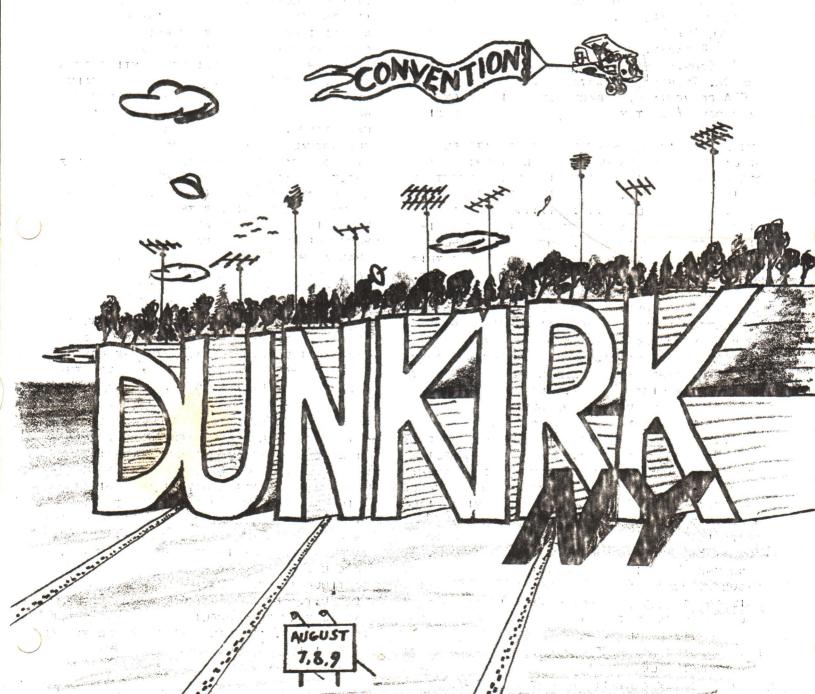
VHF-UHF DIGEST

JULY 1970





Headquarters

1970

As I'M SURE I NEED NOT MENTION, LAST MONTH'S VUD WAS A MIXED UP MESS. WE HAD THE VUDS ALL READY TO MAIL WHEN DAVE'S WIFE DISCOVERED WE HAD FORGOTTEN SOMETHING. SO THE PAGES INSERTED AFTER STAPLING WERE A LAST MINUTE OMISSION; BETTER LATE THAN NEVER. IN ADDITION, WE OCCASIONALLY DON'T GET A PAGE BACK-TO-BACK WITH ANOTHER PAGE OF THE SAME COLUMN, AND WE DID THAT AGAIN LAST MONTH AND THIS. HENCE WE HAVE DECIDED TO CHANGE THE COLOR OF A COLUMN OR TWO TO PREVENT THIS IN THE FUTURE. BEING CRAMPED FOR SPACE AT HQ, AND BESIDES THE COLUMNS COME IN AT VARIOUS TIMES AND WE CAN'T LAY THEM OUT AHEAD OF TIME, THIS PROBLEM WILL HAPPEN PERIODICALLY NO MATTER WHAT WE DO.PLEASE, WE'RE TRYING!

IN CASE YOU WONDER IF YOU MISSED ANYTHING LAST MONTH, HERE IS A TABLE OF CONTENTS:

FRONT COVER/PRESIDENT'S MESSAGE:	2 SIDES
FCC, TV AND FM:	2. "
TECHNICORNER/WAND SYNOPSIS:	2 "
EUROPEAN/EMBLEM PROPOSAL:	2. "
WESTERN TV/MAILBAG:	2 "
CENTRAL TV/CCI:	2 "
FM DX/ PRPAGATION WAND:	4 "
ANARC CONV. / PROPAGATION WAND:	4 "
VHF DX, TECHNOTES, EASTERN TV: 2 PG	
WTFDA CONVENTION, 2 PAGES OF 1 SIDE	EACH
BACK COVER/REPRT FORM	2 SIDES

THE LAST 2 ISSUES HAVE BEEN OF RELATIVELY LOW QUALITY DUE THE CHANGE IN MIMEO MACHINES AND STENCILS. THIS ISSUE IS STILL NOT PERFECT BUT A BIG IMPROVEMENT, AND A SIGN OF THINGS TO COME. THE SO-CALLED RECONDITIONED ELECTRIC MIMEO WE BOUGHT WAS FAR FROM BEING RECOND!-TIONED TO OUR STANDARDS. THE MAJOR PROBLEM WAS FIXED ONLY YESTERDAY (JUNE 20TH) SO THIS VUD ONLY PARTIALLY REFLECTS THE IMPROVEMENT. WE STILL HAVEN'T PAID A NICKEL ON THE MACHINE ALTHO A MONTH OVERDO; AND WE WON'T PAY UNTIL COMPLETELY FIXED TO UOR SATISFACTION WHICH SHUD BE VERY SOON NOW. SO WE EXPECT NEXT ISSUE WILL BE NEAR PERFECT, AND WE CAN BEGIN WORRY-ING ABOUT OTHER THINGS AGAIN. DUE TO THE OUT-LAY FOR SUPPLIES IN BULK, AND THE MIMEO TO BE PAID OFF BY THE END OF THE JUNE. OUR FIRST HALF FINANCIAL STATEMENT DOESN'T LOOK TOO GOOD. WE ARE NOT WORRIED SINCE WE HAVE ABOUT \$50 IN SUPPLIES ON HAND, OR ENUFF TO PUBLISH AT LEAST 2 MORE MONTHS WITHOUT BUYING ANYTHING OF MAJOR COST. HOWEVER, WE FEEL YOU SHUD KNOW THE STATUS QUO. THEREFORE, A BRIEF FINANCIAL STATEMENT WILL APPEAR ELSEWHERE IN THIS VUD TO INDICATE THE SITUATION 10 DAYS FROM NOW, JUNE 30TH, WHICH IS THE END OF THE PERIOD. WE KNOW THE VUDS WILL NOT BE MAILED BY THAT DATE BECUZ WE JUST OBTAINED STENCILS YESTERDAY TO MAIL TO SOME OF THE EDITORS. THIS WAS A HQ PROBLEM SO THE LATE MAILING OF THIS VUD. AND THE JUNE ISSUE ALSO, WERE FAULTS OF HQ THRU LATE RECEIPT OF NEW TYPE STENCILS WE MUST NOW USE ON THIS ELECTRIC MIMEO. (IN LATE MAY WE OBTIANED ONLY A LIMITED QUANTITY WHICH WAS PROMPTLY MAILED TO THE EDITORS); NOW WE HAVE 200+.

THE EXACT ORDER IN WHICH PAGES APPEAR IN YOUR VUD MAY VARY DEPENDING ON HOW IT WAS COLLATED. BASICALLY, COLLATING IS DONE IN THE ORDER IN WHICH PAGES ARE FINISHED AND THAT DEPENDS ON THE ORDER IN WHICH STENCILS ARE RECEIVED; SINCE THEY MAY BE RECIEVED ANYTIME OVER A PERIOD OF 2 WEEKS, WE CAN'T MAINTAIN ANY SET ORDER OF PAGES. FOR THE SAME REASON, WE CAN'T PUBLISH AN INDEX IN EACH ISSUE. UNTIL A FEW HOURS BEFORE THE ACTUAL MAILING, WE DON'T KNOW HOW BIG SOME COLUMNS WILL BE OR HOW BIG THE WHOLE VUD WILL BE. SEVERAL MONTHS AGO. WE PRE-STAMPED ALL COVERS WITH 10¢ STAMPS WHILE AWAITING THE LAST COLUMN TO ARRIVE. IT NEVER ARRIVED SO WE CUD HAVE MAILED THE VUD FOR 2¢ EACH LESS THAN WE HAD ALREADY PUT ON THEM. \$3 WAS WASTED THEREFORE. SINCE THEN WE HAVE NOT EVEN PURCHASED THE STAMPS UN-TIL THE LAST COLUMN IS RECEIVED AND WE DECIDE TO WAIT NO LONGER. IF PUBLISH-ING CAN'T BE FINISHED ONE WEEKEND. IT LIKELY WILL HAVE TO WAIT TIL THE NEXT WEEKEND WHEN DAVE AND I CAN GET TOGETH-ER AGAIN FOR FINISHING UP.

EFFECTIVE IMMEDIATELY, WE ARE RAISING THE PRICE OF SAMPLES AND BACK-ISSUES. SAMPLES WILL BE 50¢, AND BACK-ISSUES TO PAID MEMBERS WILL BE 35¢ EACH, EXCEPT THE JANUARY 1970 SPECIAL ANNIVERSAYR ISSUE WHICH IS STILL 50¢. IF YOU EVER STOPPED TO FIGURE IT OUT, YOU ARE PAYING ABOUT 37¢ PER MO AS A MEMBER, SO IT IS UNREALISTIC THAT SAMPLES AND BACK-ISSUES SHUD COST LESS. HOWEVER, AS A SERVICE TO MEMBERS, WE'LL CONTINUE TOOFFER BACK-ISSUES AT A SLIGHT DISCOUNT. THE NEW 50¢ RATE FOR SAMPLES HAS ALREADY BEEN PUBLISHED IN HAM TRADER IN MID-JUNE, AND WILL APLLY TO ALL FUTURE ADVERTISING AS WELL.

We often receive complaints at HQ about VUDs received late or not at all, and this isn't surprising since mail service has always gone down as prices have gone up proportionately. However, since the Spring USA mail strike, and the annual Canadian mail strike, the complaints have become more numerous. There are several reasons for this, if we may try to explain at least some of them. First of all, the VUDs have been mailed later in recent months, as late as the 13th one month; we never seem to make our deadline of the 1st of the month anymore. Technically, third class mail is not suppose to be dated because you would then know how long the PO took to deliver it. First class MUST be dated and there-fore you always know how long it took unless the date is illegible in the postmark.

OF COURSE THERE ARE OTHER REASONS BESIDES THE LATE MAILING. THERE ARE RUMORS THE PO STILL HAS STOCKPILED MAIL FROM THE SPRING STRIKE, ALTHO I HAVE NO WAY OF KNOWING IF THIS IS TRUE OR NOT. CANADIANS HAVE SOMETIMES VOWED THAT THIS IS TRUE UP THERE, AND THAT USA MAIL SERVICE IS MUCH BETTER THAN CANADIAN. IF TRUE, THEY ARE CERTAINLY TO BE PITTED BECAUSE WE KNOW HOW BAD IT IS DOWN HERE. (I MAILED A LETTER IN TORONTO 2 BLOCKS FROM THE MAIN PO LAST AUGUST; IT WAS CANCELLED 14 HOURS AFTER I MAILED IT AND RECEIVED LESS THAN A DAY AFTER THAT IN MILWAUKEE. I AM TOLD THE ONE DAY SERVICE AFTER CANCELLATION WAS DUE TO THE SPEED OF THE USA PO AFTER IT GOT HOLD OF IT, NOT TO THE CANADIAN PO HANDLING.)

IN THE PAST YEAR THERE HAS BEEN QUITE AN UPSWING IN MAILING OF VUDS BY FIRST CLASS AS MORE AND MORE MEMBERS GET DISGUSTED WITH THIRD CLASS. BEFORE LAST SUMMER HARDLY ANY MEMBER PAID EXTRA FOR FIRST CLASS BUT NOW A FULL 25% OF OUR MEMBERSHIP PAYS EXTRA! THIS USE TO BE A NUISANCE FOR HQ BUT IT CEASES TO BE A NUISANCE WHEN SO MANY MEMBERS INSIST ON IT. OVERSEAS MEMBERS WITHIN THE USPO, CANADIANS, AND ANYONE IN THE MILITARY ARE ENCOURAGED TO OBTAIN THIS SERVICE FOR SPEED, RELIABILITY AND FORWARDING. LET ME EXPLAIN.

THIRD CLASS IS CONSIDERED JUNK BY THE PO, AND IS THEREFORE SHIPPED AT THE CONVENIENCE OF THE PO---WHEN ALL FIRST CLASS HAS BEEN PROCESSED. IF THEY HAVE A BIG RUSH, LIKE
DURING THE CHRISTMAS CARD TIME, IT MAY SIT QUITE AWHILE BEFORE PROCESSING. WHEN SOMETHING
SITS LONG ENOUGH IT MAY ALSO BECOME LOST, AND OFTEN DOES. THE CHRISTMAS RUSH IS A PARTICULAR HEADACHE FOR THE PO AND FOR US. THE 1968 RUSH WAS THE FIRST WE ENCOUNTERED IN THIS
CLUB, AND SOME STORIES WERE UNBELIEVABLE: VUDS REACHING CHICAGO AS LATE AS 6 WEEKS AFTER
MAILING, WHILE OTHER CHICAGO MEMBERS RECEIVED THERRS IN ONLY 3 WEEKS. OTHERS NEVER RECEIVED THEIR VUDS AT ALL. IN 1969, I RECEIVED SEVERAL LARGE ORDERS FOR BACK-ISSUES AND
JELD UP THE MAILING TIL AFTER CHRISTMAS SO THEY WOULD BE SURE OF ARRIVING AT ALL AND IN
A REASONABLE LENGTH OF TIME. I WAS EVEN TEMPTED TO MAIL ALL VUDS BY FIRST CLASS WHETHER
THAT RATE HAD BEEN PREPAID OR NOT, BUT THIS WOULD BE QUITE AN EXTRA EXPENSE WITHOUT COMPENSATION SO I DECIDED AGAINST IT.

THIRD CLASS MAIL IS NOT FORWARDABLE FREE AS FIRST CLASS IS. SO IF YOU MOVE, WITHOUT SENDING SUFFICIENT ADVANCE NOTICE TO HQ, YOU ARE NOT LIKELY TO GET YOUR VUD. DELIVERY TIME OF THIRD CLASS IS NORMALLY UP TO 3 WEEKS DEPENDING ON DISTANCE AND THE CONVENIENCE OF THE PO. WHEN A CHNAGE OF ADDRESS REACHES HQ, IT IS IMMEDIATELY RECORDED BUT THERE MAY BE A LAG OF SEVERAL WEEKS FOR IT TO BECOME EFFECTIVE. IF A VUD HAS JUST BEEN MAILED IT MAY TAKE 3 WEEKS FOR IT TO ARRIVE; OFTENTIMES THE CHANGE OF ADDRESS IS TOO LATE TO CATCH THIS AND THE VUD WILL EITHER BE RETURNED TO HQ OR THROWN AWAY WITH-OUTNOTIFYING HQ OR THE RECIPIENT. THERE HAVE BEEN INCIDENCES OF A MEMBER NOT RECEIVING VUDs for several months and still not notifying HQ of a change of address. When 2 or 3 OF THESE INSTANCES OCCURRED ALMOST SIMULTANEOUSLY, WE BEGAN STAMPING RETURN REQUESTED ON THE COVERS SO THE VUDS WOULD BE RETURNED TO HQ WITH THE NEW ADDRESS. THERE IS A FLAT FEE OF 10¢ FOR RETURN, THE ORIGINAL MAILING FEE, THE RETURN FEE, AND THE REMAILING FEE ADD UP TO MAKE THE CLUB'S REMAILING FEE OF 30¢. However, ALL TOO OFTEN, THE MEMBER IS NOT CONCERNED ENOUGH TO SEND THE 30¢ TO HQ SO THAT ISSUE IS NOT REMAILED AT ALL. IT THEN BECOMES A BACK-ISSUE FOR RESALE TO SOMEONE ELSE. THE MEBERS SUBSCRIPTION IS NOT CHANGED BECUASE HQ HAS PAID FOR THE MAILING EVEN THOUGH THE MEMBER NEVER RECEIVED IT. ANY CHANGE OF ADDRESS SENT IN TOO LATE IS LIKLEY TO TURN OUT THIS WAY, SO IF YOU MOVE AND MISS A VUD OR 2, BLAME IT ON YOUR LATENESS, AND SEND THE REMAILING FEE TO HQ IF YOU WANT THOSE BACK-ISSUES. WE WON'T NOTIFY YOU. MILITARY PERSONNEL AND COLLEGE STUDENTS ARE THE MOST FREQUENT OFFENDERS. I HAVE MOVED QUITE A FEW TIMES MYSELF, USUALLY ON SHORT NOTICE, AND I REALIZE THAT THERE ARE MANY THINGS ON ONE'S MIND WHEN MOVING SO THAT MAG-AZINE AND NEWSPAPER SUBSCRIPTIONS MAY BE THE LAST THING TO OCCUR TO YOU AS IMPORTANT. THE POST OFFICE HAS CORRSPONDENT AND PUBLISHER CHANGE OF ADDRESS CARDS FREE OF CHARGE, SO I SUGGEST YOU KEEP A STOCK ON HAND IF YOU ANTICIPATE MOVING. THESE CAN BE FILLED OUT FAR AHEAD OF TIME EXCEPT FOR THE NEW ADDRESS, AND IT THEN TAKES VERY LITTLE TIME TO FILL IN THE NEW ADDRESS AND MAIL WHEN THE TIME COMES. IF YOU RECEIVE A LARGE NUMBER OF PER-ICALS AS 1 DO, THIS IS AN ESSENTIAL PART OF MOVING AND NOT TO BE TAKEN LIGHLTY IF SPEND-ING MANY DOLLARS ANNUALLLY FOR MAGAZINES YOU MAY NEVER GET WHEN YOU MOVE. FIRST CLASS WOULD SOLVE YOUR FORWARDING PROBLEMS IN MOST CASES, BUT ITS UP TO YOU TO DECIDE.

ELECTRONICS & PHILATELY

EVER THOUGHT OF COMBINING STAMP COLLECTING AND DXING-OR YOUR OCCUPATION? MANY DO.

STAMP COLLECTING HAS CHANGED DRASTICALLY SINCE WORLD WAR ?, BECAUSE STAMPS HAVE CHANGED DRASTICALLY. STAMPS ARE MUCH MORE COLORFUL, AND MORE NUMEROUS. SOME COUNTRIES DERIVE ALL OR MOST OF THEIR INCOME FROM SELLING STAMPS TO COLLECTORS WORLDWIDE. IN 1949 A FEW MILWAUKEEANS FOUNDED A CLUB TO FURTHER THEIR INTERESTS, TOPICAL COLLECTING. THEY DIDN'T COLLECTIA SINGLE COUNTRY OR A GROUP OF COUNTRIES, BUT A A TOPIC OR SEVERAL TOPICS. TOPICAL COLLECTORS ARE ONLY INTERESTED IN COLLECTING A CERTAIN THEME OR OBJECT OR OTHER SPECIFIC LIMITED AREA OF PHILATELY, NOT UNLIKE THE DXER WHO LIKES DX IN GENERAL AND ONE OR TWO BANDS IN PARTICULAR. THAT 1949 CLUB OF A FEW PEOPLE HAS GROWN TO OVER TEN THOUSAND COLLECTORS IN 21 YEARS! STILL HEADQUARTERED IN MILWAUKEE, THE AMERICAN TOPICAL ASSOCIATION (ATM) IS THE LARGEST SPECIALIZED PHILATELIC SOCIETY IN THE WORLD. PRAISE HAS BEEN LAVISHED ON THE SOCIETY BY EVERYONE FROM PHILATELIC PUBLICATIONS AND CLUBS WORLDWIDE TO DWIGHT EISENHOWER AND HIS POSTMASTER GENERAL ARTHUR SUMMERFIELD.

TOPICS ON STAMPS, BUT UNTIL COMPARATIVELY RECENTLY THERE WEREN'T MANY OF THESE STAMPS AND NO AVAILABLE LIST OF THEM FOR ME TO TAKE IN HAND AND SCROUNGE AROUND THE STAMP STORES. ABOUT A YEAR AGO HOWEVER, RTVE MAGAZINE (NOW SCIENCE & ELECTRONICS) BEGAN A COLUMN CALLED STAMP SHACK LISTED STAMPS OF PHILATRONIC INTEREST AS THEY CALL THEM. YOU MAM WISH TO LIMIT YOURSELF TO TV AND/OR RADIO, OR TO BROADEN YOUR FIELD YOU MAY WISH TO INCLUDE RADAR, TELEPHONE, TELEGRAPHY, SPACE SATELLITES, ETC. SOMETIMES IT IS HARD TO DRAW THE LINE BETWEEN FIELDS OF INTEREST IF YOUR IMA BINATION CAN SEE BEYOND THE ACTUAL PURPOSE OF ISSU-

THERE IS MUCH IN PHILATELY TO INTEREST EVERYONE, FROM A YOUNG CHILD TO PRESIDENTS NO KINGS. FRANKLIN ROOSEVELT AND KING GEORGE VI OF ENGLAND WERE AVID COLLECTORS, AS WAS CARDINAL SPELLMAN OF NY. IT IS A RESTFUL HOBBY WHICH TEACHES GEOGRAPHY AND HISTORY IF YOU ET NOT IT, AND ITS FUN. ITH THOUSANDS OF NEW STAMPS BEING ISSUED EVERY YEAR, IT IS NOT LONGER POSSIBLE TO COLLECT EVERY STAMP ISSUED. TIME AND MONEY WOULD NOT ALLOW. SO IT BECOME NECESSARY TO SPECIALIZE IN A PARTICULAR COUNTRY OR AREA, OR TOPICAL(S). AT BOOKLETS LISTING EVERYTHING FROM ART TO ZOOLOGY. IF YOU ARE A DOCTOR YOU MAY WISH TO LECT MEDICINE ON STAMPS? IF YOU LOVE ART YOU CAN COLLECT THE WORLD'S GREAT MASTERPIECTS IN THEIR FULL NATURAL COLORS. IF YOU LOVE GIRLS, COLLECT THEM ON STAMPS. I HAD THIS THING FOR QUEEN ELIZABETH WHEN I WAS IN MY EARLY TEENS, SO I COLLECTED HER.

NOW ITS QUEEN SIRIKIT OF THAILAND AND MRS. FERDINAND MARCOS OF THE PHILIPPINES WHO TURN ME ON). A FEW BEAUTY CONTST WINNERS HAVE ALSO BEEN PICTURED ON STAMPS, AND THERE ARE A WAYS FEMALE GYMNASTS.

OUS MERICANS ON THE STAMPS OF OTHER COUNTRIES), OR SPACESHIPS, ROCKETS, ETC IN THE SPACE FIELD, OR BIRDS, BUGS, CASTLES, RELIGION, SHIPS, SPORTS, FISH, FLAGS, FAIRY TALES, MAPS, WORLDSFAIRS, MARTIN LUTHER KING OR THE KENNEDYS, OR EVEN STAMPS ON STAMPS. THEIR ARE DOZENS OF ALREADY POPULAR FIELDS OR YOU MAY WISH TO START ANOTHER. OR YOU MAY WISH TO COLLECT THE COUNTRY OF YOUR ANCESTORS, OR A COUNTRY YOU'VE BEEN TO OR WANT TO VISIT SOMEDAY.

BUT OUR PRIMARY CONCERN HERE IS PHILATRONICS, OR MORE PARTICULARLY TV-RADIO. TV AND RADIO ARE STATUS SYMBOLS TO THE EMERGING COUNTRIES OF THE WORLD SO THEY OFTEN ISSUE STAMPS WHEN THEY OPEN A NEW SERVICE, OR IN THE CASE OF OLDER COUNTRIES THEY MAY ISSUE A STAMP TO COMMEMORATE THE ANNIVERSARY OF ESTABLISHMENT OF THE SERVICE. THE ANNIVERSARIES OF RADIO JAPAN, AUSTRIAN RADIO, AND THE VOICE OF AMERICA WERE COMMEMORATED IN RECENT YEARS. ENGLAND NOTED THE CONSTRUCTION OF A NEW POST OFFICE TOWER WITH TV RELAY, AND WEST GERMANY ISSUED ONE FOR THE ESTABLISHMENT OF THEIR COLOR TV SERVICE. A NEW TV RELAY SYSTEM IN THE RYUKYU ISLANDS (OKINAWA) WAS NOTED PHILATELICALLY, AS ARE THE FREQUENT OPENINGS OF TV SATELLITE GROUND STATIONS AROUND THE WORLD.

THERE ARE NUMEROUS WEEKLY, MONTHLY AND QUARTERLY STAMP PUBLICATIONS, AND THE ANNUAL CATALOGS PUBLISHED BY SEVERAL FIRMS. YOU MAY WISH TO LOOK AT SOME OF THEM IN LIB-RARIES IF NOT INTERESTED IN SUBSCRIBING. ALTHOUGH COLLECTING IS GENERALLY FOR FUN, WISE BUYING WITH THE HELP OF AN INEXPERIENCED BROKER CAN ALSO MAKE COLLECTING VERY PROFITABLE, AND AN EXCELLENT HEDGE AGAINST INFLATION.

Charles A. Dobbins 12851 Longacre Detroit, Michigan 48227

FCC

FM NEWS FOR JULY 1970
FM STATIONS OPERATING AS OF MAY 1,1970
Commercial FM 2118
Educational FM 413
Total FM 2531



TV NEWS - DATA

FCC COMPLETED ACTIONS (FINAL ACTIONS) 95.3 3 kw. Catherine Porter AAT 175 ft. *Berrien Springs, Mi. 90:9 17 kw. Andrews Broadcasting CO. AAT 300 ft. 90.1 10 w. University of Denver AAT 145 ft. *Denver, Co. 106.3 3 ky. University of Oklahoma AAT 151 ft. 90.5 10 w. Southern Colorado State College AAT 113 ft. *Norman,OK. *Pueblo,CO. Roseburg, OR. 103.1 2.7 km. WRR, Inc. AAT 218 ft. AUTHORIZED STARTS KPGY(FM) Ames, IA. 91,9 TPO 10 w. AAT 145 ft. WE TO (FM) Charlotte Amalie, VI. 101.1 50 kw. AAT 1500 ft. Cynthiana, KY. 102.3 3 kw. AAT 98 ft. WCYN-FM Fresno, CA. 95.5 50 kw. AAT 320 ft. KYNO-FM WGVL(FM) Gainesville, FL. 105.5 3 kw. AAT 265 ft. WBAQ(FM) Greenville, MS. 97.9 26.5 kw. AAT 120 ft. *WHWE(FM) Howe, ID. TPO 10 w. 89.7 KPUP(FM) Kingsville, TX. 97.7 3 kw. AAT 130 ft. Linesville, PA. 101.7 3 kw. AAT 220 ft. WVCC(FM) KLOQ(FM) Lyons, KS. 105.5 3 kw. AAT 175 ft. *WUKP(FM) Prestonbuey, KY. 89.1 TPO 10 w. St. Albans, VT. 102.3 3 kw. AAT 215 ft. WWSR-FM WICO-FM Salisbury, MD. 94.3 3 kw. AAT 170 ft. WCLF(FM) Tallahassee, FL. 104.9 38 kw. AAT 440 ft. *WETA-FM Washington, DC 90.9 75 kw. AAT 610 ft. CALL LETTER APPLICATIONS Andrews Broadcasting Corp., Perrien Springs, Mi. Req *WAUS-FM Broken Arrow Broadcasting Co., Broken Arrow, OK. req KBKN(FM) KZYM-FM Missouri-Illinois Broadcasti Co., Cape Girardeau, MO. req KFMP(FM) Xavier University, Cincinnati, OH. req *WVXU-FM Wayside Broadcasting Corp., Front Royal, VA. req WFFV(FM) *KCBL-FM Colorado State College, Greeley, CO. req *KUNC-FM Helena Vocational Tech. Center, Helena, MT. req*KHTC(FM) Miami Bible College Inc., Miami, FL. req *WMCU(FM) University of Oklahoma, Norman, OK. req KGOU(FM) Thomasville Broadcasting Co., Thomasville, GA. req WRTG(FM) Copiah-Lincoln Junior College, Wesson, MS. reg *WWCL(FM) CALL LETTER ACTIONS NorthernState College; Aberdeen, SD gtd *KASD(FM) Assurance Science Foundation, Cupertino, CA. gtd *KKUP(FM) Glendale Broadcasting Corp., Glendale, AZ. gtd KXTC(FM) Lincoln University, Lincoln University, PA. gtd *WLIU(FM) Rice County Broadcasting Inc., Lyons, KN. gtd KLOQ(FM) WMGW-FM Regional Broadcasters Inc., Meadville, PA. gtd WZFR(FM) Triple H Radio Inc., Mineral Wells, TX. gtd KMWT(FM) *WMKY-FM Morehead State University, Norehead, KY. gtd *WMKY(FM) Morristown Board of Education, Morristown, NJ gtd *WJSV(FM) Bowie County Broadcasting Inc., New Poston, TX. gtd KNBO-FM Radio Gulf Inc., Panama City, FL. gtd WGNE-FM KFMZ(FM), Robert W. Sudbrink, Pasadena, TX. gtd KYED(FM) Charlotte County Broadcasting Corp., Punta Gorda, FL. gtd WCCF-FM K. FM, Doubleday Broadcasting Co., San Antonio, TX. gtd KEXL(FM) Alfred Dienert and Walter F. Bennett, Waverly, OH. gtd WIBO(FM) Humphreys County Broadcasting Co., Waverly, TN. gtd WWRY(FM) Yuma Union High School District, Yuma, AZ. gtd *KOFA(FM)

```
FCC NEWS AND DATA JULY 1970
                                    PAGE 2 CHARLES A. DOBBINS DETROIT, MICHIGAN
APPLICATIONS APPLIED FOR OR GRANTED
Boulder, CO. Regents of Univ. of Colorado seek 89.3, TPO 1 kw. AAT 18 ft.
Carmel, CA. Monterey Bay Area Media seeks 101.7, 62.5 w. AAT 591 ft.
*Columbia, SC. The Benedict College, seeks 90.9, 15.8 kw. AAT 222.6 ft. Dillon, MT. Vigilante Broadcasting Co., seeks 98.3, 1 kw. AAT 480 ft.
Forest City, IA. Douglas E. Eddy, seeks 102.3, 3 kw. AAT 217 ft.
Georgetown, TX. Georgetown Broadcasting Co., seeks 96.7, 2.99 kw. AAT 290 ft.
*Lafayette, ID. Lafayette School Corp., Jefferson High School seeks 91.9 TPO 10 w. AAT 95ft.
*Longview, WN. Lower Columbia College seeks 89.9, 10 w.
Manistee, MI. Manistee Broadcasting Corp., granted 97.7, 3 kw. AAT 155 ft.
Mobile, AL. Gospel Voice Inc., seeks 92.9, 100 kw. AAT 348.6 ft.
Norway, ME. Oxford Hills Radio Communications Inc., seeks 105.5, 2.5 kw. AAT 324 ft.
Ocean Springs, MS. Charles H. Cooper seeks 103.1, 3 kw. AAT 295 ft. Orange, VA. WJMA inc. granted 96.7, 3 kw. AAT 170 ft. Oxnard, CA. Raymond J. Kandel seeks 98.3, 3 kw. AAT 107 ft.
Reno, NV. Elgin Capital Corp., seeks 106.9, 50 kw., AAT 2240 ft
Sallisaw, OK. Big Basin Broadcasters Inc. seeks 95.9, 3 kw.
Sun Prairie, WI. Sun Broadcasting Inc., seeks 92.1 , 3 kw. AAT 300 ft.
EXISTING STATION REQUESTS AND GRANTS
                                            KTRE(FM) Lufkin, TX. gtd KLUF
*KCEL-FM Greeley, CO. gtd *KUNC-FM
                                             KPOK(FM) Portland, OR. req KPOK-FM
KTRH-FM Houston, TX. req KLOL-FM
                                              KCCR-FM San Antonio, TX. req KFFR(FM)
WSAZ(FM) Huntington, WV. req WFAZ
CHANGES TO EXISTING STATIONS
WWAG(FM) Carrollton, AL. new FM ERP 30 kw., AAT 360 ft.
KPEN(FM) Los ALtos, CA. AAT to minus 175 ft., ERP 3 kw.
KRKD-FM Los Angeles, CA new xmtr to be installed, AAT to 480 ft.
KEBL(FM) Riverside, CA. ERP to 49 kw., xmtr change(type)
**KLLU(FM) Riverside, CA. new educ. FM ERP 1.40 kw., AAT 73 ft.
WEUS(FM) Miami beach, FL. ERP to 45 kw. AAT 170 ft.
WVTL(FM) Monticello, ID. ERP to 3 kw. AAT to 135 ft.
WHIC-FM Hardinsburg, KY. xmtr site chge, AAT dec. to 290 ft from 300 ft.
WCOP-FM Boston, MA. AAT to 500 ft.
KFMU(FM) Kansas City, MO. ERP to 77Kw. AAT to 390 ft.
WKER-FM Manchester, NH. ERP to 10.5 kw. AAT to 930 ft.
*WRPI(FM) Troy, NY. ERP to 10 kw. AAT to 370 ft.
KHEN-FM Henryetta, OK. ERP to 28.5 kw.
WFRM-FM San Juan, PR xmtr location chge., ERP to 25 kw., AAT to 1800 ft.
WLBG-FM Laurens, SC install aux. ant., ERP to 3.2 kw., AAT to 320 ft.
WRVC(FM) Norfolk, VA. ERP to 14.5 kw.
KACA(FM) Prosser, WN. chge ant, height to minus 275 ft.
WLVE(FM) Baraboo, WI. ERP to 37 kw. AAT to 1300 ft.
KUZZ-FM Bakersfield, CA. xmtr location chge, ERP to 4.3 kw. AAT to 1340 ft.
WXRT(FM) chicage, IL. xmtr and studio location chee, ERP to 50 kw, AAT to 500 ft.
*WSIE(FM) Edwardsville, IL. xmtr location chge,
*WNMR(FM) Marquette, MI. xmtr and studio location chge, ERP to 320 W.
*KBSB(FM) Bemidji, MN. granted license for new educational FM
KIVE(FM) Glendive, MT. ERP to 100 kw.
KWHG(FM) Lincoln, NB. AAT to 125 ft.
*WOFS(FM) Greensboro, NC. granted license for new educational FM
KCE-FM Springfield-Eugene, CR. ERP to 2.6 kw. AAT to 81 ft.
*KSTI(FM) Springfield, SD granted license for new educational FM
KIZZ-FM E1 Paso, TX. ERP to 27 kw., AAT to 1160 ft.
KWED-FM Seguin, TX. ERP to 38 kw., AAT to 130 ft.
*KMIH(FM) Mercer Island, WN. granted license for new educational FM
WDJC(FM) Birmingham, AL. xmtr location chge, ERP to 90 kw horiz., 30 kw. vert. AAT 540 ft
WJLN(FM) Birmingham, AL. ERP to 100 kw. AAT to 640 ft.
KFIG(FM) Fresno, CA. ERP to 50 kw., AAT to 310 ft.
*KEBS-FM San Diego, CA. install new ant. and xmtr.
*WLTI(FM) Lowell, MA. xmtr and studio location chge, ERP to 1.7 kw. AAT to 39 ft.
WLVH(FM) Hartford, CN. chge studio location, chge type ant.
WBEM-FM Chicago, IL. xmtr location chge, chge type ant., ERP to 6 kw. AAT 1180 ft.
 WKFM(FM) Chicago, IL. install new ant., AAT to 549 ft.
```

BAR TECH-NOTES

BCB'S TECK NOTES
July 1970
Page One

DXing THE TRANSLATORS

There are more than 2,200 operating translators in the United States (roughly 1,550 VHF and 650 UHF), and each is a prime target for the alert TV DX enthusiast.

Over the past five years most 'DXing of translaters' has been by mobile observations, through the region which the translator served. A few DX'ers have reported limited results as well with UHF (and an occasional VHF), in the 100-150 mile range for the most part.

A translator is a licensed (television) re-broadcast station. To be licensed by the FCC, the station operator must go through the same baneaucratic red tape as the standard TV station operator. Only, the translator (with few exceptions) is NCT licensed to broadcast any of its own programming; merely to repeat (or re-broadcast) the signal which it receives from the station it is licensed to re-broadcast (which may,incidentally, be another translator). In this way, it is very little different than a VHF or UHF satellite station, of which there are many.

The majority of translators are VHF, and they operate with power levels of 1,5 or 10 watts (with some minor exceptions). On the confines of the 12 VHF television channels, this is NCT very much power, and as you might suspect, these flea powered transmitters don't stand much of a chance against the 100 to 316 kilowatt VHF standard broadcast stations on their channels. These units serve regions of up to ten miles from their transmitting sites, usually with directional transmitting antennas that cover just the region they wish served. With very good tropo, it is possible to log high band translators up to perhaps 100 miles away, provided the channel is clear of any other signals. And, in very intense Es openings, it should be possible to log low band translators over standard Es distances ... again, provided the channel is clear.

UHF translators are licensed to operate with transmitter powers of 10, 20 or 100 watts (with a few exceptions, again). However, their actual radiated power is multiplied by the use of directional, moderate to high gain transmitting antennas, and may reach as much as 3-4 kilowatts in the favored direction(s). (On the other hand, if your receiving location is off-to-the-side of the antenna's directional pattern, you may be receiving the benefit of only a couple of watts!).

The UHF translators are normally licensed to operate from channels 70 to 83 (a few notable exceptions are K18AA in Salina, Kansas; W49AA in Peoria, etc.). This means that the channel 70-83 stations are essentially free of any co-channel interference from other more powerful transmitters (such as million watt-plus regular UHF), and any co-channel have is between two or more translators on the same channel.

The main mode of translator DX is tropo, ie. tropospheric bending. Fortunately, with many forms of tropo DX, the DX conditions actually improve higher up we go in frequency (channel). And this means that during tropo opening, the top UHF channels (where the translators are) will be propagating better than the lower UHF channels, or the high or low pand VHF signals. This is a plus, since with the relatively low power of the translators, they need all of the help that they can get!

Cn the receiving end of the line, most UHF DXing type antennas (especially the 5-7 foot parabolic antennas) work their best at the top end of the band ... again, where the translator action is. On the opposite side of the ledger, your UHF converter, your transmission line and (if you have one) your UHF pre-amplifier work their worst (if at all) in this region.

An example of the really plus benefit of added antenna gain can be found with the 7 foot parabolic as an example. This antenna has a meaared forward gain of 21-22 db at channel 70. To achieve this much gain channel 2, for example, would require that you erect an antenna sysusing 16 or more ten element channel 2 yagis!

Just how far translators (UHF) can be logged during tropo openings as yet to be determined. My experience here in Cklahoma suggests that 600 mile loggings of these little 100 watt transmitters is not impossible, since a couple have been logged in that range, and many have been logged in the 400-600 mile categorey. Not knowing where I am on the respective antenna transmitting patterns, it is difficult to estimate that what type of radiated power might have been coming my way. However, based upon the 100 watt transmitter power, it figures out to 5-6 miles per watt of power ... which is very decent at channel 70 and higher.

BASIC TRANSLATOR LOGGING PROBLEMS

Because translators operate un-attended, they do not 'cut' to a local slide or ID at station breaks. All ARE required to identify twice per hour, which is accomplished a variety of ways, using morse code. Even if you can read the morse, your chances are deciphering the call letters are remote, since often the video is keyed with streaks or pulses and with any snow or noise at all, you can't seperate the pulses from the snow/noise. So, it remains for you to use logic and the best information available to help you 'identify' the translator sources.

The only reference book in the field worth discussing is the annual TV FACTBCCK; at around 25. a pop. This includes a master listing of all translators with construction permits or licenses at the time of preparation; plus the call letters, power levels, and, the station which they are licensed to re-broadcast. This gives us something to work with, because the mathematical odds let us eliminate channels in the wrong antenna headings, even when the same originating station is being repeated by two translators on the same channel in the same general region. For example, from my Cklahoma City location, I know that only one manslator repeats KTVH-12, on channel XX 70, from a due north (O degree) antenna heading; and that is K70FK in Arkansas City, Kansas.

So the major clues to guide us in translator identifications are:

(1) Antenna heading (a closely calibrated rotor and a sharp antenna are a must, unless you like to guess!)

(2) Channel you are tuned to (more about this shortly)(3) Station which is being repeated (more also later)

Most UHF converters or UHF tuners are not very well calibrated on the 'top' end of the band. This causes some bad problems until you have an

opportunity to calibrate the dial yourself, using either a conversion chart or a marking pen (on your UHF converter), or thin tape strips to mark each of the 14 channels from 70 thru 83. Even then, with dial slippage, you may have it right one time and not right the next. I use K70EK as my calibration point whenever I question what channel I am on, since its 100 mile signal is virtually always seen here. The point is that when you have a station or two pinned down, you can use these as calibration points for the other channels.

The station being repeated is usually the one that is supposed to be repeated, but this is not <u>always</u> the case.

Remember that you are receiving the distant translator DX because very unusual tropo conditions exist. The translators are located in areas where television reception is poor, and this makes the translators <u>input</u> channel very susceptible to co-channel interference from other stations on the same input channel. If the tropo opening is quite good, you will usually see co-channel QRM on the signal, which is actually appearing on the input signal just as it comes off the air. Both the intended input station plus the CCI from one or more co-channel stations is repeated by the translator; it repeats anything fed into it. On occasion, the intended input station signal is covered by another co-channel input station, and you receive not the intended station through the translator, but another station; sort of DXing the DX, through the translator: (An example of this was my reception of a translator in Dubuque, Iowa which is licensed to repeat KWWL-7. However, KHQA-7 was so strong at the translator input that instead of KWWL I saw KHQA.)

If you are using a parabolic dish antenna, it's receiving beam pattern is razor sharp on the translator channels. You can easily seperate translator stations on the same channel, even if they are only ten degrees apart in antenna heading. This helps, because with a master check list of the translators on the air, you can sweep a region (by rotating the antenna back and forth) on a single channel (such as 70, and count off the stations coming through as the parabolic dish swings through the headings.

It may be tempting, but what you count is NCT the input station to the translator, but the translator itself. (It is tempting to count the input station, especially when it is one that you have not seen directly off the air!) The translators have call letters, and they are licensed like any other FCC controlled TV station. You count them for what they are ... (low power) UHF television stations.

Certain areas of the country have very high translator populations. The mountain states and the plains states lead the way, with many also operating along the Appalachin chain and east to the eastern seaboard.

And, because UHF translators are often in an area with no regular UHF activity, they provide a service in telling the DX er that there are unusual tropo conditions into that region. For example, west of Cklahoma City, in the Texas panhandle, there are no regular UHF stations. But there are 30 or so UHF translators, and often they come through when otherwise I would not be aware that the 'band was open for tropo DX'.

300-700 mile variety, in the early morning and late evening periods; this often happens when other conditions look quite normal and may bring in just one or a handful of stations, due to the ducting nature of this part of the year's tropo conditions. If you are equipped to DX both FM and UHF, and you discover a ducting condition at FM, look for UHF stations in the same direction on UHF. If your UHF receiving setup is sensitive enough, they will be there!

METEORS

organt most w

The major meteor season is here. For the next sixty days those who dream of adding new states to FM, their first high band MS loggings, or merely filling in awward distances on low band VHF, will have their hands full. In addition to the showers, there are MANY mornings with above average meteor burst counts, as we shall see.

Dates Shower Name	Best N/S	Best NW/SE	Best E/W	Best SW/NE
June 30- Taurids * July 2	0700-0900 1300-1500	1130-1300	1030-1130	0900-1030
July 14 Cygnids	None	2100-2330	0130	0330-0600
July 18- <u>Capricornids</u> 30	None	0100-0200	2300-0100	2200-2300
July 26- Aquarids *	None	0300-0500	0100-0300	0000-0100
July 27- Perseids ** Aug. 14	None	2330-0300	0300-0800	0800-1130
Aug. 10- Cygnids	None	1700-1930	2130	2330-0200

Major showers are starred (*). The annual SUPER SHCWER, the Perseids, deserves special mention. Although it begins in July, it peaks late in the period; usually between the 10th and 14th, with the evening of the 11th and 12th, and mornings of the 12th and 13th most likely to peak out. This is one shower that you do not want to miss!

Random mornings showing above average meteor burst counts are many in this period, and include: July 5 (count 26); 9 (count 32); 14 (count 35); 16 (count 24); 22 (count 33); 24 (count 36); 25 (count 31); 26 (count 34); 27 (count 24); 28 (count 28); 30 (count 29) and 31 (count 30).

In August, August 1 (count 37); 2 (count 32); 4 (count 32), 8 (count 35); 9 (count 33); 10 (count 42); 11 (<u>count66</u>); 12 (count 39); 13 (count 32); 14 (count 29).

Any dates with counts over 30 are in the shower categorey, and should produce high band (channels 7-9 anyhow) meteor scatter for those equipped for this type of DX. For any TV DX'ers and all FM DX'ers with average or better equipment, the whole period promises to be exciting in the 0500-0700 time periods.

73, Bob Cooper, Jr.

July 1970 - Page Cne

7011

PREDICTIONS OF DX CONDITIONS THROUGH AUGUST 15

E SKIP

July E skip openings are a mixture of July only type openings and (less frequently) the intense type June openings.

The typical July-type of opening starts slowly, builds slowly, has less fading than June (early season) openings, and fades out more slowly.

There are no 'best' times for any July openings; the 0700-0800 period, 1100-1300 period, 1400-1500 period and the 2200-0000 periods all produce some openings. The main stay remains the 1600-2000 period, as with June and other times of the year.

June-type (intense) openings that do occur in July tend to be real swingers. You might walk out on a slow fading, weak signal July type of opening, and not live to regret it, but if you run into an intense, channel 2-6 plus FM opening, stick with it because it will be a dandy!

In past years, there have been so many good July dates that it is difficult to pin point any dates to be especially close to. However, the period around July 24-30 almost always produces at least one good end-of-season June type of intense opening, so watch for it.

July is good for long haul single hop (1200-1500 miles) stations, and often you will have just one channel 2 or 3 station in this extreme long range area on the band for the entire opening. July is also good for Puerto Rico on double hop Eskip, and coast to coast double hop Eskip on channels 2-4. The last half of July is also a time when isolated reports of double and triple hop Eskip to northern South America have been reported by DX'ers through the years.

The first half of August marks the end of the Es season for another year, with most openings after August 1st in the 0800-1000 and 1500-1900 time periods.

TROPO

July can be one of the best tropo months of the year; it will depend upon how the weather front lines stabilize. One of the peculiar things about July tropo is the ducting situation; where you may receive stations up to 1,000 miles distant in a narrow band or single direction from your location. In situations like this stations in the 100-300 mile range may be normal or even below normah, but stations 2,3 or 4 times as far away (high band and UHF) are strong and clear.

Again, watch the early morning and mid-evening periods for signs of improving tropo conditions on the fringe and deep fringe stations, and you won't miss much of what is going on. Whenever you see one or more fringe or deep fringe stations up in level and quality, start looking more closely in the same direction(s) for further out stuff. July and August tend to be especially good months for FM tropo, of the

REVIEW CF Es CONDITIONS

Last month we looked at the Es conditions as recorded through May 15th in Oklahoma City, developing numbers as a method of measuring the quality of the new (1970) summer Es season.

With May complete and June half over, we can now go back and show totals for May 1-31st, June 1-15th versus May 1-15th, and attempt to draw out some numbers for the balance of the summer Es season.

May 1970 (one location only; additional all country totals later)

- (1) Total minutes of TV DX observed for 31 days 5,122
- (2) Total minutes of FM DX observed for 31 days 1,242
- (3) FM percentage of TV (percent of time TV open, FM also open) ... 24 %
- (4) Average <u>length</u> of May (1-31) FM Es opening 88.7 minutes

June 1-15

- (5) Total minutes of TV DX observed for 15 days 3,423
- (6) Total minutes of FM DX observed for 15 days 268
- (7) FM percentage of TV (percent of time TV open, FM also open)08 %
- (8) Average length of June (1-15) FM Es opening47.0 minutes

During the first 15 days in May (which was also the start of the season), we recorded 1,875 minutes of TV Es and 490 minutes of FM Es. As you can see by comparing with lines (5) and (6) above, May 1-15 was better for FM Es, not as good as June 1-15 for TV Es.

As this is prepared the expected upturn in Es conditions after the 20th or so of June has not materialized. Through mid June and slightly beyond, the quality of both TV and FM Es openings has been -on the average- much poorer than the like period in May. Weak level openings persist for hours at a time, but signals seldom exhibit high signal strength levels or stability; both of which are prerequisites to FM E skip.

The late up-dated outlook for JuXly remains mixed. Based upon the May records (or record May, as you will!), July looks most favorable. However, based upon the first portion of June, it does not look so hot.

We'll stick with our earlier prognostications at this point and point to a general upturn in Es conditions in July, surpassing last July in all quarters and very possibly making it one of the best July's in the past ten years. Particularly attractive are the periods July 1-6; 'around' the 10th, 12th, 20th and the week or so from July 21-22 to 29-30th.

Finally, as an aside, June tropo, while not outstanding, has been (in spots) substantially improved over 1969 in many quarters. The surface air movements this summer are tending to be More 'August-ish' in the north and 'May-ish' in the south. This is producing an interesting mixture of lingering moist air in the south and clear, cool air in the north. IF this pattern holds, July should be outstanding!

There has never been a VUD printed translator list, and until a sufficent number of members are chasing translators, there is no reason to prepare one; or include translator news in the monthly FCC news column.

The world of translator DX is relatively new. The key that has unlocked this world for me has been the 7 foot parabolic antenna, and the installation of a top flight UHF receivingsystem. The next step is for everyone to change their DXing habits. Deliberately tune all the way to the top of the UHF band, when we are sweeping the channels for DX. Find out where your closest UHF translators are located, and make it a point to start checking for them when tropo conditions are above normal. With a seven foot dish 50 feet or more in the air, you should find translators out to 100 miles are duck-soup regular copy every day, provided you are not in a null of their transmitting antenna pattern.

There are around 650 UHF translators up there above channel 69, just waiting to be DXed. How many will you have logged by the end of the year?

A REMINDER FCR AUGUST

Just a reminder that the complete how-to-build-it article featured on the cover of the August issue of <u>HAM RADIO</u> magazine will tell you everything you need to know about building up your own INTERDIGITAL PRE-AMPLIFIER for VHF TV DXing.

If you don't have a supply house nearby that has HAM RADIC in stock, write directly to the magazine at Greenville, New Hampshire (see Jung VUD, TECK NCTES).

Good DX - Bob Cooper, Jr.



WE HAVE DISCOVERED A COUPLE ERRORS IN THE PRINTING OF THE VUD TIS MONTH AND ARE TRU-LY SORRY. WHEN WE GET ON AN ORGANIZED EARLY SCHEDULE AGAIN WE CAN VIRTUALLY ELIMINATE SUCH ERRORS, OR REDUCE THEM TO A MINIMUM.

UNLESS RECEIVED IN THE NEXT 48 HOURS, THE FOLLOWING COLUMNS WILL NOT APPEAR THIS MONTH: VHF RADIO, CCI, SND FM DX. THE FIRST TWO EDITORS NOTIFIED HQ WHY THEY WOULD NOT APPEAR: LACK OF REPORTS AND SHORTAGE OF STENCILS. WITH POOR SKIP AND TROPS IN THE MONTH OF JUNE, THIS IS NOT SURPRISING, ALTHO THE REGULAR TV DX EDITORS STILL HAD ENUFF MATERIAL FORTUNATELY. THE DX SEASON IS COMPARABLE TO LAST YEAR IN MANY AREAS SO ITS QUITE A DISAPPOINTMENT ALL AROUND.

RENEWALS DUE IN JULY:

BOB ASTMANN

J. P. TAYLOR

DON EGGERT

JERRY PULICE

DAVID SHAPIRO

BILL RATLIFF

RENEWALS DUE IN AUGUST:

DICK DANIEL BOB MALLORY PAUL RUGINIS

MITCH DONOCK BOB MCCOY STAN SAVAGE

BOB GRACE JOHN PARILLO PAUL TRASKA

JEFF KADET KEITH POWERS SAL ZANGRI

TOM MANN DON RULAND

THE ENCLOSED CARD FROM WJIB-FM IN BOSTON, COURTESY OF MEMBER SHELDON SWARTZ WHO IS WORKING ON AN FM STATION LIST FOR THE CLUB, NEED A FEW CORRECTIONS: WBOS-FM IS NOW WBOS; WRKO-FM IS NOW STEREO WROR; AND WGLR-FM HAS CHANGED ITS CALL LETTERS TO WNHS.

PREPARING AN FM STATION LIST IS A VERY BIG TASK AND SHELDON WOULD WELCOME WHATEVER ASSISTANCE OTHER MEMBERS CAN GIVE, NO MATTER HOW SMALL. SO WRITE HIM AT BOX 56, SHARON, MASS. 02067.

V4/7 nadic

Pat Dyer
327 Solar Drive
San Antonio, Texas 78227

JULY 1970

Before I took this column I was advised that the contributions to it would be low. That was almost an understatement.

Perhaps DXing the VHF pagers is too easy, not enough challenge with them IDing every 15 seconds. I admit the messages (when they have them) are not the most exciting or entertaining either. I'm just a propagation nut so I simply view them as MUF indicators.

just a propagation nut so I simply view them as MUF indicators.

I know that more of you have 30-50 equipment out there than are sending in reports. If you do get some DX, send it in. I've got plenty of room for it in the column.

I meant to include the following information in last month's column but ran out of space. If you are interested in regional directories of VHF stations (business, public safety, etc.) Communications Research Bureau, P.O. Box 56, Commack, NY, 11725 has a huge variety. Drop them a line for a list of the various ones they sell. The usual price is around a dollar or two.

My apologies for the quality of the May <u>VUD</u> column. It had been some time since I had cut any stencils.

Robert Cooper, 6221 Norman Road, Oklahoma City, OK 73122 sent along some nice Es loggings of the 43-MHz pagers. (CDST used)

 May 11: 0950, Kig 300
 May 17: 0709, Kie 367

 KGA 804
 May 18: 1002, KQC 881

 May 12: 0900, KOE 257
 May 21: 0823; KQC 881

 L307, KQC 881
 KOE 257

 May 13: 1723, Mexico City
 0936, Pittsburgh

 1943, KGA 804
 May 23: 2020, KGA 804

 Pittsburgh
 May 29: 1653, KIE 367

 May 16: 1002, Mexico City
 May 30: 0810, KIE 367

 1210, KOE 257
 1805, KIF 653

 1600, KQC 881
 May 31: 0820, KIE 367

 2200, KIG 300
 May 31: 0820, KIE 367

Ferdinand Dombrowski, 1311 West Madison Street, Apt. 11, Milwaukee, WI 53204 also managed to get some of the Es of late with an Allied A 2589 and a TV conical antenna. (CDST used)

 May 16:
 1642, Oklahoma City
 Jun 8:
 2005, KIY 508

 1920, KIY 508
 Jun 11:
 1550, KGC 223

 May 30:
 1355, KIY 508
 1555, Oklahoma City

 1405, KIG 667
 1745, KIY 508

 2130, KKI 445
 1755, KGC 266

 May 31:
 1407, KIY 508
 1845, KGC 223 (43; new)

 Jun 1:
 2013, KIY 508
 1935, KIE 367 (new)

 Jun 3:
 1850, KKI 445
 1944, KIG 300

 Jun 4:
 2000, KIY 508
 2120, KIF 653

Now for my own log. For 30-50 MHz an Allied A-2586 with its built-in whip and 30 feet of indoor random wire are used. For 50 MHz a Swan 250 with a Swan NS-1 noise silencer and a 3-element Cushcraft horizontal beam at 20 feet. All reception via Es unless noted otherwise. 50-MHz Es deleted. CST used.

			ZKlaa (F2	2)	Jun	4:	1130,	KDN 492	
May	51:		KIM 905 Long Bead	ah .			1310	KSC 645 WWA 335	
		1200,	KMA 829	7			2005,	Long Be	ach
			KIY 508		Jun	5:	0845,	KIY 508	
May	23:		KIE 367 Long Bead	h				KIF 650 KIF 653	
May	25:	0340,	KAI 927 ((new)				KAD 931	
		0805,	Long Bead	ch	•			KSC 645	
May	26:	2350.	KIY 508 KAI 927					Long Beakor 257	
			KFL 936		Jun	6:		KIY 508	
			Long Bead	ch	Jun	7:	1600,	Long Bea	ach
May	28 .		KMA 829 KFJ 921 (now)				KIY 508	
Hay	20.		KIY 508	(Hew)	 			KSC 645 WWA 335	(F2)
		1210,	Long Beac	h				KIM 905	(12)
Morr	20.		KMA 829		Jun	9:		KAD 931	
May	29:		KIY 508 KIM 905					KIY 508 KIN 645	
			Long Beac	h			1210,	KFJ 891	
			KMA 829				1700;	Long Bea	ach
			KSC 645 KFL 936		Tun	11.	1840,	KSC 645	4.9
May	30:		KIM 905		<u>o un</u>	77.	1315.	KQD 697	(new)
			KSC 645	. 7			2025,	KIY 508	
			KIY 508 KIE 367		Jun	12:	1130,	KDN 492	
		1940,	KIF 650					KIY 508 Long Bea	ach
May	31:		KAD 931		Jun	13:	0720,	KIY 508	
			KIM 905	lh .				Long Bea	ach
			Long Beac KIY 508					KIF 650 KFL 936	
		1435,	KIE 367			14:	1125,	Oklahoma	a City
			KIF 650		Jun	15:	0920,	KIM 905	
			KIF 653 KMA 829				0930,	KIY 508 KIG 844	(now)
			Oklahoma	City	Jun	16:	1740.	KIY 508	(Hew)
Jun	1:		KIY 508				1805,	KIF 650	
Tun	2.		KIM 905 KIY 508					KIM 905	
Jun	<u></u>	1120,	KAD 931					KIG 300 KSC 645	
			KIF 650				2015,	KIQ 510	
Jun	3:		KSC 645					KIF 653	
	: :1	1745	KIM 905 KFJ 891 (new)				KAD 931 KDN 492	
		,	(17,	172	

```
Jun 17: 1110, KFL 936
1720, KIM 905
1835, Long Beach
                                                      Jun 23: 0755, Pittsburgh
                                                                  0800, KIF 650
                                                                  0815, KIY 508
<u>Jun 18:</u> 1125, KHY 508
                                                                  0910, KIE 367
                                                                  1015, KIF 651
Jun 19: 1215, KIY 508
            1235, Long Beach
1320, KIE 367
1520, KIG 300
1550, KIF 650
                                                                  1050, KIN 645
                                                                  2030, KAD 931
                                                                  2100, KSC 645
                                                2215, Oklahoma City
2240, KIM 905
2250, KDN 492
Jun 24: 0000, KSC 645
                     KIF 653
            1755, KSC 644
Jun 20: 0125, KAD 931
1255, KIY 508
Jun 21: 1930, KIM 905
2040, KIY 508
Jun 22: 0840, KIQ 999 (new)
1230, KMA 829
            1820, KSC 645
                                                                   0935, KQC 881
                                                                   1010, KIY 508
                                                                   1015, KSC 644
                                  1015, KSC 044
1250, Long Beach
1710, KIF 650
1955, KAD 931
Jun 25: 1745, KIF 650
1810, KIY 508
             1300, KSC 645
                                                                   1810, KIY 508
Jun 23: 0725, KIF 653
             0735, KIG 300
0750, KIQ 999
                                                                  1930, KIE 367
```

```
      KAD 931 35.58 Kansas City, MO
      KIY 508 35.22 Orlando, FL

      KCC 266 35.58 Springfield, MA
      KKI 445 35.58 Houston, TX

      KGA 804 43.58 Philadelphia, PA
      KMA 829 35.58 California

      KGC 223 35.22 ''
      KOE 257 43.58 Phoenix, AZ

      43.22 ''
      KQC 881 43.58 Cleveland, OH

      KIE 367 43.58 Miami, FL
      KSC 644 43.58 Chicago, IL

      KIF 650 35.58 Birmingham, AL
      KSC 645 35.58 Chicago, IL

      KIF 651 35.58 Ft. Lauderdale, FL
      WWA 335 35.22 San Juan, PR

      KIF 653 43.58 Memphis, TN
      - 35.58 Long Beach, CA

      KIG 300 43.58 Atlanta, GA
      - 43.57 Mexico City

      KIG 844 35.58 Augusta, GA
      - 35.58 Oklahoma City, OK

      KIM 905 35.22 Charlotte, NC
      - 43.58 Pittsburgh, PA

      KIN 645 35.22 Miami, FL
      ZKIAA

      KIQ 510 35.58 Jacksonville, FL
```

KAI 927, KDN 492, KFJ 891, KFJ 921, KFL 936, KIN 645, KIQ 999, KMA 829, and KQD 697 are all 35 MHz region stations which ID by Morse code tone (A2). The ID often runs ''QRA DE ---'' and is sent three times. KIG 999 earlier reported may have been KIQ 999 with tape troubles. ZKlAA runs a c.w. (A1) beacon. KIF 650 was listed incorrectly before as KIF 663.

Well, that's how 30-50 has been lately. The Es season is about past the midpoint but there should be plenty of it on up to the time F2 returns. Some days in June the F2 MUF has been up to 42 MHz into South America. The sun spot cycle hasn't died yet, and the fall and winter should supply ample F2 across the US up to near 40 MHz. Next spring will most likely be the last for years for 50-MHz F2 DX.

73, Pat WA5IYX/5



WTFDA 1970 CONVENTION REGISTRATION FORM Please complete and mail Please include a Robert Seybold as soon as possible and SASE for confir- Mail to: Bennett Road not later than July 30! mation reply. Dunkirk, New York				
Please reserve a motel room for me, for the following dates: August,,,1970				
at the following rate per day: (%6-\$8, or \$10-\$12) I would be interested in				
sharing a room with one or more DXers for a possible rate reduction: Yes () No ().				
Comments:				
() Enclosed is \$10 Advance registration fee (per person). () Will pay at convention.				
(Registration fee includes one dinner, refreshments, and other club convention expenses.)				
If you can provide transportation for other DXers in your area, or along the way,				
(splitting gas expenses) please explain:				
If you still need transportation and would be interested in traveling with another DXer				
(splitting gas expenses), please explain: (We're not guaranteeing a ride, but will				
make every effort to put you in communication with any DXer in your area that can				
provide a ride. The sooner you write, the better chance you'll have. If all else				
fails, there's always Greyhound!)				
About what time, on what day do you expect to arrive?				
Please check, if you plan to bring any of the following: () DX tape (reel to reel)				
() DX tape (compact cassette) () 35 mm slides () 8mm DX movie () Super 8				
Name Number of Persons included in this				
Address reservation				
City State ZIP				
I am primarily interested in: (For program planning) () TV-DX () FM-DX () VHF Radio				
() Other DX also interested in () TV-DX () FM-DX () VHF Radio () Other DX				

Conducted by

David T. Janowiak

TIPS & TECHNIQUES, PART II, INEXPENSIVE SIGNAL INDICATIONS

NEED FOR SIGNAL STRENGTH INDICATION

TECHNIZORNER - JULY 3661 South 46 Street

Greenfield, Wisconsin INDICATIONS

t DXers at least once must have said, "Gee, that station is strong. It must be X times as surong as usual."

The ability to tell, at least comparatively, differences in signal strengths seems well worthwhile. Let's list just a few benefits.

- (1) Curiosity. Even for the nontechnical, it would seem quite interesting knowing just how much stronger, for example, a semilocal becomes during improved conditions. Or, it might be interesting noting how much stronger a station became during an opening compared to the same station logged by a nearby DXer.
- (2) Tell how fast an opening is building up, or decaying, by using fringe stations in various directions as indicators.
 - (3) Record daily signal strengths of locals and semilocals.

All of us are aware of increased trops reception in the warmer months. Recording this info during normal and DX conditions might prove interesting. It might be possible to evaluate conditions on a day-to-day, month-to-month basis, from one season to the next. You might more clearly see which paths are most likely to open under certain conditions.

NOTE: Some may not be too thrilled with the idea of reading signal strength via a meter because one can see signal difference on the tube. However, I doubt if more than a few DXers realize what a 6 DB increase (twice the voltage) looks like In fact, a 10 times voltage gain (20 db) of a strong signal might seem minor, but a 6 db improvement in a weak signal might just be enough for an ID. Also, it is next to impossible remembering signal levels from day to day. Something to hang your hat on, a number, is necessary.

- (4) Detect amplifier (amp) malfunction. Any amplifying device, especially tube type, can "run down". If this occurs slowly and you aren't aware of it, you could be running with a less than icient TV rf amp or a half-dead mast mounted amp. The strong locals, of course, will not seem affected. Periodic signal strength checks should create suspecion of such problems.
- (5) Equipment evaluation and checks. Antenna comparison is easy if you know how to translate signal strength reading into meaningful data. (This will be discussed later when we combine meters, attenuators, etc. and "calibrate" our meter.) Also, amplifier gain, filtering, trap loss, or equipment insertion loss can be easily checked. Gain, F/B ratio, and directivity of antennas can be at least roughly measured by using the techniques described in this series.
- (6) Adjust DXing aids for optimum performance. Some DXers might have no interest in the topics mentioned above. They may, however, use selective tunable traps like the CM and Jerrold types. Without a signal meter to see what's happening, you might be missing several db of attentuation, and that just might be enough to miss a weak adjacent channel ID. In fact, I have tuned the Jerrold's by watching the TV screen only, then returned with a signal strength meter, and the difference was as much as 6 to 8 db.—Also, if you buy or build the TPA mentioned last month by Bob Cooper, you will find it impossible to realize repetative maximum gain and filtering unless you have some signal indication. (This should not discourage anyone from obtaining an IPA; it can be a worthwhile DXing device. However, I want to emphasize that most truly good that is, selective tunable traps, filters, or amplifiers, require extreme care in tuning, care that often cannot be obtained by eye. I would fall about 3 db short of maximum IPA gain under some conditions if tuning without a meter, even with the IPA calibrated. Of course, using Varactors and associated components to tune would simplify this, but that's an added cost.)

METHODS

The professional field strength meter (FSM) simply measures in microvolts a select signal. A microvolt is one-millionth of a volt (0.000001). As you might expect a FSM is quite costly, proy ranging from a few hundred to several hundred dollars. It's great if you have one, or use one constantly in your work, but otherwise hardly worth the cost.

Several articles have been written describing construction of signal strength meters (S-meters) for connection into some part of your receiver. Many of these S-meters have some disadvantages and limitations, but it may be worth the cost. (Cost may vary from a few dollars to \$20 depending upon the type, availability of junk box parts, etc.)

TECHNI/CORNER Page 2

I now have two or three articles of this type in my library of magazines, books, etc. If anyone is interested, I'll try to locate these articles.

For those DXers who have certain volt-ohm-milliammeters (VOM's) or any type of VTVM, signal indication is just a matter of connecting into the correct circuit. Signal strength reading can be made at a few points in a TV, but the AGC circuit is most convenient. In fact, most construction type S-meters connect into the AGC line.

SIGNAL STRENGTH DETECTION VIA AGC LINE

Every TV receiver has an AGC (automatic gain control) circuit. Although circuits vary, all have one thing in common: They automatically sense input signal level and control the RF and IF amplifier gain.

Basically, AGC action is much like a tetter-totter. A 200 pounder on one end of a center balanced tetter will not get off the ground with a 100 pounder on the other end. Similarly, a weak signal may not be seen unless all amplifiers are told to amplify. But if amplifiers were operated full gain, they would overload when strong signals arrive. The AGC provides the adjustable gain necessary for all conditions by supplying a varying d-c voltage to the bias circuits. For any value of input, therefore, a given AGC voltage is fed to the amplifiers. Normally, one voltage range feeds the RF amplifier, another range feeds the IF.

You can read AGC voltage conveniently (usually) at the tuner itself. Most tuners have a terminal block or lug strip that accepts wire for B+, heaters, and AGC. Some tuner manufacturers used the following color code: White = AGC, black = heater voltage, red = B+. This probably was not a universal code, however.

If you have a VOM or VTVM, you can easily determine B+, heater voltage, etc.and isolate the AGC line. When you connect from AGC to ground, you should see a varying low d-c voltage when antenna is rotated. Or, you should see a voltage change from strong and weak signal.

Range of AGC voltage will vary. With no signal received, RF amp will be fully on; with strong signal, amp will be nearly off. However, tube type RF amps are often biased so that they need an AGC voltage of changing polarity to control adequately over the range needed. Typically, the AGC voltage might be + 0.5 volts with a blank channel monitored (full gain). As signal received increases, voltage goes toward 0. A stronger signal causes -0.1, -0.2, etc. readings. You must change meter polarity when you pass through the zero point My Zeniths' AGC range is from about +.6 to -7.0 volts. Ranges will differ with individual design.

NOTE: For the technically curious, reason for the "dual polarity" AGC action is quite simple. A tube RF amplifier without an external bias voltage in the popular grounded cathode circuit will have some negative potential (usually less than a volt) on its grid. This is because of the so-called "contact bias" due to diode action between grid to cathode. Consequently, a tube so connected is almost fully on because it is almost biased for maximum gain, the only thing preventing maximum gain being that small diode drop. A small positive signal, however, slightly less than the small "contact bias", will buck the diode drop and cause a total bias that makes the tube full on. At one value of received signal, the AGC voltage is zero, and the tube operates entirely on "diode drop". As received signal increases, of course, a negative AGC voltage is added to the negative diode drop to turn the tube more off.

USEABLE METERS

Any VTVM (vacuum tube voltmeter) will work fine because it has a very large input impedance. That means connecting it into a circuit for measuring voltage does not disturb the actual circuit parameters. A high imput impedance VOM (volt-ohm-milliammeter) should work also. However, a low impedance type might distrub the AGC circuit and detract from AGC action. Try it with weak and strong signals and note the difference on the pix tube as meter is connected. If it changes the signal strength very little, it can still be used because you need connect the meter only when you check signal strength. A 20,000 ohm per volt type meter should work fine, but again, much depends upon the component values, circuit time constant, etc.

Next month, part III, S-Meter limitations and uses.

WESTERIN TY DX

July 1970

This must be a record. I'm sure I've gotten more reports this month than for any column I've

Dennis Park Smith 450 Poplar Avenue Wasco, California 93280 U.S.A.

Deadlines: 12th of each month Please use above summer address; mail addressed to Santa Barbara will be forwarded, however.

had in any club. More 26-29-April tropo to Oklahoma, though no further outstanding such DX anywhere since. Auroral activity is reported from Iowa 21 April. Of course, the big news is sporadic-E, with openings in this column on these dates in May: 2,5,6,7,9,10,11,12,13,16,17,18,19,21,22,23,25,27,29,30,31; June, so far: 1,2,3,4,5,6,7,10. Es was particularly strong on 9-10-11 May with evidence of high-band skip on 10th, and especially widespread skip on 30-31 May. Many experienced DXers feel that this is a particularly productive season for Es, though some in Iowa have noted a mostly erratic season there. Perhaps it has been strong up to certain latitudes and not as good in more northerly areas.

Glen R. Neal, 1005 N. 5th, Sayre, Oklahoma 73662 (22Apr-11May) (TimesCST;CDT26AprOn) Equipment: Zenith portable TV, Lafayette indoor amp, Lafayette VHF LVL antenna Present log total: 171 TV stations. 20 feet high, Alliance rotor. 22 Tr 0800 KAKE-10 Wichita, Kansas Mi: 215 29 Tr 0645 KMTV 3 Omaha NB 24 Tr 0600 WFAA- 8 Dallas, Texas 285 0700 WOW - 6 Omaha NB 24 Tr 0600 WFAA- 8 Dallas, Texas 26 Tr 0630 KSLA-12 Shreveport, La. 0800 KETV 7 Omaha NB 390 0700 KGIN-11 Grand Island, Nebr. 390 M6 Es, tune-in 2200, ch2 east, until 2215. 370 7 Tr 0700 KGNS- 8 Houston TX
460 8 Tr 0630 KPRC- 2 Houston TX
460 9 Es, t/in 1820, ch 2-6 until 2140.
300 1900 CKOS- 3 Yorkton, Sask. 0700 KTBC- 7 Austin TX 0615 KHOU-11 Houston TX 460. 0615 KTRK 13 Houston TX 0730 KWTX-10 Waco TX 1095 0800 KOMC 8 McCook NB 345 1830 CKX - 5 Brandon, Manitoba 990 0730 KOLN-10 Lincoln NB 1095 420 1850 CHSS- 6 Yorkton, Sask. 0900 KLOE-10 Goodland KS 310 10 Es, started 1320, Canada ch2, NNE, died1440 Es, tune-in 2155 ch2&3 east, until 2230. had to leave. Back 1820, ch2-6 til2230. 27 Tr 0630 KFSA- 5 Ft. Smith, Arkansas 270 0550 KMBC- 9 Kansas City, Mo. 385 1400 WPSX- 3 Clearfield, Penn. 1400 WBEN- 4 Buffalo, New York 0615 WIBW-13 Topeka KS 340 1830 CBLT 6 Toronto, Ontario 1200 28 Tr 0615 KYTV 3 Springfield MO 380 1930 WEWS 5 Cleveland, Ohio 1040 0600 KCMO- 5 Kansas City MO 385 1930 WNEM- 5 Saginaw, Michigan 0615 KHQA- 7 Hannibal MO <u>ll</u> Es, t/in 2117, perfect ch 2,3,6, not 0645 KTTS-10 Springfield MO 380 much 4 & 5, east. 2115 WFMY- 2 Greensboro, N.C. 1090 0700 KODE-12 Joplin MO 320 2100 WOAI- 4 San Antonio TX 420 12 Es, noticed 2210, north, ch 2-5, left 2100 KENS- 5 San Antonio TX 420 2211, still good. 2100 KSAT-12 San Antonio TX 420 13 Es, t/in 2130, good ch2-5, NNE-NE, gone2207. Whew! And that's just a sampling of the great DX we've been having here in west-

Whew! And that's just a sampling of the great DX we've been having here in western Oklahoma! April started out fair with a noted improving trend on the 22nd and then the real summertime DX trops started on the 26 with 5 straight days of reception beyond 400 miles! The Es hadn't been in well, though, until May 9 when it broke loose for the summer! I've ordered a UHF antenna so I'll be DXing on that scene before long, too. Great CX DX to all!

(Excellent summary of conditions, Glen. Thanks for your first report. dps)

Randy Miltier, 882 Pine Ave, San Jose, California 95125 (1970 to 23 May) (Times PST)

Antennas are two Swan low-band stacked and one Finco high-band, feeding 1966

Sylvania b/w set. First Es of season was noted 5/21 1900-2140. I'll have to thank
my wife (how many times can you married guys say that!) for catching this opening;
this was one of few nights I hadn't checked for skip upon coming home from work; after
eating chow I got ready for school, then my wife asked me to fix the TV before I left,
she said it was screwed up due to black bars on all the channels....I never did get to
school. Ch.3 1905, Dean Martin, Nebraska ads (wasn't KMTV tho'), KTVS Sterling, Colo.
Good audio, occasional picture seen. KTVS dominant to 2058 when KRTV 3 Great Falls,
Mcnt.took over, weather-man standing by Montana map; fair-poor; all other Es ch's died

after 2100, KRTV letf 2140. KLNE-3 Lexington, Neb. noted 1937-2005 w/ KTVS. Spanish station also behind KTVS 3, audio only, around 2000 (see CCI column). Ch. 2, KWGN-Denver audio fairly solid 2013-2026, unID video off and on then. Ch. 6, KHPL-TV Hayes Center NB for about 5 minutes, weather & news, good, photos taken. Ch 4 & 5 had things which couldn't make it; KPIX is toughest local to get through, only KORN-TV Mitchell, S.D. in past. Wouldn't anyone like to hear my Spanish unID tape? (info in CCI.) (Very good, Randy; yours is the only California report of Es this time. dps)

```
Marvin Garber, Jr., 2539 Kessler Blvd., Lincoln, Nebraska 68502 (16-30May) (Times CDT)

16 Es 1438 XHIA- 2 Forreón, Coah.

1730 WTWO 2 Terre Haute, Indiana
1800 WTTG 5 Vashington, D.C.
1820 KDKA- 2 Pittsburgh, Penn.
1830 WTAE- 4 Pittsburgh PA
2210 KPRC- 2 Houston, Texas
2233 KGBT- 4 Harlingen TX
2238 KRGV- 5 Weslaco TX
2238 KRGV- 5 San Antonio TX
2244 KENS- 5 San Antonio TX
2245 KIII 3 Corpus Christi TX
23 Tr 1300 KODE-12 Joplin, Missouri
Es 2330 KOAI 2 Flagstaff, Arizona
Present log total: 51, all VHF.
```

This is my first WTFDA report and it's about time! Thanks to Msrs. Miltier, Cooper, Dombrowski, and Janowiak for getting me interested and started in the wild pasttime of TV DXing! I recently purchased a 1964 Zenith 22" B&W, chassis 16J22, and coupled with my Channel-Master 36lOG antenna, it works very well. So far the Es openings seem to come on weekends which is the only time I have for DXing. I hope it keeps up. I hope to be a regular reporter to these pages. 73.

(Welcome, Marv. We will look forward to more Nebraska DX. dps)

Frank E. Aden, Jr., 5805 Flamingo Drive, Boise, Idaho 83704 (May) (Times CDT)

I am a new member, age 16, and have been TV DXing ½ year. Receiver is Arvin 9"

portable with 22-ft-high TV antenna pointed SE. May 21 Tr KCPX-4 Salt Lake City, Utah
in with good picture & fair sound at 7 PM; by Es at 9:50 KGNC-4 Amarillo, Texas in
with good sound & picture, ending 10:25 PM. May 31 Es WKY-4 Oklahoma City 7:32 PM
good-fair, some sound; 8:35 KRLD-4 Dallas, fair, little sound; 8:41 KGNC-4 Amarillo,
good picture & sound; 9:02 KTXT-5 Lubbock, good picture & sound; 9 PM ch 5 unID
(see CCI column); 9:28 KACB-3 San Angelo, fair, no sound.

(Happy to hear that skip is reaching the Boise area, Frank; write again. dps)

Robert J. Williams, PO Box 151, Blackfoot, Idaho 83221 (12 May- 7 Jun) (Times MDT)

12 Es 2117 KQTV 2 St. Joseph, Missouri (30)(Es) 2020 Unid 5

21 Es 1800 KMID- 2 Midland, Texas(photoed) 31 Es 1900 KMID- 2 Midland TX

1830 KMID- 2 Midland (photo; VAFI5525) 1940 KGNC- 4 Amarillo TX

1905 KMID- 2 Midland 1952 KWAB 4 Big Spring TX

2000 KTVU 2 Oakland, California J4 Es 2100 KTVI 2 St. Louis MO

29 Es 2250 KQTV 2 St. Joseph MO (photo) 2117 KQTV 2 St. Joseph MO

2300 KQTV 2 St. Joseph 2124 KQTV 2 St. Joseph

30 Es 0010 Unid 6 2130 KTVI 2 St. Louis

0020 WKY - 4 Oklahoma City OK 6 Es 1835 Unid 2 Also unids 2,4,5,6

0045 WKY - 4 Oklahoma City (photo) 7 Tr Unid 11 May be KMVT TwinFallsID

Last year I got all DX on rabbit ears. I hope to do better this year; I have a
5-element yagi atop the Milmor Hotel and run it into Apt 3 through an indoor booster to my 20" b&w Zenith console. I'm also trying to log ch 3 & 6 DX over semi-locals

KID-3 & KTLE 6 with rabbit ears since KTLE is snowy on 2 booster settings, also some snow on KID- with rabbit ears. For photos I use an Agfa Optima 1-A 35mm adjustable

camera $3\frac{1}{4}$ ft from screen. WKY- has been written for confirmation. 73s and lots of DX. (Good to hear of your recent equipment and DX work, Robert. Good luck. dps)

Fred McCormack, Des Lacs, North Dakota 58733	(1 Apr- 31 May) (Times CDT)
Equipment: Heath Gr-25, Winegard CW-48	Color Wedge.'
A5 MS 1159 WBAY- 2 Green Bay, Wisconsin 29	Es 2258 KROD- 4 El Paso TX 4433R
9 MS 0656 WKY - 4 Oklahoma City, Okla.	2314 XEJ-(tent.) 5 Ciudad Juarez 4433
Es 1300 KBTX- 3 Bryan, Texas VAFI-3235R	2354 KVOA- 4 Tucson, Arizona 4435R
1346 XHBC- 3 Mexicali (color) 4443N 30	Es 0010 KOAI 2 Flagstaff AZ 4435N
1643 KFDX- 3 Wichita Falls TX 3133R	0035 KUAT 6 Tucson AZ 4445N
1657 KRLD- 4 Dallas TX 4344R	0100 KPHO- 5 Phoenix AZ 3335R
1706 KENS- 5 San Antonio TX 4444N	2125 WGR - 2 Buffalo, New York 5545R
1728 WOAI- 4 San Antonio TX 4444N	2127 WBEN- 4 Buffalo NY 4445N
1731 KCEN- 6 Temple TX 4444R	2159 KACB- 3 San Angelo TX 3433R
1830 KJAC- 4 Port Arthur TX 3042N	2230 KGNC- 4 Amarillo TX 1332R
1958 KAUZ- 6 Wichita Falls TX 3333R 31	Tr 0746 KXMD-11 Williston, N. Dak. 3445N
10 Es 1200 WJBK- 2 Detroit, Michigan 3134R	Es 1857 KTVK 3 Phoenix AZ 4444R
28 Tr 0025 CKCK2-6 Willow Bunch, Sask. 3332N	1927 KVOA- 4 Tucson AZ 3335R
(205 miles) Pre	sent log total: 145.

It looks as though 1970 will be a good skip year if my first loggings are any indication. The weekends of 8th and 28th were the only chances I had to DX in May, and they both paid with E skip and new loggings. The tentative XEJ-logging is quite definite but won't be counted because no ID was heard. They had Spanish ad for El Paso store. I was also pleased with the Arizona opening of 30th; for about twenty minutes there were Arizona stations on chs. 2-6, all the low-band stations in the state. I am now using a Winegard CW-48 2-13 antenna. I don't know how good it is, but it certainly is different than the channel-2 yagi which I had been using. It is most apparent in improvement of ch 4 and 6 reception, with meteor bursts being seen fairly often. I hope to do some MS DXing if I can get up early enough. 73 & good DX. (Yes, undoubtedly your new antenna is an improvement. Now, how about UHF?..dps)

Bob Cooper, Jr., 6221 Norman Rd., Oklahoma City, Oklahoma 73122 (7May-7Jun) (Times CDT) A banner season start for E skip in this area. With more than 2,000 minutes of TV Es in the first 15 days of May alone, what remains of the season by the time this is in print should be a ball.

May 7 tropo 0730-0900 KHTV 39 (420 mi), KHFI-42 (350), KTRK 13 (420) and others.

1135 weak Es channel 2, no ID; 1915 ditto.

May 9 Es 1200-1400 weak several directions in & out, ch 2; 1545 XHFM-2; 1657

WUSN-2; 1800-2305 KDIX-2; KRTV 3, CKCK2-6 Willow Bunch, Sask., CKCK-2, CBWFT 3, CKOS-3,

CHSS-6 Wynard, Sask. (680 watts?), KOOK-2.

May 10 tropo 0615-0830 excellent to 300 mi, KGNC-4, WDAF-4, KRLD-4, KMID-2 (335) others. 1010 WCBS-2 and very heavy Es QRM through 1130, spent most of the time on FM; 1435 CKCK-2; 1637 CFRN-3 Edmonton (1490 mi); 1740-1805 very, very intense Es, I had to leave at 1805 but reports of TV Es until after 2300 were noted locally. There was probably high-band Es on chs. 7-8 around 1900-2100 from here (Okla) into NY/Ont. area.

May 11 tropo 0728 KLNE-3 (350), KHNE-29 (345), KTVC 6, others to 350 mi 'til 0830. Es 1025 weak ch 2 east, no ID; 1228-1249 weak ch 2-3 NW, no ID; 1330 weak ch 2 SE, no ID; 1500 weak ch 2 CBS NW, no ID; 2116-2145 WMAR-2, WSVA-3 and others, strong, heavy fading; 2250-2330 WESH-2.

May 12 Es 2126-2315 NW with violent fading, in and out, chs 2-3, no IDs.

May 13 Es 1755-1846 XEW-2; 1943-2150 NE with KDKA-2, WPSX-3, others; who on ch 3 carries Phillies BB (at Philadelphia)?..this game with Montreal, no ID.

May 16 Es 1134-1230 weak ch 2-3 SE, probable double-hop on ch 2; 1231-1415 KTVK 3, KOAI 2, KORK-3, fair; 1700-2000 N & NE, some of those seen: CKVR-3, WKYC-3, WBAY-2, WJMN 3, CFCL-6, CJIC-2; 2050-2245 W/SW, some of those seen: KNXT 2, XHBC-3, KORK-3.

May 17 Es 1010-1027 fair to SE, WESH-2, WSAV-3, WUSN-2 logged; 1040-1220 fairly

good west, NW and lastly N with KOOK-2, KTVU 2, KCRA-3, WBAY-2 and others. May 19 Es 1157 weak ch 2, E, no ID. Tropo 2200 KCIT-50, good signal.

May 20 tropo 0656 K7ØEK 70, outstanding (where, Bob? dps), 0659 KWWL-7 560mi, fair May 21 Es 0826-0936 fair mixed, WESH-2, WEDU 3, probable KDKA-2; 1820-2220 good west, NW and briefly SE, KTVN 2, KCRA-3, KOAI 2, WEDU 3, WTHS-2, KNXT 2, KEY-T 3, KORK-3 and others. There should have been double-hop Es from Florida into California -Arizona between 1900 & 2000(+) as we had it from both directions during that period.

May 22 MS 0010 KOAI 2, test pattern, bullseye type, apparently runs after signoff at 0000 following end of Carson. Es 1838-2044 weak to fair in and out most time, noted KCOK-2, KYUS-3, KUTV 2 and a couple of unID Canadians on ch 2-3.

 $\frac{\text{May}}{\text{May}}$ $\frac{23}{25}$ Es $\frac{2100-2105}{0945-1100}$ probable WFMY-2 and wBTV 3, in & out, poor; $\frac{2120-2135}{2120}$ KNXT 2

fair; 2214-2230 KDIX-2, good.

May 29 Es 1635-1640 ICR-TV 2 Habana, Cuba on TP, poor. This is old CMAB-, I suspect, with new name. They sync (horizontal) to 'right' and have basically gray shadings (ie, contrast levels low, even on TP). Their audio is music with frequent aural IDs as 'first television in Latin America' by woman. 2150-0100 (into 30th) strong Es including KRTV 3, KOOK-2, KTWO-2, KUTV 2, with KREM-2 still in at 0100 when I quit.

May 30 Es. This was first super date of the year, starting really at 2150 on the 29th. Band open here on TV for over 15 hours this date. 0750 WESH- in when I rolled out to start day, they stayed in from Daytona Beach mostly alone until 1030 when things began to happen. 1030-1431 Es began to build and drift to NW, some of those seen included WWAY-3, WUSN-2, WSAV-3, WTVR-6, KYW-3, WMAR-2, KDKA-2 and ICR-TV 2 Habana. 1638-2330+, after brief hiatus, back again, some of those seen: WJBF 6, WSB-2, WESH-2, WBTV 3, WUSN-2, WWAY-3, XHBC-3, KOOK-2, KID-3, etc. Most were outstanding for up to 3 hours solid—very local quality. I quit at 2330 with dial fatigue and KCOK-2 was still rolling through. Between 2030 and 2200 we had it from both east and west and there should have been double hop coast to coast in this period and probably others also.

May 31 Es 1545-2205 slow build-up to local quality of WESH-2, WEDU 3, WPBT 2. WPBT is new share-channel holder of Miami's established WTHS-2; same transmitter, etc just different management and nation's first share-time ETV outlets. I personally count it as WTHS-. WEDU & WPBT in for over 6 hours, local quality! 1850-2220 western opening (note band open to both coasts for long time; someone should have had double hop during this period—in fact, the two coasts were in together on FM Es from 2000-2100 or so, so even FM double-hop Es was likely). Some TV logged: KTVN 2, KCRA-3, WCIX-6 and KTVU 2. Lots of VERY strong signals. (WCIX- note: Spanish programming when seen, even the station break at 2100 (audio); this may be confused as CMQ-6.)

May closed out for me with 33 Es openings on 19dates, totalling 85 hours and 33 minutes of logged DX via Es. It's a wonder I got anything else accomplished all month!

June 1 Es 1724-2045 NE area including CKVR-3, WJBK-2, WBBM-2, WGR-2, CBFT 2

(1500 mi), and probable WGBH-2.

June 2 Es 0855-1330 same general areas as 1st, only expanded, including CBFT 2, CJIC-2, WBAY-2, WJMN 3, KDAL-3, CKPR-2, KTCA-2, CHCT-2, WMAR-2, WGR-2, KDKA-2, WLW-D 2. I was out of town from 1500 of 2nd through 1500 on 4th, in Washington.

June 4 Es 1500-0115 (on 5th) WMAR-2 (in 1500 to 1930), WPSX-3, CKCK-2, CBWFT 3,

KDIX-2, CHCT-2, KOOK-2, KRTV 3 and many others.

June 5 Es 1135-1310 ch 2 unIDed Mexican signing on 1135, plus WESH-2, WUSN-2 and WSB-2; 2015-2310 weak to Mexico with XEW-2 and XEZ-3 logged plus others in and out.

June 6 MS 0618 WMT-2; does anyone know if WTWO 2 runs color bars before sign-on? Es 1317-1340 CKCK-2, good & stable while in; 2005-2022 weak chs 2-3 N/NW, no IDs;

2155-2330 CKCK-2, CKPR-2, KDAL-3 and others.

June 7 MS 0542 WLW-D2 & WTTV 4; many pings, few bursts this AM, signals generally weak. Es 1258-1437 CBWFT 3, KTCA-2, others in & out, poor; 1656-1710 KDKA-2, poor; 1925-2135 WUSN-2, XHBC-3, others not IDed in and out with mainly poor signals.

The first week in June was definitely 'down' from the better parts of May, but

then how much fun would it be if we had May 30-31sts all of the time? 73.

(It might be like a constant candy or ice cream diet, perhaps. dps)

Leslie J. Prus, 1615 Pierre St., Manhattan, Kansas 66502 (Apr-7Jun) (CST; CDT26Apr on) Equipment: Sears 10" Model 5000 B&W semiportable, 2-bay conical 35' above ground; installed Apr 1: Winegard RD-300 ant. amp. and Alliance T-45 rotor. A5 Tr 0055 KOLN-10 Lincoln, Nebr. 4453 120 30 Es 0030 KB0I- 2 Boise, Idaho 4344 1050

0110 KETV 7 Omaha NB 5455 150 0115 KUTV 2 Salt Lake City4344 810

0120 WOW - 6 Omaha NB 3355 150 0150 KCPX- 4 Salt Lake-UT 2333 810 0135 KMTV 3 Omaha NB " in progress 1145, closed 1415. 3355 150 1145 WESH- 2 Daytona Beach 4444 1110 18 Tr 1830 KAKE-10 Wichita, Kans. 4455 100 1215 WJXT 4 Jacksonville FL 3343 1040 1830 KARD- 3 Wichita KS 4455 100

M8 Tr 0625 KGIN-11 Grand Island NB 21 150 9 Es 2100 KTWO- 2 Casper, Wyo. 32 560 2215 CKPR- 2 PortArthur, Ont3333 740 10 Tr 0900 KMOS- 6 Sedalia MO 2133 180 2230 KREM- 2 Spokane, Wash. 4234 1200 1000 KPIR-11 St. Louis MO 2143 340 4 Es 1830 WUND- 2 Columbia NC 3233 1150 0509 WBBM- 2 Chicago, III. 2 500 1830 WTAR- 3 Norfolk, Va. 4433 1100 11 MS 0509 WBBM- 2 Chicago, Ill. 2 500 Es 2133 WUND- 2 Columbia, N.C. 2112 1150 Es complicated by tropo from east. 16 Es 1800 WGR - 2 Buffalo, N.Y. 3234 950 2230 KBOI- 2 Boise ID 5444 1050 1800 WBEN- 4 Buffalo NY 4454 950 2230 KID - 3 IdahoFalls ID 4344 850 1800 WHEN- 5 Syracuse NY 4454 1100 5 E? 1800 ? 2 LatinAmerica 4333 1800 WSYR- 3 Syracuse NY 4454 1100 IDed(?) as "TV-TEC", had program "Les 18 E? 1624 TGV? - 3 Guatemala ? 2033 (1720) Intoclebas" (Spanish "The Untouch-(see CCI column) ables"?) Any idea what it might be? Es 1625 XHIA- 2 Torreon, Coah, 324 1000 7 Es 0000 CBWFT 3 Winnipeg, Man. 4433 750 30 Es, opening in progress 0000, closed 0230. 2000 WESH- 2 (6th time in a week!) (A lot of good Es there, Les. Check CCI column for Les's tentative Guatemala. dps)

and other Spanish areas from at least 1500 thru 2100 CST. May 30 logging of KOTA was weird since only their audio was noted over tropo of KIII (150 mi); no trace of video CCI; later May 30 50-MHz had 18-hr.+ Es opening. Several openings have provided good quality color signals; in a few instances color has been triggered with otherwise poor video resulution giving brilliant color smears. This reporting period wound up with a host of Mexican tropo again; I got ID from one this time but VUD doesn't have it (nor does Jones or new Jensen list. dps) so I still don't know where in Mexico XHBR is. If trend of Es continues for the rest of summer this might turn out to be a record year. (Very good, Pat. Anyone know where XHBR-TV 11 is? dps)

```
Don Ruland, 3219 Burnside Drive, San Antonio, Texas 78209 (9 May- 9 Jun) (Times CST) M9 Es 1630 YSR - 2 San Salvador, ElSalvador (31) (Es) 1830 WFMY- 2 Greensboro, N. Carolina
                                                2100 WBTV? 3 Charlotte NC (tent.)
      1630 unID 2 Spanish (probably XEW-)
      1800 WMT - 2 Cedar Rapids, Iowa
                                                    2100 WJBF? 6 Augusta GA (tent.)
      1815 KUSD- 2 Vermillion, S. Dakota
                                                  2130 WSB - 2 Atlanta GA
16 Es 1800 KGLO- 3 Mason City IA 1800 WBBM- 2 Chicago, Illinois
                                                     2210 WUSN- 2 Charleston, S. Carolina
                                              J3 Es 2100 WDCN- 2 Nashville TN
      1830 WMT - 2 Cedar Rapids IA
                                                     2100 WLW-D 2 Dayton, Ohio
   1910 WBAY- 2 Green Bay, Wisconsin
                                                6 Es 2200 WDCN- 2 Nashville TN
17 Es 1100 KGLO- 3 Mason City IA
                                               8 Tr 0700 KTRE- 9 Lufkin, Texas
                                              9 Tr 0600 WBAP- 5 Ft. Worth TX
30 Es 1200 KDKA- 2 Pittsburgh, Penn.
      1900 KDKA- 2 Pittsburgh PA
                                                     0600 WFAA- 8 Dallas TX
                                                     0600 KLTV 7 Tyler TX
31 Es 0930 WSB - 2 Atlanta, Georgia
      1800 WDCN- 2 Nashville, Tennessee
                                               Totals: 60 (56 VHF, 4 UHF) with 16 ch2 logged.
     (Thanks, Don. Hope your log continues to build in Texas. dps)
```

Jerry "Dee" Easter, 2426 West 7th, Waterloo, Iowa 50702 (Mar-Apr-May-4Jun) (Times CDT) I've been generally disappointed with conditions this year, with NO decent VHF trops and only a couple openings on UHF worth much. I've logged only 9 new stations since end of April and 7 of them were UHF; I've discovered that VHF doesn't have to be "hopping" to get interesting UHF activity. I've switched from 10' UHF dish (too much wind-loading) to new 20-element Winegard 'color tracker" parabolic yagi with wonderful results; UHF seen to 250 mi on daily basis mainly E & SE. Still using 2-bay Winegard "Super-Interceptor" for VHF. At my request, Winegard Co, Burlington, Iowa sent info on phasing the two and using common mast & preamp; it works beautifully on my 70' tower. Now if there would only be signals worth noting other than what Es manages to crop up. There really hasn't been much; I've had the set on every day at almost all conceivable hours. My wife even scans dials occasionally while I'm at work. (She still thinks TV-DXers are a little daft even though she MARRIED one!) Here are results for 3 mo.: M4 Tr 0700 KMEG 14 SiouxCityIA (verif) Mi 250 (10) (Es) 1730 WJXT 4 Jacksonville, Fla. 1100 5 Tr 0800 WXOW 19 (veried) 150 1800 WKRG- 5 Mobile, Alabama 12 LS 1630 WTVO 17 Rockford, Illinois 200 16 Es 1830 WOAI- 4 San Antonio, Texas 900 (Lightning bursts; BillHeusmann visit) . 1855 KIII 3 Corpus Christi TX 1500 WJJY-14 Jacksonville IL 300 : 1856 KENS- 5 San Antonio TX 28 Tr 1500 WJJY-14 Jacksonville IL 0800 KUHI-16 Joplin, Mo. (verif) 350 : 1900 KRIS- 6 Corpus Christi TX · 1100 0800 KTSB 27 Topeka, Kans. (verif) 250 1950 KGBT- 4 Harlingen TX 1250 0800 KTSB 27 Topeka, Kans. (verif) 250 0900 KHNE-29 Hastings, Neb. (verif) 300 2112 XEFB-23 Monterrey, NL, Mex. (*) 1630-1900, to SW, too jumbled for IDs. (& XEH-3 10pm, Mex ch6 for hr, unID) M9 Es 1630-1900, to SW, too jumbled for IDs. 10 MS 0530 WSYR- 3 Syracuse, New York 800 22 Es 1900 KVOA- 4 Tucson, Arizona 1300 Tr 0725 WMBD-31 Peoria IL 300 30 Es 2215 KPHO- 5 Phoenix AZ (verif)1300 2230 KTVK. 3 Phoenix AZ 0730 WJJY-14 Jacksonville IL 1300 300 0750 WICS 20 SpringfieldIL(verif) 300 31 Es 0045 KBOI- 2 Boise, Idaho 1350 1015 WEEK-25 Peoria IL 300 0045 KID - 3 Idaho Falls ID KUAT 6 Tucson AZ Es 1100 KYW - 3 Philadelphia, Penn. 800 J4 Es Also new: KDUB-TV 40 Dubuque, Iowa on air program testing, no schedule; darn good when I get them, 125 mi. KIIN-TV 12 Iowa City now 316kWV 31.6kWA,1149' tower. Totals now 245 seen, 214 verified by letter or photo. I repeat disappointment; shucks, etc. 73.

(Jerry, (*) XEFB-TV 3 & XET-TV 6 and XEH AM-FM (1420-93.3) are all in Monterrey; probably XEH was promoed on XEFB-3. You are the first to note better results on UHF yagi instead of dish—usually reverse. I wonder if north had less Es than south? dps)

Bill Heusmann, 2804 Brattleboro, Des Moines, Iowa 50311 (8Apr-10Jun)(CST; CDT 26Apr on) Even the miserable circumstances under which I DX haven't prevented a little skip from showing up. Those 'circumstances' centre about the ancient 1954 TV I hauled to Des Moines to replace my defunct Sony whose picture tube has now blown, too. After spending a small fortune on tubes for the thing, I still can't get any audio! Fortunately, by the time this appears, I will be in Steger for summer and can face a local-blocked ch 2 (augh!) with at least decent equipment. Latest Des Moines DX: 21 1528, auroral hash ch 3-4 heavy over (30) (Es) 1829 KATC 3 LA (ID, fairlystrCCI) 750 nulled local KØ4EW, outapx2230, no IDs J2 Es 1100 WUSN- 2 SC (good, fadey) M9 Es 1929 KID - 3 ID (audio ID) Miapx950 1200 KROD- 4 TX (ID, strong, CCI) 950 1930 KCPX- 4 UT (" "overlocal) 950 1200' KGNC- 4 TX (local Nx, like KROD600 1222 WBRZ 2 LA (MiddayLA, in&out)800 10 Es 1659 WBTV 3 NC (good, local nx) 800
1721 WMAY- 3 NC (fade-up thruWBTV)950
1731 WCIV 4 SC (str, ID-lcl CCI) 950 3 Es 1100 WESH- 2 FL (ID in CCI) 1800 WEDU 3 FL (ID, logo recog.)1100
1900 WEDU 3 FL (ID, logo recog.)1100
2000 WTVY 4 AL (poorA ID, occ.V) 850
1200 KGNC- 4 TX (local Nx, In 1200 KGNC- 4 TX 1244 KBTX- 3 TX (poor, ID in CCI)700 1330 KATC 3 LA (good, occa.fade) 1623 CKCK- 2 (tent., breakin CTV talk show 1630 CKSA- 2 Sask(VG, occ.fadeout)1030 1658 WBRZ 2 LA (into good, soon out) 11 Es 1600 XEFB- 3 NL (fair, IDprog-prom)1100 30 Es 0100 unID 2 (W, MS&weakEs, 20r3sta's) 1759 WESH- 2 (again, in & out, weak) 1837 unID 2 (concert, to SE) 1213 WESH- 2 FL (weak, ID slide) 1100 4 Es 1058 unID 3 (colour bers, S, Øoffset) 1823 KPRC- 2 TX (good, 1cl wx) 850 10 Es 1130 WBLZ- 2 ME (ID, fair w/CCl) 1250 Sony still in use thru 5/11, explaining existence of audio IDs! 17 new bring Des Moines totals to an earth-shaking 69 and 5 countries.

I don't know if it is poor set-up, a chance to watch clear ch 2 or what, but this year's skip seems to be actingioddly; station often comes upfrom newhere n reach decent level for mement, then disappear. Even CKSA-2's very good signal disappeared for apx a minute a couple of times, going out for good as quickly and replaced in opposite direction by WBRZ a few minutes later. Interesting to note that skip is coming in bunches of about 3 days' duration, just as predicted.

(Interesting situation in conditions, Bill. Better luck with gear in Steger. dps)

(And, FLASH, just as I was stencilling this, dateline 16 June:) Stanly Savage, 101 N. Ladera Vista, Fullerton, California 92631 (Apr) (Times as noted) I just received confirmation on my reception of the sound channel (50.75 MHz) of WNTV ch. 1 in Wellington, New Zealand. This reception was on April 10 at:

9:45 to 10:18 am NZST, or 1645 to 1718 EST, 1345 to 1418 PST, or 2145 to 2218 GMT.

The QSL was accompanied with a letter from Mr. A.S. Chisholm in which he said that while they had previously received reports of reception from Hawaii, and that New Zealanders had received TV from Hawaii, that my report was the first one to be received from the USA on the continent.

My monitoring of the frequency during the spring was very casual and this was the only date that I happened to hear them with good strength, up to S7. I did hear them at weak levels several other times, not good enough for identification as my receiver (Hammarlund SP-600) suffers badly with ignition noise and I live on a heavily travelled street. The receiver also has an AM detector and FM-sound copy is quite difficult.

I also monitored the Australian Channel \emptyset (zero) sound occasionally at 51.75 MHz

but never heard anything on it.

Your write-ups are excellent, and I think all of you chaps who do the work of putting together a dx publication without compensation are to be highly commended

for your efforts. Best wishes.

(Congratulations on your logging and confirmation of New Zealand, Stan! The only other US effort to get WNTV was in Feb. 1967, when Bob Cooper in northern California heard what may have been the video on 45.25 MHz; have you heard that or Australia ch. Ø video 46.25? It could have been either F2 or TE skip, I suppose—more likely F2? Thanks very much; we do this because of the enjoyment we get along with the satisfaction of knowing that it helps maintain interest in the hobby. dps)

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

Deadline: 10th of the month

Larry Vogt

8309 Greeley Blvd. Springfield, VA 22152

Rig: Fisher 500 TX. Finco FM4G (6 el) at 40 ft. Times: EDT Never saw my last letter in print, so either it got lost or I'll have two in one issue. This season has been more than ever dreamed of so far for me. I will run through the trops--locals first. Only new stuff listed as too many repeats in this category. 4/30 WJWS 105.5 South Hill, Va and WSNJ 107.7 Bridgetown, NJ around 2300. 5/1 WCOP 100.7 Boston, WFMZ 100.7 Allentown, Pa., WEEP 107.9 Pittsburgh, WKDN 106.9 Camden, NJ, WNCN 104.3 NYC, WHIM 94.1 Providence, RI, and WNYC 93.9 NYC between 0000-0219. 5/19 brought WICO 94.3 Salisbury, Md. (new stn) and WCHA 95.1 Chambersburg, Pa. around 1213. 5/22 WCCC 106.9 in Hartford, Conn., WVPO 93.5 Stroudsburg, Pa., WLVH 93.7 Hartford in SS, WGH 97.3 Newport News, Va., and WPRB 103.3 in Princeton, NJ between 9919-0230. At 0100 on 5/1 logged WRNA 95.1 and WSOC 103.7 both Charlotte, NC. Top this for unscheduled, not rehearsed lower power DX: 5/23 at 1140 a strange sig. on 89.7 announcing hot dogs and cokes for sale. Turned out to be a wireless mike used w/FM rcvr and amp at a carnival almost a mile from me! Now for the ones we all wait fore: 5/10 KJRG 92.3 1832 Newton, KS relog; KJCK 94.5 1834-1849 Jct. City, Ks; KRDO 95.1 1857-1915 Colo. Spgs. Colo state #30 @1485 mi.; KWBE 92.9 1907-1932 Beatrice, Nb State #31; KCUR 89.3 1914-2204 Kansas City, Mo . re-log in/out all eve; KGCC 89.7 2003 Denison. TX re-log; KKEG 92.1 2026-2033 Fayetteville, Ark. ex-KFAY I suppose; KITY 92.9 2045-2046 San Antonio, KLEB 94.3 2146-2150 Golden Meadown, La; KWGS 89.5 2155-2229 Tulsa, Okla. State #32. 5/16 KNEB 94.1 1900-1902 Scottsbluff, NB; KTTT 93.5 Columbus, NB; KICS 93.5 1905-1909 Hastings, NB; KOIL 96.1 1915-1916 Omaha, NB and KFBC 97.9 1925-1933 Cheyenner, Wyo. #33 @1475. 5/31 WHMS 92.1 1425-1440 Haileah, Fla.; WMCF 92.7 1442-1446 Stuart, Fla. 90.5 1405-1532 Cuba, Cy #4. 6/1 KOTN 92.3 2044-2052 Pine Bluff, Ark. The QSLs have started to trickle in. KWGS and any of the three Ark. stns I've logged would make the record 33/33. The Cuban was running the typical show w/people taking turns talking and a bit of mx in between and even an occasional echo for good measure. After 1450 it sounded like a BB game w/Camaguey mentioned. The ID sounded like R. Rebeld Can anyone else who has hrd. them help w/QTH or QSL? Total now at 307 and my log is still growing. I've been fortunate to catch all these openings and I hope others cashed in on them too.

Bill Bens 5575 Spruce Wood Drive Cincinnati, Ohio 45239

Howdy: The month of May has been fantastic here, and I sure hope everybody els e cashed in on the goodies. During May I logged 25 new stations, of which 22 were on Es, more than I've ever logged in one month before. Some of the most productive openings occurred on May 10,16 and 30. (Ed note: same dates in Larry Vogt's above RWW). DX hilites as follows: 4/21 (AUR) WOI 90.1 IA @ 2059 (510). 5/10 (Es) 1806 KHOW 95.7 CO ex-KMYR w/talk pgm; 1813 KIZ 106.7 w/RR; 1815 KLIR 100.3; 1859 KFTM 101.7 w/whopping # signal and ABC nx; 1931 KRDO 95.1 all CO and KCUR 89.3 Mo; 1944 KRBE 104.1 TX promo for Glen Campbell concert in Astrodome and rock; 2033 KCMW 89.3(???RWW) MO w/rock who IDed for me via m y phone request, hi; 2106 KGCC 89.7 TX w/wx; 2141 WFYN 92.5 Key West w/WZIP off. The next opening was on 5/16 and wow! KSTI 88.5 SD (10 WATTS) @1800 w/chicken rock and total info nx. Semi local WMUB 88.5 off due to the campus shutdown. Hi. Then @1802 KUSD 89.9 SD (10 WATTS) w/classical music. Although all the logs I've checked lists both of the above as 10 watts, I still question their low power for the following reasons: 1) both put in a strong signal for over 45'; 2) KSTI is a new stn and may have made last min. changes to their 10w CP; and 3) KUSD was in \$ and I have never hrd of a \$ 10w station. HELP: Next @1815 KRCC 91.5 CO (280w-770BAT) w/rock; 1821 KINT 97.5 El Paso w/"Starline '70"; 1917 Unn KTQM 99.9 NM w/99-fm Love promo; 1934 KPIA 97.3 TX weak. This opening netted me 1) new record Es distance @1320 mi.(cont'd) on KINT; 20 new best Es catch on KSTI or KUSD; and 3) completion of freq. w/89.9.

Bens (Cont'd) Laboring at the dials on 5/30 Es netted 1206 KGBC 106.5 TX w/ABC nx; 1230 KOKE 95.5 TX w/cw (840w); 1703 KEEZ 97.3 TX w/Alamo City wx; 1726 KMFA 89.5 TX asking for contributions; 1729 WFAA 97.9 TX; 1754 KCWM 99.5 TX w/cw asking for requests at 335-KCWM; 1801 KMFM 96.1 TX w/classical mx & YL ID; 1812 KAWA 95.5 TX ex-KEFC w/K-brand cw mx: KAWA was #13 on 95.5 Totals now at 493 all taped IDs and rising. 73. (Good rpt Bill. You give me the willies what w/all that Es stuff. O h to have a couple of Chicago stations go off the air: RWW)

Dick Clark 4110 Bayview Drive Ft. Lauderdale, Florida 33308 EST

Hi gang. Well DX on FM has picked up this month. I now have everything set up the way it was in Pittsburgh. I must say I am kind of glad that Florida doesn't have many FM stations. First WJHR 96.3 and WMJR 100.7 have started SCA. 5/18 WFYN 92.5 Key West @7:30P quite good, WMCF 92.7 Stuart @7:45P, WNDB 94.5 Daytona Beach @8:30P and WHOO 96.5 Orlando @0030. 5/21 WNFM 94.5 Naples, Fla. weak. 5/19 WKTZ 96.1 Jacksonville @0130 weak and WBRD 103.3 Bradenton @0300 w/Dolly Holiday. 5/25 WOVV 95.5 Ft. Pierce @5:00P RB music. WRMF 98.3 Titusville, Gla @9:15P, WARN 98.7 Ft. Pierce @9:30P weak, WANZ 105.5 Sebring 10P, WSPB Sarasota 106.5 weak @0005 s/off. 5/27 WKPE 104.1 Cocoa Beach 8:30P, WPKM 104.7 Tampa @0430, WMFJ 101.9 Daytona Beach @11P, WRUF 103.7 Gainesville, FL @12:15P. 5/30 WLPL 92.3 Baltimore, Md. @12:15P. WYZZ 92.9 Wilkes-Barre, Pa @12:30, WHDL 95.7 Oleans, NY @12:35, WJAC 95.5 Johnstown, Pa 1PM, CHFI 98.1 Toronto w/SCA @1:15, WDCX 99.5 Buffalo, NY @1:30, WKBN 98.9 Youngstown, Ohio @2:00, WWSW 99.5 w/SCA Pittsburgh @2:15, WROA 95.5 Albany, NY/WIWM 95.5 Nashville @2:30, WVNY 92.9 Burlington, VT. @3PM, WSTW 93.7 Wilmington, Del @3:05, WALL 92.7 Middletown, NY @3:15, WKBR 95.7 Manchester, NH @3:30, WRTI 90.1 Philadelphia, Pa @4PM (700 w), WFUV 90.7 NYC @4:30, WPGC 95.5 Morningside, Md. @4:40. WHML 98.7??(Can't' read the printing clearly Dick RWW) A great ID @4:50P.

Robert H. Baker KHBT radio Humboldt, Iowa 50548

This is to correct error in FM dope for April 1970. Shows Christensen Bc. Co. Humboldt, Iowa call letters as KHET(FM). Correct calls at KHBT. This station, if transmitter is not tied up in truck strike, will be on the air 6-1-70 97.7 MHz ERP 3kw both vert. and horiz. polar. Ant. 300'AAT Xr site at NE corporate limits. Sked 6AM-10PM CDT fulltime multiplex. Tnx Bob.

Mark L. Lewis 224 Honiton Street Downsview, Ontario Canada 475

Last 5/19 we had a fairly good DX opening down to Detroit. Unfortunatly my FM antenna setup wasn't together until the next day, but I did fairly well with a 4' hunk of wire. I logged WCAR 92.3, WDEE 93.1; WGPR 107.5 in \$, WJR 96.3, WXYZ 101.1---they are just 2 channels above CHIN which is just about 1 mile from me. WWWW 106.7 \$, I hadn't hrd. them since the old MoR format, WMZK 97.9 just below 420kw CHFI. Also hrd. was the Voice of Wayne State U, but I don't recall the call, or the location, but it was on 103 or 104mc/s. (WDET Mark 101.9 79kw RWW) All of this occured between 9PM-midnite, when things died off, cx were also good on TV. 5/20 I got my new ant. system partially completed for my FM set and my own room. I have a Channel Master fringe area VHF head (3600 series) mounted atop a 40' tower and turned by a CDE ham rotor. I am running rg59 coax presently, but by next week, I'll be using rg-110 a little less loss on FM and highband TV. As of now, I am unsure where I'll mount my UHF dish --- I have an extra rotor, and side of the tower mounting would probably be safer re: icing and wind. 5/23-24 provided some excellent trops from west again. I worked at CKFM till midnight and on my way home, I could hear that something was better than average when Buffalo FM's were zonking in on my FM car radio. I am told that the opening died @12:15AM, but when I (Cont'd) Fred McCormack

Des Lacs, North Dakota 58733

I haven't done too much DXing this year as I have been in school most of the time. However, I have hrd. some Es and it looks like it might be a good DX season. I am now using a Heath AR-15 receiver. (Must be nice. Hi. RWW) My loggings for 1970 are as follows (new stns. underlined): By aurora on 5/8 WCAL 89.3 Northfield, MN @1223 and WPBC 101.3 Richfield, MN @1237. Next on 4/4 KIVE 96.5 Glendive, MT @2028 by trops. On 5/8 I logged WIEX 98.1 Lexington, KY @2246 via MS. On 5/9 marked the first Es opening with the following@ KNTU 88.5 Denton, TX @1736, WTAW 92.1 College Station, TX @1745; KGCC 89.7 Denison, TX @1758; WBAP 96.3 Ft. Worth, TX @1818; KOKE 95.5 Austin. TX @1843; KEEZ 97.3 San Antonio @1856; KLAW 101.5 Lawton, OK @1907; KRBE 104.1 Houston @1910; KJEM 102.7 Oklahoma City @1915; KHBR 102.5 down in Hillsboro, TX @1917; WRR 101.1 Dallas @1920; KNUS 98.7 Dallas @1923; KPFT 90.1 Houston @1956; KWNS 93.1 Pratt, KS @2004, KGAF 94.5 Gainesville, TX @2006 and KITY 92.9 San Antonio @2016 and KBUY 93.9 Ft. Worth @2021. Aurora was noted again on 5/27 w/KEEY 102.1 Minneapolis @1737, KWOA 95.1 Worthington MN @1754 and KWLM 102.5 Willmar, MN @1828. On 5/29 Es tent. KOOL 94.5 in Phoenix @2245, On 5/30 via Es KTAR 98.7 @0054 and tent. KMEO 96.9 TX @2150, both Phoenix. The last logging in May was on 5/31 w/KNIX 102.5 Phoenix via Es. (All I can say is drool. RWW)

· Waldo F. Bishop P. O. Box 1678 Tallahassee, Fla. 32302

This report covers period 4/21 to 6/4. Beautiful Apr. tropo west to Texas strong 4/6 thru 20th, completely gone. Had to really work to get following: 4/21 WBT 107.9 Charlotte "Metrolina" @375 mi; 4/22 WCRT 96.5 B'ham @250. 4/24 WHRS 91.7 Boynton Beach, FL @400 mi (this on tip from Richard Clark in March VUD) WSPA 98.9 Spartanburg, SC w/Cliff Gray Show @330 mi; WCAC 101.1 Anderson, SC @208; WRAL 101.5 Raleigh @480; WGNC 101.9 Gastonia, NC @375; WFMX 105.7 Statesville, NC @400 mi.(all these catches early AM trop before locals on 0500-0600). 4/29 WPBF 107.9 W. Palm Beach @420 mi. 5/1 WDOD 96.5 Chattanooga @330 mi. and WHBB 100.1 Selma, Ala. @200 mi. 5/9 WLCM 107.1 Lancaster, SC @350 mi. All preceeding tropo. 5/10 Mothers Day and a strong Es opening into Minn, ND & Manitoba: believe opened around 1400, no logging until 1805: CJOB 97.5 Winnipeg 1920; WDAY 93.7 Fargo ND 2010; WHIA 90.3 Holman, Wis. 2245; KUMD 89.1 Duluth, MN 2130; KDHL 95.9 Fairbault, MN tx unk; WNIU 89.5 DeKalb, Ill. For an opening that didn't close until 2310, 6 IDs is poor, but can't fight the locals. Tropo on 5/10 WDYN Chatt. TN 89.7 "on the air until we meet him in the air". 5/24 WSMC 90.7 Collegedale, TN, a "listener supported station" @1400. Had them on tropo. Just before they IDed @1400, super burst w/YL annoing WHAD Delafield, Wisc. Just one small problem. VJ 5 shows WHAD on 88.3. If they haven't changed freq. has anyone an answer? (Yes, I do Waldo. WHAD has never been on 88.3. This is just one of the many errors in VJ Log that one must put up with. They are 75kw and \$ for your info. RWW) 5/30 Very short Es opening. At 1350 opened, KDCR 91.3 Sioux Center, IA ID @1400, closed at 1410, no progression up the band that I could find. 5/31 Tropo WRPM 107.9 Poplarville, MS @370 mi. 6/3 Received like local KOAA 5 Pueblo, CO. @2125, so switched to FM and 2130 hrd KAVI 95.9 in Rocky Ford, CO w/Freedom Talk #54. Closed @2140. This Es weak also, no other openings on the band that I could find.

EDITORS NOTE: VJ#6 is now available for \$2.95. To order a copy, mail to Vane A. Jones Co. 6710 Hampton Drive East. Indianapolis, Ind. 46226. Like I was mentioning above, there are quite a few errors, but it is still the best available listing of TV and FM stations, plus BCB. For the \$\$, I reccommend it highly. It sure beats Broadcasting's Yearbook at around \$12 so hurry up and get a copy. There have been a lot of station grants. RWW

Dave Janowiak 3661 South 46th Street Greenfield, Wisconsin 53220

First skip of the year was noted at 1800 on 5/10. Es was noted on channel 7 briefly so I thought the FM band should be jumping. It was, w/Es all the way up to 107.5. I stayed with the 93.7 to 94.3 area as this represents the largest "hole" in my locals. At 1815CDT KLVI 94.1 Beaumont, TX IDed. On 93.7 local commercials announced "here in Austin" tenative KTBL. Austin faded at 1820. From 1815 to about 1830 93.9 Mexican was heard, w/commercials interrupted by Desi Arnaz singing. Hrd Dallas and Ft. Worth ment. often, probably KBUY. Es on 93.9 was very strong, and reception was 6db better on vertical antenna. Had to leave RX at 1830. Returned at 2035 and skip was still good, but only to about 100.1. Loged WGOS 93.9 Miami Beach for 30 minutes. KBNO 93.7 in Houston about 2040 was weak. Skip seemed to jump from Texas to Florida. 2147 Pensacola ment. on 94.1 for tenative WPEX. At 2147 had acid rock on 94.9, probably Miami, but band went dead at 2158. 5/16 was next opening noted, but had to leave right during the peak. Skip noted at 1745 tune in. KSEL Lubbock on 93.7, w/"music presented by Radio Shack at 19th and University". (Tandy Corp. must be getting big. They are sponsering radio shows and buying fledging companies like Allied Radic.) Skip very strong at 1800 when I had to leave RX. Returned at 2300, but band dead. 5/30 had UNID Es on 93.7 from SW from 2100-2120. I have had little time to FMDX, except during the bigger Es openings. Most time has been erecting TV antennas and building filter-preamplifiers for TV. Roger, I trust you finally logged some Es; hope you were home on 10-16th Trops has been poor except for improved CX from 6-5 to 6-8. (Yes Dave, I finally have added 3 new states via Es. RWW)

Bruce Elving: 522 North: 122 Avenue EAST Duluth, Minnesota 55805

Four new stations have been added in May. WIAG 104.1 LaGrange, GA came in by MS 5/1. Real skip occurred the morning of May 10 when WVOP Vidalia (pronounced by their announcer as "Vadiaga") 97.7 and WITA 99.7 Atlanta, both GA made it. My best catch for the month, however, was KCIM 93.7 Carroll, Iowa on May 24 when nearby WAYL Minneapolis was off the air. WLTA, WVOP and WIAG have upped my Georgia total to 29, while my overall log stands at 865 FM stations heard, 793 including WIAG and KCIM verified. A note of caution on vertical antennae: Don't expect miracles. After considerable experimentation with both types of yagi antennas, I'd say that the horizontal position is preferred for all kinds of FM DXing. I have fould no advantage of vertical polarization in reception of FM skip or aurora, and to confine your DXing to a vertical setup may exclude the large proportion of stations that are only horizontally polarized. In fact, in New York's FM Guide points out that, with auto makers now incorporating horizontal antennas into car windshields, the need for vertical polarization may not long exist. ####

Bob Cooper Jr. 6221 Norman Road Oklahoma City, Oklahoma 73122

With more FM Es logged here in the first 15 days of May than during ALL of 1969, this has got to be the year we have all been hoping fore. Incidents such as CKAT 93.7 (noise free for over an hour on a seven transistor portable FM set) just suggest the type of openings we've had so far this year. Tropo has been so-so also. 5/7 0730-0830 KTBC 93.7, KIKK 95.9 (both V and H) KHCB 105.7. 5/9 First Es of season. Some of those logged included CJUS 89.7 Saskatoon (\$), CFMQ 92.1 Regina (\$); KMOT 93.7 Minot; KCJB 97.1 Minot; KBMR 94.5 Bismark and KIVE 96.5 Glendive. 2158 KFIA 94.5 Scott City, KS s/off. S/on at 0800. 5/10 1036-1126 FM Es, some logged included WKCR 89.9, WMMMX107.9 (first Connecticut) WVOX 93.5, WFUV 90.7, WGPA 95.1, WPKN 89.5 and WKOK 94.3 1740-1805 this was a dandy, but had to leave the house at 1805. Local reports suggest it lasted well past 2100 into NE from here. Noted were WHER 88.3; CKWW 88.7; CHYM 96.7; WSTC 96.7; CKQS 94.9; WMIV 95.1; WGMZ 107.9 and WFIN 95.7, 5/11 tropo to north

Cooper (Cont'd) including KICS 93.5 (350m); KWBE 92.9 KANS 96.7 and others. 2131-2135 WAMU 88.5 Washington DE on Es. 2232-2300 KCFM 93.7 458 m, PM tropo. 5/13 1951-2015 Es to East, NE. Including WJAC 92.1; WKSL 94.3; WSTW 93.7 (sounded much better on Es than on Ms!); WFRE 99.9. 5/16 Es to North, NE, including WCCW 92.1; WIAA 88.3; WDOR 95.9; WJGS 98.5; WDUZ 98.3; WWTV 92.9; WCEN 94.5; WZZM 95.7; WBEV 95.3; KFMD 92.9 (only 605 miles, first Iowa here on ES); CBF 95.1 Montreal, first Quebec and probably a double hop; CKAT 93.7 North Bay; WCRM 95.3; WHOK 95.5; WDEE 93.1, first log since WJBK, that was Ms. 2050-2134 Es to west, including KFAC 92.3; KNX 93.1; KKOP 93.5; KVFM 94.5; KPOL 93.9; KNJO 92.7; KHJ 101.1; KPFK 91.7 (boy, is their programming funny!); KABC 95.5; KEZR 95.9; KCIA 99.9 and KUSC 91.5. 5/19 Old faithful tropo tipoff KWWL 107.9 lound and clear. 5/20 0640-1100 Tropo duct into Iowa, MN, WS. Incl. KLSS 106.1, KROC 106.9, KAUS 99.9, WRVM 102.7 Suring, WS. (Roger - even SRDS doesn't list this one. I taped their ID, and it is 825 miles, .. but do they really exist??) Yes Bob, when visiting my sister in Wisc. last summer, I, too heard them and VJ lists them at 100kw. I really wound like to log it here. RWW. WRIT 102.9; KMFL 102.9; WAUK 106.1; WHWC 88.3 plus Wisconsin RN on 88.7,91.3. 1710-2130 KWWL back in plus KXEL 105.7, WCCN 107.5 (750 m) and others. 5/21 Es to NW, W SW including knew 95.5 and KUNR 88.1 Reho; KOSO 93.1; KOIT 93.3; KQED 88.3 (note- this should be a good choice for double hop into any part of the east this summer. They have a POWERFUL signal) San Francisco; KRBT 102.5; KVFM 94.5; KNX 93.1; KABC 95.5; KFAC 92.3; KPFK 91.7 (their program ming is still funmy!); KBAY 100.3; KFMS 106.1; KBEE 103.3; KBRG 105.3; KNBR 99.7; KUOP 91.3; KFIG 94.5; KSAN 94.9; KIOI 101.3 IDed as Stereo 101; KGO 103.7. 5/30 This was first of super dates, Bor this session, I had 4 hours of ES on this date, starting with 0003-0010 KQMU 94.1 Salt Lake City. 1143-1326 WWBD 92.3; WBLR 92.1; WDSC 93.1; WFMX 105.7; WNCT 107.7; WSTO 106.5; WJLM 93.5; WBCI 96.5; WICO 94.3; WWDC 101.1; WGTS 89.9 ending w/WOUB 91.3 1645-1825 WEAS 93.1; WTOC 94.1; WTMA 95.1; WDJC 93.7 new calls for Birmingham, they are a religion oriented; WJGA 92.1; WFDR 93.3; WAVO 94.9; WLTA 99.7; WLOV 100.1; WSB 98.5; WJAT 98.3; WFOX 97.1; WAKN 99.3; WPGA 100.9; WCSC 96.1; WCRS 96.5 and WJJM 94.5; As you can see, GA was predominant this session. 2200-2215 KOYN 93.3 Montana for fourth and final Es session of the day. 5/31 1853-2130 Es from west and from Florida during part of this period, at the same time, from both coasts. Did someone catch double hop Es on FM from coast to coast? Some of these heard were: KNEV 95.5; KVLV 99.3; KSRN 104.5; KSNN 93.7; KBGK 94.1; KBBK 92.3; KQED 88.3; KVCR 91.9; KNX 93.1; KPIP 93.5 (where is this one Roger?) Don't know Bob, no listing at all, only one close KVPI Ville Platte, La. RWW. KFAC 92.3, KFIG 94.5; KFRE 93.7; KABL 98.1; KNBR 99.7; KIOL 100.3; KAMB 101.5; KJAX 99.3; KKHI 95.7; KXOA 107.9; KRON 96.5; and KABC 95.5 from California: KVEG 92.3 Nevada; WFIA 93.3; WSWN 93.5; WNFM 94.5 and WVFM 94.1 from Florida. May ended up for me with 14 Es openings, 8 dates, and a whopping 20 hours and 42 minutes of FM Es logged. Just sorting out the tapes will be a month long project: 6/1 1837-1902 Fs into far northeast, including amongst others CBF 95.1 and WJMS 94.3 both Montreal and both 1500 miles. 6/2 to 6/4 out of town, no telling what I missed. 6/4 1930-1942 middle coast area stations on Es including WXTC 107.9 Annapolis, Md; WWDC 101.1; WASH 97.1 Washington; WSTW 93.7 Wilmington and mystery WSEA 93.5 Where is this last one located, Roger? Georgetown, Delaware Bob ex-WJWL-FM RWW. 6/5 XHRSM 91.3 Mexico City on Es w/good up-tempe instrumental mx while it lasted. 2014-2018. 6/7 0600 WWEL 93.9 on meteors w/ID, later at 0644 for ad for Lakefront apattments (Chicago). And that was the month that was! 73, Bob.

Roger W. Winsor 718 N. Fremont Road Valparaiso, Indiana 46383
Well, I finally logged Es. 5/16 KBMF 98.3 Spearman, TX 1800 ID, then TSN nx to
1815, KMTY 99.1 Clovis, NM 1831 ID out of blue?; KSJT 97.5 San Angelo TX 1920
SS, ID per phone call. 5/18 WIAN 90.1 Indianapolis 0745 s/on,w/local WMBI ON.
5/30 KEEZ \$97.3 San Antonio 1900 ID following nx. 6/7 WNON 100.9 Lebanon, Ind.
0705 w/local nx and ID during strong tropo opening and finally 6/13 WHMS 92.1 \$
Hisleah, Fla. 1450 ID "WHMS time 5:50" for new state. Now 325 stations logged.



Glenn Hauser, editor
Box 1466
APO San Francisco 96288

ידר

CMR Box 1466 Korat Royal Thai AFB Nakhorn Ratchasima Thailand

JULY 1970

Heading by Bill Heusmann

Co-editor Roger Bunney has put us in contact with a DXer we might call the "Bedford Brown of Australia." George Peterson of Ayr, Queensland, was most active in 1958-1963. Now a Radio & TV Service Engineer, George says of DX today, "global T.V. is so common place that it has taken the interest out of it for me." George mentions among his catches T.E.F. (trans-equatorial F-scatter, I presume), from ch. A3 in Seoul, South Korea; and also Vladivostok, RSFSR and Harbin, in northern China, both on 49.75V. In coming columns we hope to tell you more of Mr. Petersen's DXploits.

In Japan. As noted in last month's VUD, your editor took a trip to Japan in May and June. It was tough to give up $3\frac{1}{2}$ good weeks of the Es season, but it was the only

time I had a chance to go. The trip was very enjoyable, though mostly non-DX.

At EXPO 70, the Telecommunications pavilion had a display of "laser color TV," but the picture looked pretty bad when I saw it. Also a laser-transmitted picture phone. The official Seiko clocks were synched all over the fair by a UHF signal. And that

about does it for EXPO 70 and DX-related topics.

Tokyo and Osaka are as saturated with VHF TV signals as New York or Los Angeles, and most of them on the air a good 18 hours a day. So without Bob Cooper's DX technology, it's little wonder that TVDX is unknown in this densely populated country. By the way, if any of you in Hollywood or elsewhere DX some Japanese tentatives this summer, I can check some newspaper listings for you....

While in Tokyo I visited NHK's facilities, which I would say are much more impressive than NBC's in Burbank—the only other large TV production complex I have seen.

TVDX as a hobby seems to be unknown in Japan, but a couple of NHK staffers told me

that people in southern Korea watched NHK-TV quite often.

I shopped around in the renowned Akihabara electronics district but could not find a Japanese-to-US converter. I had to settle for the Japanese FM version (76-91 MHz)

of the Panasonic RF-619 portable, from the Daimaru Department Store.

Commercial FM is still undeveloped in Japan. Tokyo has the only known such station, on 80.0 MHz, newspaper-listed as JOAU-FM, but IDing as "FM Tokyo." Tokai FM, listed by WRTVH at 84.5, was not heard. NHK has the country blanketed, however, and in Tokyo the station is on 82.5, IDing as JOAB-FM (the counterpart of NHK-2 on AM, JOAB-690).

Hong Kong. Mr. Welles Hangen of NBC News graciously invited me to join them in an expedition into the hills to watch Canton TV, but I was unable to arrange any more than a one hour layover there. And as of this writing, Mr. Hangen is among those missing in Cambodia. Let us hope for his safe release.

The 87-108 version of the RF619 allowed me to note the following from the airport transit lounge; frequencies are quite approximate. This was 8 June after 2151 JST.

87 Relay of BBC English ballgame; 2159, local weather and ID as "AM Service"! Was parallel to 545 mediumwave.

91 "R. Hong Kong FM Service." Classical music; strong.

93.5 Chinese, stronger than above; relaying SW, probably BBC Cantonese service. Parallel to mediumwave 640.

94+ (mixing product with 1050 kHz MW outlet; rock mx, English; weak.)
97 Chinese, similar to 93.5, maybe parallel, but weaker. Maybe Macau-list 98 MHz.

108+ Beacon "IHK", continuous ID; better heard on 88 MHz image.

On the other RF-619, I noted the following:

76- Weird continuous sound; probably air navigation.
77- Strong Chinese 2-way; perhaps a irport activity.

Also thought I might have had China when audio was heard around 48 and 49.75 MHz on the Allied PSB, but these turned out to be images of 91 and 93.5 MHz respectively.

I picked up a copy of the China Mail with UHF-TV listings, just in case....

Thailand. Back in Bangkok, I logged nine FM stations around 0910 TST 9 June. Thai speakers were around 89, 94, 98, 98.5, 100, 103.5 and 104.5 MHz. English on 90.25 (HSA) and 95 (Thai TV). None lasted more than 25 miles out of town on the road. In Bangkok before departing for Japan, I visited Army TV Channel 7 (HSA) and took some slides of their studios; they were putting on a special program for Buddha's Birthday (19 May). Along the road I saw the tower of the Green Hill ch. A3 relay of ch. 7. A couple months ago Bangkok opened a second color TV station, on ch. E3 ("channel 2 on black and white sets"), so this country is now an F2 possibility. A Manila newspaper I saw showed stations on lowband chs. A2, A4 and A5, contradicting other sources showing A3 and A5. So watch for Philippines too on F2, hi.

Thai sections are incomplete, but Mexican and Cuban situations are clarified. High-lights from this part of the world: first listing of TV in North Korea, Pyongyang on ch. R5; also Mongolia, Ulaan Bator, but no channel given. Ch. E5 is under construction at Chittagong, East Pakistan, not far from here. In Okinawa, NHK is already extending its network as OHK, including a lowbander, ch. A2 in Naha (no power given). Get it now before Japanese sovereignty brings Japanese channels. The extensive AFVN network in

Vietnam is missing.

My DX at Korat is still pretty sparse, but at least am prepared for it now. No TV or FM DX in March and April, but some more harmonics and 2-way Russian (hams or planes?) in the 35-43 MHz area on the PSB receiver. Also bagged South Korea on FM, but the band there is conveniently lower. On 5 May I had a definite "KBS" ID amid Korean talk at 1110 TST around 44 MHz. FBIS 68 shows a 250-w link at Suwon on 44.3; FBIS 69 shows none. This may be the same outlet heard by Gordon Simkin in California for the world FM record.

A large FM antenna I had had for some time was finally installed in the attic of the barracks on 1 May, but no signs of DX before I departed on 18 May; it brough in three locals fine though. Currently pointed east, only one DX catch on it: on 11 June, at 1001 TST (GMT+7), Chinese fading around 93.6 MHz. Mostly out but when in, fairly strong. Taped it, showing Chinese talk by lady, and Hong Kong mentioned once. Doubtless the same station I logged while in Hong Kong. Also had some English and Chinese music; fade at 1030 ID time. At 1100, a six pip time signal and I left for work. That evening at 1912 it appeared again, with shortwave relay, probably BBC Chinese service; out by 1940.

Local FM includes Royal Thai Army 2nd HQ, on "90.624 MHz"; has marginal English request program Fridays around 2200. Another station on about 98.8; and one at a tech-

nical school is only on the air around noon on weekdays, about 89 MHz.

TV-wise, I finally installed my LPV all channel antenna with a rotor about 25 feet above ground, but not quite clearing surrounding barracks roofs. Frequent checks of the entire VHF band, especially evenings, have followed with no DX seen. Hopefully due to Cooper's predicted lull... An occasional weak frame bar on ch. 2, but this may just be marginal signal from Bangkok's E3 outlet. Have been especially watchful for Cambodia and Vietnam on 8 and 11, but no sign so far; no tropo openings yet, unless sunup-type when no stations are on the air! That stations regularly seen:

CH. A3 Green Hill, relay of ch. A7 Bangkok; fair video but very weak orabsent audio; seldom runs TP as long in the afternoon until approx. 1700 sign on as originator does.

Ch. A5 Khon Kaen, picture barely syncs sometimes. Said to be video tape-delay relayer of Bangkok programs. FBIS! 70kw hard to believe.

Ch. A7 HSA-TV (Thai Army TV), Bangkok, always there, sometimes fair; video weaker and audio stronger than on ch. 3. Weekends opens around 0900. Mominal 200 kw.

Ch. A12, local Nakhorn Retchasime relayer of Bangkok's Thai TV, ch. A4, which has not been seen. Nor has the Army color station on E9. Have passed the tower many times on way into town. Power unknown, but enough to mess up ch. 11.

I have not yet bought my own TV, since the prospect of getting much DX is so far pretty bleak; instead am using a nearby government set intended only for reception of

base AFTN stations on ch. 74 and 80.

Any and all pertinent correspondence for this column is welcome.

73 de Glenn

Roger H. Brown 624 Evergreen E. Lans., MI 48823

July 1970

Next Deadline: July 18

FOR TV-DX REPORTERS IN WI, IL, IN, MI, OH, PA AND ALL EASTERN CANADIAN PROVINCES

Isn't summer a ball? As I prepare this month's column, memories of recent Es openings still swim happily in my DX filled head. May and June were FINE months in these parts... especially for Es watchers. The lower channels were filled with the fluttery, screeching, signals for...at times...days and days. One period...from 5-28 to 6-12... had but one day (6-6) skip-free somewhere in this area.

We haven't had a SUPER tropo opening across a wide area. Here in mid-Michigan, the slow moving frontal systems haven't produced the strong inversions necessary to tropo. Our hot, sultry weather of mid-June lost the effects of a high pressure system early and rather than watch for trops...we watched for a long awaited front. The front produced good openings West of my area but distances were limited here.

Apparently the tropo opening mentioned last month (5-19 and 20) were best here in East Lansing. Here's a look at a very good month; with new stations underlined:

J. Joel Rosenberg, 47 Pannahill Rd., Downsview, ONT. 475 (EST)

- 5-10 Es 1059 WBRZ-2 Baton Rouge
 1129 KQTV-2 St. Joseph, MO
 plus many un-ids when I had
 to leave for school trip to
 Sarnia, Ont. where I saw...
 2330 KATC-3 Lafavette, LA
- 5-11 Es 1600 Un-id 2 from Sarnia
- 5-19 Tr 2125 WXON-62 Detroit

 WTVS-56 Detroit

 2220 WUCM-19 Bay City, MI
 2205 WKBD-50 Detroit
- 5-20 Tr 0015 Cleveland area Us weak skip in evening
- 5-21 Tr 0745 Cleveland, Lima Us in 1555 WXXI-21 Rechester, NY WCNY-24 Syracuse
- 5-23 Tr 1800 Same as above plus Erie Us
 2030 WBJA-34 Binghanton, NY
 WUTR-20 Utica, NY'
 WINR-40 Binghanton
- 5-24 Tr 0030 WCDC-19 Adams, Ma strong, out quickly

- 5-28 Tr 1845 WWJ-4 Detroit VERY strong
 2000 WENY-36 Elmira
 WUCY-19 (Detroit 20 not on Joel)
- 5-29 Au 0730 No ids.
- 5-30 Es 1300 No ids. Ch 2-4. Peaked at 1645 and again at 2100.
- 5-31 Tr 0150 CBOT-4 Ottawa
 Es 1300 Un-id 2-4. Appeared to be out of sync. (See Frank Merrill's report).
- 6-1 Es 1630 In. Un-ids on 2. In again at 2015. Un-ids on 2 til 2115.
- 6-2 Es 1730 In. Peaked at 1900, died at 1930. Again no ids.
- 6-3 Es 1400 First saw. Out at 1440. No ids on 2-4.
 - 1900 (at Mark Lewis' house) KCKT-2, KWGN-2 and (wow) KBOI-2 on double hop. All died at 2335,
- 6-4 Es 1600 First noted. 1900 KATC-3, 1959 WBRZ-2, 2030 WBRZ. out at 2340.
- 6-6 Es 1145 Weak skip till after 1900

ROSENBERG, cont.

6-7 Es 1145 KQTV Weak.

6-8 Es 0920 and again at 1815 Tr 2230 CKSO-5 Sudbury, Ont.

(Thanks for the fine report Joel. Hope the ids on your skip stations come easier along the way! Please send your Un-Ids to the CCI column).

Roger Carriere, 196 Joseph, Buckingham, Que. (EDST)

(190)4-28 Tr 2200 WHEC-10 Rochester, NY.

5-10 Es 1800 WBRZ-2 Baton Rouge Skip in there till 2100+. Also noted KV00-2 Tulsa at 2100.

5-9 Tr 2300 CHLT-7 Sherbrook, Que. (170)

5-31 Es 1200 WESH-2 Daytona Beach

(Rog...bien venue! Votre report est tres bien. Merci beaucoup mon ami. Roger is using an LP and 5' dish at 30' with a Heath. He's located behind a hill with a clear shot toward DX stations.)

John Parillo, 400 S. Market St., Girard, OH 44420 (EDST)

5-10 Es 2006 KPRC-2 Houston

5-20 Tr 2215 On WHIZ-18, WGTE-30 Ohio,

WQLN-54, PA.

5-16 Es 1929 KLNE-3 Lexington, NB

1943 KOAA-5 Pueblo, CO

1959 KWGN-2 Denver, CO

2027 KOA-4 Denver

2258 WUCM-19 Bay City 2342 WXON-62 Detroit 2357 WCMU-14 Mt. Pleasant

5-21 Tr 0052 WTAP-15 Parkersburg, W. VA.

(John notes skip there thus far has been sub-standard...about like last year. Could be an odd pocket but more likely a lack of good luck thus far! Keep at it John...good to hear from you again. Thanks for comments on my show. RHB)

Charles A. Dobbins, 12851 Longacre, Detroit, MI 48227 (EST)

5-24 MS 0615 Un-id 4

6-8 MS 0500 WCBS-2 NYC (500)

5-31 MS 0600-0700 A couple of un-ids on 4

Tr 0505 WBBM-2 Chicago (240) 0515 WLWD-2 Dayton (190)

0522 WLWI-13 Indianapolis (245)

6-7 Tr 0508 KDKA-2 Pittsburg (215)

0520 WOOD-8 Grand Rapids (130)

0526 WGN-9 Chicago (240) 0558 WBNS-10 Columbus (170)

0645 WLS-7 Chicago (240)

0608 WGN-9 Chicago

6-14 Tr 0505-0630 Pittsburg, Cleveland, Chicago Vs.

(Using a 13 el. CM and 251 RCA color set, Charles is DXing from metro Detroit...a tough location. Don't give up man, just check the totals of city bound DXers Morrie Goldman, Ferdie Dombrowski, Dave Janoiak, etc. The skip will reach you soon!)

MI

Harold Cooper, 29800 Ann Arbor Trail, Westland, MI 48185 (EST)

THE SECTION ASSESSMENT			
5-10 Es 1730	WBAP-5 Fort Worth, TX	5-18 Tr	0600 WBEN-2 Buffalo
1757	KTXT-5 Lubbock, TX		
1800	KFDX-3 Wichita Falls, TX	5-19 Tr	2200 CBLT-6 Toronto
1818	WEAR-3 Pensacola, FL		
2000	KOCO-5 Oklahoma City	5-20 Tr	0510 WFBM-6 Indianapolis
2128	KCEN-6 Temple, TX	(\$, \$ 18)	0523 WGR-2 Buffalo
2200	KALB-5 Alexandria, LA		0530 WIIC-11 Pittsburg
	THE STATE OF THE STATE OF THE STATE OF		0536 WTTV-4 Bloomington, IN
5-16 Es 1758	KARD-3 Wichita		0557 WTRF-7 Wheeling, WV
	KCMO-5 Kansas City		2200 WPGH-53 Pittsburg
	KTVC-6 Dodge City		
	KCKT-2 Great Bend, KN	5-21 Tr	0105 WWUP-10 Ste. St. Marie,

(Another Cooper????? Good report too. All those Es on 5 and 6 would sure be welcome here Harold. Please note equipment used next time. RHB)

CHECK THIS ONE FELLOW DXers...ITS A DANDY!!

(over strong WJBK)

Frank Merrill, 10673 Saline-Milan Rd., Milan, MI 48160 (EST)

4-28 MS 1630 WREC-3 Memphis, TN	5-30 Es 1515 Un-id 3 to SE, possible
A STATE OF THE STA	double hop to Carribean area.
5-10 Es 1757 KTXT-5 Lubbock (My new BYB	Movie in English w/ no ids.
says 27.5 KW Frank. RHB)	Possible Br Virgin Is. per
1959 KAUZ-6 Wichita Falls, TX	call to B. Cooper To 1555.
2159 KNME-5 Albuquerque, NM (and land	1659 Un-id 3 SE. Possible double
a new state)	1659 Un-id 3 SE. Possible double

5-21 Tr 0100 WPGH-53 (please note call Frank)

5-30 Es 1800 KGBT-4 Harlingen, TX

196 Charles I E. L. C. S. 195 11 1 X

1659 Un-id 3 SE. Possible double hop. Movie in Germanic type language. Have written several possibles plus language expert and NRC member at U. of Hawaii w/tape. (could this be Dutch outlet in Curacao Frank?

0145 WTAE-4 Pittsburg

(ALL good luck to Frank in obtaining ids from his 5-31 reception. Sorry I wasn't at the phone Frank...that's the one day I failed to watch...sob. Please continue reports... of all skip reception. Thanks. RHB)

Gary Olson, 1203 Kenton Rd., Deerfield, IL 60015 (CDST)

5-13 Es 2000 WEAR-3 Pensacola (out at 2215) 5-18 and 27 Tr UHFers to 200 miles in eve.

5-16 Es 1810 KFDX-3, WKY-4 1830 KACB-3, KGNC-4 (out at 2000) 2100 KWAB-4 Big Spring in briefly

5-17 Es 1100 Un-id 2-4 in for a short time

5-30 Es 2000 WSAV-3 Savannah 2045 WEDU-3 Tampa

6-1 Es 1800 KIII-3 Corpus Christi 1830 KGBT-4 Harlingen 1930 XEFB-3 (tent) Monterrey KBTX-3 Bryan

and Haller Views and Post of the

6-4 Es 1845 WWAY-3 Wilmington, NC 6-7 again, good early am trops to Ft. Wayne

6-6 Tr good early am uhf to 200 mi.

1 314 5 6-8 Es 2012 (tent) CFRN-3 Edmonton, Alta 2030 KID-3 Idaho Falls, Id

(Gary says most of his skippers have been of the "weak" variety...with short openings and lower 3 channels. No GOOD opening has been seen there despite frequency of reception. Also...is discouraged with Deerfield location. No new stations yet despite Conrac AV 82E. Remember...all good things come to him...etc. Maybe you could talk your "locals" in Chi and Milwaukee into taking a rest Gary. They must give you the dickens.

Mike Pawlowski, 18437 Wildwood, Lansing, IL. 60438 (CDST)

(A short note from Mike with a note that his best catches are WTVJ-4 Miami and KGNC-4 Amarillo. He'd like some info on building Antennas and Pre-amps. Why not try Bob Coopers IPAs Mike? RHB)

Bill Draeb, Ellis St., RR #2, Kewaunee, WI 54216 (CDST)

- and lots of Un-ids.
- 5-16 Es 1710 KFDX-3; KRLD-4, WBAP-5, KAUZ-6, KACB-3, KVOO-2; 1805 KCEN-6; 1815 KPRC-2; 1920 KBTX-3
- 5-17 Es 1210 Weak, un-ids on 2-4 6-4 Es 1945 Un-id Spanish audio on 3. Tr 1900-2200 Chicago area, Lafayette, Ft. Wayne Us.
- 5-18 Tr 0520 WANE-15, WKJG-33, WISH-8, WCPO-9, WBNS-10, WLWI-13; 0530 WPTA-21; 0540 WLFI-18
- 5-19 Tr 0535 Same as before plus WTRF-7, to adopte of teat WJHL-11. Tennessee. 1900-2300 Michigan, IL. Us.
- 5-21 Es 1720 Un-ids on 3 and 4 SSW 6-9 Un-id Es SW plus Tr to Peoria
- 5-27 MS 0547 WTRF-7! Eight or so overlapping bursts for 5 seconds. Smeary picture.
- 5-30 Es 1820 KATC-3, KACB-3, La. 1930 KIII-3 plus un-ids.
- 6-1 Es 1946 KBTX-3 Bryan plus un-ids
- 6-2 Es 1215 KIII-3, KRLD-4; 1233 WOAI-4 KENS-5; 1243 KBTX-3; 1903 KID-3

- 5-13 Es 1924 WEAR-3, WKRG-5; 2031 KATC-3 6-3 Es 1237 WTVY-4 Dothan and (tent) several in Georgia, FLa. area to ch. 6. 1737 KGBT-4; 1800 KIII-3, 1815 KATC-3; 1828 WOAI-4; 1853 KENS-5; 1900 KTBS-3; KPRC-2; 1930 KBTX-3; 2111 WLBT-3 plus un-ids to ch. 4, W.
 - 2015 KOB-4, KNME-5 N. Mexico.
 - 6-5 Tr 0540 Cincinnati, etc.
 - 6-6 MS 0612 KRLD-4; 0614 WCIV-4
 - 6-7 Tr WXOW-19 La Crosse, WI (snowfree)
 - WSTV-9, WICU-12, and at 0607 (tent) 6-8 Es 1828 KOA-4, KWGN-2; 1950 CKSA-2, 2008 CFCN-4; 2025 KUTV-2; 2100 KCPX-4, 2205 KSL-5. plus tentatives.
- 5-23 Tr 0655 KCRG-9 Cedar Rapids 6-11 Es in at 1620. 1730 WUSN-2, WCIV-4, WCSC-5, WWAY-3; 1748 WSAV-3, WESH-2; 1810 WPTV-5, WETC-6; 1825 WEDU-3; 2045 KRLD-4, WBAP-5, 2150 WECT-6
 - 6-12 MS 0513 WECT-6 Wilmington
 - 6-13 MS Un-id ch.10. RETMA TP, w/ no call. Help anyone?? Es 1131 Un-ids 2-4. 1441 KWGN-2, KOA-4, 1600 KOTA-3; KYUS-3; KDIX-2.
 - 6-14 Es 1123 KXLY-4

Draeb, cont.

(Congrats on new ones Bill. They must get tough after that 400 mark. They get pretty hard after 200 by my reckoning!! Bill passes along pix of his Antenna set up. .. several from near 100 feet up where the view is breathtaking. He can see Green Bay towers!! Also...several pix of Chicago Us and KDNL-30 with just a little snow. Got room on that hill old friend?) Bill received verie on KOMO logging...great going!!!

Ferdinand Dombrowski, 1311 W. Madison Apt. 11, Milwaukee, WI (CDST)

5-11 Es 2125 WDIQ-2 (tent)

5-13 Es 2135 WESH-2; 2145 WEDU-3 (tent)

5-30 Es 1230 KPRC-2, WLBT-3, KATC-3; 1300 KALB-5; 1900 KIII-3; 2045 XEFE-2 (tent) plus many, many un-ids through ch. 5.

5-16 Es 1655 KMID-2, KPRC-2; 1730 KFDX-3 KOCO-5 Okla City; 1800 KACB-3, KVOO-2 5-31 Es 1500 Un-id ch. 2.

WBAP-5, KFSA-5 Arkansas, KARD-3 Kansas, 2230 Skip gone.

6-1 Es 1830 WESH-2; 1930 WUSN-2 (tent) 2000 WSAV-3; 2101 WEDU-3

5-17 Es 1115 KPRC-2 in and out til 1220, Tr 2200+ Ft. Wayne, Peoria, S. Bend, all good plus WKBD-50 at 2345 good.

6-2 Es 1800 KOOK-2; 1830 KTWO-2; 1930 KID-3; 2000 KUTV-2. Tr 2230 WMT-2

5-18 Tr 0100 WTOL-11 (tent)

0700 WMT-2 Cedar Rapids

6-3 Es 1800 KPRC-2; 1820 XEFE-2; XEFB-3 (both tent) 1840 KBTX-3; 1845 KIII-3;

1850 KRGV-5 (tent) 1930 KENS-5 (tent) 2222 KWGN-2, KTVS-3 (tent)

5-19 Tr 0615 WKBT-8 LaCrosse (175)

5-20 Tr 0615 WJMN-3 Escanaba, MI (200)

0625 WSIL-3 Harrisburg, IL (tent)

6-4 Es 1830 WUSN (tent), WEDU-3; 1845 WRBL-3 (tent); 1915 WSAV-3 (tent)

Tr 2300 WQAD-8 Quincy, IL (300)

WESH-2: 2000 WEAR-3 (tent)

5-21 MS 0642 WWL-4 (tent) Tr 0710 WICS-20 Springfield, IL (250)

Es Un-id at 1830 on 2-3

6-7 Es 1111 KOOK-2 Billings, MT.

5-23 Es 2140-2330 Un-id, in and out to ch 5

5-29 Es 2355 WESH-2

6-8 Es Un-id from 1855 to 2230

6-11 Es 1830 WESH-2; 1900 WEDU-3; 1930 WUSN-2; 2030 WSAV-3, plus many un-id to ch 5. Opening lasted 5 1/2 hrs.

(Ferdie's log totals now over 350 with new ch 5s. On vertical antenna???) No, A TRAP-EZE--FSD.

Dave Janowiak, 3661 South 46th Street, Greenfield, WI. 53220 (CST-CDST)

4-20 through 5-8 installing antennas as follows: ch 2 finco, ch 5 finco, 2 hi band fincos, all ch winegard conical vertically polarized, 7 ft. finco dish!!

5-9 Es 1729 (tune in) KOAI-2 Flagstaff, AZ. (rcvd letter verie...Dave was first in midwest w/ this one.) 1735 KWGN-2 to 1810 turn off.

Janowiak, cont.

- 5-10 Es at 0900 tune in. Un-ids on 2-3 to 0915 tune out. 1200 WUSN-2 at tune in to 1300 tune 1630 skip strong to Texas (KMID-2, KPRC-2, KBTX-3, etc.) 10KC offset over local WLS-7. 1815-on. Lower channels clobbered FM...but noted skip shifting from Texas to Fla. all evening. Gave up at 2200, skip still in.
- Few ids.
- 5-13 Es 1800-2200 WESH-2, WEDU-3
- 5-16 Es 1640 KMID-2 at tune in. KPRC-2 in also. 1700 skip into FM band. at 1800.
- 5-17 Es KMID-2 at 1158 tune in.
- 5-18 to 30 horrible Es and Tr conditions!! to leave at 0720.
- 5-30 Es 2100 tune in...excellent skip. Logged XEFE-2, WBAP-5 plus other Texans on 2-3.
- 6-1 Es 1900 WESH-2 at tune in. Moted weak Es all evening to Florida and Georgia.

- 6-2 Es 1400 KENS-5 logged by MRS. J!! 1900 KID-3 plus others to west
- 6-3 Es 1720 at tune in. 1730 KOOK-2, KTWO-2; 1800 KPRC-2; 1810 XEFE-2; 1820 XEFB-3 (tent) 1800 skip up suddenly to ch. 7. 1900 Texans on 3 and 5. 2230 Un-ids to west.
- badly. Spent most of evening on 6-4 Es weak at 1800 tune in. 1815 WESH-2. 2000 WEDU-3. Tr good to 200 miles 160 Es 2200 KOAI-2
- 5-11-12 Es both days, 1800 to 2200. 6-5 Tr to Michigan at 0645 and to 300 mile range in evening.
 - 6-6 Tr good out to 350 miles, inc. Cleveland, Minneapolis, etc. Es 2230 KMID-2 at tune in
 - 1729 KOCO-5 (tent) had to leave 6-7 Tr Same as 6-6 plus rare wausau and Des Moines in am. Es 1630-1700 tent KPRC-2
 - 6-8 Tr still good to 350 miles. Had

(Dave's log is now at about 350. Thanks for the good letter Dave. Let us know how the IPAs work out when finally completed).

Bruce Metzner, 136 Gas Lite Sq., Apt. 6, Madison, WI 53713 (CDST)

- 5-28 Tr 0645 WZZM-13 (190) WILX-10 (260)
- 6-4 Tr 2115 WLXT-60 (135)
- 6-5 Tr 0032 Peoria Us plus WTOL-11 (315) at 0043
- 6-13 Tr 1335 WPBN-7 and WWTV-9 (225)
- 6-14 Tr 0845 WSBT-22, WGEM-10 Quincy at 2100

(Thanks for your first report Bruce. I'd love to have many more...you my farthest West reporter. Bruce is DXing with biggest CM color-vector at 60' and almost completed twin 7' set-up ala Bob Cooper. You might find wanted hybrid splitter info from Bob or Dave J., Bruce).

6-15 Tr 0017 KROC-10 Rochester (145) 0130 WNEM-5 Bay City (290)

6-16 Tr 0055 WJRT-12 Flint (290)

6-17 Tr 0001 KGIN-Grand Island, NB (490) 0055 KETV-7 Omaha (360) 0833 WHO-13 Des Moines (250)

Roger Brown, 624 Evergreen, E. Lansing, MI 48823 (EST)

5-20 Tr 0620 Youngstown Us good

2015 WBGU-70; 2025 WOSU-34;
2040 WPGH-53 (near snow-free)

PLUS Erie Us, Cleveland, etc.

WSNS-44 Chicago at 2336.

Best at 2315 with WHIZ-18 in. all perfect

2400 WKTR-16 Kettering. (220)

5-21 Tr opening continued to an w.Pittsburg Vs snowfree at 290 to 0145. 0530 WKBW-7 Buffalo w/ tp. Things died down by 0800.

5-28 Tr 2130-2400. Usual toward east plus CKCO-13, CHCH-11 and WNED-17 very 6-11 Es 1350 tune in KOOK-2 plus CCI to 'good.

5-30 Es 0130 Un-id 2 SW. First here since 1130 at tune in to SW 1200 WRPZ 2 5-17. 1200 WBRZ-2, WLBT-3, KPRC-2, etc.

6-1 Es 1930 tune in KPRC-2, 2000 WEDU-3

weak
2055 KMID-2, 2100 WDIQ-2
6-15

6-2 Es 1240 tune in to 1330. KPRC-2, KMID-2 ided plus CCI on 3-4.

phone. Tuned out at 1500. Tuned back in at 1730. KPRC-2 plus 70 minutes of un-ided audio from Mexican ch 2. Probably XEFE...had soccer game. 1945 KWGN-2 plus CCI to ch 5. 2030 KROD-4 El Paso. All Es in and out to 2300. 2315 KWGN-2 Denver.

> Tr UHFers to 250 miles east during .33 June 1999

5-19 Tr 2345 Erie Us all near snow free 6-4 Es 1850 tune in to Florida, ch 2-4 Tr 2230-2400 good to 250 miles inc.

all perfect
2330 WDAU-22 (460), WBRE-28 (460) 6-6 Es 2120 Un-id 2 + offset in for 2-3 minutes minutes

6-7 Es 1315 tune in. Weak to SE Un-id 2

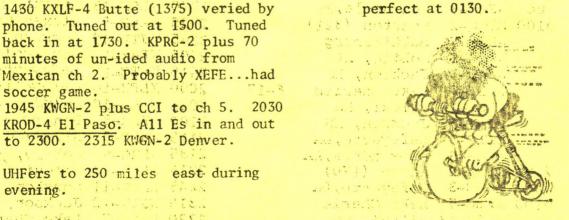
6-10 Es 0020 CKCK-2 Regina. Lasted until after locals signed off. Saw first skip on 6 at 0115. CKCK-1 Willow Bunch. At 0135, CKSA-2, Alta. Made

ch 4. 1725 KWGN-2, UN-ids. 1745 my monitor blew! Switched from Conrac to GE. 1800 Florida on 2-4. Opening lasted fro at least another 2 hours.

> 6-13 Es at tune in...1245. Weak KWGN-2 ... Stat: 1345. COffset son 3.4 . L Clanos 23 10 10 . 11 5-2700

6-15 Es at 1135 tune in. tent KOTA-3 1245 KDIX-2. Left at 1300

6-17 Tr in evening to 250 miles. 6-3 Es at tune in. 1300 WUSN-2, 1415 KOOK-26-18 Tr. to Pittsburg. CFPL-10 London



2330 611 67 That's it for now. Thanks for all excellent reports! Also, thanks to Roger Gravelle for his early am phone calls (hi) and to Glenn Hauser for nice note. Finally, special thanks to Bob Cooper for incentive, as he shows that about anything is possible if one works hard enough with good equipment!! Best DX everyone, 73s Rog

Dave Pomerov

Next Deadline: July 13

With the continuation of the summer skip season has come a further increase in the number of reporters submitting reports to the Eastern TV-DX column. Although Es dominates the reports for May and June, a few trops openings were also noted.

It is also necessary for me to write that I will be leaving the "Eastern DX Region" at the end of July at which time I will become Promotion Manager for KCSD-19 in Kansas City (DX reports welcomed!). At this time, I do not know what effect this move will have on my editorship of this column, but I will be at this address until August 1 so send reports for the August VUD to the above address.

Now, the reports:

```
Dick Clark, 4110 Bayview Dr., Ft. Lauderdale, Florida 33308
    5-1 Es 0730 WLWD-2 Dayton, OH 5-21 Es 2000 KARD-3 Wichita, KS
                                     0800 WKZO-3 Kalamazoo, MI 5-30 1130 WCBS-2 New York, NY
                                0830 WSAZ-3 Huntington, WV
2000 WTVN-6 Columbus, OH
2030 WKYC-3 Cleveland, OH
2031 WAVE-3 Louisville, KY
                                                                                                                                                                 1200 KDKA-2 Pittsburgh, PA
1230 KYW-3 Philadelphia
1430 WGR-2 Buffalo, NY
                                                                                                                                                                  1500 WPSX-3 Clearfield, PA
                                2100 WCIA-3 Champaign, IL
                                                                                                                                                                          1530 WLWD-2 Dayton, OH
     5-21
                                  1930 KVOO-2 Tulsa, OK
Ronald J. LeBlanc, 2524 Arizona Dr., Marrero, Louisiana 70072
                                                       KTCA-2 St. Paul (1055) 6-14 Tr KBNT-12 Beaumont, TX
                                     1800 WUNB-2 Columbia, NC KUNU-12 Green Bay, WI
1825 WHNR-2 Photo (900) Es 1015 WBAY-2 Green Bay, WI
     6-11
                                      2210 WBAY-2 Green Bay, WI 6-16 Tr 2205 WALA-10 Mobile, AL
                                                                                           Cedar Rapids
                                      2235 WMT-2
                                                                                                                                                                                            2210 KLFY-10 Lafayette, LA
                                      2330 WSFA-12 Montgomery, AL
                                                                                                                                                                                          2225 W.DAM-7 Hattiesburg
                                      2045 KTRK-13 Houston, TX 2230 WKRG-5 Mobile, AL
                                                                                                                                                                  2300 WLOX-13 Biloxi, NS
                                         to WEAR-3 Pensacola, FL
                                     0100 KPRC-2 Houston (321) 2325 KALB-5 Alexandria WDAN-7 Hattiesburg 2345 WJTV-12 Jackson, MS
                                                           WKRG-5 Mobile, AL WLBT-3 Jackson, MS
                                                                                                                                                                                      2405 WEAR-3 Pensacola, FL
                                                           WKRG-5 Mobile, AL
WLBT-3 Jackson, MS

KPLC-7 Lake Charles 6-17
WLOX-13 Biloxi, MS

2410 KATC-3 Lafayette, LA
2405 WEAR-3
2410 KATC-3 Lafayette, LA
2406 WEAR-3
2410 KATC-3 Lafayette, LA
2406 WEAR-3
2410 KATC-3 Lafayette, LA
2407 WEAR-3
2410 KATC-3 Lafayette, LA
2408 WEAR-3
2408 
                                                          WLOX-13 Biloxi, MS

WJTV-12 Jackson, MS

KATC-3 Lafayette, LA

KALB-5 Alexandria, LA

KALB-5 Photo (170)

KATC-3 Lafayette, LA

WLOX-13 Biloxi, MS

WLOX-14 Biloxi, MS

WLOX-15 Biloxi, MS

WLOX-17 Lake Charles

WLOX-18 Biloxi, MS

WLOX-19 Biloxi, MS
                                                           WJTV-12 Jackson, MS
                                       2200 KALB-5 Photo (170)
      6-14
                                          to KATC-3 Lafayette, LA
                                       0100 KPLC-7 Lake Charles
```

KTRK-13 Houston, TX move (Local stations are WWL-4, WDSU+6, WVUE-8, WYES-12 and WWOM-26; Total 113)

Fred Nordquist, 302 Sandra Lane, N. Syracuse, New York 13212 (EST) 2-28 GW 1427 WUTR-20 Utica, NY (45) 4-28 Tr 2230 WNED-17 Buffalo, NY 4-28 Es 2210 KQTV-2 St.Joseph, MO 5-10 Es 2020 UNID-2 to SW (weak)

Dob Combald	Dannakk :	need minimized to	. 37 77	/mmil		anti con esta esta esta esta esta esta esta esta
		Road, Dunkirk,	New York	(EDT)		1834.
: (C. P. C. P. C. B. C. P.		Mt.Pleasant	6-10 Es		KPLO-6	Reliance, SD
at	WCUM-19	Bay City, MI	6-11		WBRZ-2	Baton Rouge
2200		Saginaw, MI			KTBS-3	Shreveport
		Toledo, OH			KATC-3	Lafayette, LA
		Toledo, OH		** *	KALB-5	Alexandria, LA
		Chicago, IL		the state of the s	WDSU-6	New Orleans
	WNDU-16	S. Bend, IN			WFBC-4	Greenville,SC
		Scranton, PA		The state of the s	WWL-4	New Orleans
		Pittsburgh	<u> </u>		WKRG-5	Mobile, AL
8		Scranton, PA	S. I		WCIV-4	Charleston, SC
ic is a		Binghamtpn, NY	6-1 to 6	e elera		WENY-36
		Elmira, NY		* * *	and the same of th	WBJA-34
		Binghamton, NY				WTVS-56
		Binghamton, NY	WDH	0-24	WXON-62	(most days)
		Scranton, PA	6-1 KYW	-3	WHTN-13	WFBM-6
		Detroit, MI	WJI	M-6	WJRT-12	WOOD-8
		Detroit, MI	WGN	-9	WILX-10	WS BT-22
· · · · · · · · · · · · · · · · · · ·		Detroit, MI	× 1'		WPGH-53	Pittsburgh
	WHTN-13	Huntington, WV	1 · · · · · · · · · · · · · · · · · · ·		WFIL-6	Philadelphia
	WZZM-13	Kalamazoo, MI	Vall valled		WMAR-2	Baltimore, MD
	WJRT-12	Flint, MI	500		WLWI-13	Indianapolis
	WOOD-8	Grand Rapids	6-2			Lansing, MI
	WJIM-6	Lansing, MI				Flint, MI
the second secon	WKZO-3	Kalamazoo, MI				Grand Rapids
e e e e e e e e e e e e e e e e e e e	WLWC-4	Columbus, OH	81-070			Onondaga, MI
		Columbus, OH	PG, mod			and WSBT-22
	WTVN-6	Columbus, OH	- 1 CA			and WNEP-16
	WILX-10	Lansing, MI				Toledo, OH
trops	WNEP-16	Scranton, PA	130Ebckpos			Bowling Gr.
all	WLUK-11	Green Bay, WI	Ext Pea			and WPTA-21
night	WLS-7, an	nd WGN-9			WTVN-6	Columbus, OH
5-19	WFBM-6	Indianapolis			And the second s	Ft.Wayne, IN
	WCAU-10	and KYW-3	6-13			Toledo, OH
and a state of the		WPTA-21, WKJG-3				S. Bend, IN
	WJAN-17	Canton, OH	is the same of			Ft.Wayne, IN
	WNDU-16	and WSBT-22	± √1854.5			FT.Wayne, IN
		Lima, OH 30	J. 12			Tt.Wayne, IN
	WSYE-18	Elmira, NY			WOOD-8	
3.6	WBGU-70	Bowling Green	business.			Onondaga, MI
		Jacksonville,	1400 1			Lansing, MI
		Illinois	6-14 (Gr			200 miles)
5-20 WHTN-13	WTAP-15					excellant)
	WTVN-6		25 Charles			nd WFIL-6
	WVIA-44		City and all			Columbus, OH
	WENY-36		\			Weston, WV
WTVS-56	WKJG-33	WSYE-18	, 45			Indianapolis
	WXON-62		OU, Fgi	d		Columbus, OH
WNEP-16	WHNB-30	WKBD-50	TY to b			Baltimore, MD
5-22 Trops to						Grand Rapids
5-23						Onondaga, MI
edw.Est. effer		Kingston, Ont.				Cincinnati
5-24 Es	No ID's					OColumbus
6-10	KETS-2	Little Rock	3	- Y - 10		Flint, MI
		Denver, CO	Cirayo's			Huntington
		Denver, CO				Canton, OH
		Pueblo, CO	entro, vyrony			Lima, OH
	The same and the s	Rapid City			WJIN-6	Lansing, MI
, com	KREX-5	Grand Junct.			WLWT-5	Cincinnati
the Maria		duid ounce.		4 c. 5		CTHCTHIGCT

```
Jerry Pulice, 143 Gibson ave., Staten Island, New York 10308
4-16 Tr 0630 WTOP-9 Washington, DC 4-28 Tr 0750 WMPB-67 Baltimore, MD 0900 WCVE-23 Richmond, VA WBAL-11 Baltimore, MD 5-5 0615 WWBT-12 and WXEX-8 WJZ-13 Baltimore, MD 5-6 Es UNID (Missouri) WGAL-8 Lancaster, PA 5-9 1730 UNID-3 Cuba 1800 WEDU-3 Tampa, FL 1800 WEDU-3 Tam
  Jerry Pulice, 143 Gibson Ave., Staten Island, New York 10308
     David Long, 66 Beattie Ave., Lockport, New York 14094
         5-7 Tr 1830 WPSX-3 Clearfield, PA 6-6 Es 1924 WEAR-3 Pensacola, FL 5-11 1800 WJET-24 Erie, PA 6-8 Ms 0600 WSB-2 Atlanta, GA WSEE-35 Erie, PA 6-11 Es 1830 WEDU-3 Tampa, FL WQLN-54 Erie, PA WEAR-3 Pensacola, FL WQLN-54 Erie, PA 1900 WKRG-5 Mobile, AL CKWS-11 Kingston, Ont. KALB-5 Alexandria LA
          CKWS-11 Kingston, Ont.

WNEN-5 Saginaw, MI

5-29 0220 WJBK-2 Detroit, MI (Total now 71 stations)

KALB-5 Alexandria, LA
KATC-3 Lafayette, LA
Mitch Donock, 2921 Brinkley Road, Oxon Hill, Maryland 20031
5-10 Es 1850 KVOO-2 Tulsa, OK 5-30 Es 2115 UNID-2 Spanish
1852 UNID-2 Roller Derby? 5-31 1 1445 WPBT-2 Miami, FL
2030 KFDX-3 Wichita Falls 1450 UNID-6 Cuba (Havana?)
2100 KATC-3 Lafayette, LA 1730 WEDU-3 Tampa, FL
5-13 2000 KTVI-2 St. Louis, MO 6-1 1900 KVOO-2 Tulsa, OK
5-20 1900 WPBT-2 Miami, FL 1918 KOTV-2 St. Joseph, MO
1910 WEDU-3 Tampa, FL 2100 KTAL-6 Texarkana, TX
5-22 Tr 0600 WRAL-5 Raleigh, NC 6-4 1910 KARD-3 Wichita, KS
5-23 0930 WTVD-11 Raleigh, NC 1912 KVOO-2 Tulsa, OK
1000 WRDU-28 Raleigh, NC 1912 KVOO-2 Tulsa, OK
1000 WRDU-28 Raleigh, NC 1912 KVOO-2 Tulsa, OK
1000 WRDU-28 Raleigh, NC 2000 KTVI-2 St. Louis, MO
5-30 Es 2100 KBTX-3 Bryan, TX 2030 KETS-2 Little Rock, AK
  Larry Vogt, 8309 Greeley Blvd., Springfield, Virginia 22152
       2-26 Tr 1330 WHAG-25 Hagerstown, ND 5-10 Es 1945 KRMA-6 Denver, CO
4-28 Es 1700 UNID-3 Cuba 5-31 1450 WCIX-6 Miami, FL
CMJ-4 Camaguey, Cuba 1520 WEDU-3 Tampa, FL
1730 UNID-6 Cuba 6-1 1900 KVOO-2 Tulsa, OK
WTHS-2 Miami, FL 1913 KOTV-2 St. Joseph, MO
5-10 1845 KTVC-6 Ensign, KS 1916 KCKT-2 Great Bend, KS
```

FCC NEWS + DATA Gary A. Olson 1203 Kenton Rd. Deerfield, 111.60015 STATIONS OPERATING (AS OF JUNE 1, 1970) 108 UHF ETV JHF Com 181 VHF ETV VHF Com 82 Total Authorized Stations On The Air 881 New Stations Reported On The Air: WUTR (TV) ch. 20, Utica, NY, reported on air in April WMGZ (TV) ch. 16, Mayaguez, P.R., reported testing in April KTVM-TV, ch. 6, Butte, Mont., (satellite of KGVO-TV) NBC, reported on the air, 100 kw. KDUB-TV, ch. 40, Dubuque, Ia., ABC, 537 kw., on air June 1st *WNIN-TV, ch. 9, Evansville, Ind., reported on air in May New Target Dates Reported: *NNJT (TV) ch. 52, Trenton, N.J., fall 1970 WRTV (TV) ch. 58, Newark, N.J., mid-1971 MFCB (TV) ch. 45, Miami, Fla., late fall 1970 Miscellaneous Changes Reported: · MYES-TV ch. 8 and MVUE-TV ch. 12 switched channels effective June 8th. The new WYES-12 will be 134 kw. and WVUE-8 will be 316 kw. CMQ-2 (Cuban television) is now operating under the call of ICR Stations Reported Off The Air: KHAR-TV, ch. 13, Anchorage, Alaska, left the air May 21st WSMS-TV, ch. 51, Ft. Lauderdale, Fla., is off the air and will not return as previously expected FCC COMPLETED ACTION Call Letter Changes: VJRJ-TV, ch. 17, Atlanta, Ga., to WTCG (TV) KRLD-TV, ch. 4, Dallas, Tex., to KDFW-TV WCTU-TV, ch. 36, Charlotte, N.C., to VRET-TV * ************ * Thanks To: D. Clark M. Goldman * for their * New Call Letters Issued; Stockton, Calif., ch. 53, granted KAJC-TV *Winston-Salem, N.C., ch. 26, granted WUNL-TV * * contributions* Other Changes Allowed: WTVO (TV) ch. 9, Chattanooga, Tenn., ERP to 31.6 kw. to the column* this month! KVRL (TV) ch. 29, Houston, Tex., ERP to 1660 liv. - ant. to 940! ******* *State College, Miss., ch. 2 (Miss. ETV Authority) ant. to 1254' KTVM (TV) ch. 6, Butte, Mont., - ant. to 1936 kw. KFBB-TV, ch. 5, Great Falls, Mont., ant to 590' Dothan, Ala, ch. 18, ERP to 398 kw. - ant. to 730' KPAX-TV, ch. 8, Missoula, Mont., ERP to 276 kw. - ant. to 2150' *WSWP-TV, ch. 9, Grandview, V.Va., ERP to 316 kw.

ACTION APPLIED FOR OR REQUESTED
Applications For New Stations:

Mt. Vernon, Ill., ch. 13 (Soillcom Inc.) 316 km. - ant 757'

Misc. Requests:

FCC is requesting channel shift: for operating ch. 70 at Bowling Green, Chio, and ch. 77 Glen Ridge, NJ. Plan calls for deleting ch. 54 at Toledo and giving it to VBGU-TV.

TIDBITS AND MISCELLAMEOUS ITEMS OF INTEREST TO TV DXERS

The FCC has authorized a change in the ETV reservation at Marquette, Mich., from ch. 19 to ch. 13

(continued next page)

*MJCT (TV) ch. 7, Jacksonville, Fig., ERP to 302 kw.

PAGE 2 JULY

The FCC startled the DXing world with the news that they are reversing their earlier decision on land-mobile use of UHF. Now it appears that land-mobile radio users will be allowed to share two UHF channels in each of the U.S. ten largest cities. The channels (none of which ore occupied) are all between ch. 14 and 20. In addition the translator range (ch. 70-83) will be allocated to land mobile use - although television translator stations will be allowed to continue to operate on those frequencies. No new TV stations will be authorized on ch. 70-83.

MGSF (TV) ch. 28, Newark, Ohio, has been approved for a shift

to channel 31. New power would be 4.68 kw.

The FCC has backed a reduction in prime time offerings by the networks to affiliates. This means more local programs in the evening (and better opportunities to ID DX stations).

Sheretimers in Miami will operate as follows on ch.2: WTHS-TV Mon-FRI (8-4 PM); WPBT (TV) Mon-FRi (5-11 PM), Sat. (8-12 AM), Sun. (3-11 PM).

The FCC has changed its guidelines to allow station permittees

18 months to build their station after receiving a CP.

WBBH-TV, ch. 20, Ft. Myers, Fla. is now an all-niter on Friday and Saturday nights. WPLG-TV, ch. 10, Miami, has given up all-nite movies for the present.

Utah will shut down three of its five operating ETV stations. KUSU-TV ch. 12, KOET (TV) ch. 9, and KUCS-TV ch. 18 will leave the air.

KBYU-TV ch. 11 and KUED-TV ch. 7 will continue to operate. *******************************

An abbreviated version of the mailbag this month. That with the summer DX (what DX?) and planning for the convention, etc., we'll keep it short and sweet in the merry month of July.

New members this time around include: Ronald J. LeBlanc, 2524 Arizona Dr., Marrero, La. 70072 Virginia Lyle, 3050 3rd Ave., N. St. Petersburg, Fla. 33713 Richard Galasso, 2933 Carman St., Camden, NJ, 08105 Joseph Kureth Jr., 9233 1. Stayman Dr., Ellicott City, Md. 21043 David Ronecker, 212 Yale Ave., San Antonio, Tex., 78201 Frank Aden, 5805 Flamingo Ave., Boise, Idaho, 83704
Joseph O. Sarff, RR #1, Box 80, Pecatonica, Ill., 61063
William A. Matthews, PO Box 15306, Columbus, 0. 43215

Late renewals include:

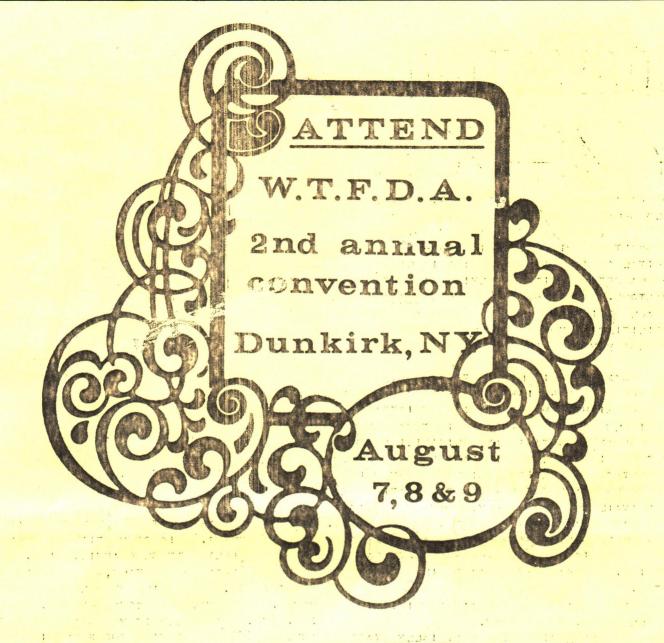
Bill Eckberg Bill Migley Al Kopec Dave Swanson Thomas Henry (2 years)

Rog Winsor Fred MacCormack

The welcome contributions of Valdo Bishop (\$9), Dave Swanson (\$5.50), Dick Clark (\$10), Verrell Tallet (\$3), and Bill Draeb (\$2) among others have been added to the mimeo fund. These donations have been immensely helpful in paying for our new machine; without these sacrifices your TV-FM DX Club would have been on an extremely tight budget this summer. After our new possession is correctly set up, I think you will feel the contributions were well worth while fellas. Many thanks:

Je mentioned Dave Swanson's generosity a moment ago. Dave -- in his usual good natured manner -- says in regard to membership renewal "OK, .OK, I concede. Here's my ante for one more year..." It seems as though our mailing staff uses a red stamp to indicate expiration of membership. Dave is a little embarrassed that the postman and all his peepy neighbors now know he waits till the last second to renew his TTFDA membership. HEY. That about you -- is your membership up???

See you all at the convention. And if you can't nmake it, we have a date here at the mailbag month as your consolation prize:



CONVENTION PLANS CONTINUE TO PROGRESS FOR THE 1970 WTFDA CONVENTION. HOST
BOB SEYBOLD REPORTS THAT RESPONSE HAS BEEN EXCELLENT TO THE REGISTRATION FORM,
AND SEVERAL DXERS HAVE OFFERED RIDES. TO THE CONVENTION. IF YOU HAVEN'T MAILED
IN YOUR FORM YET, AND PLAN TO ATTEND THE CONVENTION, PLEASE SEND YOUR FORM TO
BOB AS SOON AS POSSIBLE. COMPLETE CONVENTION DETAILS AND ROAD DIRECTIONS CAN
BE FOUND IN LAST MONTH'S VHF-UHF DIGEST.

BILL GRANT OF WORCESTER, MA OFFERS A RIDE TO ANYONE IN MA, AS LONG AS THEY COME TO WORCESTER. ALSO, ANYONE IN NY STATE NEAR EXITS OF NEW YORK STATE THRUWAY (INTERSTATE 190). ANYONE INTERESTED SHOULD CONTACT BILL GRANT AT 16 GOULDING STREET, WORCESTER, MA 01609 AND BOB SEYBOLD. ANYONE NEEDING A RIDE IN THE S. ONTARIO AREA SHOULD CONTACT WAYNE PLUNKETT AT 124 JOHN STREET, WESTON, 492, ONT. AND BOB. MARK KOZLOWSKI OF 306 RIVERSIDE AVENUE, BUFFALO, NY 14207, OFFERS BUFFALO AREA DXERS A RIDE OR TO ANYONE ARRIVING AT THE BUFFALO AIRPORT. IN A SLIGHTLY DIFFERENT POSITION IS RICHARD BARTH, 51 LINN DRIVE, VERONA, NJ 07044. RICHARD IS IN NEED OF A RIDE. ANYONE THAT CAN HELP SHOULD CONTACT RICHARD AND BOB SEYBOLD.

IF YOU HAVE T STARTED TO THINK ABOUT ATTENDING THE CONVENTION YET, DON'T WASTE ANY TIME; THERE ISN'T MUCH LEFT.

Some of the greatest TV-FM DXers in the world will be attending the convention... Will you be one of them?

CONVENTION:

A.N. A.R.

THE FIFTH ANNUAL AND RO CONVENTION WILL BE HELD JULY 31, LIGUAT 1-2, 1970 AT THE LAKE Tower 1 . LAKE SHORE DRIVE AT OH!O STREET IN DOWNTOWN CHICAGO. ILLINOIS --- CONVENTION CAPITAL OF THE WORLD. THE INN IS LOCATED ON THE LA KEFRONT WITHIN WALKING DISTANCE TO DOWNTOWN. A FREE BUS TO THE LOOP IS AVAILABLE TO ALL REGISTERED GUESTS. THERE ARE PARKING FACILITIES AT THE INN AND ELSEWHERE NEARBY. WE ALSO HAVE USE OF THE SWIMMING POOL!

RATES FOR SINGLES AT THE LAKE TOWER INN ARE \$17 PER NIGHT, AND TWIN DOUBLES ARE \$23 PER NIGHT. THE CONVENTION REGISTRATION FEE INCLU DES THE SATURDAY NIGHT BANQUET. THE SUNDAY BREAKFAST, AND ELIGIBILITY FOR ONE OF THE PRIZES. ALL REGISTRATION FEES SHOULD BE SENT TO CONVENTION CHAIRMAN JERRY HEIEN. AND RESERVATION CARDS FOR ACCOMMODATIONS ARE ALSO AVAILABLE FROM JERRY. COSTS FOR 3 IN A

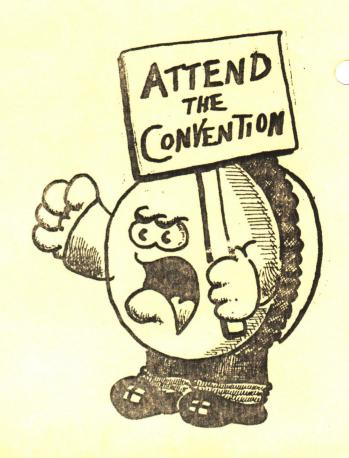
ON THE PROGRAM IS A SCHEDULED TOUR OF THE WGN RADIO AND TV COMPLEX ON SATURDAY MORNING. THE BANQUET SPEAKER WILL BE NAMED

FREE RADIO, TV. AND AIR CONDITIONING IN ALL ROOMS, BY THE WAY.

THE CONVENTION WILL OFFICIALLY START AT 5 PM FRIDAY NIGHT WITH THE HOSPITALITY ROOM OPENING. PARKING FACILITIES ARE AVAIL-ABLE FREE TO THOSE ATTENDING BUT NOT REGIS-TERED AS HOTLE GUESTS. THOSE ATTENDING AND COMING IN BY AIR CAN TAKE AN AIRLINE BUS FROM O'HARE.

ANARC REPRESENTATIVES OF THE MEMBERS THAT AN OFFICIAL ANARC MEETING CANDBE HELD.

ANTO AN TARK AND AN TO STATE AND THE STATE A



ROOM CAN BE ARRANGED I'M SURE, AT LOW RATES. REMEMBER YOU NEED NOT BE A MEMBER OF AN ANARC CLUB TO ATTEND. THIS CONVENTION IS OPEN TO ALL DXERS REGARDLESS OF CLUB AFFILIATION. COME ON DOWN AND ENJOY THE DX TALK, AND MEETING OLD AND NEW FRIENDS. NTFDA WILL BE WELL REPRESENTED AS USUAL. BRING YOUR LOGBOOKS, PHOTOS, TAPES, VER-IES. ETC. ESPECIALLY IF YOU CAN'T MAKE THE 2ND ANNUAL "TFDA CONVENTION THE FOLLOWING WEEKEND, BE SURE TO ATTEND THIS CONVENTION. OR MAKE BOTH EVENTS IF YOU POSSIBLY CAN. IT WILL BE WELL WORTH THE EFFORT AS MOST DXERS ADMIT WHO HAVE ATTENDED PAST CONVENTIONS. SEE YOU THERE!

> CONVENTION CHAIRMAN: JERRY HEIEN 3822 MARSHALL COURT BELLWOOD,

4,000 24,000

Three to the contract of the contract of THE TOTAL BUILDING FIGAT

TO TOUT ON THE SECTION

The second of the second section is at all -700 BUT INTOMBTE TOTAL SELECTION OF THE

Box 1466 APO San Francisco 96288

1970

STATISTICS

L, " + " + " +		OIDHEIMDE	2 IB DA ILDO C.DD	
Call	Location	Miles	DXer, Location	Comments
WEAR	Pensacola FL (AL)	800	Steve Teinstein, Pittsburgh PA	
WRBL	Columbus G. (AL)	840	Bill Draeb, Kewaunee WI	now in GA
KTVK	Phoenix AZ	870	Richard Lowry, Temple TX	
KIEM	Eureka CA	880	Jim Grover, Crossfield Alta	
KCRA	Sacramento CA	545	Doris Johnson, Longview WA	
KEYT	Santa Barbara CA	775	Ed Hepp, Portland OR	
WTIC	Hartford CT	990	Jerry Dee, Waterloo IA	was Easter
WSAV	Savannah GA	925	Bill Draeb, Kewaunee VI	
KID	Idaho Falls ID	1000	Ken Neal, Hamlin TX	
WCIA	Champaign IL	1020	Ghislain Girard, Arvida PQ	光度/车 子。
WAVE	Louisville KY (IN)	1030	Ed Sparks, Odessa TX	
KGLO	Mason City IA	1045	John Cody, Middletown CT	
KARD	Wichita KS	1330	John Cody, Middletown CT	
KTBS	Shreveport LA	1040	Robert Seybold, Dunkirk NY	
MKZO	Kalamazoo MI	910	Ed Bourgeois, Norco LA	
KDAL	Duluth MN	1465	Doris Johnson, Longview WA	
WLBT	Jackson MS	1250	Fred McCormack, Des Lacs ND	
KTVO	Kirksville MO	695	Fred McCormack, Des Lacs ND	
KYTV	Springfield MO	1115	John Cody, Middletown CT	
KMTV	Cmaha NB	830	Pat Dyer, San Antonio TX	
USYR	Syracuse NY	1235	Glenn Hauser, Enid OK	
WBTV	Charlotte NC	950	Glenn Hauser, Enid OK	
KYW	Cleveland OH	1100	Carlon Howington, Homestead FL	now WKYC
KY.	Philadelphia PA	705	Bill Draeb, Kewaunee WI	was WRCV
KDLO	Garden City SD	1265	John Cody, Middletown CT	a sukara n 1 mp a. Karan 1974 da Jasa Pallan
KOTA	Rapid City SD	1175	James Habermehl, Clarington OH	Tarina de la constantida della
WRGP	Chattanooga TN	810	John Cody, Middletown CT	now WRCB
WREC	Memphis TN	645	Steve Weinstein, Pittsburgh PA	11.
KBTX	Bryan TX	1135	Steve Weinstein, Pittsburgh PA	had been a second
KFDX	Wichita Falls TX	1105	Steve Weinstein, Pittsburgh PA	1115
WSVA WTAR	Harrisonburg VA	295	Richard Nieman, Buffalo NY	
WIAR	Norfolk VA	1135	Ed Shorey, Derby KS	
WISC	Huntington WV	1095	Jim Himes, Joes CO	
CFRN	Madison WI	905	Ed Bourgeois, Norco LA	
	Edmonton Alta	875	Eddie Albright, Medford OR	
CJBR	Winnipeg Man	975	Robert Cooper, Oklahoma City OK	was ch 6
CKOS	Rimouski PQ	845	James Habermehl, Clarington OH	e state of
CMH	Yorkton Sask		Charles Wood, Ashland OR	
XEM	Santa Clara Cuba		Richard Lowry, Temple TX	now off
VINI	Mexicali BCN	1010	Doris Johnson, Longview WA	

Please check the list carefully. YOU may well have some records, especially for several stations for which no meteor scatter reports at all were found (omitted from the list).

ADDITIONS AND REVISIONS

Bill Heusmann, delving into old AIPA bulletins and other sources, has uncovered quite a number of "new" records. Some appear here; many more will in months to come. VUD kept us plenty busy, though!

2	KOAI WSB KCKT WBRZ	Flagstaff AZ Atlanta GA Great Bend KS Baton Rouge LA	MS	775	Ferdinand Dombrowski, Milwaukee WI Richard Lowry, Temple TX Roy Barstow, Hyde Park MA Armand Pelland, Woonsocket RI	Cooper 755 Kadet 1455
			Т	745	Schafer & W. Dick Clark, Ft Lauderdale FL	Nieman1095 Hauser 565

		THE REAL PROPERTY OF THE PARTY.			7-0-1	
2	"CBUT"	Vancouver BC	MS	890	Robert Cooper, Fresno CA	
	CKCK	Regina Sask			Robert Mellen, mobile (Ice Island T-3, Arctic	
	011011	mogrita basic		2170	Ocean @ 71°52'N/160°20'W). Boyd 1920	
	XEFE	Nuevo Laredo Tams		1350	Roger Brown, East Lansing MI Janowiak 1250	
e fre	aga <u>e</u>		. T20			
		Panama Panama			Robert Cooper, Oklahoma City OK Cooper 1150	
3	WRBL	Columbus GA	T	510		
100		Champaign IL	T	590	Robert Cooper, Oklahoma City OK Hauser 570	
	KDAL	Duluth MN	AE	2630	Robert Mellen, mobile (as above) Simkin 1575	
	KLNE	Lexington NB	T	355	Robert Cooper, Oklahoma City OK Hauser 290	
	WLWC	Columbus OH		1160	Laurence Pickerell, Longmont CO Ballew 935	
	KVDO	Salem OR	T	45	Mike Northam, Lake Grove OR new	
44.90	KFDX	Wichita Falls TX	T	230	Robert Grace, Franklin TX 77856 Hauser 180	
	"CBWT"	Winnipeg Man	AE	2330		
	(CMQ)	Holguin Cuba	T		Dick Clark, Ft Lauderdale FL new	
	XHCV	Coatzacoalcos Ver		1430	Leslie Prus, Manhattan KS Cooper 1195	
4	WLNT	Cincinnati OH		1085	Laurence Pickerell, Longmont CO - Dubreuil 730	
	CHSJ	St John N B	T	330	Gene DeLorenzo, Hyannis MA Sundstrom 130	
	(XEW)	Tampico Tams	T	490	Pat Dyer, San Antonio TX new	
5	WOI	Ames IA	T	490	Robert Cooper, Oklahoma City OK Hauser 445	
100	KHAS	Hastings NB	T	355	Robert Cooper, Oklahoma City OK Hauser TIE	
6	WCTV	Tallahassee FL	T	855	Don Ruland, San Antonio TX Howing ton 415	
	KHPL	Hayes Center NB	T	400	Robert Cooper, Oklahoma City OK Hauser 340	
	XET	Monterrey NL	Ť.	280		
7	KMNE	Bassett NB	•		그리고 얼마나 하는 그는 그 그는	
8	WXGA			480	Robert Cooper, Oklahoma City OK new	
0	KPTS	Waycross GA		370	Dick Clark, Ft Lauderdale FL Kadet 25	
		Hutchinson KS		175	Robert Cooper, Oklahoma City OK new	
	KGNS	Laredo TX		290	Robert Grace, Franklin TX Dyer 215	
019	(CMAB)	Holguin Cuba		450	Dick Clark, Ft Lauderdale FL Howington 430	
200	WNIN	Evansville IN (KY?)		165	Dave Pomeroy, Lexington KY new	1
	KPNE	North Platte NB	1	425	Robert Cooper, Oklahoma City OK new	
10	XHX	Monterrey NL		280	Pat Dyer, San Antonio TX 280	
12	KIIN	Iowa City IA		105	Bill Heusmann, Des Moines IA new	
*	XHAW	Monterrey NL		280	Pat Dyer, San Antonio TX new	
14	WABW	Pelham GA		860	Don Ruland, San Antonio TX new	
	WEBA	Allendale SC			Dick Clark, Ft Lauderdale FL Cox 385	
15	WOWL	Florence AL			Robert Cooper, Oklahoma City OK new	
	WDCO	Cochran GA			Dick Clark, Ft Lauderdale FL new	
	KAMU	Bryan TX		25		
	VIMW	Madison WI			Mobert Cooper, Oklahoma City OK Seybold 510	
16	WUS F	Tampa FL		190	Dick Clark, Ft Lauderdale FL new	
, ,	VIBOC	Salisbury MD		355	Roy Barstow, Hyde Park MA Seybold 345	
17	WJKS	Jacksonville FL		295	그 그 그는 사람들은 사람들이 하는 그는	
18	WLEX	Lexington KY			Dick Clark, Ft Lauderdale FL new	
19	WXIX	Cincinnati OH			Robert Cooper, Oklahoma City OK Draeb 470	
17	KXIX			750		
01		Victoria TX		405	Robert Cooper, Oklahoma City OK new	
21	WHA	Madison WI		675	Robert Cooper, Oklahoma City OK Seybold 510	
		Omaha NB		405	Robert Cooper, Oklahoma City OK Pomeroy 165	
	WKYT	Lexington KY			Robert Cooper, Oklahoma City OK Draeb 470	
31	WMBD	Peoria IL		630		
33	WC FT	Tuscaloosa AL		595	Robert Cooper, Oklahoma City OK Cox 30	
44 :	WIOG	St Petersburg FL		190	Dick Clark, Ft Lauderdale FL new	
and the same	WSNS	Chicago IL		180	Bill Draeb, Kewaunee WI new	
70	K7Ø	Ottumwa IA		470	Robert Cooper, Oklahoma City OK new KHQA 7	
	K7ØDB	Clarendon TX		190	Robert Cooper, Oklahoma City OK new	
71		LaSalle IL		605		
		Mooreland OK	1,		Robert Cooper, Oklahoma City OK new	
361.		Hansford Cnty TX	· "		Robert Cooper, Oklahoma City OK new	
73		Mooreland OK		105		
		Hansford Cnty TX	hit J			
CA C	K73A11			190	Robert Cooper, Oklahoma City OK new	
r	· · · · · · · · · · · · · · · · · · ·	Ji slebrabum		the office	CDA	

74	K74BY Atlantic IA	436 Robert Cooper, Oklahoma City OK new WOI 5
	K74CQ Parceline MO	385 Robert Cooper, Oklahoma City OK Pomeroy 135
	·· K74BF Arnett OK	130 Robert Cooper, Oklahoma City OK . new
	K74CJ Clarendon TX	190 Robert Cooper, Oklahoma City OK new
75	K75BM Mooreland OK	105 Robert Cooper, Oklahoma City OK new
	K75BN Hansford Cnty TX	200 Robert Cooper, Oklahoma City OK new
	. K75AV Wellington TX	150 Robert Cooper, Oklahoma City OK new
76	K76BZ Ottumwa IA	470 Robert Cooper, Oklahoma City OK Total Romeroy 180
	K76CA Marceline MO	385 Robert Cooper, Oklahoma City OK new KCMO 5
	K76BD Booker TX	175 Robert Cooper, Oklahoma City OK new
	K76CL Bryan TX	25 Robert Grace, Franklin TX KCEN 6
	K76AU Shamrock TX	140 Robert Cooper, Oklahoma City OK new
77		100 Robert Cooper, Oklahoma City OK Smith 15
78	K78 Keosauqua IA	470 Robert Cooper, Oklahoma City OK new KHQA 7
	K78BX Marceline MO	385 Robert Cooper, Oklahoma City OK Pomeroy 135
	K78AZ Matador TX	210 Robert Cooper, Oklahoma City QK new KCBD 11
	K78AP Miami TX	170 Robert Cooper, Oklahoma City OK new
	K78CM Shamrock TX	155 Robert Cooper, Okalhoma City OK new
79	K79AZ Alva OK	100 Robert Cooper, Oklahoma City OK Smith 15
	K79 Cheyenne OK	115 Robert Cooper, Oklahoma City OK new
80		85 Robert Cooper, Oklahoma City OK new
Y	K8ØAY Booker TX	175 Robert Cooper, Oklahoma City OK new
81	K81 AW Dubuque IA	605 Robert Cooper, Oklahoma City OK new KHQA 7
	K81AN Alva OK	100 Robert Cooper, Oklahoma City OK Smith 15
0		The contract of the contract o

Obviously the time of translators as DX has arrived; not only do we have some fantastic distances here, but some are revisions of previous records; may there be more.

THE CARD, THE THE SERVICE

Stations	States	Provinces	Countries As of 1970 Dat	е
465	49	?	6 26 March	
265	7	?	? 30 March	
264	38+DC	1.27.20 6.00	7 February	
235 11 7	1 ,35 MON	6.	. 3 W. 197 MARTIN	
*1226 AH D	40.32+DC	9	3 27 February	
130	.≈33⊭ .: :	1 2	y 5 30 April	
127 ··· v	33	1.7	28 February	
115	26		? 30 March	
1.17	33		5 - 20 April	
IL 113	3	?	? 30 March	
: 6975 70	10	2	2 7 February	
59 .7	. 18	21.	2 February	
147T 8A)	11	. 0	3 reserve a single	
.0223 TAO!	37	5	13 May	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second of th	
464	24+DC	2	2 April	
113	128	4	20 March	
75	10112	1	2 27 February	
	265 264 235 130 127 121 115 114 IL 113 169 59 223 1464 1 335 113 75	Stations States 465	Stations States Provinces 465	Stations States Provinces Countries As of 1970 Dat 465 49 ? 6 26 March 265 ? ? 30 March 264 38+DC 6 4 7 February 235 1 35 Mo 6 3 *1226 32+DC 9 3 27 February 130 33 2 5 30 April 127 *33 2 5 28 February 121 ? ? ? 30 March 115 26 3 3 7 February 114 33 1 5 30 April IL 113 ? ? ? 30 March 69 10 2 2 7 February 59 18 2 2 7 February 47 2 2 7 February 47 4 1 0 3 23 7 7 <

I hope that the rank arrangement will now suit more of you and we may have many more reports. Please be sure to submit your rank totals on a separate sheet or card from other material. Apologies to anyone missed because the stats were included in a letter which was filed elsewhere. Until a few of the "giants" compile their totals, there doesn't seem much point in numbering the ranks. We should gradually build up a good sized list. Report when you please and update as often as you can.

THEFUROPERIL SCE

ROGER BUNNEY, TRELAWNE, CUPERNHAM LAME, ROMSEY, HANTS, SO5 8JH, ENGLAND

FROM MY RESULTS TO DATE, THE EXPECTED SPORADIC E SEASON HAS MADE A VERY LATE START THIS YEAR. WITH THE CONTINUED SUNSPOT ACTIVITY REMAINING AT A HIGHISH LEVEL, WITH A VERY SLOW FALLING NUMBER, POSSIBLY THIS CAN ACCOUNT FOR THIS LATE START. WHATEVER THE REASON, THE SEASON, SUCH AS IT HAS BEEN SO FAR. DID NOT REALLY GET UNDER WAY UNTIL ABOUT MID-MAY, AND EVEN SO THERE HAVE BEEN LONG PERIODS BETWEEN OPENINGS. TO LIST THE BETTER DAYS:

17TH MAY- USSR 01. 02

A MELLY

21 dd:

- TVE E2. 3. 4. DURING THE AFTERNOON THEY CARRIED AN OB FROM ITALY. OF A CYCLE RACE. NCLUDED IN THIS WERE SOME REALLY SPECTACULAR SHOTS FROM A MOTOR BIKE CAMERA, FOLLOWING THE CYCLISTS DOWN A ZIG-ZAG MOUNTAIN PASS ROAD. ALSO RAI, IB AS ABOVE, HUNGARY (MT) 01, NORWAY E2. (NRK)

25TH ORTF CH. F2, BASTIA, CORSICA, RAI IA (23)

2ND JUNE- POLAND 01, 02 (TVP)

- ?? FOOTBALL 01,2,3, RAI IA, ORTF F2

TVE E3 RAI IA, IB **7TH**

13TH USSR 01, RAI IAX2, IBX2, PORTUGAL (RTP) E2, ORTE F\$, TVE E2, I CELAND E4 TEST CARD @ 1655 GMT, NORWAY (NRK) E2, 3, 4, SWEDEN, E3, 4 TROPS THIS DAY- NOS E4, W. GERMANY E9, ?? E5 COLOUR BARS TO SE.

POLIAND 01, RAI IA, ORTF F2,4, TVE E2,3,4, CZECH 01. TROPS- E. GERMANY (DFF) E6 (520 MI) DUCTING SIGNAL, AS NO WEST GERMANS ABOUT. ORTF-PARIS 22, CAEN 25, ROUEN 33, ENAMPRES F7, RENNES F5, ROUEN F10, CHER-

TVE SPAIN WERE NOTED ON 14TH CARRYING A NEW TYPE TEST CARD. THIS IS THE ONE I RECEIVED BACK IN WINTER SPRING, AND MENTIONED ITS SIMILARITY TO THE OLD DFF CARD, WITH THE PROMINENT BLACK AND WHITE CONCENTRIC CIRCLE, BUT AT THAT TIME. WE WERE UNABLE TO ID IT. THE OTHER NEW CARD. AN ELECTRONIC CARD WHICH HAS BEEN FLUTTERING AROUND ON 01/EZA LOOKS AS IF ORIGINATING FROM AUSTRIA OR HUNGARY, M OST LIKELY AUSTRIA (ORF). A LETTER, IF ANSWERED BY ORF WILL BE TO HAND SHORTLY, TO CONFIRM.

ON SEVERAL OCCASIONS IN THE PAST FEW WEEKS, DURING TIMES AT WHICH NO SPO-RADIC E WAS PRESENT, GOOD QUALITY A.M. SOUND HAS BEEN HEARD AT 46 MC/S, APPROXI-MATELY DUE SOUTH. POSSIBLY AN HARMONIC, IT IS IN AN UNKNOWN LANGUAGE, BUT SIMILAR TO EAST EUROPEAN. ON 7TH JUNE, VERY STRONG HARMONIC OF AN A.M. RADIO TRANSMITTER WERE HEARD, CARRYING ARABIC MUSIC, NEWS, ERC., ON 60.75 MC/s, APPROX. THIS INDI-CATES THAT AS SOON A NORTH AFRICAN COUNTRY OPENS UP IN BAND 1, RECEPTION HERE SHOULD INCLUDE A NEW CONTINENT. ONLY ONCE HAS AN AFRICAN COUNTRY (NIGERIA-ENUGU E2) BEEN RECEIVED IN THE U.K.

IT IS MY INTENTION IN THIS COLUMN TO GRADUALLY INTRODUCE ABREVIATIONS FOR BROADCASTING ORGANIZATIONS, TO SAVE TIME AND SPACE. YOU WILL NOTE I HAVE INCLUDED SOME ABOVE, A MORE COMPLETE LIST IS SET OUT BELOW:

BBC- BRITISH BROADCASTING CORPORATION, U.K.

DFF- DEUTSCHER FERNSEHFUNK, EAST GERMANY (AS THERE ARE SO MANY ORGANIZATIONS IN WEST GERMANY, WE USUALLY JUST INDICATE WG.

RTE- RADIO TELEFIS EIREANN, EIRE

NRK- NORSK RIKSRINGKASTING. NORWAY

SVERGE- SVERIGES RADIO, SWEDEN

BRT- BELGISCHE RADIO EN TELEVISIE, BELGIUM (RTB IS THE OTHER BC ORGANIZATION)

ORTF- OFFICE DE RADIODIFFUSION-TELEVISION FRANCAISE, FRANCE

NOS- NEDERLANDSE OMROEP STITCHING, HOLLAND

RTP- RADIOTELEVISAO PORTUGUESA. PORTUGAL

TVE- TELEVISION ESPANOLA, SPAIN

RAI - RADIOTELEVISIONE ITALIANA, ITALY

JRT- RADIO-TELEVISION YOUGOSLAVIA, YUGOSLAVIA

ORF- OSTERREICHISCHER RUNDFUNK, AUSTRIA

MT- MAGYAR RADIO ES TELEVIZIO

TVP- POLSKIE RADIO TELESIZJA, POLAND