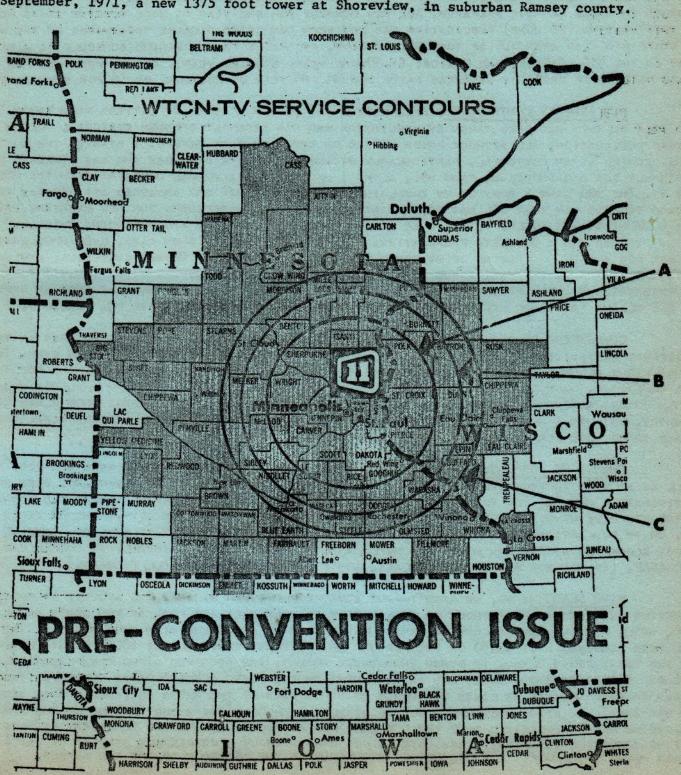
# VHF-UHF DIGEST

JULY



1971.... A SIGNAL YEAR FOR WTCN-11, the independent that grows with the Upper Midwest. In September, 1971, a new 1375 foot tower at Shoreview, in suburban Ramsey county.



### Headquarters

TRAVELLING HAS CAUSED SOME PROBLEMS WITH VUD COLUMNS. LAST MONTH, THE FCC-FM EDITOR CHUCK DOBBINS WAS CALLED AWAY SUDDENLY TO OREGON AND WASN'T ABLE TO SUBMIT HIS COLUMN FOR THE JUNE VUD. THIS MONTH, DAVE POMEROY WAS COMING TO MILWAUKEE TO A CONVENTION AND BROUGHT ALONG HIS COLUMN TO DELIVER IN PERSON, BUT HIS SUITCASE DISAPPEARED--THE COLUMN AND LETTERS WITH IT. SO IF YOU WROTE DAVE FOR THE JULY VUD, WRITE AGAIN BECAUSE HE DOESN'T HAVE YOUR LETTER ANY MORE.

OTHER MOVES INCLUDE PAT DYER MOVING SUDDENLY TO COLORADO AND LETTERS RECEIVED AT SAN ANTONIO AFTER JUNE 8TH WILL NOT BE IN THIS MONTH'S COLUMN. HE INDICATES GLENN HAUSER MAY AGAIN MOVE, TOO. AND OF COURSE DENNIS SMITH HAS MOVED BACK HOME TO WASGO FROM CHICO STATE IN CALIFORNIA.

BE SURE TO NOTE THAT MEMBERSHIP RATES WENT UP EFFECTIVE 16 MAY, (THE DATE OF THE POSTAGE RATES INCREASE), AND THAT TWO YEAR RENEWALS RECEIVE AUTOMATICALLY THE NEW "BASIC COURSE" IN DXING WE HAVE PREPARED. ALL NEW MEMBERS FOR ONE YEAR OR MORE RECEIVE IT AS WELL. AT THIS WRITING (20 June) PUBLICATION HAS NOT BEEN COMPLETED BECAUSE TWO-THIRDS OF THE MILW HQ STAFF HAS ALSO BEEN OUT OF TOWN ON VACATION, AND WE'VE FALLEN BEHIND SCHEDULE AS A RESULT. DUES IN THE USA, CANADA, AND MEXICO: \$5.50-ONE YEAR, \$10-TWO YEARS. ADD \$3 PER YEAR FOR FIRST CLASS MAILING IF DESIRED. OVERSEAS RATES NOW \$4 PER YEAR OS EDITION, OR \$6 FOR REGULAR VUD.

PUBLISHER'S CONTROVERSY: Afew months ago we ran a bunch of letters from Irate DXXers who felt we/they had been taken by publishers who had recently changed editorial policy or ceased publication, all without prior notice or offer of cash refund. I started the controversy series as an editorial, particularly because I was one of those who was "taken." Well I finally got a cash refund from S&E, altho I had to file a formal compaint with the BBB to get it. The BBB sent a copy of my complaint to the publisher who answered it: "He was sent a card telling him that S&E was being cancelled and if he preferred our new magazine entitled COMMUNICATIONS WORLD. ..... We never heard anything from him regarding this...."

THIS WAS A COMPLETE FABRICATION. I NEVER RECEIVED ANY SUCH CARD, EVEN UPON WRITING
TO ASK FOR A REFUND OF MY MONEY. IF SUCH A TURNOVER TO CW WAS AVAILABLE, WHY WAS
THIS NOT STATED IN THE LAST ISSUE OF S&E WHICH ANNOUNCED CHANGEOVERS TO EE (ONLY)? I WOULD
BE INTERESTED TO HEAR FROM OTHER S&E SUBSCRIBERS WHO DID OR DID NOT RECEIVE SUCH AN OFFER
AS S&E CLAIMS THEY GAVE ME--A CHANGEOVER TO COMMUNICATIONS WORLD. WRITE HQ, FERDIE D.

SUMMERFEST BEGINS IN MILWAUKEE SOON, SO WHY NOT COME TO VISIT HQ AND JOIN IN THE LAKEFRONT FESTIVITIES AS WELL? JULY 16-25 ARE THE DATES, BIGGER AND BETTER THAN EVER. THE FIRST NIGHT ALONE WILL FEATURE JOSE FELICIANO, JUDY COLLINS, DAVID STEINBERG. THE ACE TRUCKING CO., BOBBY SHERMAN, WOODY HERMAN, B. B. KING, DELLA REESE, DOC SEVERINSEN, THE ASSN.., LITTLE RICHARD, BLOOD SWAET & TEARS, JACKSON 5, ETC ETC... MUSIC WILL RANGE FROM BLUES TO COUNTRY, SO WHEN I HEARD JEANIE C. RILEY (AND ROY OLARK, RAY PRICE,) WILL APPEAR ALSO, I DECIDED TO GO DOWN FOR A LOOK-BEE; (JEANIE C. TURNS ME ON).

CHANGE OF ADDRESS: WHEN YOU SEND ONE, IT WUD BE HELPFUL IF YOU KNOW HOW LONG YOU WILL BE AT THAT ADDRESS (IF TEMPORARY), OR AT LEAST INDICATE IF IT IS TEMPORARY. WHEN YOU ANTICIPATE A CHANGE, TRY TO STOP SENDING OF YOUR VUD IF IT WILL ARRIVE AT YOUR OLD ADDRESS AFTER YOU HAVE MOVED; THIRD CLASS IS FORWARDED ONLY WITHIN THE SAME CITY, IFTHE PO FEELS LIKE IT. OR IF YOU ANTICIPATE A CHANGE AND DON'T KNOW JUST WHEN OR WHERE IT WILL BE, SEND HQ THE FIRST CLASS FEE AT 25¢ PER MONTH AND WE'LL MAIL IT FIRST CLASS SPECIALLY SO YOU'LL GET THE VUD ASAP. (IF YOU NOW GET IT FIRST CLASS, DON'T WORRY; UNCLE SAM WILL FORWARD.)

MIND READERS: NO, WE AREN'T--BUT SOME PEOPLE THINK WE ARE. ODD AMOUNTS OF MONEY ARE SOMETIME RECEIVED AT HQ WITHOUT AN EXPLANATION OF WHAT THEY ARE FOR. IF YOU DON'T SPELL IT OUT, WE'LL USE OUR OWN DISCRETION, WHICH MAY NOT BE IN AGREEMENT WITH YOUR WISHES. THE USUAL FEES RECEIVED ARE: \$5.50 OR \$10 FOR ONE OR TWO YEARS FIRST CLASS. IF OTHER THAN THESE AMOUNTS ARE RECEIVED WITHOUT EXPLANATION, WE USE OUR OWN DISCRETION. SOMETIMES WE RECOMMEND THAT SOMEONE SENDING FIRST CLASS FEE TAKE 3RD CLASS INSTEAD BECAUSE HE LIVES TOO CLOSE TO HQ TO WARRANT THE EXTRA FEE(UNLESS MAIL SERVICE IN HIS AREA PARTICULARLY BAD.) BUT WE USUALLY DO SO ONLY WITH THE CONSENT OF THE MEMBER, UNLESS HE HASN'T INDICATED WHAT THE FEE WAS FOR ANYHOW. (SOME OF THE PUBLICITY WE HAVE RECEIVED SPECIFIED OUR FIRST CLASS RATE AS OUR DUES WITHOUT SPECIFICALLY STATING IT WAS A 1ST CLASS RATE. THEREFORE I USE DISCRETION DEPENDING ON THE LOCATION OF THE NEW MEMBER.—FSD

WTFDA DX MAILBAG P.O. BOX 5001 MILMAUKEE, VIS. 53204

### 



Coming around the first turn and headin' for summer and the home stretch of another DX season. It's time for another peak into

the mailbag. This month the postman tells us that we have a number

of recent new members:

John F. Pinckney, 2903 School St., Alexandria, Va. 22303
Mike D. Coffey, Box 103, Randolf AFB, Texas 78148
Leslie F. Price, 1710 Church St., Jilmington, N.C. 28401
Paul C. Gunn, 1396 Fourth St., Aurora, Ill. 60538
Herbert Sivula, 149 N.E. 26th St., Jenatchee, Jash. 98801
T.L. Tauchen, 153 Hemlock St., Park Forest, Ill. 60466
James Pizzi, 300 Park, Orcutt, Calif. 93454 (welcome back) 2 yrs.
James Brann, Glen Heights, Chapel Hill, N.C. 27514 - 2 yrs.
Dennis Heiskanen, 378 Erie St., Postal Station P, Thunder Bay, Ont.
Roy D. Horsley Jr., Route #1, Steele, Ala. 35937

Thanks to Glenn Hauser's recent TV DX article in "How To Listen To The Jorld" James Brann has hitched a ride on our bandwagon for two years. Jim is truly a man of the read as he is a truck driver for overnite transportation. His main interest is TV DX for which he has had a liking for many years. All that time away from the receiver, however, tends to discourage keeping a log. So Jim is contact to follow the action on TV as well as on his secondary

bands (shortwave and medium wave).

Frank Herrill sends word from his new residence in Toledo
"I'll probably be at the convention if its within 700 miles of
Toledo, which would roughly take in Hartford, Tidewater area,
Atlanta, Hemphis, Kansas City and all spots between. (Guess you are
sincere about coming - hi) Since it will be after June, no other
plans should upset." (Hope to see you there Frank - along with about
200 hundred others from JTFDA!)

Roy Barstow sends a quick note informing us that he has moved out from under the shadow of the Boston TV towers. His new place is 70 miles from Boston with the nearest TV being ITEV-6 at 30 miles. Obviously Roy's DX is going to improve with this new

location bonus!

An interesting note received from Ken Jennings of station KUHF (FK) in Houston. He says "I'm the host of the only current FM, and possibly the only DX show on radio. As yet, Dxing Today has no FM or TV DX, and I am thinking of including some in the show. I was wondering if you could help me get started into the types of UHF-VHF DX there are and what can be heard". Ken invites anyone passing by to stop in and see the station. Any of you who have ideas be sure to let Ken know. By the way the show airs at 6:45 - 7:15 F.M. CST on KUHF (FI) 88.7 for all you skip chasers who'd like to hear your reports make the air.

A wide variation in DX reports continues to be coming in from the four corners of the United States and Canada. Some have reported a fairly good early season. Numerous others feel this season thusfar is one of the worst on record. The midwest has been especially disappointing - perhaps because of the prolonged cold meather during the spring. Cheer up gang. Things can change in a hurry!

To repeat: This column is still looking for a qualified and enthusiastic editor. For those interested in compiling the mailbag column each month (or any other column for that matter)

please drop HQ a quick card.

73's for July

#### \*\*\*\* WTFDA CONVENTION '71 \*\*\*\*

FUN & GAMES & LOTS OF DX RELATED ACTIVITIES IN THRILLING MID-MICHIGAN (WOULD I LIE?)

OK, so East Lansing may not be the heart of happy activity...but a small area within this sleepy college metropolis in Central lower Michigan will ABOUND with glad times during the third annual WTFDA convention. The dates to remember are August 13-14-and 15, 1971. The host (graciously assuming the role following the HIGHLY successful job done by super DXer Bob Seybold in 1970) is Roger (I print 'em as they're reported) Brown, would-be farm broadcaster and editor of the Central DX column.

Again this year, the program is not complete...but we promise enough activity to warm any TV, FM or what-have-you DXers heart and very SOUL. Besides discussions and demonstrations, there will be as usual a lot of "shooting the bull" with people like yourself...and for some DXers, this is a rare opportunity to meet fellow DXers.

Again, there will be reams of literature and fact sheets from North American TV-FM antenna and equipment manufacturers. Hopefully there will be prizes and goodies for all!

The cost will be moderate, as usual. The convention site will be the University Inn motel...their rates are \$11 for single or \$16 for double occupancy. The convention registration fee is \$10, which includes a Saturday night picnic, good-old-refreshments and other convention expenses.

Finally, there will be an opportunity to DX...and you're welcome to bring equipment for a session at your hosts DX den.

How does one find this mecca of DXing joy? Simple. The motel is located on the North side of Trowbridge Rd., about 1000 feet off US-127 North, at the East Lansing city limits. I-96 passes just South of Lansing and East Lansing. If you're coming from the Souteast or East, take I-696 and I-96 from Detroit or US-23 and I-96 from Toledo. From the South and SW, take I-69 to US-27 to I-96 from the Indiana line, or (for Chicago-Milwaukee and points West), I-94 to I-69 to US-27 to I-96. Everyone should look for the US-127, East Lansing exit off I-96 (NORTH). If you're by some chance coming from the North (down US-27) go South to Saginaw Ave., West on Saginaw (in Lansing) to US-127 (at the WJIM-TV studios), to Trowbridge. If arriving from Flint and East on M-78, you'll eventually cross the North end of US-127. Again, go South to Trowbridge.

Hey, conventions are a blast! This is your HOSTS first WTFDA gathering too...so come share the good times. SEE YOU THERE!

Oh...one more thing. Please use the handy-dandy registration form. Thanks!

### OTHER COMVIS.

THE IRCA CONVENTION WILL BE HELD IN TOLEDO AT THE TOWN HOUSE MOTEL AUGUST 20-22. WE PRESUME THIS WILL BE OPEN TO ALL DXERS SINCE IRCA OFFERED TO HOST THE ANARC CONVENTION AT THE SAME SIGHT. REGISTRATION: PROBABLY LESS THAN \$8. ROOM RATES AND OTHER INFO ON REQUEST FROM DON ERICKSON, 6059 ESSEX ST., RIVERSIDE, CA 92504. CLUB IS BCB ONLY.

THE NRC CUNVENTION (ALSO BOB ONLY) WILL BE HELD LABOR DAY WEEKEND IN SAN FFRANCISCO. FOR FURTHER INFO WRITE NRC, Box 99, CAMBRIDGE, MASS. 02138, (PHIL SULLIVAN).

THE NNRC CONVENTION IS OVER ALREADY, SO YOU MISSED IT. AREN'T YOU SORRY NOW?

THE ANARC CONVENTION WILL BE HELD JULY 23-25 IN INDIANAPOLIS, AT THE HOLIDAY INN AT THE AIRPORT. MORE INFO LATER. Conducted by David T. Janowiak

TECHNI/CORNER
July 1971

3661 South 46 Street Greenfield, Wisc., 53220

#### ABBREVIATION LIST, Continued

HKY ice hockey HP Horizontal polarization headquarters HQ HV high voltage HVY heavy (fading, for example) HZ hertz (replaces CPS) ID identification IF intermediate frequency IHTP Indian head test pattern IPA Interdigital Preamplifier JFD television receiving equipment manu. JFET junction field effect transistor ki lohertz (1000 hertz) KHZ ki lovolt (1000 volts) ki lowatt (1000 watts) KV KW L inductance; local (station) LA Latin America LB low band TV (channel 2 to 6, 54 to 88 MHZ) LC inductance/capacitance LF low frequency LGG logged (received) LGGN logged, new station LGGU logged, not new LOG written record of reception LP log periodic (antenna) LPV log periodic, elements veed LPY log periodic yagi LS lightning scatter LV low voltage MA milliampere (0.001 amps) MANU manufacturer MAX maximum MIN minimum MB Marine Band MF (0.000001 farads) microfarad MIHTP modified Indian head test pattern MS meteor scatter MUF maximum useable frequency (highest frequency skip reaches) MW medium wave MX music ND news director NF noise figure NSP no silent period NX news OL overload 00 owned and operated OP operated P pentode tube PA public affairs (program or spot) PAD nonadjustable attenuator PB police band PC printed circuit PD program director PF picofarad (micro-micro farad) PH photographed PING short meteor burst under one second, no useful info PM afternoon, before midnight; program manager PO post office

VT

video tape

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PO/A
                     post amplifier
PP
                     postpaid
                     public relations
PR
PR/A
                     preamplifier
PROMO
                     promotional announcement
PSA
                     public service announcement
PSB
                     public service band
PWR
                     power
                     resistor; resistance
R
                     random meteor scatter (non shower)
RAMS
                     radio control; resistance/capacitance; resolution chart
RC
RCA
                     Radio Corp. of America
RCVR, RX
                     receiver
                     rabbit ears
RE
REB
                     rebroadcast
REC
                     record
RF
                     radio frequency
RFC
                     RF choke
RL, RLY
                     relay
                     rock and roll music
RR
RTMA
                     Radio Manu. Association test pattern
RTTY
                     radioteletype
S
                     side band; station break; super burst (2 second or more)
SB
SCA
                     subcarrier
SCB
                     split color bars
                     silicon controlled rectifier (correct term is THYRISTOR)
SCR
SHR
                     shower (meteor)
SIL
SK
                     Standard Kollsman (tuner manu.)
S/ON
                     sign on
S/OFF
                     sign off
SPKR
                     speaker
SS
                     Spanish speaking
                     studio transmitter link
STL
STN
                     station
STRIP
                     row of electronic circuits such as IF strip (slang)
SW
                     short wave; switch
SWR
                     standing wave ratio
                                                      VTR
                                                               video tape recorder
T
                     tube, triode
                                                      VUD .
                                                               VHF/UHF Digest
TD
                     taped
                                                      WK
                                                               weak
                                                               Worldwide TV FM DX Association
TE
                     transequitorial skip
                                                      WTFDA
TE/ES
                     transequitorial E skip
                                                      WTP
                                                               wedge test pattern
TFMR
                     transformer
                                                      WX
                                                               weather
T-LINE
                     transmission line
                                                      Y
                                                               yagi antenna
T/ON
                     transmitter on
T/OFF
                     transmitter off
                     test pattern
TROPS, TROPO
                     tropospheric DX
TT
                      test tone
TV
                      television
 TVI
                     television interference
 TWR
                      tower
 TX
                     television
T40
                     top 40 (music format)
                     Ultra-high frequency television (U.S. channel 14-83, 470 to 890 MHZ)
 U, UHF
 V
 VCI
                     video carrier injection
 VERIE
                     station verification
 VHF
                     very high frequency (US channels 2 to 13, 54 to 216 MHZ)
 VFD
                     verified
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FM FCC

CHARLES A. DOBBINS 12851 LONGACRE DETROIT,MI. 48227

NEW STATIONS

INITIAL APPLICATIONS

Cedar Rapids, IA. Stereo Beam Corp. seeks 102.9 100 kw. AAT 667 ft. Crookston, MN. University of Minnesota Tech. College seeks 89.3 10w. AAT 130 ft. Elizabeth City, NC. Love Bdcstg seeks 93.7 100 kw. AAT 363 ft. Ellisville, MS. South Jones Bdcstg Inc. seeks 102.3 3 kw. AAT 298 ft. Georgetown, SC. Winyah Bay Bdcstg Co. seeks 97.7 100 kw. AAT 202 ft. Goldsboro, NC. Southern Radio & Television Corp. seeks 102.3 3 kw. AAT 213 ft. Hershey, PA. South Central Educ. Bdcstg Council seeks 89.5 15.5 kw. AAT 820 ft. Jefferson City, MO. Lincoln University seeks 88.9 40 kw. AAT 73 ft. Ladysmith, WI. Stewards of Sound Radio Co. seeks 92.9 100 kw. AAT 700 ft. Moberly, MO. Moberly Bd. of ED. seeks 90.1 10w. AAT 40 ft. Palatka, FL. Morris Bdcstg Co. seeks 99.9 100 kw. AAT 500 ft. Pikeville, KY. Pikeville College Inc. seeks 90.7 1 kw. AAT 1385 ft. Rensselaer, NY. New People Comm. Inc. seeks 103.9 3 kw. AAT 82 ft. Sheboygan, WI. Joint City School District #1 seeks 91.7 10w. AAT 104 ft. Thief River Falls, MN. Area Vocational Technicial School Dist. #564 seeks 89.5 10w. AAT 100 ft. Vernon, TX. KVWC Inc. seeks 102.3 6.48w. AAT 337 ft. Winner, SD. Midwest Radio Corp. seeks 93.7 100 kw. AAT 548 ft.

FINAL ACTIONS

Corvallis, CR. KLOO Inc. gtd 106.1 27.7 kw. AAT -87 ft.

AUTHORIZED STARTS

Boulder, CO. KBUL(FM) on 94.7 TPO 10w. AAT 180 ft. Eufaula, AL. WULA-FM on 92.7 TPO 2.3 kw. Greencastle, PA. WKSL(FM) on 94.3 ERP 170 kw. AAT 360 ft. Los Angeles, CA. KWST(FM) on 105.9 ERP 72 kw. AAT 730 ft. Manhattan, KS \*KSDB-FM on 88.1 TPO 10w. Morehead, KY. WMKY-FM on 90.3 TPO 19 kw. AAT 510 ft. Oceanside, CA. KUDE-FM on 102.1 ERP 10kw. AAT 950 ft. Pittsburgh, PA. WKJF-FM on 93.7 TPO 17.5kw. AAT 550 ft. Santa Rosa, CA. NZST(FM) on 100.1 ERP 3 kw. AAT 240 ft. Stockton, CA. KSJC-FM on 89.5 TPO 10w.

FM STATE OF THE INDUSTRY
Now operating 2670
(incl. 457 Educ.)
Licensed 2673
CPs outstanding 267
Applic. for new stat.
334
Sta. bdcstg in stereo

CALL LETTER APPLICATIONS

Wesson, MS. WWCL (FM) on 91.1 TPO 10w.

Corvallis, OR. KLOO Inc. req KLOO-FM
Georgetown, TX. Georgetown Bdcstg Co. req KGTN-FM
Houston, TX. Wm. M. Rice Univ. req \*KTRU(FM)
Lebanon, OR. C.T.Isley req KOMS(FM)
Louisville, GA. Peach Bdcstg Co. req WPEN-FM
Martin, TN. Univ. of Tenn. req \*WUTM(FM)

Memphis, TN. Memphis Comm. TV ASSOC. req \*WKNOMemphis, TN. Me

CALL LETTER ACTIONS

Cadar Rapids, IA. Buddy Tucker Evan. Assoc. gtd KTOF(FM)

Centerville, O. Centerville City Sch. gtd \*WCWT-FM Lincoln, IL. Virginia Bdcstg Corp. gtdWFRC-Chicago, IL. Loyola Univ. gtd\*WLVC-FM Riviera Beach, FL. F. Kegel gtd WGMW(FM)

Des Plaines, IL. E. Piszek & J. Westerfield gtd WYEN(FM) Rogers, AK. KAMO Inc. gtd KAMO-FM

Douglas, GA. Coffee Co. Bdcstrs Inc. gtd WOKA-FM Thief River Falls, MN. Area Voc. -Tech. Sch.

Drew, MS. Triangle Bdcstg Co. gtd WDRU(FM) gtd \*KAVS(FM)

Forest City, IA. D. E. Eddy gtd KWHC(FM) Wilkes-Barre, PA. Wilkes College gtd \*WCLH(FM)

Jefferson City, MO. Lincoln Univ. gtd \*KLUM-FM

EXISTING FM STATIONS

CALL LETTER APPLICATIONS
Hartford, CT Communico Inc. WBMI(FM) req WKSS(FM)
Memphis, TN. Sonferling Bdcstg WTCV(FM) req WAID(FM)
Santa Barbara, CA. Schuele Org. KMUZ(FM) req KRUZ(FM)

CALL LETTER ACTION
Los Angeles, CA. Pac. & Sou. Co. KRHM(FM)
gtd KKDJ(FM)

FCC-FM NEWS AND DATA JUNE, 1971 PAGE 2 CHARLES A. DOBBINS CHANGES TO ALREADY EXISTING STATIONS WSIP-FM Paintsville, KY. gtd CP to chge ant sys: ERP 29 kw. ant hgt. 700 ft. KIOU(FM) Corpus Christi, TX. gtd CP to chge ERP to 35 kw. delete vert. polar. ant. hgt 290 ft. KRBE(FM) Houston, TX. chge xmtr loc: chge ant sys. ERP 96 kw. ant hgt. 790 ft. WKZN(FM) Kenosha, WI. gtd waiver of rules for mod. of lic. to chge loc. to Zion, IL. \*WSUP(FM) Platteville, WI. gtd CP to chge xmtr loc. &stud. loc. ERP 420w. ant. hgt. 140 ft. KNJO(FM) Thousand Oaks, CA. gtd lic for aux. xmtr and ant. ERP 2.55 kw. ant. hgt. -64 ft. WDCS(FM) Portland, ME. CP to chge xmtr and stud. loc. ERP 30 kw. ant. hgt. 500 ft. WRBS(FM) Baltimore, MD. chge xmtr and stud loc. chge ant sys. ERP 50 kw. ant hgt. 260 ft. WEMD(FM) Catonsville, MD. chge ant, xmtr and stud loc. ERP 50 kw. ant hgt. 245 ft. WWA-FM Gloucester, MA. gtd CP to chge ERP to 3 kw. WDVX(FM) Buffalo, NY. gtd CP to install new xmtr. WPNA(FM) Philadelphia, PA. chge xmtr loc. and stud. loc. install new ant. ERP 8.3 kw. ant hgt WTRE-FM Greensburg, IN. gtd CP for new xmtr. ERP 50 kw. ant hgt. 275 ft. \*WBKY(FM) lexington, KY. chge xmtr loc. install xmtr and ant. ERP 50 kw. ant hgt. 540 ft. WQDC(FM) Midland, MI. chge loc. from Midland to Auburn, MI. KPLD(FM) Branson, MO. gtd lic. covering new FM; ERP 3 kw. ant. hgt. 210 ft. WCRF(FM) Cleveland, O. gtd lic to chge xmtr ERP to 25.5 kw. ant. hgt. 660 ft. WNCR(FM) Cleveland, O. gtd CP to chge xmtr loc. and install new ant.; ERP 29 kw. ant. hgt. 500ft. KRMG-FM Tulsa, OK. gtd lic. covering chges; ERP 62 kw. ant. hgt. 295 ft. WVEN(FM) Franklin, PA. gtd lic covering new FM ERP 3 kw. ant. hgt. 230 ft. WKJF(FM) Pittsburgh, PA. lic to cover chges; ERP 41 kw. ant. hgt. 550 ft. WAEL-FM Maricao, PR. gtd lic. for new FM ERP 10.5 kg. ant. hgt. 1950 ft. WLOW-FM Aiken, SC gtd lic to chge ERP to 3 kw. ant. hgt. 200 ft. KTOD-FM Sinton, TX. gtd CP to install ant. ; ERP 21.5 kw. KZST(FM) Santa Rosa, CA. gtd lic. for new FM. WIKY-FM Evansville, IN. gtd lic. covering use of old xmtr &ant. for aux. purposes only ERP 50 kw. ant. hgt. 460 ft. WKOX-FM Framingham, MA. gtd CP to chge xmtr loc. install xmtr and ant. ERP 10.5 kw ant. hgt. WBYO(FM) Boyerstown, PA. gtd CP to install new ant. chge ant. system. \*WENC (FM) Harrisonburg, VA. gtd CP to chge studio and xmtr loc. & install new ant. WYFI(FM) Norfolk, VA. gtd CP to chge xmtr loc. install new xmtr and ant., chge ant. system ERP 50 kw. ant. hgt. 400 ft.

#### READERS CONTRIBUTIONS

PRUCE ELVING - Albion, MI.; gtd Family Life Bdcstg Sys. lic. covering new FM WUFN 96.7 Des Moines, IA. gtd Contemporadio Inc. to resume operation of FM sta. KNYA (was KWDM) on 93.3 at 35 kw.

Geneva, NY. gtd lic. for new educ. FM WEOS-FM to The College of the Seneca on 89.3 Rutland, VT. gtd lic. for new FM sta. WHWH to Central Vermont Bdcstg Corp. on 98.1 Bruce also sends along a list of new FM stations as follows:

WLVC Chicago on 88.3; KTOF Cedar Rapids on 104.5; KWHC Forest City, IA. on 102.3; WDRU Brew. MS. on 95.3; WDCS Portland, ME. on 97.9; WRBS Baltimore on 95.1; WBMD-FM Catonsville, MD on 105.7; WCVA-FM Gloucester, MA. on 104.9; WFNA Philadelphia on 94.1.

Since this is the last one of these columns that I will be writing I would like to thank all of those who took the time and effort to write to me with information that I can use in the preparation of this column for the past year. As of the August WDO( this is already June 16th) I will be writing the FCC-TV column while Gary Olson moves on to broader horizons. In my place will be the new FCC-FM column editor, Bruce Elving whose address is 3000 North Oakland Ave Milwaukee, WI. 53211. Super FMer, Bruce, will more than easily fill the bill as the new editor of this column and I hope that you will all give him the same support that you have given me over the past year. Best of DX to everyone this year.

73's Chuck

FROM ROBERT BAKER OF HUMBOLDT, 10WA:

Two new 2000° Towers are being built 14 miles north of the Des Moines city Limits. A

Joint Tower is being built for WHO-13, WOI-5, and KDIM-11, plus WHO-FM and WOI-FM. It is

EXPECTED TO BE IN USE BY THIS FALL. ALL STATIONS WILL USE MAXIMUM POWER AS WELL..... IN

ADDITION, KRNT-8 WILL BUILD ANOTHER 2000° TOWER A HALF MILE AWAY, PROBABLY WITH KRNT-FM

ON THE SAME TOWER. "THIS SHUD PRESENT QUITE A SPECTACULAR PICTURE...LESS THAN \$ MILE APART."

Editor: Druce P. Elving 3000 Forth Oalland venue illaulee I 53211

As the the new editor of this column, I'll try to keep you informed of all the changes in stations operating and authorized on Fathet will interest Diers. Information on new stations and frequency changes is useful to all Mers in updating radio logs, and for those who keep their own records like I do, the information on power changes, calls, etc. will be valuable. Once the TTD. station list is available, this column should be even more valuable in enabling all P. D.ers to maintain accurate station lists, updated monthly. I have regular access to the .... Inddenda to Television Digest, Broadcasting, United Press International's Broadcast Rou, and publications like Billboard and Variety - all of which are good sources of station info. Later, I hope to subscribe to the 'ueen's Printer service so as to provide updated Canadian station information. Contributions from readers are always velcome, and will help to make this column as complete and helpful to the DMer as possible.

#### Construction Permits Granted

Camarillo C. 95.9 193' 3000 w horz. a vertical 00 \*69.3 18' 1750 to Loulder CT \*90.5 320' 1000 tr Guilford Jacksonville FL \*69.9 100000 w, 621' Valdosta GA \*89.9 10 W 102.5 200' 100000 W WAYK, Inc. Maycross G. 103.3 390' 25500 to Teletronics 105.5 300' 3000 w horiz & vert. 95.3 177' 3000 w 94.1 1836' 25700 w Monticello IL Lantoul IL Butte T Luburn NE 105.5 300° 3000 w horiz.d vert. Garden City NY \*90.3 112' 350 (replaces Floral Park 90.3, which is deleted)

North Syracuse FY 100.9 140, 3000 w horiz a vertical - initial decision by FCC. I had an interest in the competing application for 100.9 in Syracuse!

Ossining 1.Y \*90.3 10 w

Wellston CH 96.7 3000 tr, 100'

Thiladelphia N. \*91.7 225' 6300 W. Drexel Institute. Sharetime operation with WPMT 91.7, 10', 179 v, also Philadelphia.

Stations Now on the Air LLRB Carmel CA 101.7 591' 625 W

MPEH-FN Louisville GA 92.1 200' 3000 w h & vert. MIOI Flora IL 103.9 300' 3000 w horiz. & vert.

WPRC-Fit Lincoln IL 100.1 201' 3000 W

WWTO Peoria IL 105.7 571' 36000 w

LTOF 104.5 Cedar Rapids IA 550' 100000 h & vert. MYNA 93.3 Des Noines IA 410' 35000 (formerly

KIDM, returning to the air after a hiatus) WESH Prince Frederick ID 92.7 370' 1850 h & vert. horizontal and 23510 w vertical. WSHN-FM Fremont MI 100.1 184 3000 w

W.LA-FII Ludington III 106.3 250' 3000 W

WDTH Duluth III 103.3 551' 100000 w h & v-24 hrs.

WFG-FII Hibbing IN 106.3 270; 3000 hor & vert.

WHLB-Fil Virginia iN 107.1 105' 3000 w

WDRU Drew NS 295' 3000 w horizontal & vertical on 95.3.

LCTM Canton 10 102.3 175' 3000 w

WOTI Dunn NC 103.1 240' 3000 W

KTRU Houston TX \*91.7 10 w (Rice University)

LEPH Ephraim UT \*89.5 10 w (Snow College)

\*Denotes educational station.

Powers given are effective radiated in watts (except 10-watt stations, with transmitter output powers given), antenna heights are above average terrain in feet. Power is horiz-ontal only unless vertical polarization is ontal only undicated.
indicated.
Changes in Facilities

KLIR-Fi Denver CO 100.3 235' 100000 h & vert. USIE Lake Ronkonkoma IY from 89.7 to 91.9\*, 145' 1650 W

BLI-Fal Patchogue IY 106.1, 360' 10000 w horiz a vert. (Note call change from UPAC-FM). MOSU Stillwater Cl 91.7 to 440' 100000 w MIDB Philadelphia PA 96.5 500' 48000w h & vert. Phoenix AZ, EFCA 91.5, to 1640' 100000 w

MFOY-FM St. Augustine FL 97.7 160' 3000 w, horizontal and vertical

WORZ-FN Alton IL 100.3 490', 19300 h & vert. WJJD-FN Chicago 104.3 820', 14000 " " "

WHI Muncie IN\*91.5 to 79' 330 w

ADIC Grinnell IA from 89.5 to \*88.5, 10 w. KLIN-FM Lawrence KS 105.9 to 34154 w, 135'

WEET-FN Brockton MA 97.7 280' 1200 w, h & vert.

MANO-FM Nemphis TN \*91.1 580 40000 w IBYU Provo UT \*88.9 to 2850' 32000 W

MPAP-Fil Panama City FL 92.5 270' 100000 h & ver. LCLC St. Charles in from 90.1 to \*89.1, 240'

1500 W.

WHOT Hurfreesboro TH \*89.5 238' 50000 h & vert. WOHI Norfolk VA 102.9, 471' 50000 w hor & vert.

WLIF Baltimore ID 101.9 to 560' 38000 w IVGN Bellingham WA 92.9 2440', 50000 W

WFWO (formerly !RIT-FM) 102.9 to 430', 33620 w

MDUQ \*90.5 Pittsburgh PA to 476' 25000 w.

#### Call Letters Assigned

MROI Rochester IN 92.1 MAFR Durham NC \*90.3

UNVO-FIT Havelock NC 104.9

WPLR New Haven CT 99.1 (formerly WNHC-FM)

UCIC Pompano Beach FL 102.7 " URBD-FM)

WIOQ Philadelphia PA 102.1 ("W-102", formerly TFIL-FM)

Continues next page

(Call assignments, continued)

MTGP Greenville PA \*88.1 (Thiel College) WHCG Metter GA 104.9 WTTU Cookeville TN \*90.1 Tenn. Technological U. MCSG Grand Rapids MI \*91.3 (Baptist Bible Col.) MSPL La Crosse WI 95.9 LVR Longview WA \*90.5 (Lower Columbia Col.) WOAL Cleveland OH 104.1 (formerly WCJW) LFYE Fresno CA 93.7 (formerly LFRE-FII) NDAR Oxnard CA 98.3

WPDQ-FM Jacksonville FL 96.9 (formerly WRLJ) WRVU Mashvill WLJE Valparaiso IN 105.5 (formerly WAKE-FM) MCLU Pasco WALICB Fort Dodge IA \*88.1 (Iowa Community College). Schools) WRVU Nashville TN \*91.1 (Vanderbilt U. students) MOLU Pasco WA \*90.1 (Riverview Baptist Christian

ITCC Colby KS \*91.9 (Colby Community Jr. College) WHSI Savannah GA 96.5 (formerly WAFW)

MONIS Lebanon OR 103.7 LOEL-FH Oelwein IA 92.3 MIBU-FN Hutchinson LS 102.9

MUTH Hartin TH \*90.3 (U of Tenn at Hartin) LGTN-FH Georgetown TK 96.7 MSMG-FM Greenwood MS 99.1 (formerly MSMG)

WHFL Winter Haven FL 97.5 (formerly WALL)

#### SHARETILE FILSTATIONS

A very recent development in FM is the share-time station, with the only examples to date being educational operations in the 88 to 92 mHz band. Here is the complete list of Fir stations which share the same frequency:

\*89.1 UNYU (New York University) 220' 8300 w horizontal and 7700 w vertical with WFDU (Farleigh Dickinson University) Teaneck NJ, 500' 500 w horizontal only. \*91.7 WPUT (Wireless Technical Institute), 10' 179 w with (Drexel U.), 225' 6300 w - call letters unassigned.

Not sharetimers: 88.3 UHPE (U. of Chicago) and ULVC (Loyola U.), both Chicago, and both ten-watters.

Sharetime program operation \*90.3 Garden City NY 112' 350 w between Adelphi University and Nassau College Association, Inc. Call letters unassigned; may be one or two sets of call letters resulting.

John Ebeling, Bloomington III, sends information along concerning construction of the massive TV-Fil antenna towers in Shoreview, north of the Twin Cities, with operation expected by around September 1, 1971. FII stations expected to be on the tower are MCCO-FII 102.9, which will have 100000 w both horizontal and vertical at 1150' and KSTP-Fi 94.5. The article mentions that NTCN hopes to acquire an FN station and operate it from that site (ATCR-FN 97.1?), but makes no mention of the fact that KSJN 91.1 will provide educational (public) radio programming from the site with 100000 w both horizontal and vertical at 1160.

#### -0-0-0-0-0-0-0-0-0-0-

As a follow-up to my article on DKing Educational Fil, I should point out that the national public radio program, All Things Considered. . ., is transmitted live from 5 to 6:30 p. m. EDT, ... with delays on the West Coast and in the Mountain time zone; Monday through Friday. Several small educational stations have bit the dust for the summer, including THRU 68.1 Clayton NO, WSUN 91.7 Whitewater WI, and WBEZ 91.5 Chicago. Others have increased their schedules, as predicted. MFSU 91.5 (205' 3100 w) has expanded its schedule to 6 a. m. to 1 a. m. seven days a week (they formerly signed on at 5 p. m.). WDET 101.9 Detroit, a public station operating on a commercial frequency, is now on from 6:30 a. m. to 3 a.m.; formerly they signed off between 9:30 a. m. and 3 p. m. MCAL-FM 89.3 Northfield IN has added the 3-4 p. m. period to its daily programming, and WUMI 89.7 Milwaukee WI is on the air 365 days a year from 8 a. m. to 1 a. m. or later. WGGL 91.1 Houghton will increase to 810', 100000 w by fall, and are on seven days a week from 1 to 11 p. m. Eastern Standard Time.

From the St. Louis area we learn that MSIE 88.7 Edwardsville IL is in stereo, .6 a.m. to 12:15 a.m., WIL-FM 92.3 St. Louis is off the air only from 2 to 6 a. m. Hondays (stereo), while LADI 96.5 stereo is off Monday mornings from 1 to 5. IRCH 98.1 St. Louis, stereo, is off daily at 1 a. m., LFUO-FM 99.1 Clayton MO signs off daily at 11 p. m., MONZ-FM Alton IL 100.3 is off daily between 12 and 12:15 a. m.; MRY ("Lady of the Snows") 101.1 East St. Louis, is off at midnight daily. KLPW 101.7 Union 100 is off at 10:15 daily, WCBW 104.9 Columbia ILis off 11 p.m., MGNU-FII Granite City IL at midnight unless there's a Chicago White Sox game, and LGRV 107.7 St. Louis operates 6 a. m. to midnight. 73, bruce elving

## BOB'S TECK NOTES July 1971 Page One

#### MINIMUM EQUIPMENT STANDARDS FOR SERICUS DXING

During the past several years in the Digest a few of us have attempted to discourse on equipment for DXing. Dave Janowiak, noteably, has consistently attempted to show how simple home construction projects utilizing readily available parts can greatly improve your ability to receive DX.

In discussing equipment with other DX'ers (especially at the Dunkirk convention last summer) it became apparent to me that many DX'ers know, in their hearts, that their own DXing installations leave a great deal to be desired, but that they are quick to point out "I can't afford an AJ-15 tuner" or "...a Conrac receiver". Granted, many of our members are young, or students, and finances are a problem. In this very vein however much if not all that Dave Janowiak has written about is in the \$5.00 total cost region, and it works! Perhaps not as well as an AJ-15 or a properly aligned Conrac, but it does work ... better than what you now have.

For those who do not have the money to afford a Conrac or AJ-15, but do have a few dollars left unspent at the end of the month, the problem seems to be more of a fear of the unknown. A good example of what can be done with plenty of guts and some spare time is Carlon Howington of Chio. Carlon spent nearly one year building, and re-building some homebrew FM yagi antennas. I don't think I will offend Carlon if I point out that he didn't know very much about antennas when he began his project, and that he made several mistakes. But he found reference books and magazine articles and he tore into the project refusing to be discouraged when "at first he did not succeed". Now he has what I believe is the finest FM DX antenna system in the country. And he built every bit of it himself. From locally available aluminum tubing and hardware.

Jerry Pulice of Staten Island is another prime example of what a young (or old) DX'er can do. Jerry was bitten by the DX bug, but was soon disenchanted with commercially available traps, filters and pre-amplifiers. So he startedbuilding his own. I don't know how many Jerry has built, but probably 25 or more would be a safe guess, before he got what he wanted. And in the process he worked out a system to bring distant Es and tropo right through his New York City local signals. I might point out that Jerry is a high school student, with limited funds, and a very heavy school load.

Inspite of these and other successes with "rolling your own equipment", is seems apparent that TV and FM DX enthusiasts will never become a very technically proficent bunch. Few of us come into DXing from technical fields, and few of our younger members are headed into technical fields after they leave school.

This makes it difficult for Dave J. or I to sit in our technically oriented typping chairs and tell Digest readers to "do this" or "do that" for better DX reception. Because frankly it takes our kind of expertise to appreciate what can and cannot be done, or the successes of Howington and Pulice to motivate you (without the technical expertise) to even want to improve your situation.

So as Dave J. and I have discussed from time to time, how do we get "through" to the bulk of the membership? How do we show them how important

BCB's TECK NOTES
Page two
July 1971

#### Minimum Equipment - continued

even a few pieces of specialized equipment can be to good DXing results?

The answer, probably, is that we don't, won't and can't. Most DX'ers, I have decided, like to talk about equipment, but few actually ever do anything about it\$

So let's talk about it for the balance of this page.

If you live in a VHF fringe area, you already know what type of equipment it takes just to get decent/viewable television from your VHF stations. I read a study last summer that showed something like 3.5 million US homes have an average of \$150.-\$200. invested in their television receiving antennas. This probably includes a fringe or deep fringe all (VHF) channel antenna, a 50 foot mast or tower, and a rotor. Installed. Most of us do not live in fringe areas. Weenjoy television from stations less than 50 miles away, and we and our neighbors have small roof top, attic or top of set antennas for normal viewing. Consequently most of us aren't even aware of the poor fringe area viewer plight; all 3.5 million homes worth. If we live in suburban or metropolitan regions, we don't drive down the street and see tens or hundreds of 50 foot masts sprouting from rooftops on both sides of the street. We don't even know for sure, other than what we have read, what fringe area viewers MUST use to receive acceptable television from stations 75 to 100 miles away.

I'd like to suggest that if you really want to know what it takes to get consistently good distant reception, that you take a Sunday drive and head out into the fringe areas around you. Visit a few TV shops in towns 75 miles out and talk with the people who have to sell working antenna systems or they don't sell TV sets.

Then go back to your comfortable suburb and put together your own fringe area receiving system. If 3.5 million American homes can do it for everyday reception, you can do it for DXing. But remember only one thing - antennas with built-in pre-amplifiers are probably OUT for you, even though they work fine out in the fringes, IF you live within 40 miles of local TV/FM transmitters.

For UHF TV DX, there is only one commen sense answer; the 7 foot UHF Parabolic. Apparently Allied Radio is no longer carrying the Finco version of this antenna, which leaves the Channel Master version (probably an order item at your local CM distributor). If you live out in the sticks, you might get by with it only 30 feet up. But if you live in a built up region, put it up 50 feet or more - or don't bother to put it up at all.

All of this has been said before, and it will probably be said again. Fquipment is a favorite discussion subject whenever two or more DX'ers get together. But keep in mind that TV/FM DXing, like any hobby, is a give and take proposition. You get out of it exactly what you put into it. In time, and money. We are all very "results" conscious, and I for one hate to see someone get bitten by the DX bug, start out with a very mediocre DXing set up, have poor results, and drop out of the hobby. Because of poor results. The hobby is pretty darned small to begin with ... let's all make an effort to keep DXing productive for everyone!

Six Month Propagation - continued from June

#### NOVEMBER

November is known mainly for the "un-expected" DX. We don't expect good tropo, or much Es, or MS, during November. But virtually every November produces one or more (totally) un-expected DX openings, such as the 1970 November 7-8 Es session or the 28th-30th tropo session. And consequently November serves to remind us that DX of any form can happen at ANY time.

Tropo - Most November tropo depnds upon "warmer than normal" weather building over a region of the country (which itself improves morning and evening tropo), followed by the inevitable return of cool weather - which will often trigger ducting type DX along the cool front line. This can and does happen over virtually any portion of the country, and once again the key weather phrase to watch for is "unseasonable" - especially when it refers to warm or warm/moist air masses.

Along the Gulf coast this is a pretty good time for up to 500 mile tropo over east/west paths without any obvious weather front boundaries present.

- Es Most November Es, of the regular garden variety, occurs around sun down over the southwest and northern Mexico. The non-garden variety (such as the November 7/8 binge of 1970) is closely correlated (if not related) to the occurence of a major auroral display or magnetic distumbance. If you learn that a major aurora is occuring or is expected, watch closely for the next 48-72 hours.
- Ms Good meteor dates, keyed as with July, are as follows: 15th (Leonids shower) (b), 21/22 (c), 27 (e)

#### DECEMBER

December used to be known as the winter sub-peak of the Es season. More recently, January has been as good or better than December. Tropo reminds us of November, and MS is good twice.

- Trope A repeat of November, but seldom productive above the Mason/Dixon line. When it is, it is great!
- Es December can be goodfor up to a half dozen openings between the 10th and 31st. Dates between the 15th and 25th are often best and the best times are 8-10 AM and 4-8 PM. Anyplace in the country can get it, but the south is favored.
- MS The second best month of the year, the Geminds (10th-14th) and one day Ursids (23nd) are often outstanding. Again, keyed by month of July: 3 (a), 7 (a), 10/11 (d) (a), 12/13 -peak (d) (a), 14 (d), 23 (b), 27 (a), 30 (a).

In a future column, we will cover January-June. 73, Bob Cooper, Jr.

## STATISTICS

Glenn Hauser, editor PSC Box 42309 Kelly AFB TX 78241 J. U. L. Y. 1971

#### ADDITIONS AND REVISIONS

Ch .	Call _	Location	Prop	Miles	DXer, Location		Old Record
2	KATU	Portland OR	MS	565			new
	XHCH	Chihuahua Chih	(Es)	1085	Robert J. Williams, Blackfoot		/
1.	WTVY.	Dothan AL	MC	700		/Pizzi	/LeBlanc 965
4	KXJB	Valley City ND	MS MS	790 820	Charles Dobbins, Detroit MI Glen Neal, Sayre OK		new
	WKY	Oklahoma City OK	T	405	Don Ruland, Houston TX		Foster 370
				707	of the same of the		. TOUTEL JO
5	KFYR	Bismarck ND	MS	785	Glen Neal, Sayre OK		new
6	KPLO	Reliance SD	MS	600	Glen Neal, Sayre OK	A	new
9	VWIW	Tupelo MS	(T)	500	Don Ruland, Houston TX		Burch 245
	KMOM	Monahans TX		460	Don Ruland, Houston TX		Hauser 420
- 1	XH_	Tampico Tams		495	Glenn Hauser, South SanAntoni	o TX	new
10	XHAT	Las Lajas Ver		665	Pat Dyer, San Antonio TX		new
11	KKTV	Colorado Springs CO		455	Robert Cooper, Oklahoma City	OK	Hauser 415
	WLOX	Monterrey NL		690	Ron Le Blanc, Marrero LA	an i	Dyer 280
13	KINI	Biloxi MS New Iberia LA		685	Glen Neal, Sayre OK	Clar	ck/Hauser 635
The second second	WFYI	Indianapolis IN		570	Glen Neal, Sayre OK	130	Hauser 555
28	WCPB	Salisbury MD		395 170	Robert Seybold, Dunkirk NY Jerry Pulice, Staten Island N	v	Draeb 330 new
33	WCFT	Tuscaloosa AL		700	Glen Neal, Sayre OK		Cooper 595
	WURD	Indianapolis IN		395	Robert Seybold, Dunkirk NY		Brown 225
41	WDRB	Louisville KY (IN)		445	Robert Seybold, Dunkirk NY		Brown 315
	KWEX .	San Antonio TX		505	Ron Le Blanc, Marrero LA	F	Rareshide TIE
42	WIVI	Charlotte NC		365	Tom Yingling, Baltimore MD	4 160	Kureth 80
45	WEFF	Baltimore MD		255	Robert Seybold, Dunkirk NY		Yingling 15
52	WNJT	Trenton NJ		160	Larry Vogt, Springfield VA		Pulice 35
	W53AA	New York NY		165	Tom Yingling, Baltimore MD		WCBS-2 new
NAME OF TAXABLE PARTY.	WUNG	Concord NC		345	Tom Yingling, Baltimore MD		new
	K7ØCF	Higgins TX		60	Glen Neal, Sayre OK		KGNC-4 new
75	W75AJ	Fond du Lac WI		65	Bill Draeb, Kewaunee WI		WBAY-2 new
92.	W75AL W83AN	Luray VA		70	Larry Vogt, Springfield VA		new
رن	MODAIN	Stephenson MI		70	Bill Draeb, Kewaunee WI		WLUK-11 new
					FM RANK		
	r. Loca			Station	ns _ States Provinces Count	ries	As of date
		ng, Duluth MN		927	00170		5 February
		ng, Bloomington MN		572	39+DC 3 2 2 3 3 3 4 3 3 4 3 3 4 3 4 3 4 3 4 3	}	23 May
		bold, Dunkirk NY	a Year	445	35 2 2		9 May
		, Charleston IL		384	16 18 2		1 May
Lar	ry vogt	, Springfield VA		358	34+DC 2 4		13 May
		mack, Des Lacs ND	MV	236	34+DC 3		6 June
		uist, North Syracuse	INI	200	21 2 2		1 February
		lo, Girard OH er, South San Antoni	о ту	170	35 2 2 2 16 18 2 34+DC 2 4 34+DC 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1 May
		r, Jr, Metairie LA	O IN	117	11 6	C 1 ( )	14 June 4 June
		ay, Potsdam NY		104	6+DC 2 2		21 January
	THE RESERVE AND ADDRESS OF THE PARTY OF THE	ann, Des Moines IA		86	12 0 1		8 April
		San Antonio TX		71	9 8		14 April
		ng, Baltimore MD	1.	37	v 3. 8 5 6 5		10 June
		ncludes "verified" s	tatio	ons on	ly)		
ATIT	THO TITING	PM Dyong ! Domination	+h	The C			

ATTENTION FM DXers: Beginning with the September issue (deadline 10 August) we will list distance records on FN, starting with the five 88 MHz channels. Please submit your one furthest station by Es, tropo, MS, aurora for 88.1, 88.3, 88.5, 88.7, 88.9, that is a maximum of 20 stations. Some lists already received—for which thanks for your patience:

*								
<u> </u>	PATIST:	<u>ccs</u>		Page 2	July 1971			
	TV RANK							
Re	nhart S	Seybold, Dunkirk NY	496	49+DC 8 6	Q Mare			
		son, Deerfield area IL	282		9 May 1 June			
	TO SECURE LINES AND LINES	rown, East Lansing MI	280	37+DC 7 5 39 5 4				
		smann, Steger IL	241	39 5 4 37 6 5	19 April			
		Goldman, Chicago IL	238	37 6 5 39 5 4	8 April 7 June			
		Cormack, Des Lacs ND	227	39 5 4 39 6 3	6 June			
		Blanc, Marrero LA	183	30 1 6	21 May			
		alice, Staten Island NY	164	32+DC 3 3	6 June			
	THE PARTY OF THE P	Manhattan KS	152	39 6 3 30 1 6 32+DC 3 3 3 31+DC 5 3	6 June			
		Grace, Franklin TX 77856	149	37+DC 7 5 39 5 4 37 6 5 39 5 4 39 5 4 39 6 3 39 6 3 30 1 6 32+DC 3 3 3 31+DC 5 3 30 2 4 30 5 5 30+DC 2 3 25+DC 4 4 34 2 5 31 4 3 25+DC 3 2 26 1 5 18 2	6 April			
		ox, Carrollton AL	142	30 5 5	6 June			
		ogt, Springfield VA	142	30+DC 2 X 3	13 May			
		eth, Southern Pines NC	133	25+DC 4 4	10 February			
		r, San Antonio TX	127	34 2 V 5	14 April			
		an, Valleyfield PQ	126	31 4 3	12 March			
Pa	aul Luc	chter, Oceanside NY	121	25+DC 3 2	11 February			
Bi	ill Het	ısmann, Des Moines IA	118	26 1 5	8 April			
		rdquist, North Syracuse NY	99		1 February			
G	Lenn Ha	user, South San Antonio TX		30 1 4	15 June			
To	om Yine	gling, Baltimore MD	70	V 21+DC 1 3	1 June			
		CHA	NNEL 5	SKIP TVDX RECORDS				
1.71	CDC							
WY	CRG	Mobile AL	1125	John Cody, Middletown CT				
VI	PHO	Dhamis A7	tie					
	TSA	Phoenix AZ Fort Smith AR	2235		was KNAC			
	MA			Dennis Smith, Wasco CA	Was vivo			
	PIX	Los Angeles CA San Francisco CA	2405	Harold Cooper, Westland MI				
	REX	Grand Junction CO	1525					
		CTANK CANCELON CO	The second second second second	Norm Erint, Kenmore NY				
KC	SJ	Pueblo CO	1370					
			tie		now KOAA			
W	TTG	Washington DC		Glen Neal, Sayre OK				
	JFT	Gainesville FL	1175	Stu Grade, Sioux City IA				
	PTV	Palm Beach FL	1350					
	AGA	Atlanta GA	1850					
W	GAN	Chicago IL	1215		ile Range NM			
WC	OI	Ames IA	1465	Doris Johnson, Longview WA				
	X	Davenport IA	900	Maurice Dubreuil, Lavaltrie PQ	now ch 6			
	AVE	Louisville KY	1160	William Bashta, Albuquerque NM	now ch 3 (IN)			
	ALB	Alexandria LA	1800	Ron Boyd, Truro NS				
	ABI	Bangor ME	1260	Don Ruland, Holly Hill FL				
	HDH	Boston MA	1400	Edwin Shorey, Derby KS	yearaya Vir			
The second second	NEM	Bay City MI	1915					
	STP	Saint Paul MN	1280					
	CMO	Kansas City MO	1505					
	SD von	Saint Louis MO	1400	Morris Foote, Middleton ID				
~~	KGN	Glendive MT	1095					
V	BB	Great Falls MT	1630					
	HAS	Hagtings ND		Robert Seybold, Dunkirk NY Doris Johnson, Longview WA				
	HBV	Henderson NV		Robert Grace, Franklin TX 77856				
	IME	Albuquerque NM	1300	Frank Merrill, Milan MI				
	VEW	New York NY		Glenn Hauser, Oklahoma City OK				
	PTZ	Plattsburgh NY		Glenn Hauser, Enid OK				
		Rochester NY		Glenn Hauser, Enid OK	now ch 8			
- 330 (600)	HEN	Syracuse NY		Fred McCormack, Des Lacs ND				
ANTONIO SE A SECULIA	RAL	Raleigh NC	Brate de Article	Larry Godwin, Amarillo TX				
	* 3.0							

STATIST	<u>ICS</u>		Page 3	July 1971
KFYR	Bismarck ND	1260	William Hider, Binghamton NY	
WLWT	Cincinnati OH	1250	Jim Dillon, Regina Sask	was ch 4
WEWS	Cleveland OH	CONTRACTOR OF THE PARTY OF THE	Robert Cooper, Fresno CA	
KGEO	Enid OK	1340		ecame KCCO
KOCO		1480		occanic moo
	Oklahoma City OK		The second secon	To work MODI
KTVM	Medford OR Charleston SC	1035		now KOBI
WCSC		1260		
KDSJ	Lead SD	1235		
KORN	Mitchell SD	1325		
WMCT	Memphis TN	1285	Jim Dillon, Regina Sask	now WMC
WLAC	Nashville TN	1160	Ghislain Girard, Arvida PQ	
WBAP	Fort Worth TX	1350	Jim Pizzi, Santa María CA	
KTXT	Lubbock TX	1395	Bob Astmann, Kenmore NY	
KENS	San Antonio TX		Doris Johnson, Longview WA	
KRGV	Weslaco TX		Morris Foote, Middleton ID	
KSL	Salt Lake City UT	7260	Bill Drach Kewaunce WT	
WCYB	Bristol VA (TN)	1090	Larry Godwin - Amarillo TX	
KING	Seattle WA	2705	Robert Seybold, Dunkirk NY	
WSAZ	Charleston WV	685	Maurice Dubreuil, Lavaltrie PQ	now ch 3
WDTV		1225	Fred McCormack, Des Lacs ND was ch 3	was W.IPB
	Weston WV	1205	Fred Nordquist, White Sands Missile I	Range NM
WFRV	Green Bay WI			range min
KFBC	Cheyenne WI		Bob Berg, Norfolk VA	
"CBXT"	Edmonton Alta		Ferdinand Dombrowski, Okauchee WI	
CKX	Brandon Man		Ross Harvey, Goose Bay Lab	
"CBNT3"			Frank Merrill, Milan MI	
CJCH	Halifax NS State Nach	1240		
"CBWCT"	Fort Frances Ont	1140		
CKSO	Sudbury Ont	1235	Glen Neal, Sayre OK	
CHAU	Carleton PQ	1130	Ferdinand Dombrowski, Okauchee WI	
CKMI	Québec PQ	1075	John Owen Broomall, Augusta GA	
CKBI	Prince Albert Sask	1430	Norm Erint, Kenmore NY	
		tie		
CJFB	Swift Current Sask	1455		
LR1	Buenos Aires, Argentina	5290		now off
	São Paulo, Brazil	5015		TV Paulista
CMHQ.	Santa Clara, Cuba		Stan Penc, Utica NY	
CMLB	Santiago de Cuba	7/160	Steve Weinstein, Pittsburgh PA	
XHAC		1110	Karl Aiken, Kingston, Jamaica	
	Tuxtla Gutierrez Chis	1255	Ferdinand Dombrowski, Okauchee WI	
XEJ	Ciudad Juárez Chih			ja.
XHFI	Chihuahua Chih		David Cox, Carrollton AL	
XHGC	Mexico Dr	1/20	Robert Gooper, Fresno CA Doris Johnson, Longview WA Pebent Gooper, Fresno CA	
WORA	Mayaguez PR	3050	Doris Johnson, Longview WA	de dia
YVKA	Caracas, Venezuela	3785	Robert Cooper, Fresno CA	THE RESERVE OF THE PARTY OF THE
	Company of the Compan		16 TVDX RECORDS	
KKOG	Ventura CA	25	Dennis Smith, Santa Barbara CA	now off
WUSF	Tampa FL	190		
WUSI	Olney IL	565	Mark Lewis, Downsview Ont	
WNDU	South Bend IN	740	Robert Cooper, Oklahoma City OK	
KEDD	Wichita KS		Robert Seybold, Dunkirk NY	now off
WBOC	Saliebury MD	355	Roy Barstow, Hyde Park MA	
WAPT	Jackson MS	לעל	Dick Clark, Fort Lauderdale FL	
	T	100	Dill Design	
KUHI	Joplin MO	720	Robert Cooper, Oklahoma City OK	
WKTR	Rettering on	700	Tahn Pari 330 Cinand OU	now off
WENS		00	John Parillo, Girard OH	HOW OIT
WQEX	Pittsburgh PA	470	Bill Draeb, Kewaunee WI	
WNEP	Scranton PA	630	Bill Draeb, Kewaunee WI	THE WADE
		tie	Ferdinand Dombrowski, Milwaukee WI	was WARM
KVVV	Galveston TX	520	Ron Le Blanc, Marrero LA	now off
			Until the next,	73 de Glenn

V.J.F.D.K

Office of Telecommunications
Institute for Telecommunication Sciences
Boulder, Colorado 80302
Deadline: 12th of month

#### JULY 1971

Please note the change in my address. I am currently on a temporary appointment at ITS to prepare data on WHF Es for the CCIR (Consultative Committee on Ionospheric Radio). At present it looks like I'll be here until mid-September. My apologies to those who sent in a report before the deadline which has not been forwarded yet.

Hank Holbrook, 7211 Chestnut Street, Chevy Chase, MD 20015 with more QSLed DX from the Fair Haven, MD cottage; GMT used.

10-31: 1703, KCH 209 39.82 Pocatello, ID (sheriff) 12-5: 1713, KOA 362 39.18 Douglas, AZ (police) 12-29: 1858, KQC 584 39.82 Grand Traverse, MI (police)

Morrie S. Goldman, 5815 North Christiana Avenue, Chicago, IL 60645 had daily Es in 30-50 MHz from May 21 thru 31, using a Hallicrafters S-94 and Allied A-2586 (the latter being found the more sensitive but less selective receiver).

most commonly heard: Oklahoma City; KCC 482; KIY 508

Morrie reports also that KSC 645, 35.58, in Chicago is now using tone signals rather than voice paging messages.

Richard T. Colgan, B-9-C College View, College Station, TX 77840 had Es many days but there were so many signals on any one channel that ID's were hard to come by. Some good trop was also noted.

5-16: KHB 33 162.55 Brownsville, TX (weather)

18: KIB 486 45.06 Lake City, FL (state police)

21: KAA 270 42.06 Poplar Bluff, MO (state police)

26: KGC 343 35.2 Philadelphia, PA (pager)

30: 42.38 Williston, ND (police)

31: KOE 257 43.58 Phoenix, AZ (pager)

Now my loggings. Allied A-2586 with built-in whip and 30-feet of indoor random wire. Hi-Band, Wards 62-1 with 2-foot whip antenna. CST used, new underlined, Es unless noted; 50-MHz Es deleted.

	Long Beach KOE .257 KHB 33 (tr)		2255,	KIM 905 KFL 936 KMD 342			<b>0</b> 754, 1120,	KIM	905
16: 1120,	KIM .905 KMD 342	111/2	0737,	Long Beach KIM 905			1218, 1327, 2026,	KIG	300
18: 0035,	KHB 41 (tr) KOE 257		0802,	KIG 300	2		0027,	KFL	936
	Long Beach KIY 508		0837,			4:	0945,	KIY	508
1304,	KIN 645 KIQ 999		1208,	KIY 508 KIN 645			1818, 2000,	KIG	300
1615, 19: 1633, 1945,	Mexico City KIY 508 KIN 645 KIM 905		0700,	KQD 607 KFJ 991 KQD 303 KIY 508		<u>5:</u>	2020, 0900, 1119, 1500,	KSC KIN KIY	644 645 508

```
28: 2103, KIM 905
                                                                    1: 2228, KHB 41 (tr)
25: 1500, KFL 936
                                                                    2: 1155, KIY 508
                                  29: 1005, KIM 905
     2220, KIM 905
26: 0935, KOE 257
1830, KSC 644
27: 0847, KIM 905
0905, KQC 881
                                       1133, KSC 864
                                                                        1618, Long Beach
                                  30: 0705, KIM 905
1047, KSC 864
1550, KIY 508
                                                                    3: 1825, KSC 864
                                                                                KQD 609
                                                                    2034, OK City
4: 1238, KDN 402
                                  31: 0857, KIM 905
     1705, KIY 508
28: 0850, KIY 508
1829, KSC 864
                                       0859, KOE 257
                                                                        2009, KOE 257
                                       1203, KIY 508
                                                                    7: 1103, KIM 905
                                                                        1201, KIG 300
                                       1406, Long Beach
     1830, KDN 402
     1923, <u>KQD</u> 609
1936, KQD 303
                                <u>J 1:</u> 1100, KIM 905
                                                                   <u>12:</u> 1438, <u>KKV 690</u>
                                                                        1447, KIQ 999
                                       1800, Long Beach
(add M23: 2017, KIM 905)
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(add M2): 2017, kim 9057 (J 12 loggings made from Boulder, CO with 20' indoor random wire antenna on ground floor of 3-story building)

KAI 927	35 ≠		KMD 342	35.22	Fresno, CA
		Concord, NH	KOC 881	43.58	Cleveland, OH
KDN 402	35.54	Omaha, NE	KQD 303	22.55	Detroit, MI
			KSC 644	43 58	Chicago, IL
KHR 41	105.22	C. Corpus, TX-w			
KTG 300	43.58	Atlanta, GA	KSC 864	35.58	Peoria, IL
				ZE ER	Long Beach, CA
KIM 905	22.55	Charlotte, NC		THE RESIDENCE OF THE PARTY OF T	
KTN 645	35.22	Miami, FL	$A \cap A \cap A \cap A$	43.57	Mexico City
	The state of the s				
KIY 508	35.22	Orlando, FL		22.50	Oklahoma City, OK
WWW 600	35 60	Houston, TX			
TUA CAC	20.00	nous our, in			

A2 tone ID by: KAI 927, KDN 402, KFL 936, KFJ 991, KIN 645, KIQ 999, KKV 690, KQD 607, and KQD 609; all pagers except w-weather.

The following table was run in this column last August. MUF vs. skip distances for a non-tilted Es patch at 105 km height.

1400     35.22     35.58     43.22     43.58     60.0       1300     35.36     35.72     43.39     43.75     60.2       1300     75.75     76.13     43.39     43.75     60.2	
1200       35.75       36.11       43.87       44.23       60.9         1100       36.38       36.75       44.65       45.02       62.0         1000       37.40       37.79       45.90       46.28       63.7         900       38.92       39.32       47.76       48.16       66.3         800       41.07       41.49       50.39       50.81       70.0         700       44.12       44.62       54.12       54.65       75.2         600       48.60       49.10       59.64       60.14       82.8         500       55.15       55.72       67.68       68.25       94.0         400       65.12       65.78       79.91       80.56       110.9         300       81.15       81.98       99.58       100.4       138.2         200       108.7       109.8       133.4       134.5       185.2         150       129.6       131.0       159.1       160.4       220.9         100       155.8       157.4       191.2       192.8       265.4         50       183.4       185.3       225.0       226.9       312.4	100 100.4 101.5 103.3 106.2 110.5 116.6 125.4 138.0 156.6 184.9 230.4 308.7 368.1 442.3 520.7

To use the chart, suppose you have 43.58 MHz skip down to 600 miles, this means the Es should skip 60.14 MHz at 1420 miles (the maximum one-hop distance for the given cloud height). Remember that the Es must be at the midpoint of any path, so getting short skip on 43 MHz will not always give you TV Es at the same time.



Editor: Roger Winsor 718 N. Frement Read Valparaise, Indiana 46383

Al Kopeo

R. D. 1 Himrod, New York 14842

I sent in a report at the end of January, but have not seen it published, so I assume it got lost somewhere along the way. I have become rather addicted to meteor scatter DX, as my attached report will testify. 14 new stations and ? new states have been added during the last 6 months by MS, which really isn't a very good amount of return on my investment, considering the time monitoring. However, it has proved to be some of the most exciting DXing I've experienced in some time, especially the Jan. 3rd Quadrantids peak, when 5 new stations were added to the logs. A good part of my time is spent on 101.5 which is my best "clear channel" free from most trouble some semi locals until the afternoon s/on of WPIT Pittsburgh. In a total of approx. 62 hours spent on 101.5, 8 new stations have been added via MS. This mode can be frustrating also. Louisiana is a needed state and I have been patiently waiting to add 100kw WYNK to the logs. I've hrd them many times, including a beautiful 10 sec. burst on 1/17 recruiting "...aerospace workers right here in Baton Rouge". But, sofar, no positive ID has been hrd. On the otherhand, I have hrd no fewer than 11 crystal clear perfect copy IDs from WBIE Marietta, GA, listed at 3500 watts! To DX: report is from 10/1/70 thru 5/31/71. Receiver Allied 395, antenna 8 element Winegard Stereotron amplified. 10/3 0825 tropo WVCC 101.7. 10/11 new local WEKT 98.3 @1000. 11/8 Es 1900 89.7 WUSF FL: 1917 91.5 WFSU FL: 1924 93.5 WGEA al; 1923 95.5 WTVY AL: 1934 107.7 WORJ FL: 1935 104.1 WGIF FL and 1959 94.9 WOMA FL. 11/9 2000 89.7 WKSU OH. 11/29 1602 101.5 WAYZ PA. 12/1 0400 93.1 WHYN MS. 12/2 0510 97.3 WGH VA. 12/3 MS 101.9 WIOD FL. 12/6 1202 MS 101.9 WVEM IL. 12/24 0800 WJMD 94.7 MD; 0847 WDBN 94.9 OH. 12/25 0706 MS 102.1 KEEY MN. 12/26 0821 101.7 WJFR OH. 12/30 0906 100.3 WMGW PA. 1/10500 99.9 WWFM Pa; 99.9 WHFB via MS from Michigan; 0635 new local WGCR 97.7 Wellsboro, Pa. 1/3 MS 0611 WSJC 107.5 Miss new state; 0815 tropo 100.5 WOMP OH; more MS 1108 181.5 WBIF GA New state; 1120 WONF FL 101.5, 1300 WCIL 101.5 IL, 1509 WIBA 101.5 WI. 1/5 0500 WJEJ 104.7 MD; 0732 MS WBAW 101.7 SC. 1/9 0501 WBFA 107.3 OH. 1/13 0525 WFIS 93.3 VA. 1/16 0558 WOKU 107.1 Pa. 1/17 0730 WMCR 99.5 OH. 1/24 0540 WHEP 107.9 Pa. 2/13 Blizzard in progress!: 1630 WCRF 103.3 OH; 1817 88.9 WYWC WVa. 2/21 1725 102.3 WBAB NY; 1730 102.3 WHYL Pa; 1933 93.9 WRC DC. 2/22 0600 100.5 WCMS VA; 0825 WDLC 9.6.7 NY; 1903 WPRB 103.3 NJ. 2/24 more Dowerful local WAER 88.3 off, logged WECW 88.1 Elmira, NY @2038. 2/25 0400 WPAT 93.1 NJ, 2/27 1600 1600 WJZZ 99.9 CT local WYRT 99.9 off; 1633 99.9 WQRC Barnstable, MS. 3/1 local WMIV off, 1810 95.1 WRN J NJ. 3/4 local WFIV off, 2200 103.5 3/5 1145 WEIV still off 103.5 WSTV OH, local WMIV off @1200 95.1 WGMS DC. WRBS MD. "nd great blizzard of '71 gave me 2 days home from work and 6 new stations. 3/5 1335 103.7 WEZS Va; 1506 102.5 WEFG Va. 3/6 0539 106.3 WHUN Pa; 2030 95.1 WEDA Pa w/WMIV still off. 4/2 1900 TITF 89.5 Pa. 4/4 1300 new local WEOS 89.7 Geneva, NY. 4/14 1831 AU WMBI 90.1 IL, first AU ID ever; WKAR 90.5 MI @2100. 4/19 0015 92.3 WCUY OH. 5/2 0720 MS 101.5 WBNQ IL. 5/3 MS?0900 WGNB 101.5 FL w/sustained burst of over 3 minutes! 5/4 0830 MS WYNR 101.5 GA. 5/21 1040 MS 101.5 KTXR MO. 5/26 caught this opening while home on lunch break. If this was Es, very odd, as TV was unaffected: 1245 92.3 WDBO FL; A300 94.9 WLCY FL; 1300 WTRS 102.3 FL; WHEW 101.9 @1300 and @1310 WMOP 93.7 FL were all added. (Great work!! RWW)

Robert Eddy. Box 123 Newport, Ohio 45768

Time for another report. First skip of this poor season came in the form of KSJM 93.3 Jamestown, ND on 5/23 @1628 FST. They were in very strong for 2 min. then rapid fade. State #28. Tropo has resulted in the following 5/25 WIJV Ephrata, Pa. 105.1 @1929. 5/26 WCSI 101.5 IN @2000. 5/27 WIVK 107.7 TN @1856. 5/28 WMMS 100.7 OH @1900, WERT 98.9 @1905, WGWR and WIRJ both ID @1930 on 92.3. Skip on 5/27 brought in WHMS 92.1 @1929 with very strong signal. The best skip so far appeared on 5/30 from 1030 to 1230, and the following were heard: KGAF 94.5; KNTO 95.1; KBIM 94.9; KRST 92.3; KMIW 93.9; KFWR 94.7 and KSET 94.7. Signal levels were good, but rapid fading. KRST and KSET are my most distant DX to date. Skip is been frequent here in the 30 to 50mc and TV channels 2 thru 4, but very little skip has reached FM. Totals to date are 340 stations from 28 states, Ontario and Cuba. Finally, I would like to recommend Bruce Elvings FM Statio n Atlas to any serious FM DXer. Good job, Bruce!

Pat Dyor 327 Solar Drive San Antonio, Texas 78227

At last some Es has come my way. Wards AM/FM Police transistorized rx w/25 whip antenna used. CST used, new ones underlined. 5/10 0110 KVIL 103.7 Dallas (250). 5/15 2348 KELT 94.5 Harlingen (215). 5/16 0249 WFAA 97.9 Dallas, 0255 KRLD 92.5, 0300 KFAD 94.9 Cloburne (215). 5/17 0108 KVIL, 0320 XEFM (?) 94.(?) Monterrey, NL Mexico (270), 0400 KRLD, 2359 KWKH 94.5 Shreveport, IA (355). 5/18 0004 WFAA, 0008 KVIL, 0114 KTAL 98.1 Shreveport, IA, 0130 WBAP 96.3 Ft. Worth (245), 0133 KBUY 93.9. 5/21 2100 tune in to find Es up to 108MHz. 2125 WVIC 94,9 MI (1170), 2130 WHFI 94.7 MI (1220). Es out at about 2140. 5/25 1000 Es at tune in. 1002 WUSF 89.7 Tampa (975), 1006 WWBA 107.3 St. Petersburg, 1007 WLCY 94.9 Tampa, 1045 unID on 91.3. Two other unIDs in opening as well. Last Es @1120. 5/28 very brief Es near 89mHz, unID. 5/30 1100 Es at tune in hear 90 mHz, however the signal was so strong and steady that I . mistook it for our local on 90.3, forgetting that it didn't even come on Sundays: 1125 finally realized my goof when 94.7 roars in. 1130 WHWC not 88.3 Colfax WI (1090)(???RWW), 1159 WHSA 89.9 Brule, WI (1200), 1200 unID near 99mHz, 1220 near 91.3. Atleast 2 or 3 other unIDs in. Last Es @1225, good channel 6 audio for several minutes, unID. 5/31 1100 Es at tune in. 1100 KOMU 94.1 Salt Lake City, Utah (1080), 1115 KCPX 98.7 same. Es out about 1120. 1145 trop KRMH 103.7 San Marcos, TX (60). 6/2 0745 catch the final stages of large trop opening. 0800 apx 95 MHz AL (WZAM?), 0815 KIXY 94.7 San Angelo, TX; 2311 WFAA. 6/3 0128 KRID, 0130 KNUS, 0150 KBUY, 0157 WBAP, possible brief Es near 88.3, unID. By next month's column I should be set up in Boulder, Colorado with a temporary type job at ITS (ESSA) with worldwide Es on VHF. I will be there at least until early October. The slow start of Es in May sure made up for itself. Not if the rest of the summer could be as good.....

Fred Mc Cormack P. O. Box 611 Watertown, S.D. 57201

I finally have a little FM DX to report. It was heard on my AR 15 with rabbit ears for an antenna. On 5/21 Es reached FM for some 20 minutes, and the following wer logged: KPLC 99.5 IA @2200 CDT w/ID and NBC nx; KLYX 102.1 Houston @2207 w/rr mx and KRBE 104.1 Houston @2209 announcing as Stereo 104 and Sound of solid gold. 73.

Fred Nordquist

302 Sandra Lane

North Syracuse, NY 13212

Activity on the FM has picked up with even some Es to report. Totals now at 215 logged, 22 states, 74 NY and 7 unlogged channels. The AJ 15 can't be beat. Here's what's hrd: 5/9 WUOM 91.7 MI unn 1430, CKWW 88.7 @1886, 5/10 WPDM 99.3 NY 2357 s/off. 5/11 WEOS 89.7 Geneva, NY rr @2159. 5/12 WSIU 96.7 NY opera @2125, WRCU 90.1 NY rr 10w @40 mi@2251. 5/13 WHCL 88.7 NY Female annr 10w @40 mi@2203. 5/18 unn Montreal and Ottawa stations L&C @0001 w/strong aurora ex. 5/25 WLAE 93.7 CT SS @2300. 5/26 WETA 90.9 DC NPR network@1817, WSTW 93.7 DE u/o WBLK/WLAE @2000. 5/27 WMOD 98.7 DC w/chimes ID @1859. WITF 89.3 Hershey, PA ID @1930. 5/29 first Es of the season, unID on 89.7 to Fla? w/fairy tales @1500 (Probably WUSF Fred. RWW), WGNB 101.5 Relig. prog.1501 (1130), unn WGVL 105.5 FL w/cw mx @1459, unID 102.3 FL? honkey tonk mx w/Mark Barney @1453 who? Es out by 1524. 73.

Glenn Hauser South San Antonio, TX (PSC Box 42309, Kelly AFB TX 78241.

Seven Es openings on FM stready, so maybe it's not such a bad season after all...just a late starter. May loggings are on the interior "Color Eagle" antenna with limited rotation. June ones are on the same antenna, exterior on a rotor. All involved use of a lowband TV IPA which boosted signals considerably on an antenna not really designed for FM. Tropo has been rewarding from along the Gulf, as far as Pensacola. Almost all loggings are new, except those duplicated within this report. 5/6 XHMLS 98.1 @ 2000 w/ads and CST TV, ID "Radio Estereo, frequencia modulada 98 punto 1 megaciclos, desde Matamoros, Tamaulipas", 2100 KNCT 91.3 Belton, TX s/off mentioning 50kw. 5/17 WQNZ 95.1 Nathcez MS @2124 w/HP 71, 2237 KLYZ 102.1 Houston ID in passing, 2344 KBPO Beaumont local ad, 2346 105.7 KHCB gospel mx, but not in SS. 5/21 Es WHWC 88.3 Colfax, WI class mx, CCI from non WSBS class, 2027 WHA 88.7 Madison ID during concert, 2028 WHKW 89.3 // 88.7, 2029 WIVE 94.9 Baraboo, WI ID as Baraboo/Madison, local ads, CCE from WDBN OH w/local ad, ID as "Serving the Cleveland/Akron areas...The Quiet Sound", 2045 WHSA 89.9 Brule, WI concert // 90.3, WHIA 90.3 //89.9 WSBS concert, 95.3 KIFG 95.3 Iowa Falls, IA local ads, KIFG total info nx, 2048 WUOM 91.7 assumed w/guitar classics. 2051 WTMB 98.9 Tomah, WI w/nx, 2053 WNCI 97.3 Columbus, OH local ads, ACN nx, WNCI local and regional nx headlines, 2132 WHFI 94.7 Birmingham, MI w/prog rock, wx local ad. 5/22 0738 KSJR 90.1 MN sneakaly o/KPFT w/classics and Twin Cities wx soon gone. 0959 WKAR 90.5. MI ID w/guitar mx; amid WBAY TV recording, 2304 KIEF 94.5 Houston s/off. 5/24 KPFT 90.1 Houston @0520 lightning skip made strong very weak gw signal, storm passed thru SA 2 hours earlier. 5/25 WUSF 89.7 Tampa @1018 to past 1100, 1025 WTHS 93.3 Miami w/Kid shows, ID @1029, 1032 92.3 WDBO Orlando ment. "here in Fla"., 1042 WMYQ 96.3 Miami Beach ID "Fun lovin' WMYQ FM". 2331 KELT 94.5 Harlingen, TX PSA, ID, 2345 KYND 92.5 Pasadena, TX \$ID. (should be KYED Glenn RWW). 5/29 WRAS 88.5 @0749 Es logged 0749 to at least 0808 when lengthy and was hrd, 0804 WISB? 95.7 NC tent. logged, ABC I net matches AM listing, 0838 talk. 0805 WRNA 95.1 Charlotte, NC local ads, 0816 WQSM 98.1 Fayetteville, NC ID @0819, 0820 WKIX 96.1 Raleigh, NC RR mx, ID, 0824 WPTF 94.7 Raleigh, NC ID @0830, 0927 WIEX 98.1 Loxington, KY cw mx, 0931 ID, HP 71 CCI. 5/30 CJOM 88.7 @1051 ID, 1104 WKAR MI w/Michigan State Univ. sports, 1109 WHAD 90.7 WI //other WBBS stns., 1123 WNIU 89.5 Dekalb, IL ID in nx. 5/31 KQMU 94.1 SLC Utah ID @1100 KQMU \$ FM 94 SLC. 1104 KBBK 92.3 Boise, ID local ads. 6/2 antenna installed outside on rotor. 0630 WCKW 92.3 LA ID in w/nx, 0635 KBPO 94.1 Beaumont, TX NBC nx, ID, 0638 WLPR 96.1 Mobile, AL local ads, 0642 KRMH 103.7 TX rock mx, 0702 ID, WDSU 93.3 IA light mx, nx FM 93 nx headlines. O652 WROA 107.1 MS local ads. (CONT'D) Howser (Cont'd)
6/2 0655 WVSL 105.3 IA rock o/KWED, soulish too, IE @0659, 0703 WYNK 101.5
Baton Rouge, ABC nx, local ads, ID, 0711 WPEX 94.1 Pensacola, FL ID, ad, CCI
soon covered, KBPO 94.1 @0713 jingle, ID o/WFEX, 0728 WBYU 95.7 New Orleans
ID o/KIKK, 0736 WZAM 94.9 Mobile, AL Mobile promo, ID @0757, new station,
0750 KSMB 94.5 Lafayette, IA local ad, 0759 WAFB 98.1 Baton Rouge HP Z1, ID,
0800 WWOM 98.5 NO, IA ID, 0804 WQXY 100.7 Baton Rouge local nx, IDs. 2359
KWKH 94.5 Shreveport, IA s/off, \$ sounded lousy. 6/3 0021 KRID 92.5 HP '71,
0657 WSJC 107.5 Magee, MS CD, cw mx, also serves Mendenhall, 0709 107.3 KINB
Poteau, OK local ads, etc, KANU 91.5 @2023 classical mx, steady to 2048, 2027
KCMW 90.9 MO classical mx, 2033 ID and mispronouncements. 73 de Glenn.

j d Bob Hawkins 1515 Marlowe Ave. Cincinnati, Ohio 45224

Howdy! I'm still logging as I'm reporting. Loggings this month have fattened up the totals a bit. The DX activity of Bill Bens has recently been defuncted after Bill was listening to a weak signal for over an hour only to find it was WAKW overload! New loggings are: 5/12 WAMX 93.7 2200 EST; WJER 101.7 @2231. 5/18 KSHE 94.7 @2233; WBYS 98.3 @2310; WPRC 100.1. @1115 (3kw RWW); WJBL 94.5 @1130; WNIL 95.3 @2335; WBBM 96.3 @0009; GFPL 95.9 @0014.5/T9 last 3 on this date plus WJR 96.3 @0016. 5/21 KEEZ 97.3 @2200. 5/27 WNDU 92.9 @2349. 5/28 WWWW 106.7 @0000. 5/31 WROY 97.3 @0916; WCRA 95.7 @0957. 6/1 WKNR 100.5 @0000. 5/28 was my last day of schoo 1 forever. That really has made my totals jump. 6/1 WIAI 99.1 @0005. 6/2 WKNT 100.1 @0831; WVHI 105.3 @0930; WPLN 90.3 @1031; WATH 105.5 @2229; WPKE 92.1 @2300. 6/3 WHFB 99.9 @0000; WJAS 99.7 @0022; WAUS 90.9 @0031 (17kw RWW); WXUS 92.7 @0100; WSOY 100.9 @0115; WPGU 107.1 @0200; WRMM 91.1 @0730; WNPQ 95.9 @2257. 6/6 WLEC 102.7 @0830. 6/8 WENO 100.9 @2205; WWIN 190.9 @2212, noted WHKK off for those 100.9 loggings, WJPA 95.3 @2243; WWVR 105.5 @2230. WFCJ 93.7 was off thus morning 6/9 and the result was WINO 93.7 @0922 and WJCD 93.7 @0930. Finally one I've wanted a long time WXTA 94.3 @1000. This one is hard to get because of WSAI 94.1. WAKW is now on the air until midnight local time all nights except Sunday. WWEZ changed XMTR location, now approx. 1100 AAT and 7900w H/V. Their power will increase soon to about 14kw. That should be a good check station to Cincinnati. (Yes it should, live never heard it.RWW). Roger, if you really want an AJ 15 I'll be able to help you in July or late June, I own an extra. Congrats to Andy Bolin, he won a WAKW gospel kit on 6/5 for being the farthest listener to my show @200 miles. RX here is Lafayette LT 425T IF into an AJ 15. Antenna is a JFD LPL FM10A. the world's best FM antenna without a doubt, Well, totals at 392 and on the upswing. See ya all next month with another hotline DX report. Good day and DX.

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

Nothing to report here again, except I finally got my RX switch fixed, so maybe I will get something new. Naturally it got fixed after all this great Es was popping around. Trops are up most every morning, but nothing of any unusual nature has been heard. I did hear what sounded like audio on 89.9, but superpest WMB I prevented any ID. Isn't there a CP for one in Milwaukee? Lots of reports this time. I appreciate all the help I receive friends. Just as a plea on my behalf, when reporting stations, instead of just call letter, freq. and time, try to include any pertinent info, or unusual jingle IDs, so that perhaps others can have an idea what to listen for when attempting to log this station. Next month more, I hope.

Bob Cooper, Jr. 2609 Chaucer Drive Oklahoma City, OK 73120

This years FM effort is going to be low keyed. Last years 36 element antenna array with switchable V. and H polarization is down and stored. This years antenna is too small (stacked 9 element Stereo Probe 9's) amd far too low (25 feet), plus with greatly limited time available. DX this summer will be catch as catch can, at best. Receiver still AJ 15 with some interdigital preamps and filters. 5/4 WHA 0713 on MS for several minutes. Also KTBC 93.7 on tropo and others to 400 miles. 5/6 KCFM 93.7 and others to NE to 500 miles 0600 to 0730. 5/8 KMYO 95.7 and others east on tropo to 350 miles evening. 3/21 1150 to 1202 WITA BM 93.7 San Unan, Puerto Rico on double E(EE) at about 2450 miles. 2133 to 2210 Es to Florida area with WVFM 104.1, WMOP 93.7 and a few others in/out. 5/26 1303 to 1315 heavy Es opening probably stretched over several hours to NW from here. Caught KGVW 96.7 ID in Montana, but didn't have time for rest coming thru. 5/30 1002 to 1130 approx. Es to east and NE w/signals in/out. Logged WJIM, WSGM 93.5, WRVA 94.3, WRFK 106.5, WGTS 91.9, WMOR 92.1, WPGC 95.5, WSTW 93.7, WFMN 93.1, WETA 90.9, WAMU 88.5, WWDC 101.1, WOUB 91.3 and others. Mostly VA, MD, KY OH greas. 5/31 at 1220 tune until 1300 or so, Es to so. CA w/KPOL 93.9, KPFK 90.7, KNX 93.1, KKOP 93.5, KABC 95.5, KFSG 96.3, KFOX 100.3 and others. 6/5 2027 KWPM 93.9 covering closer KSPO, indicating duct forming. 2055 WSIU 91.9, KFMV 107.9 and others to 500 miles thru MO, central southern Illinois. 6/6 More of same 0800 with KGRV 107.7 and KCFM 93.7 leading the pack. 73.

Russ Brown 3274 So. Lake Shore Drive St. Joseph, Michigan 49085

May was a good month here despite the fact that it got off to a poor start, lots of Es after the 21st, but the highlight of the month here was tropo on the AM of the 18th. First off on 5/14 @1004 I heard my 1st ID of KTOF 104.5 Codar Rapids, IA, this was an ET, RS began the next day. KTOF is 24hrs and religious. They have a very, very strong signal here all the time so should be heard widely throughout the midwest on tropo. Also WSHN \$100.1 in Fremont, MI is on RS and WRIT 102.9 is now WFWO (For Women Only) in \$ with yuk programming. Now for the DX: 5/17 aurora produced CHFI 98.1 Toronto @2250 and WNCQ 97.5 Watertown, NY @2300. 5/18 tropo in abundance to the S and SW between 0530 and 0945. 0603 KNOE 101.9 \$ Montos, LA local quality and stayed that way until 0945 (745 mi). 0613 KARK\$ Little Rock, AR (615), 0624 WBAP\$ 96.3 Ft. Worth, TX, WREC\$ Memphis, TN w/"Stereo, part one" @0629 (525), WMC\$ 99.7 also Memphis @ 0632 and then KQUE\$ 102.9 Houston "in full dimensional stereo", didn't sound that good here, hi; anyway it's a full 1005 miles @0638, WKYV 106.7 or "KY" as they call themselves, Vicksburg, MS (735), WCPC 93.3 Houston, MS @0655, KWFC 97 3 Springfield, MO @0700, KMYO 95.7 Little Rock w/religious pgmg and KRAA 94.1 (615) between 0715 and 0730, KWPM 93.9 West Plaines, MO w/MOR 0748, KRCH\$ 98.1 St. Louis w/MOR 0755. most St. Louis stns in well at this time, KAMS 95.1 Mammoth Spring, AR w/cw @0815 (490) and last new logging was KWEH Camden, AR @0845 (690). Later that day WPIN 90.3 Nashville, TN ID @2000, WDBL 94.3 Springfield, TN w/nx @2205 (400). 5/19 WMC in again. 5/21 first Es of the season here from 2150 to 2240, KLBK\$ 94.5 Lubbock w/MoR @2250, KTNM 92.7 Tucumcaei, NM @2200 // to AM, KBAD 92.1 Carlsbad, NM w/rock 2210, KUHF 88.7 Houston @2204 w/nx, KRDO\$ 95.1 "Stereo 95 in Colorado Springs" @2216, KINT\$ 97.5 El Paso, TX w/rock @2220, KVMN 98.9 Pueblo, CO @2225, KQXX\$ 98.5 McAllen TX w/ABC FM nx@2230 and finally WTAW 92.1 College Stn, TX @2236. Cont'd

Brown (Cont'd) 5/23 a couple of short breaks of ES into the FM band in the PM, KSEL 93.7 and KLBK 94.5 both Lubbock between 1715 and 1725, KIIX 93.3 CO "growing greater w/greater Ft. Collins" and KFBC 97.9 Cheyenne, WY between 1827 and 1835. Es on 5/27 beginning w/KRSN 98.5 Los Alamos, NM @0840 w/nx KLBK presenting "Mx by Misty", KBIM 94.9 Roswell, NM w/PSA @0915, KTNM 92.7 again @0940, KOB\$ 93.3 w/MoR @0945 and KRST 92.3 @0950, both Albequerque. Strongest Es of the season so far was on 5/30 beginning w/KBPO\$ 94.1 in Beaumont, TX (the following are all Texans) @1050, KTRM 95.1 Beaumont w/cw mx @1103, KAYD 97.5 Beaumont @1108, KRBE 104.1 Houston w/SID @1110. KQUE 102.9 Houston @1111, KLEF 94.5 Houston @1115, KILT 100.3 w/rock @1117 KLOL 101-1 @1120, KSJT 97.5 San Angelo @1143 in SS, 1150 KWIW 93.9 San Angelo w/MoR, 1209 KEEZ San Antonio 97.3 w/ABC nx promo, 1200 KITY 92.9 w/MoR, 1214 KNBT 92.1 ending TSN nx. Es ended around 1225 w/KSJT the last to fade out. 5/31 very brief Es in the evening, 1957 WFYN 92.5 Key West and WVFM 104.1 KeleWand @1959. 6/6 tropo up slightly and 2 needed class A caught, WDMP 107.1 Dodgeville @0626 and WOCO 107.1 Oconto @0629. 6/8 trops north in the PM including WHSA 89.9 Brule, WI (390) and WHSB 107.7 Alpena, MI. 6/9 good tropo to about 400 mi between 0530 and 0900, noted were KDMI 97.3 and KRNT 102.5 both Des Moines (370), KHAK 98.1 Cedar Rapids w/cw mx // to AM, KNWS 101.9 Waterloo @0857 w/religious mx, KGRC 92.9 Hannibal, St. Louis area also in well. Hopefully I'll have more next month. 73.

Waldo F. Bishop P. O. Box 1678 Tallahassee, Florida 52302

Have been absent from FMDX column due to reworking of antonna system. On 5/29 stumbled on Es approx. 1130AM until 1230. I say stumbled, as had just picked up two Winegard SC 65's, assembled thom, and was mocking up my array on the patio. One of them approx 2' off ground; and the other exactly 11' above it. Had tuner and amp on card table, and as I tuned in WFUV 90.7 NYC Ded. Thought I had a pretty hot system until I realized I was in the midst of Es. Antenna due N: WEOM 92.9, KSEL 93.7 Lubbock, TX, WISZ 95.9 Glen Burnie, MD, WWDB 96.5 Philly, WFPG 96.9 Atlantic City, NJ all IDed the next hour. Don't know how Lubbock got in all the eastern stuff, but it was there. Did anyone catch aurora Es about that time? I had grotesque audio distortion at quite a few places on dial, but blamed it on vagaries of 750hm system, w/antennas on ground, etc. I just tuned by it, but on reading Larry Vogt's report in June VUD, I realized could have been ARES. Never had it down here before, and haven't had it since, unfortunately. I had a Palmyra, PA station at 92.1 this opening loud and clear, assume it was WCTX, but never could catch ID, so am not logging it. On 5/30, still antennas on the ground, KFLO 92.5 Sioux Falls, SD boasting about talles t FM tower in the world, KCHF 93.5 same, KCIM 93.7 Carroll, IA, KNWC 96.5 Sioux Falls again, KDVR 97.9 Siouc City, Iowa (just about cleaned up all the Sioux that session) and KLIR 100.3 Denver, CO. This opening started about 1:30PM until 2:35. During the 5/29 opening have one I need help on. Freq. unk Howard ???? reading the news, spoke of so and so belonging to "Explorers Post of KHOB radio", gave ENM wx, told of rainfall here in Hobbs last night, but then IDed as KIEG or KIDG. I have this all on tape, but can't get clear reading on ID, I assumed I had KHOB until the ID. No Es since 5/30 on FM, but know the TV boys are cleaning up, as 2 and 3 have been full of it here. New antenna system is: Rohn 25G tower, top of rotor is 51' AG, Winegard SC 65's stacked as in Bob Cooper's 12/69 VUD article, 132" apart, w/identical lengths of RG59U feeding into a VIKOA 836 splitter. Top antenna 64' AG, finally got it created 6/5 too early to evaluate it. Not as hot as my old system. WTCX 99.5 is now WQYK countrypolitan, WBIL dropped soul format, now HP:71 and WRLJ 96.9 now WPDQ.

July 1971

Roger H. Brown 1617 Linden St. E. Lansing, Mi 48823 517-351-6126

allocation and the

Next Deadline July 15

TV-DX AS NOTED BY ENTHUSIASTS IN WI, IL, IN MI, OH, PA AND EASTERN CANADA

Obviously, thus far (as of mid-June) this is not one of the memorable DX seasons. That situation could, should and hopefully will change, but thus far there isn't a great deal to make a DXers heart pound. If you all don't mind, I'll be optimistic!

Es began in this reporting area just after mid May. The earliest reported was from Wilkes-Barre and Jim Hayes with two definate loggings on 5-18, following an un-id on 5-2 and a tentative on 5-8. I know others across the region noted traces of skip but the real openings apparently began after the 18th. Here on the Western end (of the Central area) 5-21 seems to have been the breaking date.

Tropo had the blahs most of the period, except for a few minor...and one major exception. Unfortunately I can't recount the latter in detail because I heard about it by phone and a day late. As you will hopefully see in the FM column, there was a ducting situation from Southern Lake Michigan and surrounding environs to as far SW as Eastern Texas, at around 0730 LT on May 18. FM Editor Rog Windsor called on the 19th with news of his super catch...KTHV-ll Little Rock. Nice, but not seen by many others!

With a smattering of MS, Aurora, and Lightning Scatter...here's the month from the Central US...and Eastern Canada...

#### Jim Hayes, 9 Henry Street, Wilkes-Barre, Pa 18702 EDST

4-14 Au 1630-1830 ch 2-7 no IDs 5-2 Es 2030 Unid	5-24 Es 1800 KTVI-2 St. Louis, Mo 0422R (730)
5-8 Es 1825 KCKT-2 Great Bend, Kn 0433 Tent	1806 WBRZ-2 Baton Rouge, Landy
5-16 MS 1430 Strong bursts ch 2-4 with TP	5555R (1116)
tones heard on 2 and 4.	5-25 Es 1530 Unid-2
5-18 Es 1730 WEAR-3 Pensacola, F1 5545R (970)	5-26 Es 1600-1800 Unid 2-4
1930 WDIQ-2 Dozier, A1 3322R (920)	5-27 Es 1800 WEDU-3 Tampa 3033R (972) plus
5-23 Es 1815 Unid-3 FF! (more of that	Unids 2-5 to F1 and A1 to 2000
strange Carribean business	5-31 Es 2000 KATC-3 Lafayette, La
perhaps???)	0533R (1170)
	2153 KPRC-2 Houston 2012N (1350)

"Quite a few Es days. The openings are quite a bit different...more quantity than quality. Instead of building slowly to FM in a few hours, they subsist all day on and off on channels 2-4. Totals here now 50." (Well said Jim...others seem to concur. Nice long haul on KPRC! RB)

#### Roger Gravelle, 35 Aldborough Ave., St. Thomas, Ont. EDST

	5-27 Es 1700-1900 Same as 5-26
(130)	5-30 Es 2000 WPBT-2 Miami 5555R (1175)
5-15 Tr UHF to Cleveland and Detroit (120 mi.)	2020 Unid 3 SS, suspect Cuba.
all 5555.	Es 2030 WTVJ-4 Miami 5533R (11/5)
5-26 Es 1800 WPBT-2 Miami 5544R (1175)	5-31 Scattered Es all dayonly ID
WEAR-3 Pensacola 4323R (1000)	WTHS-2 Miami. Es faded on 6 IDs in
WTVJ-4 Miami 4212R (1175)	a row! 6%#('%6%

#### (GRAVELLE cont.)

6-4 Tr 1900 CKCO-TV-1 (?)-2 IDing as Georgian Bay. About 100 miles

"Suspect (New Georgian Bay channel 2) to be 100 kW per St. Thomas cable company." (Note last months Digest, Central DX column Rog. Hey...I miss your early AM calls but my wife doesn't! Hi! RB)

#### David Egan, 12a Andrew, Valleyfield, Quebec EDST

5-30 Es 1957 Unid-2 NET (Buckley?) probable WTHS-2. Also, Unid-4 w/delayed "Ice Palace" at 2025. (Dave...see Rog Gravelle's report above. RB)

6-7 Tr early AM WNYS-9 Syracuse (195), WKTV-2 Utica (180), WRGB-6 Schenectady (190) WROC-8 Rochester (230), WHEC-10 Rochester, WTEN-10 Albany (185) all Grade A.

"I finally got 31/31 (plus DC) in States total w/WLBT-3 verie (#106). Totals now 125 seen."

#### Frank Wheeler, 6589 Wattsburg Rd., Erie, Pa. CDST

4-11 Tr 0	750 CICA-19 Toronto, On 2345N (118)	5-29 Es	2221	KMID-2 Midland, Tx 3333R (1394)
5-19 Es 2	100 KCKT-2 Great Bend 5444R (1015)			KNOP-2 No Platte, Nb 4323R
2	200 KWGN-2 Denver 5444R (1292)			(1066)
	800 KARD-3 Wichita 5312R (953)			KFDX-3 Wichita Falls, Tx
5-23 Es 10	627 KCKT-2 Great Bend 4312R (1015)			3423R (1114)
	630 KMTV-3 Omaha, Nb 4312R (815)			KFDX-3 Again and WKY-4 OkCity
5-27 Es 1	550 KUSD-2 Vermillion, SD 5545R (851)	St been		3435R (1090)
1	600 KDLO-3 Garden City, SD 4432R (846)	5-30 Es	1330	KPRC-2 Houston 4323R (1210)
10	610 KTCA-2 Minneapolis 5445R (687)	5-31 Es	1300	KNOP-2 No Platte 5433R
				KGNC-4 Amarillo 5433R (1251)
			1220	CKCW-2 Moncton, NB 5433R (820)

(Thanks Frank...good to see your reports again...makes this column easier to write! RB)

#### John Parillo, 400 So. Market St., Girard, Oh 44420 EDST

5-29 Es 1223 KTEW-2 Tulsa, Ok (885) (New call if you missed it) Again at 2300.

"Nice to have some skip back but its more like end-of-season type...not too strong, short duration, usually effects only ch 2 and 3, sometimes 4." (Agree John. Hey, do you suppose KMID-2 is the most frequently seen US station by ES? RB)

#### Gary Olson, 1203 Kenton Rd., Deerfield, Il. CDST

4-14 Au 1700-2030 ch 2-6 No IDs
Tr 1730 WMKG-54 Muskegon
4-18 Tr 1930 WWUP-10 SteSt Marie, Mi. (tent)
2000 WKBD-50 Detroit, Mi.
2100 WTVS-56, WXON-62 Detroit

4-19 Tr 1930 WCAE-50 St. John, In. 2200 WKBD-50 Detroit, Mi.

5-7 Tr 0655 WKJG-33, WANE-15 Ft. Wayne, In 5-21 Es 2055 KIII-3 Corpus Christi, Tx 2100-2230 Unids 2-6 SW 5-23 Es 1845 Unid ch 3-4 But probably

missed much as was not tuning around

(more OLSON) "DX has been very poor due to cold weather this spring. Antennas not shaped up yet. Will order tower in a day or two. Seven foot dish is 4 1/2 weeks backordered from Lafayette in Chicago. Second baby due here July 21 so may miss convention. (No sweat Gary...congratulations! Now you can feed him/her and catch early morning MS! RB)

#### Morrie S. Goldman, 5815 N. Christiana Ave., Chicago, Il. DCST

5-21 Es 2128 KIII-3 Corpus Christi 3433R 2200 KOB-4 Albuquerque 3444R Tr 2342/WLUK-11 Green Bay, Wi 4545R 5-24 Es noted all day while in Milwaukee publishing VUD 5-25 Es 1145 Unid-2 20KC w/WBBM-2 5-27 Es 0857 KWAB-4 Big Spring, Tx 3234R 0858 Unid-4 EBS test 0859 Unid-4 IDed as "Big-8".

0930 KGNC-4 Amarillo, Tx 3333R
0931 KOA-4 Denver 3333R
1000 KID-3 Idaho Falls 4444R
1130 KWAB-4. Big Spring 3422R
1200 WOAI-4 San Antonio 4333R
1232 KGNC-4 Amarillo 3234R
6-7 MS/-Es? 1545-1600 Numerous Bursts of
MIHTP on ch 3 as airplanes passed over.
NOT tropo. Went into programming at

"This year continues to be a poor one here for Es." (Morrie has only a Finco LB yagi up...and still awaits orders for active duty. Great to have a report from you again Morrie. RB)

1600.

#### Robert Zoller, 8125 Donna, Westland, Mi. EST

Translator? (nothing in the

0859 KFDX-3 Wichita Falls 3323R

Factbook Morrie RB)

5-9 Tr 0720 WTAP-15 Parkersburg, WVa 3332N
(240)
5-10 Tr 0810 WCET-48 Cincinnati 2235N (230)
5-12 MS 0513 WESH-2 Daytona Beach 3412R (910)
5-13 MS 0553 WKY-4 Oklahoma City 4411N (885)
5-18 MS 0456 WSB-2 Atlanta 4414R (590)
5-29 MS 0607 WHBF-4 Rock Island, I1 3212N
(390)

"Equipment includes RCA portable, convertor, ch 13, and ch 2-6 yagis and corner reflector. Total now 141 stations received." (What happened to Hal Cooper, Bob? RB)

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

5-18 Tr 2100 WAND-17 Decatur, Il 2124R (310) 2130 KDNL-30 St. Louis 2424N (410) 2230 WSEE-35, WJET-24 Erie 3353R (225)WUTV-29 Buffalo 3355R (290) 2300 WICS-20 Springfield, Il 2225R (340)2302 WJJY-14 Jacksonville, Il 2225R (360)plus WPGH-53, WEEK-25, WMBD-31 5-21 Es 2140 tune in to at least ch 5 2200 KGBT-4 Harlingen, Tx 1411N (1250)2213 KIII-3 Corpus Christi 1331N (1200)2218 Unid SS audio, Unid-5 NET 2230 KOB-4 Albuquerque 3511R (1200) 2320 KMID-2 Midland 4445R (1200)

5-22 Es Unid-2, 3 at 0920, out quickly 5-24 LS 1745 WMBD-31 bursting to good grade B picture (300) 1800 WTVO-17 same w/CCI from probably WAND 5-27 Es 0830 KMID-2 Midland 4421R (1200), and a list of all their translators. Also...KOB-4 Albuquerque 4521 (1200) 1300 KMID-2 again 5-29 Es Unid-2, 3 SW 5-30 Es 1100 KBTX-3 Bryan, Tx 4424R (1000) KPRC-2 Houston 5545R (1100) 1135 KDFW-4 Dallas 3345 (1000) 1200 WOAI-4 San Antonio (1200) plus others to at least ch 5. Probably in all day. 1800 SS on

ch 2, Gymnastics meet. 1815 SS

(BROWN cont.)

on ch 3 (first here) w/music probably Cuba. 5-31 MS 0508 WMAR-2 Baltimore 3311R

Es 1430 KTEW-2 Tulsa 5544R (800)

1530 KMID-2, KWAB-4

Es 1540 KFDX-3 Wi. Falls, Tx 2100 WPBS-2 Miami, Fl 3311R (1100) WDIQ-2 Dozier, Al 3321R (1900) WEAR-3 Pensacola 3321R (950) 2200 KJAC-4 Port Arthur 2221R (1000) 2230 KPRC-2 Houston 4431R (1100)

6-4 MS 0515 WCBS-2 NYC plus unid-4 NBC TP (does either WRC-4 or WNBC-4 NOT carry an ID on TP??)

6-5 0500-0630 Many unid MS bursts E and SW Tr 0600 WAVE-3 Louisville 0341R (300)

6-6 LS 0945 WVTV-18, WKOW-27, about an hour before passage of storm.

Tr 1100-1400 Inversions formed behind storm, city grade signals from Chi, Milwaukee, Rockford

LS 1130 looking east through storm, WPGH-53 and CCI on ch 28 from WBRE-28, (470)

6-7 Es 2200 WBRZ-2 Baton Rouge 2221R (1000)

6-8 Es 1115 Brief, through ch 5 No IDs

6-9 Tr 2015-2400 WLEX-18, WKYT-27 Lexington, Ky 4445R (330) WKLE-46 Lexington 4445N (330), WKSO-29 Somerset, Ky 4445R (380), WKHA-35 Hazard, Ky 3322R (350), WKPI-22 Pikeville, Ky 2222R (350), WKMR-38 Morehead, Ky. 3435R (370), and 2208 WTVK-26 Knoxville, Tn 3445N (470)

6-11 Es 1720 KPRC-2 Houston 3442R (1100) (another loser...signing as "Big 2") 1730 KMID-2 Midland 4442R (1200)

Tr 1800 WFYI-20 Indy 2225R (225) 2120 KDUB-40 Dubuque 1115R (310)

6-12 Es 1615 KPRC-2 Houston 1700 KJAC-4 KATC-3 Lafayette 4131R

6-14 MS 0515 WMAR-2 Baltimore

6-15 Es 2215 KMID-2 Midland and Unid SS audio on 2.

Es has been spotty, mostly weak and MUF has been only to ch 4, most openings. Saw briefly first SS on ch 3. My experience with Lightning Scatter has been limited at best, but find it pretty reliable thus far. Kind of fun! Tropo...except for wierd ducting to E. Kentucky and Tenn. has been pretty dead. However, the past 4 days (June 15-16-17-18) have begun with strong early am-type tropo on UHF to 300 plus miles. The 18th brought such as WBRE-28, WBJA-34, WSYE-18 and WINR-40 with so-so signals (the latter sounded like they IDed with a new call, but I'm not certain.) Distances are 380-470 miles.

Received some hairaising photos and a good note from one of last year's steady reporters, Bruce Metzner...he notes, "I honestly wish I could send you a report but with a little wire dipole on the first floor of an apartment, I haven't seen anything worth reporting. I'm going to be traveling in Europe this summer so that the period is shot as far as DXing goes. Bruce, if you want to stay at home and DX, I'll take your place. The photos show young Bruce atop a 60 foot tower, beneath side-by-side 7' dishes, and a big color vector. He says that the only thing the pix can't show are his knees shaking. Hope to have you back next season my man!

Each month, I seem to be closing off by noting the impending inauguaration of big-power WUHQ-41, Battle Creek, Mi. Why change? They received their antenna on the 13th of June...6 months late from Ampex. They promise to hit the air within a week...so watch for them. If you don't care about them...try for WGTU-29, due to beging service within a month. Studios are in Traverse City, Mi. but tx and tower (a megawatt and 1300'...both GE) are at Kalkaska. They'll be ABC, but plan a summer s/on of from 1200 to 1400. Should be a local for Bill Draeb.

#### FERDINAND S. DOMBROWSKI, JR., 1311 W. MADISON ST., APT. 11, MILW. WI 53204 (CDT)

I SEE THERE'S SOME ROOM LEFT SO I'LL DO MY THING. DX POOR HERE , AS IT IS EVERYWHERE ELSE UP NORTH I'M SURE. EXCEPT FOR A WEEK AT THE END OF MAY BEGINNING OF JUNE, THERE'S BEEN VIRTUALLY NOTHING TO CALL DX. AND WHAT SKIP THERE HAS BEEN HAS BEEN MEDIOCRE TO SAY THE MOST. SKIP WAS NOTED IN MAY ON THE 21ST, 23RD, 26TH, 28TH, 29TH, 31ST, AND IN JUNE SO FAR ONLY ON THE 23RD. UNLY 8 POSITIVE IDS WERE SEEN ON ALL THOSE DAYS COM-BINED, AND ALL WERE COMMON IN GOOD YEARS (OTHER THAN 1970-71). ALL WERE IN THE ROCKY MT STATES AND THE GULF COAST STATES: MT, CO, WY, FL, TX, AND LA. SO THATS IT FOR 1971:

# WESTER) DX

Dennis Park Smith
450 Poplar Avenue
Wasco, California
93280 U.S.A.
Deadlines: 12th of each month

Glen Neal has further info about DX-testing of KFDO-8 Elk City OK on Friday and Saturday nights with a clear id slide and music. Whenever tropo condx are suspected, his Friday times are 0030-0100 CDT; Saturday night, 0130-0200 (actually are Sat & Sun mornings). He notes that what may be needed for high-band MS work is some organized effort to watch on some night during a good shower. Yes, this might be possible; "TV-DX Specials" have been run in the past, such as the memorable effort in October 1959 for a Giacobinids shower that unfortunately was diverted and missed the earth. Glen, perhaps some coordination between you, Bob Cooper, WTFDA HQ and a shower might give some very nice results for MS enthusiasts.

Early May noted only scattered Es activity, but the 15th began to show promising signs. The 18th was the first excellent day, and loggings were very extensive from there to the 31st, indicating possibility of a good season after all. The first few days of June brought another slump, however, so the rest of the summer is a question. June has shown the promise of improving tropo conditions, so perhaps all is not lost. In addition, there have been some MS loggings and some lightning-scatter DX. May Es days: 7, 8, 9, 15 through 31 (every day); June: 1 through 8 (at least a little daily).

A report from the Walls was completely overlooked for February, so for continuity, here it is, combined with their March report. My apologies. Matthew and Bradford Wall, 25776 Walker St., San Bernardino, California 92404 (EST) Magnavox VHF-UHF 21", stacked conical 50 feet high, fixed E-W. 2300 XEWT-12 Tijuana BCN Mexico

O300 KOCO 10 Company Tract E-W.

2300 XEWT-12 Tijuana BCN Mexico

O300 KOCO 10 Company Tract E-W. F14 Tr 1820 KERO-23 Bakersfield CA San Diego stations are semi-locals 0312 KFMB- 8 San Diego here. Mountains stop a lot of DX. Slight Es Feb 7 but no ids. M6 GW 0130 KECC- 9 El Centro CA 20 GW 1155 KPBS-15 San Diego (PST) 9 Tr 0120 XETV 6 Tijuana BCN 1830 KCST 39 San Diego A-few minor trop openings, only San Diego stations coming through. KECC-9 is in almost every night very weak after KHJ-9 sign-off. Very weak unid signal on or near

almost every night very weak after KHJ-9 sign-off. Very weak unid signal on or near ch. 45. Looking forward to season's first E-skip, unless we've already missed it!

Bill Heusmann, 1362 24th Street Des Moines Town 50311 (-thru har) (CST: CDT 25Ann on)

Bill Heusmann, 1362 24th Street, Des Moines, Iowa 50311 (-thru may) (CST; CDT25Apr on) The hiatus since my last excuse for a report has seen me move to less pretentious quarters, befitting the unemployment which my graduation has left me with. First, the last of my DX at 1527 24th, using real antennas. These are all by MS: 8 MS 0448 WCBS- 2 New York City Mr25 MS 0614 WLW-D 2 Dayton OH May7 MS 0524 WGR - 2 Buffalo NY 0512 unid- 3 SMPTE w/ID up.left 0524 WSYR- 3 Syracuse NY 0524 WSYR- 3 & 0524,27,40) (wedge tp) 0622 CBOT 4 Ottawa Ont. 0632 CBOT 4 Ottawa 9 MS 0540 WSYR- 3 Syracuse 0548 unid- 5 RCA tp, WTTG? WNEW? Antennas, and I use the term loosely, at the new apartment presently consist of two ch-2 dipoles, one horizontally polarized, the other vertically, with a knife switch allowing choice. Heaven only knows when I can get something decent up. At least dipoles are not totally useless for Es, which is all that follows: 27 Es 0900 KPRC- 2 Houston TX (id, 4435) (31)(Es) 1333 wciv- 4 SC (NBC w/gd ABC-2) 1030 KOOK- 2 Billings MT (took turns KBOI- 2 Boise ID dominating) 1343 wway- 3 NC (ABC) 1354 wsav- 3 GA (NBC replacing ABC) 28 Es 1730 KOOK- 2 (3024, id w/all xltrs) 1356 wesh- 2 FL (NBC, later w/CCI 20) 29 Es 1100 WGBH- 2 Boston (gd w/CCI on id) 1420 wrbl- 3 (ColumbucTech'slide, CBS) WSAV- 3 Savannah (alm. local id) 1431 WUSN- 2 SC (fairly good on id) 1200 WCBS- 2 NYC (4444; smeary on id) 1800 KOOK- 2 MT (4444 id) 31 Es 1200 kyw - 3 (T) NBC, Phila paging gd 1235 WUND- 2 NC (Ø offset, //WUNC-4) 1300 WFMY- 2 NC (5544 on id) 1830 KACB- 3 TX (audio id, vid.up&down) 2200 WEDU 3 FL (aud.id after //KDIN) 2215 VESH- 2 FL (fair w/FL weather) WUNC- 4 NC (almost local on id) 73 and best DX.

Les Prus, 1615 Pierre, Manhattan, Kansas 66502 (1-31 May)(CDT) Sears 9" B&W semiportable TV, 2-bay conical VHF antenna w/ ant amplifier, 4-bay bowtie & screen UHF ant w/ 300-ohm lead-in causing extremely high loss. All on rotor.

May 8 Es Late tune-in 1802-1815 f (fade). WCBS-2 New York w/ CBS Nx.

4444R 1200 mi. First skip this spring.

May 9 Tr 0600-1200 to 250 mi south and east, KYTV 3 KOTV 6 KMOS-6 KOMU-8 etc.

May 16 Es North into Canada, 1520-1535 f, unid-2 w/ ice hockey.

May 17 Es East (Carolinas?) 1625-1645 f (ch 2 PMason, ch 2 MRogers & Sesame St).

May 18 Es Sweeping East coast from Carolinas to Florida, 1503-1750 f. 1640 WRBL-3 GA, 1645-1710 WESH-2 FL, 1715-45 WDIG 2 AL, WEDU 3 FL fade approx 1750.

1745-49 f CFCL2-2 Kearns Ont. in unexpectedly from northeast.

May 19 Es 1455-1503 south, Mexico unid-2 CBS-type tp "TCM" (Tele Cadena Mexicana) in inner circle, VAFI 5555. 1645-1710 weak-Florida, WESH-2 V: 3.

1731-1745 XHBC-3 Mexicali BCN w/ id slide, skip lasted till 1820, no further ids.

May 21 Es Noticed apx 1100 but thunderstorm condx made DX impossible. 1320 Es Utah, later WY & MT: 1320-50 KUTV 2 Salt Lake, 1345-1410 KTWO-2 Casper 4444R-560, unid-3 KIEW?, 1420-45 KOOK-2 Billings KRTV 3 (VAFI both 5553, Montana new state). Skip was strong, slow-moving, and CCI was negligible. Es south, Mexico, 1624 tune-in, 1700-10 XHCH-2 Chihuahua Chih. id slide, Mex. cartoons, 5444.

Es NE, E. Long-lasting thunderstorms still hampering DX effort; CCI from several skip clouds made ids difficult. 1745 unid-2, 1800 KDKA-2 KYW-3 PA ided.

Es NW, 1930 CFAC-2 Calgary Alta. (change from CHCT-TV). Es SE

Es SE AL & FL, 2030-2230 WDIQ 2, 2050-2130+ WEDU 3, 2200-2250 WEAR-3, 2230-2300 f WESH-2.

May 22 Es Tune-in 0900, SE, AL moving toward LA & TX, 0900-10 WDIQ 2, 0920-40

WBRZ 2 unid-3, 1120 KPRC-2 ided and stayed for at least an hour. Es NW 1100-1135, CFRN-3 Edmonton Alta., VAFI 4444.

May 23 Es Starting from NE (NY & Canada) & moving south, may also have been Es to SE moving north. 1618 WKYC-3 OH WSYR-3 NY. Lots of unids until 1729 when WDCN-2 Nashville ided (short skip 580 mi). Ch 6 reached, 1630-1710, Lots of unids & CCI.

May 24 Es West 1120-1135 KTVN 2 Reno NV, weak 2135, Nevada new state.

May 25 Es FL area 0848 WESH-2, WJXT 4, unids thru ch 6, to 0940.

May 26 Es Another strong, slow-moving opening NW to MT ID WA, 1157-1600 fade. KBOI-2 KID-3, KXLF-4 KTVM 6 (both Butte MT), KHQ-6 Spokane, KOOK-2, KRTV 3 KFBB-5 Falls, KXLY-4 Spokane, several unids. Es E 1758-1810 f unid. May 27 Es NW 1000, unid-2 Canada, 1030 KBOI-2 ID, KRTV 3 MT. Great Falls, KXLY-4 Spokane, several unids.

May 29 Es East, heavy CCI from tropo, 1830 KYW-3 PA 1900 WPSX-3 PA 1930 WTIC-3 CT.

May 30 Es SE 1055-1135, WUSN-2 WCIV 4, WCSC 5 SC, WRCB-3 TN, WJBF 6 GA.

May 31 Es 1055-1115 XHCH-2 Chihuahua; 1250-1520 MD PA NC: 1250-1450 WMAR-2 MD, 1250-55 KYW-3 PA, 1500 WWAY-3 NC, 1515 WUNC-4 NC (M-RTMA tp), 1520 WUND-2 NC.

Es 2000-2200 WUSN-2 SC, 2220 WESH-2 WEDU 3 FL.

Totals now stand at 152 stations, with 30 states + DC.

Dave Pomeroy, 8720 W. 80th Street, Overland Park, Kansas 66204 (8 May-5 Jun) M28 MS 0525 WLW-D 2 Dayton OH (3)(Tr) 2230 KTHV 11 Little Rock AR 29 Tr 1000 KELO-11 Sioux Falls SD 4 Tr 2405 KTUL 8 Tulsa OK KMEG 14 Sioux City IA 2410 KTVT 11 Ft. Worth TX Unid- 9 (CCI on KMBC-9, KCAU 9?) 2415 XEFB- 3 Monterrey NL (1000 mi.) Es 2200 Unid- 2 (Newswatch-EDT, gd color) 2320 KDFW- 4 Dallas TX KTEW 2 Tulsa OK J3 Tr 0655 KVFD-21 Ft. Dodge IA 5 Tr 1130 KMEG 14 Sioux City IA 0700 WHO -13 Des Moines IA KELO-11 Sioux Falls SD KWWL- 7 Waterloo IA 2030 KGTO-36 Fayetteville AR KVFD-21 Ft. Dodge IA 2035 KNCT 46 Killeen TX (580 miles) Finally a good tropo opening and the

beginning of the skip season here that still hasn't produced anything else. Tropo from XEFB-3 is record for me and I was quite surprised to hear Spanish audio during a tropo opening--no video; audio clear. First tropo here from outside U.S. KCNT 46 was also quite a surprise since I had forgotten they were on the air and I was going crazy trying to figure out a PBC station to the south on channel 46. After checking all available sources mystery was solved. (Don't know if call or exact city is correct since available info included data for CP; CP was for Belton TX, but attempt to call station got me through Killeen operator.)

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Don Ruland, 2714 Stetson Lane, Houston, Texas 77043
                                                                        (May)
                                                                                   (CDT)
8 Es 0930 KORK- 3 Las Vegas NV
22 Es 0830 KMTV 3 Omaha NE
KTIV 4 Sioux City IA
                                            (30)(Es) 1045 WWJ - 4 Detroit MI
                                            1047 WNEM 5 Bay City MI
                                                  1145 WCCO- 4 Minneapolis MN
29 Es 0930 WSAV- 3 Savannah GA
                                                 1147 KSTP- 5 St Paul MN
                                             1150 CKX - 5 Brandon-Winnepeg Man.
      1030 WCIA 3 Champaign IL
      1200 WWAY - 3 Wilmington NC
                                                  1152 WMAQ- 5 Chicago IL
                                        1200 WTMJ- 4 Milwaukee WI

31 Es 1100 KCPX- 4 Salt Lake City UT
            WCIV 4 Charleston SC
1230 WRAL- 5 Raleigh NC
30 Es 0930 KYW - 3 Philadelphia PA
                                                   1230 KORK- 3 Las Vegas
      1000 KDLO- 3 Watertown SD
                                                   1330 KTVK 3 Phoenix AZ
                                                  1500 WJMN- 3 Escanaba MI
           WTAE- 4 Pittsburgh PA
     This is my last Western DX report. Next reports will come from 4448 Plale,
Kenosha, Wisconsin 53140. Houston's TV-DX logs totalled out at an even 100 (90 VHF,
10 UHF) in three months of more serious DX efforts. 73's. (Good luck, Don. dps)
Pat Dyer, 327 Solar Drive, En Antonio, Texas 78227 (8 May - 6 Jun) (CST) Receiver: 1968 RCA color J721W. Antenna: Wards 11-el. hi-low VHF, 15' up, fix-aimed SE.
M9 Tr 0000 KRGV- 5 Weslaco TX
                                   215
                                            (22)(Es) 1335 WMT - 2 Cedar Rapids IA 950
10 Tr 0010 KRGV- 5 Weslaco
                                                   1459 WISC- 3 Madison WI
                                     215
                                                                                  1075
           KGBT- 4 Harlingen TX
                                    215
                                                   1540 KTVO 3 Ottumwa IA
                                                                                  975
14 Tr 2343 KGBT- 4 Harlingen
                                     215
                                                   1700 unid 2 Cuba
                                                                                    ?
15 Tr 2350 KRGV- 5 Weslaco
                                             24 Tr 0959 KPRC- 2 Houston
                                     215
                                                                                   185
                                                Es 1005 WEDU 3 Tampa FL 975
1059 WESH- 2 Daytona Beach FL 1055
16 Tr 0050 KTRK-13 Houston TX
                                     185
17 Tr 0001 KPRC- 2 Houston
                                     185
      0003 KRGV- 5 Weslaco
                                     215
                                             25 Es 0952 WTHS- 2 Miami FL
                                                                                  1150
           KGBT- 4 Harlingen
                                                   0952 WEDU 3 Tampa (tent.)
                                     215
                                                                                  975
      0010 KTRK-13 Houston
                                185
                                                   0955 WCIX- 6 Miami (new)
                                                                                  1150
      0025 XHAI-10 Las Lajsa, Ver. 485
                                                   1055 WESH- 2 Daytona Beach(t.) 1055
      2310 WVUE 8 New Orleans LA
                                     510
                                                   1059 WDBO- 6 Orlando FL
                                                                                  1030
                                             27 Es 0959 WBBM- 2 Chicago IL
28 Es 1659 KDIX- 2 Dickinson ND
      2320 WDSU- 6 New Orleans
                                     510
                                                                                  1050
           KHOU-11 Houston
                                     185
                                                                                  1225
      2330 KDFW- 4 Dallas TX
                                     240
                                                        KOTA- 3 Rapid City SD
                                                                                  1050
      2335 WAFB- 9 Baton Rouge LA
                                     450
                                                   1859 WJBK- 2 Detroit MI
                                                                                  1240
      2340 WBAP- 5 Fort Worth TX
                                     230
                                             29 Es 1059 WUSN- 2 Charleston SC
                                                                                 _1115
18 Tr 0010 KTVT 11 Fort Worth
                                     230
                                                   1159 WDIC 2 Andalusia AL
                                                                                   725
   Es 0755 WTWO 2 Terre Haute IN
                                             30 Es 0859 WMT - 2 Cedar Rapids IA
                                     940
                                                                                   950
19 Es 1100 KDLO- 3 Watertown SD
                                    1085
                                                   1059 WJBK- 2 Detroit MI
                                                                                  1240
      1429 KWGN 2 Denver CO
                                     800
                                             31 Es 0929 KTWO- 2 Casper WY
                                                                                  1015
20 Tr 1645 KPRC- 2 Houston
                                                   KWGN 2 Denver CO 800
0959 KUTV 2 Salt Lake CityUT 1080
                                     185
      1800 KUHT 8 Houston
                                     185
21 Es 0829 WFMY- 2 Greensboro NC
                                    1175
                                                        KID - 3 Idaho Falls ID
                                                   1159 KOAI- 2 Flagstaff AZ
      0929 KWGN 2 Denver CO
                                     800
                                                                                   850
           KTWO- 2 Casper WY
                                    1015
                                             J2 Tr 0035 WVUE 8 New Orleans LA
                                                                                   510
      1229 KTCA- 2 Minneapolis MN
                                    1110
                                                   0759 WAFB- 9 Baton Rouge LA
                                                                                  450
      1259 KGLO- 3 Mason City IA
                                                   2335 WBAP- 5 Fort Worth
                                     985
                                                                                   230
                                                   2359 WDSU- 6 New Orleans LA
           WMT - 2 Cedar Rapids IA
                                     950
                                                                                   510
      1402 WEDU 3 Tampa FL
                                             3 Tr 0000 WVUE 8 New Orleans
                                    975
                                                                                  510
      1429 WBAY- 2 Green Bay WI
                                    1190
                                               Es 2029 KTCA- 2 Minneapolis MN
                                                                                  1110
22 Tr 0759 KPRC- 2 Houston
                                  185
                                             4 Es 1629 KTWO- 2 Caspers WY
                                                                                 1015
   Es 0759 WBBM- 2 Chicago IL
                                    1050
                                                 1700 KUTV 2 Salt Lake City
      1029 KDLO- 3 Waterrown SD 1085
                                                Es really came in with a vengeance
after mid-May. If the rest of the summer can keep it up it will be nice. By next
column I'll be in Boulder CO at a temporary-type job with ITS (ESSA) dealing with
worldwide Es on VHF. I'll be there at least until early October. What equipment for
TV-DXing I'll have there isn't known at present. The local Ch 2 in Denver isn't going
to help much. I bet the July column is going to be a huge one. 73, WA5IYX/5.
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Glenn Hauser, South San Antonio TX (PSC Box 42309, Kelly AFB TX) 78241 (15May-7Jun) (CST)
    Es got a late start, but as I'm sure most of you noticed, it finally got under
way on 18 May. And there was some Es every day since except 1, 2 and 6 June. Tropo
from Mexico has not returned, but the expected Gulf coastal tropo has appeared several
times, with one foray noted as far north as Oklahoma City. Pat Dyer and I have been
exchanging observations and find, not surprisingly, that our DX is very similar, being
about 10 miles apart. At the beginning of June I finally got my VHF antenna on the roof, along with a rotor and an 8-bay bowtie for UHF...all about 25 ft above ground.
15 Tr 2350 XHAH- 8 Las Lajas Ver.? (23) MS var. Ch2 Occasional Cetid bursts
      2356 XH-- 9 Tampico Tams. 4555N 495 Es 2155 KOAI 2 Flagstaff AZ 3433N 845
16 Tr 0013 XHAI-10 Las Lajas Ver? 3345T 660 24 Es 1855 WLW-D 2 Dayton 0H N1075
                                               Tr 1933 XEFE- 2 NuevoLaredoTams.
      0029 KCEN- 6 Temple TX 2353R 155
                                  2353R 155 Tr 1933 AEFE- 2 Nuevolaredolams. R 140
4545R 180 Es 1950 WDCN- 2 Nashville TN 3333R 825
      0057 KTRK-13 Houston TX
      0541 KRIS- 6 CorpusChristi 4455R 130 25 Es 1025 WEDU 3 Tampa FL
                                                                               3134N 990
                                             1055 WESH- 2 Daytona Beach 3334R1045
      0558 KSLA-12 Shreveport LA 1445N 360
      0756 KGNS- 8 Laredo TX 5455R 130
                                             1530 XHCH- 2 ChihuahuaChih. 3124N 455
   Es?0841 unid 2+ color bars
                                                   1540 KTCA 2 St Paul MN ?
17 Tr 0706 KERA-13 Dallas TX 4444N 260 26 Es 1649 YSR - 2 SanSalvador, ElS.? T
      1859 XEFE- 2 NuevoLaredoTms2133R 140 1703 XHFM- 2 Veracruz Ver. N 705
      2129 KUHT 8 Houston 3343N 180 27: Es 1728 YSR - 2 San Salvador?
      2254 KNOE- 8 Monroe LA 3344R 430
                                               1746 XHCV- 3 CoatzacoalcosVer.? T
                                             28 Es 1630 WBBM- 2 Chicago IL ?
      2312 WAFB- 9 Baton Rouge ? 2434T
      2314 WDSU- 6 New OrleansLA 1245N 515
                                                                                   F.1235
                                                  1712 WJBK- 2 Detroit MI
      2316 WKLG- 5 Mobile AL ?
                                   T
                                                   2123 WTWO 2 Terre Haute IN
                                 1344N 245 29 Es 0727 WFMY- 2 Greensboro NC
                                                                                   N1175
      2325 KDFW- 4 Dallas
      2329 WVUE 8 New Orleans ? T
                                                  0859 WDCN 2 Nashville TN
1159 WDIQ 2 Dozier AL
                                                                                   R 825
      2338 WBAP- 5 Fort Worth TX 3332N 245
                                                                                  H 885
      2352 XHAH- 8 Las Lajas Ver. 2325R 660
                                                   1211 WSB - 2 Atlanta GA
                                                1229 WUSN- 2 Charleston SC
      2355 KWTX-10 Waco TX 3324N 165
                                                                               I.1125
18 Tr 0004 XHAI-10- LasLajas Ver. 3325N 660 30 Es 0815 WSB - 2 Atlanta GA 4444E 885
   OO16 KIII 3 CorpusChristi 5554R 130
Es O650 WSJK 2 Sneedville TN? T
                                              0859 WMT - 2 Cedar hapids IA
                                                  0859 KGLO- 3 Mason City IA ?
      0700 WDCN- 2- Nashville TN 5533N 825
                                                 1029 WBAY- 2 Green Bay WI
                                                                                   F.1190
  *Tr?0743 WABG- 6 Greenwood MS 0211N 560
                                                 1058 WJBK- 2 Detroit MI
                                                 1259 KTWO- 2 Casper WY
1259 WIW-D 2 Dayton OH
   Es 1415 WUSN- 2 Charleston SC 4333N1125
                                                                                   I.1010
      1536 WESH- 2 Daytona Beach 4444N1045
                                                                                   F.1075
      1549 XHCV- 3 CoatzacoalcosVer? T 31 Es 0927 KWGN 2 Denver CO 4544N 805
    1613 XHAP- 2 Acapulco Gro.? T
1630 WDCN- 2 Nashville TN R 825
                                                0929 WUSN- 2 Charleston SC
                                                0959 KUTV 2 Salt Lake City UT N1080
1015 KID - 3 Idaho Falls ID R1245
      1829 YSR - 2 San Salvador 4433N1210
19 Es 1457 unids 2 signs for hours, almost no aud.
                                                   1040 KCPX- 4 Salt Lake City ?
20 Es 1613 X - 2 XEWnet nx, gone after min.
                                                1145 KOAI 2 Flagstaff AZ
                                                                                    R 845
21 Es 0655 WSB - 2 Atlanta GA 2033N 885
* 1025 KTWO- 2 Casper WY 3122N1010
                                                   1210 KORK- 3 Las Vegas NV
                                                                                    N1060
                                                1329 KNXT 2 Los Angeles CA
                                                                                    N1190
      1059 KID - 3 Idaho FallsID 2223N1245
                                                   1629 KTCA 2 Saint Paul MN
      1124 KNOP- 2 NorthPlatteNE 3232N 825
                                                   2059 CKPR- 2 Thunder Bay Ont.
                                                   2115 WBBM- 2 Chicago IL
                                                                                    R1055
      1128 KARD- 3 Wichita KS ?
                                      T
                                  3132R1010 J1 No DX noted! UHF 8-bay bowtie ant, interia:
      1535 KTWO- 2 Casper WY
                                  4221N1055 2 Tr 0615 KHTV 39 Houston TX
      2014 WBBM- 2 Chicago IL
                                                                                    N 180
                                                   0746 KINI 15 New Iberia LA
                                                                                    N 400
      2109 WJBK- 2 Detroit MI
                                      N1235
                                                   0755 WBRZ 2 Baton Rouge LA
                                                                                    N 450
22 Es 0625 WBAY- 2 Green Bay WI 3334N1190
                                                 Antennas & rotor installed outside:
      0731 KTCA 2 Saint Paul MN N1120
                                                                                    F 180
      1759 WBBM- 2 Chicago 2554R1055
                                                  2300 KHTV 39 Houston
      0929 KGLO- 3 Mason City IA N1005
1159 KDLO- 3 Garden City SD N1075
                                                                                    N 400
                                                 2302 KLFY-10 Lafayette LA
                                                2315 WAFB= 9 Baton Rouge LA
                                                                                 N 450
      1159 KDLO- 3 Garden City SD
                                                                                  R 245
      1333 WMT - 2 Cedar Rapids IA N 965
                                               2317 KDFW- 4 Dallas TX
                                              2318 WBAP- 5 Fort Worth TX
2319 WFAA- 8 Dallas
                                                                                 R 245
                                    T
      1421 KTVO 3 Kirksville MO ?
                                                                                 R 245
                                    N 785
      1423 KTVI 2 Saint Louis MO
1721 XHFM- 2 Veracruz Ver.? 2124T 2320 KTVT 11 Fort Worth N 245
23 Tr 1202 XEFB- 3+ Monterrey NL 2432N 280 2321 WVUE 8 New Orleans 5555N 515
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2332 KTBS- 3 Shrevepart LA? T
                                              2116 KOAI 2 Flagstaff AZ ? T
     2345 KTRK-13 Houston 5555R 180
                                              2130 KWGN 2 Denver CO R 805
     2347 KPRC- 2 Houston
                              4454R 180
                                         4 Tr 0548 KWTX 10 Waco TX
                                                                           R 165
     2358 WDSU- 6 New Orleans
                                   R 515
                                              0553 KWTV 9 Oklahoma City
                                                                           N 430
                                           Es 1155 WMT - 2 Cedar Rapids IA
 3 Tr 0005 XHAB- 7 Matamoros Tams.
                                  T
                                                                            R 965
     0107 XHAH- 8 Las Lajas Ver. 2235R 660
                                            1155 KGLO- 3 Mason City IA ?
                                           MS 1456 X
     0109 KHOU-11 Houston TX 5555R 180
                                                         2 ? (circular tp, ant. NW)
     0438 KALB- 5 Alexandria LA
                                 N 390
                                          ₩Es 1629 KTWO- 2 Casper WY?("K2") T(R)
     0445 KNOE- 8 Monroe LA
                                  R 430
                                          1735 KUTV 2 Salt Lake City
     0445 KLFY-10 Lafayette LA
                                 R 380
                                          5 Tr 0759 KINI 15 New Iberia LA
     0508 WAFB- 9 Baton Rouge LA
                                 R 450
                                           Es var. weak, in & out, AFT & eve, ch 2-3
     0533 KITV 7 Tyler TX
                                              2110 WMT - 2 Cedar Rapids IA R 965
                                   N 285
  Es 1759 WBAY- 2 Green Bay WI
                                         7 Es 1435 WLW-D 2 Dayton OH
                                   R1190
                                                                        4444R1075
     1806 WITI 6 Milwaukee WI ?
                                   T
                                              1550 XEW - 2 Mexico DF ?
                                                                            T
     1829 WBBM- 2 Chicago IL
                                  R1055
                                              2334 KBTX 3 Bryan TX
Asterisked (*) comments: 17 May & 3 Jun KNOE-8: s-off/on incl xltr K18AB El Dorado.
18 May WABG-6: on car radio at Kelly AFB stoplight null of KRIS, id in passing.
18 May XHAP-2: XEW net "W2"-news. 21 May KTWO-2: back from work; also pagers; 1029
id; also CBC Butterfly--double hop? 4 Jun KTWO-2: id slide showing large white "K2"
with spectacles underneath; KTEW and KATU unlikely.
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(CDT) Glen R. Neal, 1005 N. 5th, Sayre, Oklahoma 73662 (1 May - 7 Jun) By May 15 I had given up all hope of E-skip; by May 30 I thought the season would be better than normal; now I don't know.

May 4 Tr 0800 excellent to west: KGNC-4 KVII-7 KFDA-10, 5's.

May 5 Tr 1900-0000 good to east: KODE 12 Joplin MO fair, KUHI 16 poor, K76AU K78CM K8ØAT K79## K81## good.

May 7 Es t/in 0749-1350 KNXT 2 (CBS tp) in & out, KEY-T 3 KNBC 4 noted, CA. May 8 Tr 0800 KACB 3 KCTV 8 San Angelo TX good, new. KTBS-3 KTAL-6 KSLA-12 Shrevepot LA excellent.

May 9 Tr 0800+ extremely good, unable to monitor.

May 18 Es t/in 1345-1930 WPSX-3 WSYR-3 WSB-2 WBTV 3 WWAY-3 WFBC-4 WUSN-2, \* chs 5 & 6 good at times.

May 19 Es t/in 1001-1029 (missed both id breaks!): KTVU 2 KCRA-3 KRON-4 CA.

May 20 Es t/in 1356-1442 ch 2 SS good: election, live B&W coverage, to tp 1428.

May 21 Tr 0000-0130 KCEN-6 (new), KWTX 10 KDTV 39 good. PM tropo excellent.

Es t/in 0841-1045 WUSN-2 WSAV-3 KCRA-3 (open from both coasts) KNXT 2 KNBC 4 KTLA 5 (w/ IHTP 0959); 1354-1430 KTVU 2 & WDIQ 2 excellent, both coasts again.

May 22 Es t/in 1115-1430 (left): KEY-T 3 CKCK-2 KDIX-2 CKOS-3 CBKMT 4 KOTA-3

(new) + chs 5 & 6 good, unid.

May 23 Es t/in 2017-2243: KYUS 3 Miles City MN (new). From both coasts at 2130. Then south, very interesting: 2100 XHIA-2 XHQ-3 (new) followed by fade-in & id of XHJMA-3 (new) XEIN-4 (id, new), XHQ-3 again 2230-2233. I assume most stations were signing off as id cards were on quite a while.

May 31: Put up an entirely new receiving system: VHF, RCA VHF ant. w/ preamp, 75 ohm down to PS & trans, then to TV; UHF, a 7-ft dish & 25 feet, UHF preamp, 75-ohm down to PS, then into +25db UHF amp, then to trans & TV. Same Zenith TV. Two new

rotors, CDE's. Improvement all around, but the UHF dish is amazing.

June 1 Tr Excellent morning 0522-1135 to try out new system. VHF: KMID-2 Midland TX (5554R270) KWAB 4 Big Spring TX (5554R235-rare) KOAA-5 Fueblo CO (3543R340-rare) KØ6DF Pampa TX (3543R80) KOSA 7 Odessa TX (5554R290) KLTV 7 Tyler TX (4554R325) KMOM 9 Monahans TX (5555R290) K1ØFR Fargo OK (3442R) KTXS 12 Abilene TX (5555R195) K12GA Fargo OK (3442R75) KUPK 13 Garden City KS (5555R175). UHF: KUHI 16 Joplin MO (3445R-310) KDTV 39 Dallas TX (5555R235) KSEL 28 Lubbock TX (4545R165) KHFI-42 Austin TX (3545R365) KHTV 39 Houston TX (2030R460); translators, K7ØCF K72CB K74BF Higgins TX, K7ØBD K72CD K74CJ Clarendon TX, K71BK K73BK K75BN Gruver TX, K71BG K73AU K75AV Wellington TX, K72BD K78AP K82AK Miami TX, K7ØDA K72BZ K74CH Childress TX (KOSA-7 exc. before KSWO-7 c/on, K72BZ), unid ch 72 KFDO-8, unid ch 73 KFDO-8 (KLTV 7 exc. before KSWO-7 c/on, K75AV), K76AU K78CM K8ØAT Wheeler TX %8s, unid ch 76 KFDO-8, K77AQ K8ØAT K82AZ Memphis TX, (KOSA-7 CCI ch 77), K76BD K78BI K8ØAY Booker TX, K78AZ K8ØBD

K83AQ Matador TX, unid KOSA-7 tp ch 78, K79## K81## Reydon TX, unid KFDA-10 & KTXS 12 ch 79s, unid ch 81 KGNC-4 (KETA 13 CCI ch 83), ch 64 & 68 KGNC-4 SW, ch 66 KFDO-8, K66AB K68AD Perrytown TX. That's all! Over 35 translators were logged, most were 10 or 20 watts TPO, and Matador is longest @ 100 mi. Condx were not all that great, but the dish brings 'em in anyway! By 0700 the xltr channels were so crammed I couldn't believe it; almost all were snowfree! MS 0546 WSAV-3 Savannah GA (4514R1085). Es t/in 1324-1359 WUSN-2 Charleston SC (5534R) unid 3-4 CBs 1358 WDIC 2?

Tr 2225 exc. all directions: KOAM 7 Pittsburg KS (3440R315), relog of U xltrs & VHFs. June 2 Tr 0538-1105 KLFY 10 KATC 3 KLNI 15 Lafayette LA (4543,4543,4545 R565), KIII 3 KHIS 6 KZTV 10 Corpus Christi TX (3533R535), KWAB 4 good, KTBC-7 Austin TX (3442R365), KSWS-8 Roswell NM (4545R265), KOSA-7 good, KMOM 9 good, KHOU-11 KTRK-13 Houston TX (3343R460), KSAT 12 San Antonio TX (4543R425); PM Tr: the "regular" UHF xltrs, from Wheeler, Reydon, Memphis good-exc. (it seems the worst tropo brings in Wheeler (3 xltrs) & Reydon (2), and a slight increase gets Higgins (3), Memphis (3), Wellington (3)). Noted K79## repeating WKY-4 very nicely before KGNC-4 c/on(carrier). Es 1051-1231 weak, in and out, WESH-2 WSAV-3.

LS (lightning-scatter burst reception) 2230-0000 KØ7FX K1ØFR K12GA Fargo OK (10"0"5R-75), KOAM 7 KODE 12 KUHI 16 (310mi). This storm did \$1,000,000 damage to Enid, OK; rather expensive DX! Tr 1900-2255: KMXN 34 KSEL 28 KDTV 39 KHFI-42 good.

June 3 Tr 1129-1430 KTBS-3 KTAL-6 KSLA-12 Shreveport LA (4542R380) KSEL 28 KDTV 39 good, Wheeler, Reydon & Memphis good-exc. KSLA 12 snowfree until 1400! Tr 2245-0242 opening to NE, first in long time: KMBC-9 KMBA 41 Kansas City MO (3423R,3425N, 385) KTSB 27 Topeka KS (3545N340), KSEL 28 KMXN 34 KDTV 39 good, WIBW-13 Topeka & KODE 12 Joplin good, chs 70 72 74 Higgins, 71 73 75 Wellington, 77 80 82 Memphis, 76 78 80 Wheeler, 79 81 keydon all good, with some CCI. No Es all day here.

June 4 Tr 0525-0950 KØ6DF Pampa TX (3544R80) KWTX 10 Waco (4545R300) KHOU-11

KTRK-13 Houston (3433R460) KSLA 12 good KHTV 39 Houston good.

MS: the Perseids (June 4-6) produced lots of bursts 0525-1000, nothing ided. Es t/in 0915-0930 weak NE ch 2, no id; 1202-1408 (left), exc. 2 & 3, good 4, no ids.

June 5 Tr continuing good. AM Tr, xltrs excellent.

Ls 1128-1304 KTVU 2 KTVN 2, and weakly through ch 6; xltr CCI noted via Es @ 1130. June 6 Tr "regular" UHF xltrs good-exc, 14 in all. No Es all day here. June 7 Tr KØ6DF Pampa TX (4544R80) K1ØFR Fargo OK (3040R75) KBIM-10 KSWS 8 Roswell NM (4543R285,4540R265) KFDW-12 Clovis NM (5543R215) KMOM 9 Monahans TX (5544-R290) KSEL 28 Lubbock TX (5555R165). Es t/in 1232-1549 (left) WUSN-2 WESH-2 (local-quality for hours) WTVJ 4 (1315mi, no sign of WTHS or WCIX, not on yet?) WPIV 5 WDBO 6 WCTV 6 excellent; Es t/in 1727-1817 (left) weak SS ch 2 south, some ch 4 & 5 unid. <u>Tr 2220-2352</u> xltrs abo (KVII 7) noted repeating CCI of KSWO 7. Tr 2220-2352 xltrs above average, 14 logged, Wheeler's K8ØAT

I have had the new system up for a week now, and it is by far the best I have ever had. The 7-ft UHF dish is the only UHF antenna to have. Daily VHF & UHF to 250 miles is normal, with at least 6 translators (5 UHF, 1 VHF) always in. All I need is a "supermorning" to try out the dish some more. One of my projects this month is to built a preamp, using the 2N5397 and Bob Cooper's circuit (low-band VHF, for MS work). I have 2N5397's, and Siliconex said that they have a newer version of 2N5397, in epoxy form, at a much lower price. It is electrically the same; its number is E300. The devices are available through Hamilton/Avnet Electronics, 2403 Farrington, Dallas, Texas 75207.

Bob Cooper, Jr., 2609 Chaucer Drive, Oklahoma City, Oklahoma 73120 (9May-8Jun) (CDT) By all reports, the late-starting May Es gave some unpleasant moments. Hopefully the rebound after May 15 renewed everyone's faith in the Es 'system.' It is very difficult and not a little dangerous to attempt to draw parallels between successive Es seasons, and this year's late-starting season will best be viewed closely next fall, not now.

To DX: An equally 'unusual' general lack of Gulf Coast moisture kept April-May tropo down from 1970 levels. But not to worry; with conditions so bad, they have to come back up--sometime!

May 9 2302 tune-in until 0000: lightning scatter reception on WAPT 16 Jackson MS (473 mi). Byrsts averaged about 100 for the hour with some 2-3 seconds long. Running three receivers, on 3, 12 & 16 (Jacksen channels), revealed bursts only on ch 16.

May 11 MS 0550 WGR-2. Meteors not much this AM. May 12-14: Out of town on business, no observations.

May 15 Es 2155-2225 NW ch 2, both 20 offset. No id.

May 17 Tr 0633 t/in, KPRC-2 KHOU-11 KTRK-13 KHTV 39 Houston (420mi); KTHV 11, KATV 7 (305), KTBC-7 KHFI-42 Austin (345), KTAL-6 KSLA-12 (300), with heavy fading all around. Es 1639-1645 NE ch 2, no ids.

May 18 Es 1240, first sign for day, in & out, N. NE & E (ch 2 only) until 1530. 1550, ICk-TV 2 Habana with last year's TP & music background broken by YL announcer. 1603 WPET 2, 1610 WEAR-3 (630), 1655 XEW-2 (now using mostly "W2" call slides & ids), 1715 WFMY-2, 1718 WWAY-3, 1731 XEZ-3, 1743 XEFB-3 (650), 1815 XHY-3 (RTMA test chart & s/on), 1902-1945 more Cuba chs 2 & 3, 1930 id on 3 for ICR-6 net, which is Habana 6 originating net NOT parallel in programming to ICR-2 Habana. Same program on 2, but missed id due to fade, suspect far eastern Cuba, double-hop E.

May 19 Es 1630-1645 ch 2 E/SE, no ids.

May 21 Es weak or moderate most of day. 0845 noted KTVU 2 on RTMA test, s/on. 0955, WUSN-2. Es in & out E & NW all AM. This continued until 1830 or so to E with dozens of 3-5-min Es spurts on 2 & 3. Also FM, double-hop Es from Puerto Rico. 2100, WSAV-3 WUSN-2 WESH-2, 2200 to west ch 2, no id.

May 22 Es 2200 to west ch 2, no id.

May 23 Es 1545-1800 apx, in & out to E, SE; no ids.

May 24 Es 1140-1210 ICR-TV 2 Habana. Es in & out most of afternoon.

1715-1900 WPBT 2 very steady but weak Es signal. 2100 WKAQ-2 double-hop (2450 mi).

2123 XEW-2 XEZ-3 to about 2200.

May 25 Es 0745 t/in to 0935, WMAR-2 KYW-3 and others.

May 26 Es, missed most of this one due to work load; however, 1130 t/in to 1515 KTVM 6 KRTV 3 CKCK-2.

May 27 Es 0837 WUSN-2 WBBM-2 WSAV-3 WWAY-3 CKPR-2 WBAY-2 and others to 12 noon. No time to DX after 1000.

May 28 Es 2000 WWAY-3 WUSN-2 WSB-2 until 2120.

May 29 Tr KATV 7 KTHV 11 KKTV 11 KRDO 13 (463mi), KTTS 10 0000-0100.

May 30 Es 0850 t/in WESH-2, 0900 SS under WESH, suspect WKAQ San Juan.

Es open all morning with WTAR-2 WFMY-2 WTVR 6 WUSN-2 WSB-2 WKYC 3, and WKAQ 2 on double-hop for sure, 1242 to 1345. Then WESH again, ch 2, and "OOK-2; around 1500 CKCK-2 KDIX-2; at 1730 KBOI-2.

May 31 Tr 0730 6/in, duct north with KMEG 14 & KVFD-21 only U's (both apx 500mi) plus KS00 13 KELO-11 (559) and others. Es 1230 t/in, KOAI 2 KORK-3 KNXT 2 XETV 6 until 1330; 1315-1600 WSYR-3 KYW-3 WBAY-2 WJMN 3 CJIC-2 WJBK-2; 1738-1835 CKCK-2. 1900 to 2200+ heavy thunderstorms and time to shut down. 2200 t/in to 2315+ WUSN-2 WSAV-3 WWAY-3 on Es.

June 2-4: Out of town until 1800 on 4th.

June 4 Es 1830 t/in to apx 2215, in & out to W & NW weakly all evening.

1900 XHBC-3, 1930 KNXT 2, 2159 CFAC-2 (old CHCT).

Tr 2100-2300 up slightly, KHTV 39 KTRK-13 KHOU-11 Houston (420) logged.

June 5 Es 1040 to apx 1230 KTVN 2 in & out; 1300-1350 KTVN 2 NBC-3, both west.

Tr 1850 KTHV 11 (305). Es 1900-2015 to NE ch 2-3, weak, no ids.

Tr 2100 to N, NE, E KCIT 50 KBM4 41 KYTV 3 & others within 300 mi good level.

2134, first signs of WDRB 41 Louisville (675 mi) followed at 2137 by WLKY-32 (675);

2200, WHBQ 13 (425) KFVS 12 (455), 2305 KDNL 30 (458), 2353 KRCG 13 (350) and others.

WDRB 41 is UHF number 118.

June 6 Tr 0700 WMBD 31 WRAU 19 (625) KOLN-10 KGIN-11 (350) WICS 20 (590) KMEG 14 (488) WAND 17 (660) K18AA (240--relays KCKT 2, but KCKT was off at the time so was rebroadcasting mixture of KTEW 2 & KQTV 2) KETV 7 WJJY-14. Tropo out by 0845.
Es 0910 on, in & out ch 2 east, NE, SE, until 1400 or so.

June 7 MS 0515 & 0529 WTVJ 4 Miami (1223 mi).

Tropo has been trying to break loose here all week (June 2-8) with nil results. Moisture, a stable front, everything is there--including duct-destroying thunderstorms! 73.

Fred McCormack, PO Box 611, Watertown, South Dakota 57201 (-thru May)	(CDT)
May DX from Watertown: (28)(Es) 1900 KCRL- 4 Reno 44	
15 Es 2200 WSB - 2 Atlanta GA 3035N 2256 KOMO- 4 Seattle WA 33	335R 970
16 Es 1128 CFAC- 2 Calgary Alta. 4345N 30 Es 1445 KMID- 2 Midland TX 44	433R1115
21 Es 1859 WSB - 2 Atlanta GA 3034R 1500 KFDX- 3 Wichita Falls 44	445R1000
2058 KREM- 2 Spokane WA 0333N 1504 WOAI- 4 San AntonioTX 33	335R1305
2059 WBRZ- 2 Baton RougeLA 4333N 1526 KACB- 3 San Angelo TX 33	335R1155
22 Es 1057 CFAC- 2 Calgary 4445R 1559 KOAI 2 Flagstaff AZ 34	442R1030
1157 KREM- 2 Spokane 4435R 1600 KTVK 3 Phoenix AZ 44	445R1150
	435R1200
	443H1075
	335R1300
	335R1295
	445R1330
	.042R1380
	442R1415
	434R1445
	.033R1335
	033F1115
	335R1075
2301 KOB - 4 AlbuquerqueNM 3	334N 940

It certainly seems like a long time since I have had any DX to report. I didn't get much time for DXing in May, but my observations and what I have heard second hand suggest that the latter half of the month was quite good for E skip. I did some DXing from both Watertown and my former QTH of Des Lacs ND. I am presently using a Heath GR-169 solid state portable color set for DX at both locations with a Winegard antenna as Des Lacs and rabbit ears at Watertown. KOB-4 was my only addition to my Des Lacs log, but it was good for state number 39. CFAC-TV as logged on 16 & 17 is new call for CHCT-2; they id for both CFAC-2 Calgary and CJOC-7 Lethbridge. Most unusual DX of period was on 5-24 @ 1000 when I logged audio of WDSU-6 New Orleans via Es on my car FM tuner while driving near Gettysburg SD. 73 and good DX.

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(24 May - 8 Jun)
Robert J. Williams, 251 6th Ave. E., Twin Falls, Idaho 83301
Equipment: RCA 21" color, 2 set-top boosters, rabbit ears, various antennas.
                                          (26)(Es) 1346 KTCA 2 St Paul MN (color tp) R
24 Es 0959 KWAB 4 Big Spring TX · R
                                           28 Es 1832 CKCK- 2 Regina Sask.
                                                                               R
      1014 unid 3 (CBC tp, Canada)
                                          30 Es 1204 KQTV 2 St Joseph MO
                                                                               R
      1029 KFDX- 3 Wichita Falls TX N
                                             Tr 1221 KBOI- 2 Boise ID
25 Es 0900 KTCA 2 St Paul MN (tp)
                                    R
                                             Es 1431 KSD-5 on ch 3 (translator? dps)
26 Es 0944 KTCA 2 St Paul
                                    R
                              (tp)
                                                1431 KYTV 3 Springfield MO
      1101 KCKT
                2 Great Bend KS
                                    N
                                                1437 KTEW 2 Tulsa OK
                3 Springfield MO
      1103 KYTV
                                    N
                                           31 Es 0934 KMID- 2 Midland (&@ 1104) R
      1119 KYTV 3 Springfield
                                    R
                                           J5 Tr 0940 KB0I- 2 Boise
      1128 KQTV 2 St Joseph MO
                                    R
                                                            2 (heavy CCI, no ids)
                                           8 Es 1551
      1330 WBAY- 2 Green Bay WI
                                   R
     Many photos were taken. E skip was been pretty good here so far; I'm looking
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forward hopefully to good Es later in June and in July and however later it comes in. I recently got an antenna-mounted preamp and experiments have been working well, with good cable-leak reception. Skip may still make it over the radiation. I took one set-top booster out of circuit and get a couple of cable-leak stations snowy but good with just a 5-el multi-channel ant. connected to arms of rabbit ears and into the set. Rabbit ears have 6-position selector switch. Color is good and vivid on the cable channels. I will look for KTVB 7 with ch-7 yagi without one booster. 73s and gud DX.

Randy Miltier, 882 Fine Ave., San Jose, California 95125/ (1 May - 5 Jun) May 7 Es 0610-0621 (t/out) KMID-2 Midland TX (3455): local KTVU 2 off at time.

May 11 MS RETMA tp ch 2 0602; Capt. Kangaroo ch 2 0603.

May 18 Es 1658-1900 XHQ-3 Culiacan, Sin. (2122); XHQ-3 tp seen at 1658.

May 21 MS 0601 KDIX-2 id; 0626 local news with announcer and a "3" in a circle, assume KCKT 2 as they are a satellite of KARD-3. May 22 Es 1105-1400, E/SE ch 2, 3, 4 intense bars, no ids.

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May 30 Es 1005-1130, E/SE ch 2 & 3, repla of May 22.
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May 31 Es 1350-1430 ch 4 children's rogram (clown & cartoons) (4034),

ch 3 Lassie seen at 1420 (4034), both E/S.

June 5 Es unid ch 2 cartoons, 0902 MS 3 (2122) cartoons. 2320 ch 2 looked like "CF-- News." Video was over local in negative form. Only station on ch 2 with CF-- is CFCL-2 Kearns, Ont. with 26.5 waits. I believe this station signed off after news at 2320. (It may have been CFAC-TV ? Calgary, CHCT-TV's new call. dps) Good DX.

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Jim Pizzi, 300 Park, Orcutt, California 3454 (Jan thru 9 Jun) (PST; PDT 25 Apr on)
Zenith 18" color 1969; antennas, Jerrolc VHF PIX-225, Finco UHF 7-ft dish.
Ja14 Es 1730 KMID- 2 Midland TX R 30(Es) (1300) KXLY- 4 Spokane
                                                                                                                                   4444R
                                                                                    1326 CFAC- 2 Calgary
                                                                                                                                 4433R
   29 Tr 2130 KGSC 36 San Jose
  1400 CFCN- 4 Calgary 3332N
1730 KLNE? 5 (NET) 4032
1900 KNOP- 2 North PlatteNE 4033R.
                                                            1112R
May 7 Es 0930 KTWO- 2 Casper WY
  0730 KFDX- 3 WichitaFallsTX 3443R J 5 Es 0830 KDIX- 2 Dickinson ND 2432R
            0759 KRTV 3 Great Falls MT 3433R
       0759 KRTV 3 Great Falls MT 3433R

Tr 0801 unid 3 (to SE, IHTP, XHBC?) 2332

Es 0827 XHCH 2 Chihuahua 4444R 1000 KOOK+ 2 Billings 2422R
 0930 WOAI- 4 San Antonio TX 3323K 1136 CFCR- 4 Kamloops 0433N 1030 KROD- 4 El Paso 3321K 1130 CFCN- 4 Calgary 3032K 22C KhTV 3 Great Falls MT 3011K 22 Es 0730 KMID- 2 Midland 4433K 2219 CKCK- 2 Regina 1311K 0930 KCNC- 4 Amarillo TX 5544K Tr 2300 KGSC 36 San Jose CA 2213K 0937 CKSA- 2 Lloydminster 3322K 2200 KATU 2 Portland OK 4433K 0937 CKSA- 2 Lloydminster 3322K 2200 CBUT 2 Vancouver BC 2212K 2200 KOK- 2 Billings MT 4433K 1200 KOK- 2 Billings MT 4433K 1200 KOK- 2 Billings MT 4433K 1300 CHBC- 2 Kelowna BC 3021K 9 Tr 0030 KPIX 5 San Francisco 2031K Things have been fairly active lately—hope it
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Things have been fairly active lately-hope it keeps up. I ordered CADCO's post amped converter and am anxious to see how it works. Best of DX.

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Dennis Smith, 450 Poplar Ave., Wasco, California 93280 (Jun: 3-6, 15-16)
                                                                                                                   (PST)
J5 Es 0629 KDUH- 4 Hay Springs NE Mi: 1050 (5)(Es) 1029 CFCN- 4 Calgary Alta. 1110
        0659 KTWO- 2 Casper WY (& 0859) 860: 1059 KFEM- 2 Spokane WA (& 1200) 850
0729 KDIX- 2 Dickinson ND 1200 1200 KXLY- 4 Spokane ?
KFYR- 5 Bismarck ND 1280 (opening faded apx 1215)
        0759 KOTA- 3 Lapid City (&0859) 1070 6 Es starting 0615, various tp's, color-0859 KOOK- 2 Billings MT (&0929) 930 bar, etc., faded 0650. No ids.
        0929 CFAC- 2 Calgary (& 1029) 1110
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We were in Wasco 3-6 and 15-16 June, but of those dates, Es apparently occurred only on 5 and 6 June, a very poor showing.

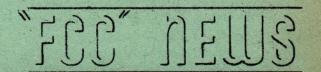
### BEMMISCENCES = = = = (CONTINUED FROM JUNE VUD.)

"WE RETURNED TO CANADA IN 1923. AT THAT TIME LITTLE WORK WAS AVAILABLE IN RADIO AS IT WAS JUST COMING IN. SUCH STATIONS AS WHAS-LOUISVILLE, WGY-SCHENECTADY, WJZ-NEW YORK CITY, KDKA-PITTSBURGH WERE THERE, AND OTHERS STARTED COMING ON ALMOST MONTHLY. HERE IN BRANTFORD (ONTARIO), A FRIEND OF MINE, HAROLD BROWN AND HIS FATHER, HAD PURCHASED A WAR ASSET MODU-LATED OSCILLATOR TYPE TRANSMITTER MADE BY WESTINGHOUSE FOR AEROPLANE USE; OUTPUT 5 WATTS. TO MAKE A LONG STORY SHORT, A PERMIT WAS OBTAINED FOR AN AMATEUR LICENSE, BROADCAST GRADE: 108Q, 1200 KC. BY PUTTING PHONES IN THE PLATE CIRCUIT. AND TUNING DEAD ON WOAL-SAN ANTONIO, WE KNEW WE WERE DEAD ON THE FREQUENCY. SOME MODIFICATIONS HAD BEEN MADE TO THE TRANSMITTER TO STABILIZE IT. STILL IT DID DRIFT OFF-FREQUENCY A BIT, BUT NOT ENUFF TO DEFEAT THOSE DX HOUNDS WHO WANTED US TO STAY UP ALL NIGHT AND BROADCAST MUSIC. THERE WAS A DEPRESSION COVERING THE LAND AND BROADCASTING DID BOTHER OUR FISHING. AFTER ABOUT FIVE OR SO HOURS OF TROUT FISHING, WE WUD COME HOME THOBOUGHLY COOLED OFF AND NOT TOO SLEEPY, SO WE WUD TURN ON THE TRANSMITTER AND YACK FOR A FEW HOURS AS I DID ON THE AMATEUR STATION ON 160 METERS. NO WORK IN THE MORNING SO WE CUD SLEEP IN, AND DID. THAT TRANSMITTER WAS HEARD AS FAR AS NEW ZEALAND AND AUSTRALIA. WE USED VERIE CARDS AND AMATEUR RADIO TO VERIFY ALL BONAFIDE LETT-ERS. AND HERE I AM FORTY YEARS LATER TRYING TO GET SOME VERIFICATIONS ON THE FM BAND, SO IT JUST HAS TO BE INCURABLE."

ALBERT H. ELLIS, 19 McClure Ave. BRANTFORD, ONTARIO, CDN.

#### FROM BILL MATTHEWS, COLUMBUS , OHIO:

SOME WHITES, ASIATICS, AND MULATTOS IN THE REPUBLIC OF SOUTH AFRICA WILL GET TV SERVICE IN ABOUT THREE YEARS TIME. BUT BLACKS WILL HAVE TO WAIT LONGER. THE REPUBLIC IS THE ONLY MAJOR INDUSTRIAL NATION IN THE WORLD THAT DOES NOT HAVE TV AT PRESENT.



INITIALLY, A SINGLE CHANNEL WILL BE AVAILABLE TO PROVIDE SERVICE TO 75% OF THE WHITE POPULATION, 84% OF THE ASIATICS, AND 60% OF THE NULATTOES. ALTHO THE RECOMMENDED SECOND CHANNEL FOR BLACKS WILL NOT BEGIN IMMEDIATELY, IT HAS BEEN RECOMMENDED THAT THE WITWATERS-RAND AREA GET SERVICE ASAP AFTER THE START OF THE FIRST CHANNEL FOR THE NON-BLACK PEOPLE.. ALL SERVICES WUD BE UNDER THE CONTROL OF THE GOVERNMENT'S SABC. NO SPONSORED PROGRAMS WILL BE ALLOWED, BUT ONLY SPOT ANNOUNCEMENTS BETWEEN PROGRAMS, AMOUNTING TO A MAXIMUM 10% OF BROADCASTING TIME SIX DAYS A WEEK, WITH NO ADVERTISEMENTS ON SUNDAYS. THE FIRST CHANNEL WILL BE ON THE AIR 37 HOURS A WEEK, IN COMPATIBLE COLOR. ENGLISH AND AFRIKAANS LANGUAGES WILL BE TREATED EQUALLY IN TH3 FIRST CHANNEL SERVICE, IN THE FIRST PHASE. THE SECOND PHASE WILL SEE SEAPRATE SERVICES FOR THE TWO LANGUAGE GROUPS AS WELL AS FOR THE AFRICANS (BLACKS). THEY INTEND TO EMPHASIZE PROGRAMS OF LOCAL ORIGIN, RATHER THAN THE GLUT OF FOREIGN PROGRAMING AVAILABLE.

WPNE-38, GREEN BAY, WISCONSIN WILL BE THE STATE'S NEXT PUBLIC STATION, DUE ON THE AIR IN OCTOBER. S TATE FINANCED (SIMILAR TO WHA-21.), WPNE WILL LEAE SPACE ON THE TOWER OF WBAY-2. THE STATE IS ALSO PREPARING APPLICATIONS FOR UHF CHANNELS AT WAUSAU, EAU CLAIRE, LA CROSSE TO COMPLETE THE STATE NETWORK. (WHEN WSAU-7 WENT ON THE AIR FROM RIB MOUNTAIN, SPACE WAS PROVIDED ON THEIR TOWER FOR A FUTURE PUBLIC STATION AS PART OF CONTRACT ALLOWING THEM TO BUILD A TOWER IN A STATE PARK.) IT HAS ALSO BEEN RUMORED THAT THE LOCATION OF SOME STATE FM TRANSMITTERS MAY BE CHANGED TO COINCIDE WITH THE LOCATIONS OF THE TV. TRANSMITTING TOWER 3.

RON LEBLANC OF MARRERO, LA WROTE SEVEN CA COUNTRIES ABOUT THEIR TV SYSTEMS AND RECEIVED ONLY TWO REPLIES. NICARAGUA OPERATES TWO NETS: CHANNELS 6 AND 8 (TV DE NIC.), AND TELEVICENTRO CH. 2 AND 4. EL SALVADOR LISTS ONLY YSR-2 AND YSU-4 IN THE CAPITAL CITY SAN SALVADOR. DAVE SWAN-SON LIVING IN THE CANAL ZONE SENT PHOTOS RECENTLY OF TV NACIONAL, CH. 2, AND RPC-4, HIS LOCALS IN PANAMA CITY, REPUBLIC OF PANAMA. HE BOUGHT A POLAROID CAMERA FOR DX, AND NOW HAS AN SC-1000 ON THE ROOF OF HIS BARRACKS (BOQ). WE'LL PRINT THE PHOTOS IN THE NEAR FUTURE.

## BOBS TECKNOTES

BOB'S TECK NOTES

Bob Cooper, Jr. 2609 Chaucer Drive Oklahoma City, Ok. 73120

#### QUESTIONS AND RESPONSES

CATV Radiation -

"I live in a town with a CATV system. In certain directions with my rooftop antenna I pick up the cable signals even though I am not hooked to the cable. Is there any cure?"

YES - there certainly is! Cable or CATV systems are required by FCC Rules and Regulations to limit their cable "radiation" to levels which if maintained cannot be picked up by roof-top antennas. In other words, you should be able to DX or watch fringe area TV on your rooftop antenna and not even know the CATV system is operating. Most cable radiation occurs because of improperly tightened or prepared cable fittings (at splices, into and out of line amplifier boxes, etc.), improper or non-existant grounding of the messenger wire that supports the actual cable (coupled with the cable itself being "hot"), or a house cable "drop" having been dis-connected at the set but not at the line; in which case the un-terminated house drop simply radiates signal in the immediate neighborhood. Another not so common cause is some cable viewer hooking both his antenna lead in and his cable drop to his set antenna terminals simultaneously; in which case the cable signals feed into his receiver AND into his antenna, and the antenna re-radiates the cable signals into the area.

To set the matter straight, contact the cable company first and provide them with a map of your own making showing the directions you receive the radiation. If possible, triangulate the radiation with some other antenna user to pin point the exact region it seems to be coming from. Tell the cable company engineer or technician that you know the problem can be solved, and that if it is not in say a week, you are going to file a formal complaint with the regional FCC office. If it comes to that, do file a complaint with the regional FCC outlet and include all pettinent information, including a map of where you believe the radiation is coming from, the date you reported same to the CATV company, who you talked to at the CATV company, what you were told, and what was not done about the situation. Eventually you will get results.

FM Tuners-

· (63) Strain Strain Company

"I am thinking about buying a good FM tuner for both normal listening and DXing. Is the Heath AR-15 and AJ-15 really so good? If it is, why is it priced below the top of the line Scott, Fisher, Marantz, etc. units?"

DAVID JANOWIAK has said it many times. I'll repeat it here again. In every conceiveable engineering test, every possible side by side comparison, the AJ-15 tuner or the AR-15 receiver has been found to be the hands down winner for best sensitivity and selectivity. Every major electronics magazine, Consumer Reports and even Heath competition have agreed. They are the best. Unfortunately, most DX'ers do not know what is an important "spec" and what is meaningless "spec". There are many impressive looking units on the market - but none work as well as the AJ-15 tuner or AR-15 receiver. If YOU want to impress somebody with how much money you have, buy something else. If you want the best reception, buy one of the Heath units. I believe it is fair to say that my own reputation is that of having nothing but the best. And I have owned an AR-15 and more

#### BOB'S TECK NOTES

Page two

recently I added the AJ-15. In 12 months I logged over 650 FM stations in 42 states, Canada, Cuba and Mexico - and that's pretty hard to beat.

#### ANTENNA Height -

"I live in a typical suburb and am debating about either raising my present antennas to 50 feet or buying a new larger antenna and keeping it at 50 feet. What do you think?"

Let's cite a few examples. I also live in a typical suburb. The land is more or less flat, with gentle rolling hills. The lowest point within the city to the highest spot (elevation) varies less than 125 feet, so the only major obstructions are man made and vegetation; power lines, buildings and trees. Last year, living a couple of miles away from my present location, I had my FM antennas at 55 feet. Stations 275-325 miles away were ALWAYS solid copy. This year, because of a smaller lot and no room for more than one tower, I am stuck with a rooftop short tower on FM, placing the antenna array center at about 25 feet. This year I hear the same stations (275-325 miles) only about ten percent of the time. Same receiver, same equipment, same antenna system. And same elevation above sea level. Only my height above ground has changed. In terms of engineering numbers, you are in real trouble for signals beyond 125 miles when you are BELOW the high signal absorbtion levels of 40 feet and down. Block and after block of houses, power lines and trees take a heavy toll in weak signal signal strength, and the ONLY way to combat it is to rise above this ground crud level stuff and get into the relatively un-signal-polluted levels of 50 feet and more. It's just like being buried in a low lying fog bank - when you climb above the crud level, the sky is clear and the air is warm . So by all means increase your antenna height first - then put up the bigger antenna!

#### CO-CHANNEL Interference -

"Many nights I leave my receiver running on channel 2 which has an 80 mile distant station on it; naturally I am keeping an eye peeled for Es. I notice many-many meteor bursts (evidenced by sudden bursts of co-channel) that seldom if ever rise above the 80 mile distant channel two signal level. If nighttime is supposed to be generally a poor time for meteors, why do I see more CCI indicated meteor bursts during this period then when I get up early in the morning and my 80 mile channel two is not on the air yet?"

An 80 mile distant signal probably runs around 100 microvolts, or in db talk, minus 20 db(mv) (with 0 dbmv equal to 1,000 microvolts). Tests have proven that we can detect the presence of co channel lines when the interfering signal is 40 db weaker than the primary, stronger signal. So if your channel two signal is averaging minus 20 dbmv (100 microvolts), a signal 40 db weaker than this would be minus 60 dbmv, or 1 microvolt. Unfortunately a TV receiver will seldom show even a frame bar or a hint of sound for a signal much weaker than minus 40 dbmv (10 microvolts). So many of the meteor bursts you are seeing are strong enough to show up as CCI, but not strong enough to show up as a signal on their own – when they are all alone on the channel. This may be difficult to understand without some engineering or technical background, but the simple fact is that CCI can be present when you have a signal for it to show up against, but the CCI causing signal may not even be detectable when it stands alone.

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#### HIGH Band Es

"I've read that the best time to look for high band E skip on channels 7 and 8 is when there is a strong Es opening on channels 2-6, and FM Es signals are also pouring thru. Is this true?"

NO - not necessarily so. During the past twenty years or so of semi and organized TV DXing, there have been approximately 20 authenticated reports of E skip occuring in the high band channel region. Most of these have been on channel 7, and cover such paths as Cuba/Mexico City/Florida to Texas, the mid-atlantic coastal states to the mid west and the mid south to the southwest. Few if any have been reported north of a line stretching rather arbitraily from San Francisco to Washington, D.C. The extremely dense portion of an Es cloud (ie. that highly concentrated "core region" that is sufficently strong or intense to reflect/refract signals above 120 MHz), if it exists at all, is sually very small, and short lived. It is possible and in fact probable that this dense portion of the cloud could be located in a portion of the much larger general Es cloud so that you would be receiving only very poor or marginal low band TV and/or FM signals at your location at a moment when a high band Es station is rolling thru. It appears that there is MORE high band Es, by a wide margin, than we catch. And I believe that DX'er habits (tuning channels 2,3,4,5 and 6 - and stopping) are more to blame for the lack of high band Es reports than the shortage of propagation conditions. It is a little late (but not too late) for the current summer, but everyone of us should begin to tune channels 2-8 or so during Es openings, in the same manner we have grown accustomed to tuning channels 2-6. The results could easily surprise us all!

DUCTS - again -

"Do I read you correctly? That ducts generally follow along weather frontal patterns?"

Base d upon our present knowledge of ducts, yes, that is true. The exact point along the front that will be productive is open to further study however. In some cases, the duct will form ahead of the front and be pushed along by the front itself. However, heavy or violent weather often also forms along the leading edge of a weather front and this type of weather formation will break up a duct quickly. Immediately behind a front, if the weather clears and stabilizes rapidly, the duct may either re-form, or an entirely different duct may occur. Ducts may linger behind a front by 10 miles or 100 miles. And be "dragged along" by the front as opposed to being pushed along by the front. I don't have any quanitative numbers at hand, but it appears that ducts forming behind a front tend to be more UHF oriented (ie. UHF only, with very; little if any VHF activity) than ducts forming ahead of a front. And, ducts forming behind a front also seem to produce weaker signals more subject to long term stability - that is they stay in longer, but never become very strong. It also appears that if a duct is noticed on the leading edge of a front, you have a 50-50 chance that a second duct will be found on the trailing edge of the front, although as noted, the two ducts will seldom be similar in type or scope, and because the front has moved through in the meantime, may not even produce ducting DX into similar areas. A front that produces ducting on the leading edge, moves past you and stalls just past you, is a good bet for a UHF weak signal duct on the trailing edge also.

73, Bob Cooper, Jr.

UROPEAN SCENE

Roger Bunney, Trelawne, Cupernham Lare, Romsey, Hants, SO5 8JH, England The remaining part of May sustained very good Sp. E conditions in Europe, but with June these conditions seemed to have dropped somewhat. My reception for the past four weeks is as follows:

15- RAI, IB; JRT, E4; TVE, E2,3,4. Trops, BRT, E2 19- Sweden, E2,3; DFF, E3,4; RAI, IA, IB; TVE, E2,3,4: W. Ger., E2,3; JRT, E3; TVP, 01,02; Romania, 02,03; USSR 01,02; ORTF F2 20- Czech 01; TVE E2,3,4; USSR 01,02

22- T/E E2. Trops, BRT E2 23- RAI IA, IB; JRT E3, E4; TVE E3, plus unIDs.

24- ORF E4; JRT E3, E4; RAI IA; W. Germany E2; plus unIDs. 26- USSR 01,02,03; TVP 01,02; RAI IA; TVE E2,E3,E4; BRT E2

27- RAI IA, plus un IDs

28- RAI IA, IB; JRT E3x2; ORF E2a, E4; TVE E2, E3, E4; USSR O1, + unID

29- NRK E2x2,E3; Sweden E2; ORF E2a; BRT E2, plus un IDs 30- RAI IA; DFF E3; USSR 01,02; TVP 01.02; Czech 01, plus un IDs

31 - RAI IA June

1- DFF E3.E4; ORF E2a; TVP 01,02, plus un IDs

2- RAI IA. IB; TVE E2, E3, E4; NRY E2, E3; plus un IDs

3- RAI IA

5- Swiss E2; Trops, BRT E2

6- MT(Hungary) 01,02; USSR 02; ORTF F2; ORF E2a,E4; RAI IA, IB; JRT E3, E4; W. Germany E2, plus un IDs.

7- TVE E2; JRT E3; plus un IDs 9- NRK E2x2.E3; Trops, BRT E2

10- Czech 01

12- Trops. BRT E2

The opening of 19th May gave me a new station in Poland, the TVP-2 outlet in Krakow with 1kw. Station opened at 1945 BST with a caption TVP-2, the 2 being extremely prominent, followed with a female announcer also with TVP-2 to the RH side. A second new station, on the 6th June, was the NDR station on E2 in W. Germany. In this area the openings seem to have favoured the LF part of the band, and the June openings certainly seem to be of lower intensity than May. However, a letter from A. Papaeftychiou in Cyprus tells of many openings each day. He-hos also experienced many strange signals. One, of a rather ornate test card, we think is possibly Bulgaria.

I have heard that LUXEMBOURG will be changing line standard from September 1, from the existing 819 line (like ORTF 1st chain) to 625 lines, + video, AM sound (like Belgium and ORTF 2nd chain). In 1972 a new mast is being built, with higher gain aerials at an increased height. Later in the Summer of 1972 UHF transmission will start on ch.

21 with 1000kw and SECAM system colour.

In Italy, the problems of external TV transmissions being beamed into that country continue to rise. Tele Monte Carlo are planning a station projected for SECAM colour in band 5 with 1000kw, on Bec Rouz Mount- Western Alps, north of Tenda to cover the Po Valley, and some Tuscany areas. Yet another staion is planned for Corsica, to cover the Tirrenian Cost into Rome, will also use the SECAM system.

Sunspot details for the month of May: Mean value for the month: 53.8 25th 25 26th 35 27th 49 17th 62 1st 41 9th 67 Next six months: 2nd 46 10th 73 18th 43 June 64 Sept 58 19th 40 3rd 52 .... 11th 61 Oct. 56 July 62 20th 40 28th 65 4th 59 12th 62 Nov. 54 5th 65 6th 64 29th 56 30th 58 Aug. 60 21st 38 22nd 30 13th 76 14th 73 31st 60 Courtesy Swiss Solar Observatory 15th 75 7th 72 23rd 15

24th 16 16th 81 8th 70

PRINTED signal 0
Use vetectable 1
Heavy snow 2
MANUAL Snow 4
Snow free 5

Audio (A)
No signal 0
Just detectable 1
Poor 2
Fair 3
Good 4
Excellent 5

Fading (F)
Auroral flutter 0
Deep fast 1
Slow deep 2
Moderate 3
Light 4
None 5

Interference (1)
Loss of signal 0
Extreme 1
Heavy 2
Moderate 3
Light 4
None 5

#### BERSHIPS DUE IN AUGUST:

NOTE NEW DUES RATES ----- YOU GET PREE BASIC COURSE IN DX" WITH 2 YR RENEWAL !

DANIELS, R. J. DAVI DEON, RICHARD DISTER, ROBERT DONAGHUE, DAVID DONOCK, MITCH

PARILLO, JOHN PRUS, LESLIE SHAPIRO, DAVID STANBURY, C. M. SEPTEMBER:

4 HOB , PETER LE CUMPTE, WM. D. LITTLE, THOMAS

#### DUE IN OCTOBER:

CAMPBELL, HERB EDDY, ROBERT FILES, NEAL HAWKINS, ROBERT WUDAR, JOHN A.

ne. 1903 / Children Se avendes dender

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THE ABOVE EMBLEM AVAILABLE PROM HQ FOR \$2 POSTPAID, BY ARRANGEMENT WITH DEI STAMP SERVICE. MAKE CHECKS PAYABLE TO THE CLUB, HOWEVER.

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