec 3 Es 1915 t/in, Mexico, XEW-2 XHY-3 plus several unId Spanish, out apx 2055.

Dec 4 Es 2125 t/in, west (probably missed good opening earlier), KTVU 2 KCRA-3 CA and others in & out; several not Ided positively; still in past 2215.

Dec 5 Es 0905 t/in, west, KOAI 2 AZ in & out past 1015; 1920 t/in, CFAC-2 Alta through 2100 or so; then 2110, KREM-2 WA and others not identified.

Dec 6 Tropo ducting, 2030-2100 approx., KNOP-2 NE (430).

Dec 7 No real DX; had to be up early anyhow (0450 on) so checked channels 8, 7 & 2 for MS simultaneously. Supposed to be a big date for random meteors; it was not. We did try out new 40-element quad array (four 10-el. Winegard SCX-7's) and antenna-mounted 1.0 db pre-amp, however. It shows real promise. 73.

Rest of DX to all

Dennis

CENTRAL TV

Roger H. Brown
1617 Linden St.
E. Lansing, Mi. 48823

January 1972

Next deadline: January 15, 1972

For TV-DX reporters and enthusiasts in Wi, Il, Mi, In, and Ohio. Happy New Year!

Again one of those "events" dear to a DXers heart occurred too late for general reporting but we have enough information to start the ball rolling this month. The subject is winter Es and after a major opening on December 14, there will certainly be more on this (and hopefully others) next month.

Just one of the reports received this month reflects activity during the annual meteor event on 10-14 December. Two quite fierce wind storms in the past six days have fouled things up here and I have had to make a few repairs. Thus I missed the shower's best days. This has been an unusually warm December in the Great Lakes region but most of the warm air has been associated with DX killing low pressure. A couple of fair tropo days are noted in the few reports I received.

Once more, I wish to add my thanks to that of others to Ferdie Dombrowski for his publishing work since the clubs inception. I'm certain too that the monthly chore of maintaining a quality Digest is passing into highly qualified hands. Of course our mainstay is the VUD. In a way, the VUD is the WTFDA. I feel sure that the one job MOST important at the publishing center will be carried out very, very well.

William J. Draeb, Ellis St., R.R. #2, Kewaunee, Wi. CST

- | | | | |
|---------------|---------------------------------|--------------|----------------------------------|
| 11-13 Tr 1930 | WANE-15, WKJG-33 Ft Wayne (268) | 12-3 Tr 1730 | WUAB-43 Lorain, Oh. (340) |
| | WKEF-22 Dayton, Oh (368) | | WKBD-50, WTVS-56 Detroit (265) |
| | WDRB-41 Louisville, Ky (437) | | WKBF-61 Cleveland (355) |
| | WLFI-18 Lafayette, In. (275) | | WXON-62 Detroit, Mi. (265) |
| 1939 | WURD-40 Indianapolis, In. (336) | 1805 | WFYI-20, WURD-40 Indianapolis |
| 1941 | WLBC-49 Muncie, In. (310) | 1830 | WKJG-33 Ft. Wayne, In. (268) |
| | WPTA-21 Ft. Wayne, In. (268) | | WIPB-49 Muncie (note call Bill) |
| 2100 | WKBD-50 Detroit, Mi. (265) | 1900 | WOSU-34 Columbus (395) |
| | WJW-8 Cleveland, Oh. (355) | 1915 | KDUB-40 Dubuque, Ia. (208) |
| | WAKR-23 Akron, Oh. (380) | | WLIO-35 Lima, Oh. (292) |
| | WTVS-56 Detroit (265) | 1929 | WUTV-29 Buffalo, NY (445) |
| | WKRF-61 Cleveland, Oh. (355) | | WKBN-27 Youngstown (420) |
| | WXON-62 Detroit, Mi. (265) | 1937 | WWVU-24 Morgantown, WVa (437) |
| | WGTE-30 Toledo, Oh. (278) | 1950 | WLFI-18 Lafayette, In. (275) |
| | WKNX-25 Saginaw, Mi. (188) | 2020 | WDRB-41 Louisville, Ky. (437) |
| | WVIZ-25 Cleveland, Oh. (355) | 2035 | WPTA-21 Ft. Wayne, In. (268) |
| | WDHO-24 Toledo, Oh. (278) | 12-4 Tr 0530 | CHCH-11 Hamilton, Ont. (394) |
| 2122 | WUAB-43 Lorian, Oh. (340) | | tent. WWNY-7 Watertown |
| | WFMJ-21 Youngstown (420) | | WISH-8 Indianapolis, In. (336) |
| | WKBN-27 Youngstown (420) | | WBNS-10 Columbus, Oh. (395) |
| | WJET-24 Erie, Pa. (450) | | WLWI-13 Indianapolis |
| | WUTV-29 Buffalo, NY (445) | | tent. WBIR-;0 Knoxville, Tn. |
| | WJAN-17 Canton, Oh. (395) | 0600 | WANE-15, WKJG-33 Ft. Wayne |
| | WHIZ-18 Zanesville, Oh. (400) | 0606 | WHIO-7 Dayton, Oh (368) |
| 12-3 Tr 1730 | WCMU-14 Mt. Pleasant, Mi. (147) | | WCPO-9, WKRC-12 Cincinnati (400) |
| | WUCM-19 University Center (188) | 0745 | WLIO-35 Lima, Oh. (292) |
| | WICD-15 Danville, Il. (300) | | WDRB-41 Louisville, Ky. (437) |
| | WAKR-23 Akron, Oh. (380) | | WAKR-23 Akron, Oh. (380) |
| | WDHO-24 Toledo, Oh. (278) | | WDHO-24 Toledo, Oh. (278) |
| | WVIZ-25 Cleveland, Oh. (355) | 0830 | WKEF-22 Dayton, Oh. (368) |
| | WGTE-30 Toledo, Oh. (278) | 0842 | WKBD-50 Detroit, (265) |

Draeb, cont.

12-4 Tr 1820 WTVS-56 Detroit (265)
 WXON-62 Detroit (265)
 WDHO-24 Toledo, Oh. (278)
 1824 WKBF-61 Cleveland (355)
 WKNX-25 Saginaw (188)
 1909 WUAB-43 Lorain, Oh. (340)
 WPTA-21 Ft. Wayne (268)
 1912 WJET-24 Erie, Pa. (405)

Trops peaked on a few days but most of the time, wx was too cold for much of anything. I've been a little lax in getting out of bed to watch for MS...or I might have had more to report. Am improving my UHF set up here. I ordered a CMA-U 14-59 pre-amp, but don't have the coax for it yet. Can anyone get .412 for me? (Not here Bill, RB)

Donald R. Ruland, 4448 68th Place, Kenosha, Wi. 53140 CST

11-13 Tr 1300 WKBD-50, WTVS-56 Detroit (250)
 11-15 Tr 0530 WXYZ-7 Detroit (250) finally, before WLS-7 s/on
 11-26 Tr WHAS-11 Louisville, Ky (330)
 12-3 Tr 1530 WKBD-50, WTVS-56 Detroit (250)
 12-6 MS 0618 WOAI-4 San Antonio, Tx. (1070)

12-12 MS 0537 WCBS-2 New York, NY (720)
 0620 WBAP-5 Fort Worth, Tx (850)
 0658 KATC-3 Lafayette, La (900)
 12-13 MS 0520 WJXT-4 Jacksonville, Fl. (920)
 0600 WWL-4 New Orleans (890)
 0632 and 0635 WOAI-4 San Antonio

Log now at 158 (104 VHF, 54 UHF). (Darned good for a few months and no nig UHF antenna. RB)

Gary Olson, 1203 Kenton, Deerfield, Il. CST

10-5 Tr morning WLIO-35 Lima, Oh.
 11-13 Tr 1723 WKBF-61 Cleveland (320)
 WVIZ-25 Cleveland (320)
 1730 WAKR-23 Akron, Oh. (340)
 WDHO-24 Toledo, Oh.

11-13 Tr 1800 WXON-62, WKBD-50, WTVS-56 Detroit
 1830 WGTE-30 Toledo
 WLIO-35 Lima, Oh.
 1846 WKEF-22 Dayton, Oh.
 Unid ETV on 48 or 49

Am already thinking on how to improve the UHF set-up for next spring. The neighbors are taking bets on whether or not the tower can take a winter full of Chicago winds!

John Parillo, 400 S. Market St., Girard, Oh. 44420 EST

11-16 Tr 1630 WNDU-16 So. Bend, Ind. (300)
 1650 WANE-15 Ft. Wayne, Ind. (250)
 11-25 Tent. Au...hash to ch 4

This was one of the poorer years...didn't receive first new station 'til WUHQ-41 in mid-August!

Bill Matthews, P.O. Box 15306, Columbus, Oh. 43215 EST

12-14 Es 1801 KNOP-2 North Platte, Ne.
 1830 WBRZ-2 Baton Rouge, La.
 1900 KTWO-2 Casper, Wy.
 2000 Unid SS on 2, tent. Cuba

Had unfd on 2 at 1950 w/ ad for T.G.&Y Stofes and Wig Castle. Tent. WESH-2. My total on 1969 Admiral and Rabbit Ears now 53 received. (Tnx for fone call Bill! RB)

Ray Stilwell, 1113 Cleveland, Lansing, Mi. 48906 EST

12-14 Es 1810 KNOP-2 North Platte
 1815 KARD-3 Wichita, Kn.
 1848 KDUH-4 Hay Springs (5555 for a long time)
 1928 KGBT-4 Harlingen, Tx. (1400)
 1930 KTWO-2 Casper, Wy.

(KNOP-2 had "Maywood H.S. Chorus" in what could have been...judging from conditions...their first national appearance! RB) Saw nothing on ch 5. Opening died at 2010.

Roger H. Brown, 1617 Linden, E. Lansing, Mi. 48823 EST

- 11-16 Tr 2130 WMUL-33 Huntington, WVa 4443R (330) 12-14 Es 1800 WESH-2 Daytona Beach
- 2131 WOUB-20 Athens, Oh. 2323N (270) WJXT-4 Jacksonville
- 11-17 Tr 0140 CBLT-6 Toronto 3324N (280) 1820 tent. WEDU-3, WEAR-3
- 12-3 Tr like summer hi pressure tropo to 300 1830 KWGN-2 Denver, KPRC-2
- miles including KDUB-40 and WMBD-31, WOUB-20 Houston, others.
- WCET-48, others. Much the same on 12-4. 1900 KTWO-2 Casper, KDUH-4
- Hay Springs
- KFBC-5 Cheyenne 4422N

The Es opening was very intense. A note from Dave Egan in Quebec (passed on to Dave Pomeroy) notes Es there on Dec. 8 and 10. This appeared to be not auroral-induced. I imagine this one got into FM too...and that the cloud or clouds were intense enough to produce double hop. Don't know when it started though...probably about 1600. Total here now 329 w/ 141 Us.

Station note: recent issue of Broadcasting notes that United Broadcasting (Richard Eaton ...WFAN-14, WMUR-9, KECC-9, WJMY-20, WMET-24) wants to sell all properties. Sounds good for DXers since most of Eatons stations have been low powered and are limited in programming time. Might give more of us a chance to see some of them! Man, you talk about bad management! The United TV outlets have had more trouble from the FCC than most.

The next couple of months are notoriously bad for TV DXers in this area. Good time to get everything ready for the coming year. It's going to be a great one! Happy New Year everyone! 73s Rog.

LATE HQ:

FM STATION LIST NOTICE TV MAPS
VIDEO LINES ADVERTISEMENT: ITEMS FOR SALE

DUE TO UNAVOIDABLE DELAYS, THE WTFDA FM STATION LIST WILL NOT BE PUBLISHED UNTIL APRIL. WE WERE PREMATURE IN OUR ANNOUNCEMENT OF THE PRICE AND TAKING ORDERS FOR IT. THEREFORE, WE ARE OFFERING TWO ALTERNATIVES TO THOSE WHO HAVE ORDERED: IF YOU WISH TO WAIT UNTIL APRIL YOU MAY DO SO, BUT PLEASE INFORM MILWAUKEE BY JANUARY 31ST. IF YOU DO NOT DO SO, WE WILL ASSUME THE ALTERNATE COURSE AND SEND YOU A COPY OF THE 1972 FM ATLAS & STATION DIRECTORY WHICH WE WILL BE AVAILABLE BY THE TIME YOU READ THIS. WHILE IT DOES NOT CONTAIN THE SPECIFIC POWER AND TOWER HEIGHT FOR EACH STATION, IT CONTAINS INSTEAD A COVERAGE RADIUS FIGURE WHICH TAKES INTO ACCOUNT BOTH TOWER AND POWER. AND OF COURSE IT ALSO INCLUDES THE MAPS. THE PRICE IS THE SAME SO ITS AN EVEN DEAL PRICE-WISE AND IS AVAILABLE RIGHT NOW FOR SHIPMENT RATHER THAN YOUR HAVING TO WAIT FOR 3 MORE MONTHS. BUT WE REPEAT, IF YOU WANT TO WAIT 3 MONTHS, LET MILWAUKEE KNOW BY 31 JANUARY OR THE GUIDE/DIRECTORY WILL BE SENT INSTEAD. YOU MAY WRITE BRUCE OR FERDIE--IT DOESN'T MATTER REALLY.

A COUPLE OTHER NOTES: THE GUIDE LISTS STATIONS GEOGRAPHICALLY AND THE LIST BY FREQUENCY; AND IF YOU HAVE ALREADY ORDERED BOTH, WRITE MILWAUKEE WHETHER YOU WANT BOTH OR WANT A REFUND OF THE REST OF YOUR MONEY. PRICE FOR EACH WILL BE \$2.50--OR \$5 FOR BOTH.

FOR SALE:

UHF DX KIT: FINCO-ALLIED 7 FT DISH, MINT CONDITION (UP ONLY 3 MONTHS), BTX-11A ULTRAVERTER (UNMODIFIED), AND CADCO UHF-DXC-2 BOOSTER (FOR CHANNEL 5): \$75.00. BTX AND DXC-2 SHIPPED PREPAID, BUT FREIGHT WILL BE FOR PURCHASERS ACCOUNT. WALDO F. BISHOP, BOX 1678, TALLAHASSEE, FLA. 32302.

IN A SIMILAR VEIN, THE MAPS OF TV STATIONS WILL BE PUT OFF INDEFINITELY, UNTIL THE SPRING AS I NOW SEE IT. ONLY A COUPLE ORDERS WERE RECEIVED HERE SO IT ISN'T SO MUCH OF A PROBLEM AS WITH THE FM STATION LIST FOR WHICH UPWARDS OF A DUZEN ORDERS ARE ON HAND. HQ MOVE CAUSES PROBLEMS.....

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37
6

YES, THE ALL-NEW WTFDA TV STATION LIST IS NOW AVAILABLE! DESIGNED ESPECIALLY FOR DXERS, IT IS THE MOST COMPLETE LIST AT ANYWHERE NEAR THE PRICE. ARRANGED BY CHANNEL, YOU GET CALL, LOCATION, POWER AND ANTENNA HEIGHT, NETWORK AND EVEN OFFSET. PLUS, AN ADDED BENEFIT WITH MEXICAN, CUBAN AND EVEN COSTA RICAN, IN ADDITION TO U.S. AND CANADA. ALL THIS IS READY AND WAITING FOR YOU, NOW, BEFORE THE DX SEASON HITS US. THE PRICE, A MERE \$2.00!!

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***	***	\$3.50	\$1.00 EA. =	
***	***	\$2.50	\$0.75 EA. =	

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