

HQ STAFF: FERDINAND S. DOMBROWSKI DAVID JANOWIAK (TECHNI-C.) BRUCE ELVING MORRIE GOLDMAN GARY A. OLSON (FCC-TV) BILL HEUSMANN (CCI) EDITORS: THE ABOVE PLUS! ROGER BROWN (CENTRAL TV) ROGER BUNNEY (EUROPEAN S.) ROGER WINSOR (FM-DX) CHUCK DOBBINS (FCC-FM) PAT DYER (VHF RAD! 0 DX) GLENN HAUSER (STATISTICS) DAVE POMEROY (EASTERN TV) DENNIS SMITH (WESTERN TV) BOB COOPER (TECH-NOTES)

EUROPEAN SCENE IS TYPED BY BILL HEUSMANN; MAILBAG IS TYPED BY G.

WORK PROCEDES ON THE FM STATION LIST AND MAPS, AND TO A LESSER EXTENT ALSO THE TV MAPS AND LIST. IT HAS NOT BEEN DECIDED WHE-THER THE MAPS AND LIST SHOULD BE SOLD SEPARATELY OR TOGETHER, AND YOUR COMMENTS ARE WELCOME. SIMILARLY, THE PRICES HAVE NOT BEEN DETERMINED PENDINGTHE ACTUAL COST OF PRINTING -- AND FOR THE MAPS THAT COST CAN VARY CONSIDERABLY DEPENDING ON WHICH METHOD WE FINALLY USE. COMMENTS ARE WELCOME ALSO ON:

SHALL WE PRINT MAPS ON A HEAVIER PAPER OR LIGHT CARDBOARD? SHALL WE PRINT MAPS BACK-TO-BACK ON THE SAME PAGE? LIST, TOO?

TEST PATTERN PICTURES WILL BE PRINTED SHORTLY, AND WE ARE DE-BATING WHETHER TO INCLUDE THIS INFORMATION FOR EACH STATION ON THE TV STATION LIST. THE INFORMATION WOULD NOT BE COMPLETE BUT IT WOULD BE A START, AND CAN BE ADDED TO THERE AFTER WITH THE HELP OF YOU MEMBERS.

THE FM MAPS HAVE BEEN PREPARED BY STATE BY BRUCE EL-VING, AND WILL BE PUBLISHED AND SOLD BY HIM. THE MAPS HAVE BEEN COMPLETED BUT NOT PRINTED YET AS OF 20 FEB. RATHER THAN WAIT UNTIL THE FM STATION LIST IS FINISHED O LSON; HQ COLUMN BY F. DOMBROWSKI. (WHICH WILL SE A FEW MONTHS YET), BRUCE DECIDED TO GO AHEAD ON HIS OWN WITH THE FM MAPS.

EFFECTIVE IMMEDIATELY, THE FIRST CLASS FEE FOR MEMBERSHIP IS RAISED TO \$3; THEREFORE, FIRST CLASS MAILING OF VUDS WILL NOW COST \$4.50 PLUS \$3.00, OR A TOTAL OF \$7.50 (FOR ONE YEAR.) THOSE OF YOU HAVE PAID THE FORMER \$2/YEAR WILL CONTINUE TO RECEIVE YOUR VUDS AS USUAL. THIS NEW RATE IS FOR ALL NEW MEMBERS AND RENEWALS RECEIVED HEREAFTER. INCREASED POSTAGE TO GO INTO EFFECT SOMETIME IM MAY ACCORDING TO PRESENT PLANS MAKE THIS MOVE NECESSARY NOW, TO RE---COUP SOME OF THE LOSSES WE WILL EXPERIENCE ON THOSE WHO HAVE ALREADY PAID THE OLD RATE.

WE ARE STILL SEEKING KEYPUNCHING AID FOR THE TV AND FM STATION LISTS. ALTOGETHER 3-4,000 CARDS MUST BE PUNCHED, SO THERE IS PLENTY OF WORK FOR ANYONE AND EVERYONE WHO IS ABLE.

THE EUROPEAN DX COUNCIL AND THE ASSOCIATION OF NORTH AMERICAN RADIO CLUBS HAVE BOTH ESTAB-LISHED SUBSCRIPTION RATES IN RECENT MONTHS FOR DXERS WHO WISH TO SUBSCRIBE TO THESE MONTHLY NEWSLETTERS. THESE ARE PERSONAL RATES FOR ONE PERSON --- NOT FOR A MEMBER OR OBSERVER CLUB. EDXC CHARGES 85 NEW PENCE (BRITISH CURRENCY) -- ABOUT \$2.05; THIS IS PAYABLE TO ALAN B. THOMP-SON, 16 EMA AVENUE, NEATH, GLAMORGAN, GREAT BRITAIN. MAKE CHECQUE OR MONEY ORDER PAYABLE TO "EUROPEAN DX COUNCUL" BUT SEND TO MR. THOMPSON, WHO IS THE NEW SECRETARY GENERAL OF THE EDXC. IF YOU WISH TO SEND IRCS, THE PRICE IS 23 OF THEM.

ANARC NEWSLETTER SUBSCRIPTIONS (TO INDIVIDUALS) WILL BE ANNOUNCED NEXT MONTH PROBABLY.

WE'LL SHORTLY HAVE TO PUBCHASE STENCILS AGAIN, AND REQUEST EDITORS TO OBTAIN A DISCOUNT PRICE QUOTATION IF THEY WILL. PRICE SHOULD BE FOR 10 QUIRES (BOXES OF 24 EACH), SHIPPING INCLUDED .. WE HAVE NOT BEEN ABLE TO OBTAIN A PRICE AS GOOD AS WE GOT BEFORE IN MILW., \$2.60 A BOXX.

ELSEWHERE IN THIS VUD YOU WILL FIND MORE COMMENTS ON OUR RUNNING FEUD WITH THE BIG HOBBY PUB-LICATIONS, AND WE HOPE THIS WILL BE THE LAST COMMENTS PAGE. THE COMPLAINTS HAVE BEEN OVER-WHELMINGLY AGAINST THE PUBLISHERS FOR UNDERHANDED TREATMENT OF READERS. A NEW PROBLEM HAS BEEN BROUGHT UP ON ANOTHER PAGE, AND WE SOLICIT CONSTRUCTIVE CRITICSM FOR THAT FROM NOW ON. THE POPTRONICS EDITORIAL PAGE GIVES A PUBLISHER'S VIEW OF THE DXING HOBBY: WHATS WRONG WITH IT, AND HOPEFULLY YOU READERS CAN TELL US AND THE PUBLISHERS IN NEW YORK CITY WHAT TO DO ABOUT IT. THIS .. EDITORIAL IS QUOTED LOOSELY FROM THE ORIGINAL IN POPTRONICS WITH EMBELLISH-MENTS BY WIFDA PRESIDENT NONE OF THE COMMENTS ARE MEANT TO BE INTERPRETTED AS OFFICIAL CLUB POLICY, BUT PERSONALLY I FEEL THERE IS MUCH WRONG WITH THE HOBBY AND HERE ARE SOME VIES ON IT.

BACK-ISSUES: STILL AVAILABLE TO MEMBERS AT 35¢ EACH (DEC., 169, AND FEB., 170 TO DATE.)

PHOTO-COPIES: AVAILABLE FROM HQ AT 15¢ EACH FOR FIRST 5 PAGES, AND 12¢ EACH FOR ADDITIONALS ..

SAMPLES: PRICES ARE SAME AS THAT FOR BACK-ISSUES. IF A MEMBER SENDS MONEY FOR A SAMPLE TO A FRIEND, ITS 35¢. IF A NON-MEMBER SENDS IN THE MONEY, ITS 50¢.

Pat Dyer

### MARCH 1971

A lot of unseasonal Es mixed with the F2 lately.

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

8-8: 2039, - 42.06 Toronto, Ontario, Canada (prov police)\* 12-7: 1754, KBQ 393 39.82 Browning, MT (police, 60 w) 12-29: 1858, KQE 938 39.82 Beulah, MI (sheriff)

\* A long reply to Hank's report gave the following info: 102 stations in Ontario on 42.06, powers ranging from 60 to 330 watts. Hank was evidently their first DX report and they had no policy formed for supplying information on the system. Hank would appreciate hearing from anyone with a list of calls for the Canadian police.

Glenn Hauser, always on the move, has DX with his Allied A-2586 and oblique 50-MHz dipole from two spots this time. Dec loggings from Enid, OK and Jan from Warner Robins, GA. GMT used.

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D14: 1619, Kingston 21: 1602, WWA 335 17: 1734, Long Beach 1845, Honolulu 28: 1800, WWA 335 19: 2113, KMD 342 15: 1643, KIM 905 (Es) J14: 2203, KGC 223 (Es) 2123, Oakland 2205, KQC 884 (Es) 2202, Long Beach 1959, KOA 796 2211, KGA 804 (Es) 28: 2125, Long Beach 2242, KQC 881 (Es) (KGC 223 is 43-NHz) 20: 1820, WWA 335 17: 1503, WWA 335
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Now, my loggings. 30-50 with Allied A-2586 with built-in whip and 30 feet of indoor random wire; hi-band Wards 62-1 with 2-ft whip; 50-MHz Swan-250, 3-el horizontal cushcraft Yagi 20 feet up. CST-Es noted-New.

new-ID from old logging: 12-8-70, 1630, KCD 379

f-fire, c-county, v-volunteer, mp-mobile phone, w-weather. Rest 35-43 pagers. A2 code ID's by: KAI 927, KCB 897, KFL 936, KIN 645, KIQ 999, KMA 829, KME 438, KMB 305, KOK 418, and KOP 303.

73. Pat WASIYX/5



WMAR-TV Baltimore, KENS-TV San Antonio: Ronald Le Blanc, Marreo, LA. WDAU-TV Scranton, PA, WVIA Scranton, WNEP-TV Scranton: Jerry Pulice, New York City. KOTA-TV Rapid City, SD: Morrie Goldman, Chicago.

WTFDA would very much like to run photo pages more often in the VUD. However we can't without your help. Send any DX photos you would like printed in the VUD to Hq in Milwaukee. Please indicate whether or not you want them returned.

EUROPEAN SCENE

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

The sunspot count for December was as follows: 88 9th 87 25th 68 17th 60 1st Predictions: 69 95 70 61. 50 101 88 Jan. 85 28th 47 12th 95 4th 20th 101 Feb. 83 71 82 93 Mar. 81 90 Apr. 79 81 76 May 16th 65 97 8th 24th 63 June 75

The smoothed count for December was 75.5 The period under review has been extremely quiets. No paging activity has been noted since 16th December. Indeed, there has been little activity noted above 30mHz lince that date. MS has brought some activity for Ursids around the 22nd Dcember, mainly low band, and the Quadrantids of early January similarly gave some activity, altho nothing particularly outstanding. Es has virtually been a memory. On Christmas day a small O1 Es gave a program from Eastern Europe. Trops gave a minor lift around 10th January, with Northern French stations received in this area.

Dec. 17- RAI, IB, to 2- BRT E2. to 19- NOS E4, tc, trop 20/23 BRT E2, tc 3- Czech O1, to 4- ORF E2a, tc 24- Czech O1, tc 6- Czech O1, tc 25- Czech O1, tc. Prog. O1, ?? 7- ORF E4, tc; BRT E2, tc; NOS E4, tc 27- NOS E4, tc 28- Sweden E2, tc 11- TVE E2, tc

In last month's column I noted that TVP had been noted with a caption 'TVP-1'. I had speculated that possibly this may indicate the start of a UHF service. We now know via a Czech contact that this is indeed so. As soon as we have gen re the actual stations/channels, I will pass this on.

I have noted on odd occasions on E2 short MS bursts of the 'new' electronic test card, as used by ORF this past year. It seemed unlikely that ORF had opened an E2 transmitter, but only yesterday we have the answer. Nak has been received in the North of England on E2 and E3 using this

card, but carrying an identification.

Our good friend, Michele Dolci, of Bergamo, Italy, has kindly sent further information on the RAI test card problem of last Es season. At that time we noted that at times their test card was carrying a new number of identification, ie #8. This is actually the number for the Rome transmitter on channel G. Michele informs us that all transmitters go onto the Rome test card 15 minutes before they go onto programme. This card also carries the letter S.

Michele also informs us that in Brindisi, a DXer is receiving Albanian TV on channel R6, unfortunately co-channel with his local transmitter. This is an unlisted station; possibly the network has grown. We did note last year that plans were ready for a new TV studio centre in Tirana, which inferred an expansion in their TV network. There is listed an experimental transmitter on 02, which is a possibility for many DXers in Europe via Es, assuming they have increased power from its present listed 50 watts.

Michele mentions that JRT are putting out programmes in Italian for

Italy from a powerful TV station.

The BBC local radio station Radio Solent was opened officially on New Year's Eve here in Southampton, on 96.1 mHz. They were, however, preceded by Radio Free Solent on 94.1 mHz. This pirate station was on all day, transmitting programmes and ads. The GPO were unable to locate them. Apparently they were mobile. The BBC noted that signals were 'fuzzy', and added that this was wonderful publicity for their own station! Good DX. Roger

### The TV-DXer's Log

Logs of one sort or another have been important to man since the day he first learned to graphically record things he saw. Even before he devised an alphabet. man recorded such information as the number of animals he killed or how bad a storm was by painting pictures on the walls of his cave.

For the TV-DXer, a log is something special, and it seems that there are as many ways to keep a DX log as there are DXers. Every DXer has his own preference regarding how to record information of stations received. Many DXers do have this much logging policy in common, however, keeping two logs. One a formal log; the other a running log.

The running log is usually a note pad with just about every detail written down. Example: Oct. 20, 1969

0440 Several MS bursts of WCBS-2 w/tp

O451 WJBK-2 w/tp weak by trops
O510 UnID-4 by MS to SW with tp and
large "TV" in top left and "4" in
top right. No call noted.

0530 WOOD-8, WTOL-11, KFVS-12

Oct. 21, 1969

2000 Noted auroral hash up to ch. 13

2015 CJBR-4 with talk show & ad for "Bill's Gas Station on 12th Street". ID with temp (29°) on panel at 2017.

You might not want quite this much detail, but remember, it may be a useful reference source at a later date. Make sure that you include enough program info, ads seen, etc. for your report to the station.

Your formal log can be kept in any of a number of ways. Some DXers prefer listing their stations received by channel, others by location, and still others in order received. The most basic form of a formal log would include only a list of call letters of stations received. More complex forms might include transmitter location, date and time of reception, audio and video signal quality, whether a request for verification was sent and received, etc. Shown below is the form / which I employ in my formal log.

.DATE TIME CALL/CH. LOCATION VFD **PHOTO** 10-5-69 0530(D) WKBW-7 Buffalo, NY X 10-5-69 0605 (D) CHCH-11 Hamilton, Ont. The (D) after the time indicates DST.

The log is kept in a loose leaf binder, along with card and letter verifications and DX photos. Pages are protected by plastc covers. These sell for about 10¢ for three and are really a must for protecting pages and veries.

We mentioned briefly that it may be a good idea to keep your notes as detailed as possible for later reference. Projecting ahead to when this information might be needed, let's examin a hypothetical opening by reading from the notes.

June 3, 1970 1118 Noted Es, SW, strong on chs. 3 & 4 w/CCI on local 2.

1120 UhID-3, WSW w/local nx pgm.

1121 Same 3 w/local spot for "Williams Radio Sales" on 5th Avenue.

demail od

1125 KGBT-4 with tec trouble slide

1128 KIII-3 ID. 20kc offset with same UnID-3.

1200 WOAI-4 w/local nx and WOAI radio promo.
UnfD-3 ID's as "Big 3". Both ABC and CBS logos were shown.

This is perhaps an exagerated example, but with some basic logic you stand an excellent chance of identifying this unknown.

Peviewing, you know from offset observation, as recorded in notes, that KIII is 20 kHz with the UnID station, By checking a station list, you find that KIII is a -3, which would make the UnID station a +3. You now know several facts about the mystery station: it is a +3, is probably in the area of Texas, (the other stations that were identified were from Texas) and the station is an affiliate of both ABC and CBS networks. From this information it would appear that the UnID is KBTX, Bryan Texas. But to be certain, a call to Bryan directory assistance (a no charge call) reveals that there is indeed a "Williams Radio Sales" on 5th Street.

One additional benefit resulting from maintaining detailed notes is your potential for aiding DKers who may have reported an UnID to the CCI column of the VUD. His station may have been one that you had the good fortune of identifying.

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Standard Elektrik Lorenz, an ITT subsidiary in West Germany, has developed a new tolevision sound system for multilingual countries. With the Lorenz system, 12 audio tracks (or even 24 in select cases) can be synchronized with one video signal. Even though bandwidth required for the new system is a huge 13MHz, the major problem for the system is expected to be agreement of an international standard. If the Lorenz system does find its way into commercial use, it should pose some interesting problems for European TV-DXers.

About the middle of 1971, look for Philips (Norelco in US) to make available a consumer line of three cassette video tape recorders. Playback systems should range in price from \$300 or so for a black and white unit, to about \$400 for color. Philips feels that for about \$550 you will be able to purchase a color record and playback system, complete with TV receiver.

A large number of Europeon electronics companies have already agreed to the new Philips video cassette standard, and more are expected to join. Other companies planning (as yet unstandardized) video cassette systems include Ampex, Sony and Avco.

Though the cost of playback or record video decks is due for a sharp decrease in the near future, the cost of videotape may not be. Presently, a half inch tape long enough for one hours recording on a Sony, or 40 minutes on a Panasonic video recorder sells for about \$40. Some say the costs required to produce video tape will not be greatly decreased, even with greatly increased tape outputs.

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At this time I'm still not sure just when I'll be called for Army basic training, (for the Army Reserve, not Reg. Army) so until then the column continues: All comments are welcomed. 73 and best DX, Morrie

. I MENTS TO ALL

100

### FM STATION ATLAS OF THE UNITED STATES AND CANADA BY BRUCE F. ELVING

Over 30 PAGES OF MAPS SIMILAR TO THE REVERSE!

TO BE PUBLISHED IN MARCH USING THE LATEST UP-TO-PRESSTIME FCC DATA! OUT IN TIME TO HELP IN LOGGING FM DX DURING THE PEAK 1971 SKIP AND TROPS SEASON!

A VALUABLE ASSET TO BEGINNER AND PRO ALIKE!

KNOW YOUR "FM GEOGRAPHY" VALUABLE FOR DXING, TRAVELING WITH FM IN THE CAR, AND FOR HOME HI-FI LISTENING. THIS LIST SHOWS THE LOCATIONS OF ALL THE FM RADIO STATIONS IN YOUR REGION OF THE COUNTRY, AS WELL AS ELSEWHERE.

and saids

INDICATES WHICH STAT ONS TARE COMMERCIAL, WHICH ARE EDUCATIONAL, WITH THE MINOR, TEN-WATT EDUCATIONAL STATIONS LISTED PARENTHETICALLY.

PRICE FOR WTFDA MEMBERS \$2.00 POSTPAID BY THIRD CLASS MAIL (U. S. FUNDS), U. S. AND CANADA. ADD 25 CENTS FOR FIRST CLASS, OR 50 CENTS FOR OVERSEAS MAILING. PRICE TO NON-MEMBERS \$2.50.

CARE TALLY OF LATE, WE SEE

SEND ORDERS TO:

BRUCE F. ELVING
3000 North Oakland Avenue
Milwaukee, Wisconsin 53211

CEC OF READER ON THE REAL PROPERTY OF THE PROP

ESPECIALLY OF LATE, WE HAVE BEEN HEARING MORE AND MORE ABOUT THE GROWING

SECONDARY READERSHIP OF THE VHF-UHF DIGEST; THAT IS, DXERS WHO READUTHE

COPIES OF NEIGHBORING WTFDA MEMBERS. THERFORE, THE NON-MEMBER IS RECEIVING

THE BENEFITS OF WTFDA MEMBERSHIP WITHOUT PAYING DUES. WHILE THIS IS

CERTAINLY ADVANTAGEOUS TO THE NON-MEMBER, IT IS NOT TO WTFDA. THAT NON
MEMBER IS ACTUALLY HURTING YOU WHO LEND HIM THE VUD, AS WELL AS HU RTING

THE WTFDA FINANCIALLY. IN VOLUME THERE ARE SAVINGS TO WIFDA IN THE COST OF

SUPPLIES, SO YOUR MEMBERSHIP COULD BE LOWER THAN IT IS IS ALL THESE SECON
DARY READERS PAID THEIR OWN WAY.

WE AREN'T GOING TO SUGGEST THAT YOU SUDDENLY STOP LETTING YOUR
FRIENDS READ YOUR VUD, BUT WE DO SUGGEST THAT YOU ENCOURAGE THEM TO JOIN,
FOR YOUR BENEFIT AS WELL AS WTFDA'S BENEFIT. AF TER ALL, YOU ARE PAYING
YOUR OWN WAY, SO WHY SHOULDN'T THEY? IF HE'S A GOOD FRIEND HE'LL UNDERSTAND
YOUR CONCERN FOR YOUR CLUB AND WON'T TAKE ADVANTAGE OF YOUR GENEROSITY INDEFINITELY.

A GREATER NUMBER OF PAID READERS CAN HELP US PRODUCE A BETTER
QUALITY VUD FOR ALL MEMBERS. ISIMILARIY

A GREATER NUMBER OF PAID READERS CAN HELP US PRODUCE A BETTER QUALITY VUD FOR ALL MEMBERS. SIMILARLY, INACTIVE BUT PAID MEMBERS CONTRIBUTE TO THE UTE TO THE COST OF PRODUCING THE VUD ALTHO THEY DON'T CONTRIBUTE TO THE COLUMNS WITH THEIR REPORTS. INACTIVE PAID MEMBERS ARE OF MUCH MORE BENEFIT TO A CLUB THAN ACTIVE NON-MEMBERS. THINK ABOUT IT. COSTS CONTINUE TO RISE IN PURCHASING SUPPLIES, TAXES, POSTAGE, ETC. THE MORE MONEY THE CLUB TAKES IN, THE MORE ALL MEMBERS WILL BENEFIT BECAUSE WE CAN POUR THAT MUCH MORE BACK INTO THE VUD AND OTHER SERVICES WE WOULD LIKE TO PROVIDE, AND PLAN TO IN 1971 WITH YOUR HELP.

### MORE ABOUT TROPO DUCTING

Judging from both my mail and the remarks in the bulletin the past few months, my October column on tropo ducting alerted many DX'ers to the possibilities of this most interesting form of DX.

One DX'er noted wrote in the bulletin about receiving a couple of 600 mile UHF stations when "nothing unusual" was showing on VHF or FM.

This is not unusual, and points up what does happen very often. Remember that with true ducting, the duct is actually like a piece of wave guide of coaxial cable ... stretched between your location and the transmitter location(s). And recall also that the physical size of the duct (ie. how tall it is, and how wide it is) determines which channels or frequencies are carried along in or by the duct.

We wrote last fall that ducts are "more efficient" at UHF. Which is another way of saying that because the ducts usually do not get very BIG, they are usually BIG enough for a short wavelength UHF TV signal to FIT INTO, but not always BIG enough for a longer wavelength VHF TV or FM signal to FIT INTO.

So it is often the case that a true duct may be going like gang busters at UHF, and be carrying signals 500-800 miles with good strength, while the VHF signals over the same path(es) are simply to BIG to fit into the duct.

We wrote last fall about what type of weather fronts cause ducts to form. Co back and review that material, and then design your own DXing habits around starting at UHF FIRST in your tuning for DUCT signals, because the signals will always show up first at UHF, almost always be strongest at UHF, and may not show up at VHF at all!

There are certain areas of the country where ducting is more likely to happen than others. As is obvious from reports in the bulletin, the mid west is a dandy location for ducts. So too is the gulf coast region and along the eastern seaboard. There is NO reason at all why Miami area UHF TV signals do not make it as far north as the North Carolina bulge several times a year, or even north as far as New England ( where the reciprocal path from New England TO Miami would also work of course) once or twice a year. All that is required is a good front stretching north and south and pushing off of the coastline in a straight line running from New England to mid or south Florida. The weather fronts cause this type of situation several tikmes each year. AND - why hasn't somebody caught southern Florida to New England UHF tropo before now?

The answer is very simple: (A) No body has been looking at the right time. Once fronts of this type start to clear the east coast, they either distory (ie. lose their straight line), or fold back on the south end, or break up. It appears to me that you have from 15 minutes to one hour to catch the front in just the right location for - say - Miami to Boston. That's 15 minutes to log Miami UHF in New England or New England UHF in Miami.

The Gulf Coast tropo ducting is another story. Here fronts pushing south from the Canadian cool air basin, or north (in the spring/summer) from the Gulf warm air basin tend to stagnate and linger

## BOB'S TECK NOTES MARCH 1971 Page two

along or 100-200 miles south of the mid-gulf region (ie. New Orleans/Mobile). When this happens (and it happens every spring sometime between March 15 and May 15th at least once if not several times) you may get a duct that holds in position for as much as 43-72 hours. The problems between Florida and Texas, for example, are station and DX er activity. From Texas looking east, there are many UHF stations in Florida running from the pan handle all the way to Miami. But there are only a couple of UHF TV DX ers in Texas properly situated. Around Dallas, for example, the front will be moving south (or north) quite fast and you may have 15-30 minutes to catch the north Florida-south Georgia stations. Down around San Antonio, where the front usually stalls out (going south) you will have several hours or days.

On the Florida/Ceorgia end looking west, you have several alert DX'ers, but few UHF stations on the other end. Channel 39 Houston and channel 41 San Antonio / channel 42 Austin are about all that you have to look for. And they are grouped close together... channels 39,41 and 42. If you have a converter imageor local station in that spot on your Florida UHF dial, you could be missing a fantastic duct opening and never even know it.

So what you need to do is to sit down ahead of time, wherever you are, and PLAN your attack.

- (1) Put up at least a single 7 foot Channel Master or Finco dish. Put it up 50 feet minimum (right Morrie?) and run good UHF foam twin lead to your UHF converter.
- (2) Start paying VERY CLOSE ATTENTION to the weather maps in the paper, and on TV. If you have a local FAA weather bureau, make a trip cut to see them. ESSA weather maps are printed out every hour or two on facsimile machines in their offices and this is the current, most up to date data that is available. Find a friend in this office and tell him what you are looking for. Once he understands what you want, you should be able to call him and ask "where the front line lys..." and he can tell you "...it's 50 miles west of here, running NE 800 miles and in two hours it will cross over here and stretch NE to Dayton"... or whatever.

Remember, ducting is usually short lived. You have got to be on the spot when it happens, and be prepared ahead of time with the channels you are going to look for. Then with the front about an hour away and heading towards you, start concentrating on tuning for those channels. That's really all there is to 700 mile plus UHF TV reception!

### TID BITS

The December 1970 issue of QST featured part one of a two part article on SPORADIC E SKIP (Es) by WWTVFMDXA member Mel Wilson. I don't know when part two is due out, but it is MUST reading for all members interested in Es. At your library.

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The February 1971 issue of HAM RADIO featured a nine page article on etched inductance interdigital bandpass filter/pre-amplifiers by your's truly.

73 MAGAZINE has had an article on METEOR BURST DXing of mine for several months, all about TV and FM DXing via meteors. It should be out soon. RADIO ELECTRONICS magazine has bought and will publish a feature on TV/FM DXing ... which pushes the WWTVFMDXA. And POPULAR ELECTRONICS "may" publish a feature on building your own single channel high gain interdigital pre-amplifier for out-of-town pro football watching; either July or August. Thanks Perry!

73. Bob Cooper, Jr.

Conducted by David: T. Janowiak

March TECHNI/CORNER

3661 South 46 Street Greenfield, Wisconsin 53220

AR-15 POTPOURRI

The Heath AR-15 Stereo FM Receiver has received much "ink" for several years. What follows is a collection of miscellaneous information and incidents related to the AR-15 that might be of interest to FM DXers.

#### HEATH AR-15 STILL THE BEST SAYS CR

Possibly old news now, but still of value to FM DXers or future FM DXers, is the review of stereo FM receivers (RXs) in the August 1970 Consumer Reports (CR).

Two really dominent items are of interest. The first is that FM RXs have come a long way baby. Quality RXs with "big-name" features are available at all costs. CR check-rated (top billing) about a dozen familiar-named receivers. Their general comment was that the FM sensitivity, audio amplifier response, etc. was approaching the ultimate, not just in one RX as was the case a few years ago, but in several. What this means is that a purchaser is less likely to get "burned". Consult the CR review for details, which abound, with performance specs, etc., on a comparative basis.

I was, however, amazed when the highly touted Heath AR-15 was not among the check-rated. Closer perusal, however, showed no <u>listing</u> of the AR-15, but <u>reference</u> was made to it at the end of the article. And this serves as the second item of interest: The fact that the AR-15, now so copied by others, <u>still rates</u> as the very best RX checked to date.

When checked a few years ago, the AR-15 had performance specs in most areas that exceeded by far any RX ever checked by CR. The AR-15, and separates AJ-15 (tuner) and AA-15 (amplifier), were head and shoulders arove all others.

The AR-15 is over four years old now, and, apparently, other manufacturers have almost caught up with the total performance of the AR-15. CR actually found the AR-15's performance in isolated areas second-best. But the top overall performance nod still went to the famous AR-15.

Improved technology will eventually drop the AR-15 from its lofty status, of course. In fact, word from Heath employees is that an "improved" AR-1500 is now in the homes of "select" individuals, a technique Heath uses after initial product development and before release for sale.

Those AR-15 owners whose pride might be wounded if a RX surpassed their AR-15 needr't worry, apparently. "Insiders" claim that major changes in the AR-1500 are an improved AM section and more audio power. The FM portion is to remain virtually unchanged. That's just what we need: more audio power!

A word regarding CR's reputation and evaluating techniques appears in order. CR is a non-profit organization dedicated to presenting the facts about products commonly purchased. CR receives no "payoffs" (as some have suggested) so that brand "A" is unjustifiably placed ahead of brand "B". CR's 40 year history of service plus support by various government groups speaks for itself. (See 6/69 Techni/Corner for my opinions of CR's evaluation of products used by DMers.)

Testing techniques leave little to chance. Critical performance specs of TV and FM RXs are measured with the best equipment available. Receivers, for example, are in competition with each other. However, important FM specs such as sensitivity, selectivity, etc. are not necessarily listed as, for example, 1.9 microvolts for 30 db of quieting, or so much signal to noise plus noise ratio. Rather, the "numbers" are reclassified into groups so that the reader is not confused by electrical specs that mean nothing to the uninformed. For sensitivity, for example, CR might class any sensitivity figure below 2.0 microvolts for 30 db of quieting EXCELLENT, 2.0 to 2.5 as VERY GOOD, 2.5 to 3.0 as GOOD, 3.0 to 3.5 as FAIR, and 3.5 and up as POOR. This is all relative, based on the spread of RXs in that class. However, RXs are indeed compared against each other in precisely-measured tests, not "ear" or "eye" tests. (This classification allows one to compare CR's findings against manufacturer specs, which can be misleading as discussed later.)

TECHNI/CORNER Page 2

Anyone who rejects CR's results of such thoroughly evaluated products as FM RXs, speakers, automobiles, etc. shows an immense stubborness that is exceeded only by his ignorance.

#### AR-15 VS FISCHER 500 TX

This incident involves a "less than-technical ear/eye" comparision of my AR-15 and Bruce Elving's Fischer 500 TX (the top Fischer RX). Bruce, as most of you know, holds several records among known FM DXers, including most FM stations heard (over 900) and most years engaged in FM DXing (over 20). Bruce now lives in Milwaukee and is WUWM-FM station manager.

Comparisons of electrical characteristics such as FM sensitivity, selectivity, cross-mod, etc. were made. (Since audio amplifiers in these top of the line RXs are so good, it's virtually impossible to detect differences here with no test equipment, and no attempt was made to do so.) Physical characteristics such as tuning ease, type of external hardware, and general "feel" and appearance were noted.

Of course, electrical comparisons can give false impressions. For example, brand A might normally have greater sensitivity than brand B. But if A is misaligned or has a RF transistor with slightly worse than nominal gain or noise figure, or if brand B has an unusually "not" RF stage, brand B might show greater sensitivity. Some have found slight differences in identical AR-15s, or between an AR-15 and AJ-15. So our intent was only to compare our RXs, and possibly relate this to CR's evaluation. (Truthfully, I was a bit scared because, after all, I had built the AR-15 from kit and "dickered" with the FM alignment in spite of Heath's warning not to, whereas Bruce had his Fischer "in the shop" two or three times for various bugs, and repair men had been instructed to align the RX well.)

Tests of F<sup>M</sup> characteristics were made by connecting my Finco FM4G and FM5G yagis through an antenna switch and attenuator and finally through a Jerrold quality 2-set hybred splitter/mixer, with one output feeding the AR-15, the other the 500 TX. It had been determined that both splitter outputs were identical, so far as it could be determined. My Kcss 727 stereo headphones provided the audio, allowing us to zero in on weak signals while reducing the wive's chatter.

The following major electrical characteristics were noted:

- 1) Selectivity -- the ability to receive a weak station adjacent to a strong station -- seemed very close. Both RXs use dual crystal or ceramic filters. Testing was done by monitoring weak fringe stations next to Milwaukee bombs at select parts of the band.
- 2) Cross-mod undesireable mixing of strong signals with weaker signals with resultant stronger stations being received at several places along the dial—again seemed the same. However, we didn't check this too carefully (had forgotten, actually), since most stations we were monitoring (and most DX) come from directions away from Milwaukee locals. Consequently, we didn't aim the antenna at the locals and see how much cross-mod appeared on each RX. Suffice to say, however, that Bruce is tearing his hair out trying to DX between the cross-mod at his Milwaukee site, even with a 6 db pad I designed to cut down the cross-mod. Bruce lives closer to the mid-Milwaukee FM towers, while I like closer to the S, SW, NW and W side Milwaukee towers and near suburban towers. Needless to say, Bruce's Duluth, Minn., bluff overlooking Wisconsin is a bit better!
- 3) Sensitivity the ability to receive weak stations was where the marked difference was noted. The AR-15 clearly outperformed the 500 TX. This is tough to check using the "ear" method as you can imagine, because what you want is weak but steady signals, not weak, eratic signals. (This is where CR test facilities "have it" made.) However, the switchable attenuator between the selected antenna and splitter allowed us to reduce the signal levels instantaneously of fairly strong semi-locals so that weak but steady signals resulted. Weak (but hardly stereo quality) signals were heard on the AR-15 that just weren't there or were buried in noise on the 500 TX at several positions across the band. A part of a microvolt is indeed small, and such a difference is difficult to detect

TECHNI/CORNER Page 3

unless you have very weak signals. However, signals often appeared about equal when the signal to the AR-15 was reduced by 50% (6 db pad).

4) Physical characteristics. The untrained eye cannot easily detect if short-cuts were made here or there. However, past experience indicates that if a manufacturer makes little attempt to use quality components on the exterior, you can bet that interior quality isn't going to be too hot. True, some put on a great "front" to disguise lousy "guts", but people soon see through these fakes and reject such products. (See RANDOM VISITS, next article.)

Anyway, the AR-15 had, in my opinion, superior external layout, type of controls, fluid dial tuning, etc. Features on the 500 TX not on the AR-15 included preset station switches and Autoscan. The preset stations feature can be a DX aid. Autoscan you need as much as a class C local. Both features seem to be included by Fischer in an attempt to provide something not found on other RXs. For the normal FM listener, these features hardly are worth the extra cost, but they do add some gingerbread to the 500 TX's appearance.

What did we prove? Nothing maybe. My AR-15 outperformed Bruce's 500 TX in sensitivity, "class! appearance, and higher quality exterior components. Selectivity was even, and immunity to cross-mod seemed even, although insufficient tests were made.

For repair, (which any of these expensive FM monsters might need), the AR-15 has the nod, of course, with its excellent repair manual and test meters for those who wish to repair their own. Trouble shooting Heath quality FM RXs and color TV RXs is a lot easier than trouble shooting others, as any knowledgeable person who has done repair work knows.

Both AR-15 and 500 TX are excellent receivers, but our informal tests compared nicely with CR's evaluation. If you don't care to build the AR-15 (\$349) kit, the \$525 wired price is indeed higher than the \$500 500 TX list price. And you might get discounts as great as \$200 (typically \$100) on the 500 TX. You would have to determine if the more expensive wired AR-15 is worth the better performance. If you're handy with kits, there seems to be no justification for buying a 500 TX over the AR-15 kit, unless the 500 TX gingerbread appearance with its Autoscan, etc. grabs you.

Of course, one can dream up any sort of justification for purchasing a RX of poorer quality than others for the same price or more, but who is that person really fooling except himself.

FM RXs with fine FM performance are available for considerably less than both the AR-15 and 500 TX as CR points out. Or, if the prospective FM DXer has a fairly decent amplifier, the Heath AJ-15 at \$189 kit would be fine, as several WTFDA members have discovered.

Continued next month.

73's

Dave

THE MAIL HAS BEEN RECEIVED ABOUT THE ELECTRONICS PUBLISHERS IN ANSWER TO MY DECEMBER FO-

FROM JOHN RAMSEY:

SUBSCRIBERS WERE SCREWED. DON'T GET ME WRONG, PE HAD EVERY RIGHT IN THE WORLD TO CHANGE FURMAT; BUT THEY SHOULD HAVE INFORMED EVERYONE A LOT SCONER AND ALLOWED SUBSCRIBERS TO GET THEIR MONEY BACK. I REMEBER ABOUT SIX MONTHS AGO THINKING THAT RADIO-TV EXPERIMENTER AND EI (ELECTRONICS ILLUSTRATED) WERE THE ONLY GOOD MAGS LEFT; PE WAS TOO COMMERCIAL AND HAD ONLY A LITTLE TO DO WITH DXING IN EACH ISSUE. AT LEAST RIVE (NOW SE) AND EI SOME MORE OR LESS GOOD ARTICLES ON DXING, WRITTEN IN MORE DX-CLUB-STYLE THAN MAGAZINE-STYLE. THEN RIVE CHANGED TO SEE: ALL WE NEED IS ANOTHER MECHANICS ILLUSTRATED TYPE. NOW THEY'RE NO LONGER BEING PUBLISHED, AND I GET TO RECEIVE ELEMENTARY ELECTRONICS, WHICH LEAVES MUCH TO BE DESIRED. INDEED EI IS STILL AROUND. WE WERE SCREWED AND FOR NO GOOD REASON IT SEEMS. THAT DO THE MAGAZINES HAVE TO SAY ABOUT THIS, (NOTHIN' I BET).

FROM LES PRUS:

RE THE MAGAZINE CONTROVERSY, I AM IN AGREEMENT WITH YOUR EDITORIAL. I HAD SUBSCRIBED TO PE FOR FIVE YEARS SELELY FOR HANK BENNETT'S SEL COLUMN AND THE OCCASIONAL ARTICLES
CONCERNING DXING. THE TERMINATION OF THE COLUMN DID NOT ANGER ME AS MUCH AS THE MANNER IN
WHICH IT WAS DONE WITH THE ANNOUNCEMENT COMING IN THE FINAL PARAGRAPHS OF BENNETT'S LAST
COLUMN. IT IS UNLIKELY THAT THE CHANGE IN PE'S FORMAT WAS A LAST-MINUTE DECISION ON THE
PART OF THE MANAGEMENT, SO WHAT OTHER REASON COULD THERE BE FOR WITHHOLDING THE NEWS OF
THE CHANGE OTHER THAN TO 'SCREW THE SUBSCRIBERS,' WHETHER THEY CONSTITUTED AN 'INSIGNIFICAN'T PORTION OF THE READERSHIP' OR NOT? UNTIL MR. FERRELL PROVIDES THE FACTS UPON WHICH
A MATURE JUDGEMENT CAN BE BASED, I CAN HARDLY BELIEVE THAT HOBBY ELECTRONICS MAGAZINES,
THOUGH OF INSIGNIFICANT VALUE TO DXERS, HAVE GONE TO THE EXTREME OF 'LITERALLY SUBSIDIZING' THE DXING HOBBY. ALTHOUGH THE NUMBER OF DXERS MAY NOT BE GREAT ENOUGH TO WARRANT A
POPULAR MAGAZINE DEVOTED ONLY TO DX ACTIVITIES, THERE MUST BE ENOUGH TO BE REPRESENTED
BY A FEW PAGES IN A 150 PAGE MAGAZINE. IT IS DIFFICULT TO BELIEVE THAT ZIFF-DAVIS WOULD
CONTINUE TO PUBLISH COMMUNICATIONS HANDBOOK YEAR AFTER YEAR IF ONLY AN INSIGNIFICANT NUMBER OF THEM WERE BOUGHT."

FROM OLIVER P. FERRELL (OF PE) AGAIN:

AM GOING TO MAKE ANOTHER TRY AT "EXPLAINING" WHAT HAS BEEN TAKING PLACE HABBY--IN THE BROADEST SENSE OF THE TERM. THE LETTERS AND COMMENTS THAT YOU HAVE PUBLISHED ARE ALL VERY SILLY AND I DON'T INTEND TO DIGNIFY THEM BY POINT-TO-POINT ANSWERS. THE SITU-ATION IS SIMPLY THAT ' . THERE ARE TOO FE SWLS AND THE LOSS OF 100, 250, 500 OR EVEN 1000 READERS I S INSIGNIFICANT WHEN VIWEWED FROM OUR AVERAGE CIRCULATION OF ABOUT 375,000 READERS.... A MAGAZINE CANOT SURVIVE ON NEWSSTAND OR SUBSCRIBER SALES. IT MUST HAVE ADVERTISING, AND THERE IS ALMOST NO ADVERTISING TO BE SECURED FROM SAL EQUIPMENT MANUFACTURERS ... WHO ... DO NOT WANT TO TALK CONTINUOUSLY TO THE SAME AUDIENCE. MY WARCH ED-ITORIAL (IN PE, I ASSUME, ED) TOUCHES ON THIS POINT AND ATTEMPTS TO ILLUMINATE SOME OF THE PROBLEMS THAT ARE BESETTING THE HOBBY. IN ALL OF THE COMMENTS SO FAR PUBLISHED, THERE DO N'T SEEM TO BE ANY CONSTRUCTIVE REMA RKS AS TO WHY MAGAZINES SHOULD DEVOTE EDITORIAL SPACE TO SWLING. I WOULD HAZARD THE OPINION THAT THE VERY DEVIAUS FACTS CONCERNING THE DE-MISE OF MAGAZINES AND MAGAZINE COLUMNS THAT HAVE PERTAINED TO SILLING WITHIN THE PAST YEAR WOULD BE INDICATIVE OF WHAT IS ACTUALLY TAKING PLACE. CERTIANLY THERE MUST BE SOMEONE WITH SUFFICIENT CURIOSITY TO ASK WHAT IS TAKING PLACE. ONE FINAL THOUGHT. NONE OF THIS IS CONSTRUCTIVE. | AGAIN URGE ALL SWLS--REGARDLESS OF THEIR FIELD OF INTEREST -- TO STOP FEEL-ING SO SORRY FOR THEMSELVES AND TO TAKE POSITIVE ACTION TO IMPROVE THE STATURE OF THE новву.

PRESIDENT'S FURTHER COMMENTS;

I THINK ITS CBVIOUS FROM ALL LETTERS PUBLISHED THE PAST FEW MONTHS THAT THE GRIPE ISN'T SO MUCH THAT THE COLUMN'S/MA GAZINES WERE DROPPED, BUT HOW THEY WERE DROPPED: WITH LITTLE OR NO PRIOR NOTICE, AND SECONDLY WITH NO CIFER O A REFUND AT THE SUBSCRIBERS OPTION. THERE ARE ONLY TWO REAL QUESTIONS AT STAKE, AND MR. FERRELL HAS AVCIDED BOTH. I WAS INFORMED TODAY THAT TRAVEL & CAMERA TO WHICH I SUBSCRIBE IS BEING DISCONTINUED AND I WAS GIVEN THE OPTION OF A CASH REFUND OR A TRANSFER TO ANY OF THREE OTHER PUBLICATIONS. THE LAST ISSUE WAS RECEIVED 10 WEEKS AGO AND ALTHO THERE WAS NO PRIOR NOTICE, AT LEAST THE PUBLISHER HAD THE COUTESY TO GIVE ME FOUR CHICES. PE AND S&E DIDN'T GIVE ANY CHOICE NOR DID THEY GIVE ADVANCE NOTICE. (INDEED, S&E WAS STILL SOLICITING SUBSCRIPTIONS OF UP TO THREE YEARS IN THEIR THIRD-LAST ISSUE. HOW CAN THIS BE VIEWED AS ANYTHING BUT OBVIOUS FRAUD?) WHY?????? GRANTED THE HOODY CAN BE IMPROVED, BUT OUR QUESTION HERE IS WITH THE BIG PUBLISHERS.

## KCSD-TV 1211 McGee Street Kansas City, Mo. 64106

Dave Pomeroy

Deadline: February 12

Tropo reception again dominates this month's reports with three people reporting favorable conditions in November and December. Dick Clark saw over 30 new stations within a 16-hour period and Ronald J. LeBlanc saw 8 new stations via tropo within two weeks. Thomas Yingling of Baltimore, in his first report, was able to cash in on the November 8 skip opening so that part of the country was also affected by that off-season opening. DX has been almost non-existant in Kansas City for the last month, but a rotor from Santa will make this spring and summer a lot more exciting for this editor. My wife never did like climbing up on the roof to turn the antennas for me.

Ronald J. LeBlanc, 2524 Arizona Dr., Marrero, Louisiana 70072 11-21 T 1930 KPLC-7 Lake Charles 11-28 T 1030 WAPT-16 Jackson, MS 2000 WMAA-29 Jackson, MS 1700 WDIQ-2 Dozier, AL 2015 WTOG-44 St.Pete(488)

2030 WINK-11 Ft.Myers,FL 11-30 2215 KBMT-12 Beaumont(244)
2100 KLNI-15 Lafayette,LA
2130 KHOU-11 Houston(321)
2135 WAPT-16 Jackson(160)
2200 KTVE-10 El Dorado,AK 12-1
2215 WLBT-3 Jackson, MS
2345 WTOK 11 Meritin All Market St.Pete(488)

1700 WDIQ-2 Dozier, AL
2215 KBMT-12 Beaumont(244)
2420 WABG-6 Greenwood,MS
2450 KFDW-12 Clovis,NM(830)
0100 KFDA-10 Amarillo(773)
2200 WDIQ-2 Dozier,AL
2200 WCOV 30 W 2200 KTVE-10 El Dorado, AK 12-1
2215 WLBT-3 Jackson, MS
2345 WTOK-11 Meridian, MS
2350 WJTV-12 Jackson, MS
2430 WTVM-9 Columbus, GA 12-3
0125 WLCY-10 Largo, FL(472)
1030 XHX-10 Monterrey, NL
1145 XEFB-3 Monterrey, NL
2200 XHX-10 Monterrey, NL
1300 XHX-10 Monterrey, NL
2300 KBMT-12 Beaumont, TX
2300 KBMT-12 Beaumont, TX
2400 KTVE-10 El Forado, AK 12-6 E
1000 WCOV-20 Montgomery, AL
2200 WKAB-32 Montgomery, AL
2200 WSFA-12 Montgomery, AL
2200 KHFI-42 Austin, TX(460)
2215 KHOU-11 Houston, TX
2255 KHTV-39 Houston, TX
2300 KBMT-12 Beaumont, TX
2410 KPRC-2 Houston, TX
2410 KPRC-2 Houston, TX
2425 KIII-3 Corpus Christi
2400 KTVE-10 El Forado, AK 12-6 E
1220 WCBS-2 New York, NY
1000 WCFT-33 Tuscaloosa, AL(263)
1235 WUSN-2 Charleston, SC
ught this was going to be my worst year of DX'ing but the colder 11-25 11-26 I thought this was going to be my worst year of DX'ing but the colder the weather gets the better the reception gets. Of 38 new stations received this year all but 12 were received in the months of October, November, and the first week of December. Tropo reception from Monterrey on November 11 was first tropo ever from Mexico for me. Tropo on November 30 was first west of Texas. KFDM-6 was identified through local channel 6 only 4 miles away. (Some nice catches there. It has been cold here, but I sure haven't noticed any increase in DX. That would make the weather a little easier to take! dp)

This column is f	or TV-DXer's fi	n the following sta	tes:
NEW YORK	VERMONT	NORTH CAROLINA	TENNESSEE
MAINE	NEW HAMPSHIRE	SOUTH CAROLINA	MISSISSIPPI
MASSACHUSETTS		GEORGIA	LOUISIANA
CONNECTICUT	MARYLAND	ALABAMA	DISTRICT OF
DELAWARE	VIRGINIA	FLORIDA	COLUMBIA
RHODE ISLAND	WEST VIRGINIA	KENTUCKY	A PARTICIONAL PROPERTY AND A PARTICIPATION OF THE P

Richard Clark, 4110 Bayview Dr., Ft. Lauderdale, Florida 33308 Really great TV DX'ing on tropo from 3 pm to 7 am December 18-19. The following 40 stations are all new! WMAA-29 Jackson, Mississippi WJXT-4 Jacksonville, Florida WRDU-28 Raleigh, N. Carolina WWL-4 New Orleasn, Louisiana Florence, CS. Carolina WLOX-13 Biloxi, Mississippi Columbia, S. Carolina WLOX-13 Biloxi, Mississippi WJPM-33 WRLK-35 WCES-20 Wrens, Georgia WGHP-8 High Point, N. Carolina WWOM-26 New Orleans, Louisiana WWAY-3 Wilmington, N. Carolina WOLO-25 Columbia, S. Carolina \*WHTN-13 Huntington, W. Virgina WVUE-8 New Orleans, Louisiana WATL-36 Atlanta, Georgia WDHN-18 Dothan, Alabama WTCG-17 Atlanta, Georgia WNTV-29 Greenville, S. Car. WETV-30 Atlanta, Georgia WJSP-28 Columbus, Georgia
WABW-14 Pelham, Georgia WCLP-18 Chattsworth, Georgia WTVM-9 Columbus, Georgia WACS-25 Dawson, Georgia WYEA-38 Columbus, Georgia Charleston, S. Car. WCWB-41 Macon, Georgia WUSN-2 WRET-36 Charlotte, N. Car. WDSU-6 New Orleasn, Louisiana WKRG-5 Mobile, Alabama WQXI-11 Atlanta, Georgia WJHG-7 Panama City, Florida \*Dick's record VHF & UHF trops By the way all DX'ing is done on my new IPA-LB/HB amplifiers from

By the way all DX'ing is done on my new IPA-LB/HB amplifiers from Cadco. A very good piece of unit. I would recommend it very highly. (Hope 1971 is providing the same results. dp)

Thomas J. Yingling, Jr., 221 Pinewood Road, Baltimore, Maryland 21222
10-15 T 1830 WDBJ-7 Roanoke, VA 11-8 E 1925 KTAL-6 Shreveport, LA
1830 WSVA-3 Harrisonburg 1955 WREC-3 Memphis, TN
1850 WVPT-51 Staunton, VA 11-27 1000 WFBC-4 Greenville, SC
11-8 E 1900 WABG-6 Greenwood, MS 1020 WCYB-5 Bristol, VA
(very strong) 11-28T 0130 WJHL-11 Johnson City, TN
1920 WCBI-4 Columbus, MS 11-29E 1130 WJBF-6 Augusta, GA
Total is now 52 stations since May 1970. All TV-DX'ing is done on my
Sony TV-720UJor a 1968 Zenith color set. Antenna is an Allied
Colorset 60-element log-periodic with rotor mounted about 35 feet
above ground. A JFD amplifier is also used with the Sony set. The
best E-skip in 1970 was KCPX-4. My location is in the Dundalk
suburbs, not in the city of Baltimore or Dundalk, Maryland.
(Thanks for your first report, Tom. Hope to see more during 1971
from the home of the world champion Baltimore Colts. dp)

Dick Clark has sent the following list of Cuban stations seen in FL.

La Habana--CMBF-2 Television Nacional, CMQ-6 Television Cubano Ciego de Avila--CMJA-2 Television Nacional, CMFD-7 Television Cubano Santiago de Cuba--CMKU-2 Television Cubano, CMLB-5 Television Nacional Holguin--CMKJ-3 Television Cubano, CMLD-8 Television Nacional Camaguey--CMJ-4 Television Nacional, CMJL-6 Television Cubano Santa Clara--CMHQ-5 Television Cubano, CMRA-8 Television Nacional Matanzas--CMGQ-9 Television Cubano, CMG-13 Television Nacional Guantanamo--CMKG-13 Television Cubano, AFRTS-8 Baracoa--CMKB-7 Television Cubano

(HQ NOTE: I UNDERSTAND ALL CUBANS NOW IDENTIFY THEMSELVES AS ICR SO THE CM-IS NOT VALID.)

EASTERN TY DX

Dave Pomeroy KCSD-TV 1211 McGee St. Kansas City, Mo. 64106

Deadline: March 12

Although the summer skip season is still a couple of months away, the word for January for TV-DXer's is skip with a strong opening being reported by three Eastern DXer's on January 14. The opening extended into this area with Les Prus of Manhattan, Kansas reporting reception from Florida on that evening-see "Western TV-DX column. I must not have been home that evening as I do not recall a sign of Es throughout the entire month. You will note two Eastern TV-DX columns for March (one is February's). Last month's stencils were accidentally sent third-class and didn't arrive in Milwaukee. Sorry for the delay.

Mitch Donock 2921 Brinkley Rd. Oxon Hill, Maryland 20031 (EST) 10-8 Tr 0530 WCAU-10 Philadelphia, PA 10-12 Tr 0530 KYW-3 Philadelphia, PA 0535 FYW-3 Philadelphia, PA
0600 WTAR-3 Norfolk, VA
0630 WRAL-5 Raleigh, NC
0630 WITN-7 Washington, NC 0540 WCBS-2 New York, NY 0545 WGHP-8 High Point, NC 0600 WCAU-10 Philadelphia, PA 0600 WRAL-5 Raleigh, NC 0700 WAVY-10 Norfolk, VA 0605 WTAR-3 Norfolk, VA 0605 WITN-7 Washington, NC 0700 WTVD-11 Raleigh, NC 0730 WHAG-25 Hagerstown,MD 0610 WAVY-10 Norfolk, VA 0730 WCVW-57 Richmond, VA 0750 WUHY-35 Philadelphia, PA 0550 WCAU-10 Philadelphia, PA 10-13 0550 WCTI-12 New Bern, NC 0555 WFIL-6 Philadelphia, PA 10-16 Es 2125 KTCA-2 St. Paul, MN 0600 WITN-7 Washington, NC 2130 KUSD-2 Vermillion, S 0610 WFBG-10 Altoona, PA 2200 UNID-2 CBC 10-9 Vermillion, SD 0615 WAVY-10 Norfolk, VA 11-8 2000 WDCN-2 Nashville, TN 2200 WUND-2 Columbia, NC 1-14: 1830 KATC-3 Lafayette, LA

Trops from 10-8 to 10-13 the best I've ever seen here. The skip opening on 1-14 was really a big surprise and I've been keeping an eye on the TV screen ever since. BCB LX'ing has really been booming here.

Thomas J. Yingling, Jr. 221 Pinewood Rd. Baltimore, Maryland 21222 (EST)

1-14 Es WKY-4 Oklahoma City, OK 1745 1-14 Es KATC-3 Lafayette, LA 1757

KIII-3 Corpus Christi, TX 1755 KFDX-3 Wichita Falls, TX1805

Skip was strong with CCI (does that answer your question?, dp) on channel 2 and unid on channel 6. Weak local trops at same time. (Although licensed to Burlington, New Jersey WKBS-48 transmitter is in Pennsylvania and, in my opinion, should be listed as a Pennsylvania station. Sorry. dp)

Joseph E. Kureth, Jr. P.O. Box 572 Southern Pines, North Carolina 28387

11-6 Tr 2330 WYAH-27 Portsmouth, VA 12-31 Tr 2100 WOAY-4 Oak Hill, WV
12-4 0545 WMAL-7 Washington, DC 1-23 0105 WOXI-11 Atlanta, GA
12-19 0830 WJRJ-17 Atlanta, GA Total now 132 (Winegard SC-54 w rotor)

Glenn Hauser PSC Box 4563 Robins AFB, Georgia 31093 (CST)

1-14 Es 1530 CBFT-2 Montreal, Que. 1-14 Es 1627 WJBK-2 Detroit, MI(680)

1550 WGBH-2 Boston,MA 1630 CJIC-2 Sault Ste.Marie
1559 WMAR-2 Baltimore,MD 1630 UNID-3 has trans,K76EP?

I'm back in USA without any permanent TV-DX setup. Have my old reliable RCA
1961 New Vista portable with "bunny ears." Earlier in month saw WSPA-7 and
WGTV-8 via trops. Have tried whenever possible for Euro 41 MHz TV audio, but
no luck so far.(Welcome back, dp)

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Ronald J. Le Blanc 2524 Arizona Drive Marrero, Louisiana 70072
12-17 Tr 1715 WINK-11 Ft. Myers, FL(564) 12-18 Tr 2400 WFSA-12 Montgomery, AL
          1800 KHOU-11 Houston, TX(321) 2405 WINK-11 Ft.Myers, FL(564) 2100 KTHV-11 Little Rock(350) 2410 WLCY-10 Largo, FL(488)
          2130 KALB-5 Alexandria, LA
                                                      2430 WAPI-13 Birmingham, AL
                                                   2445 WQXI-11 Atlanta, GA*
           2335 KATV-7 Little Rock, AR
                                                 0135 WBRC-6 Birmingham, AL
           2400 WMSL-48 Decatur, AL(375)
           2415 KPRC-2 Houston, TX
                                                        0210 KBMT-12 Beaumont, TX
          2415 KPRC-2 Houston, TX
2430 WATL-36 Atlanta, GA(406) 1-9
                                                        2000 WATL-36 Atlanta, GA
                                             A TOP I THE
           2445 WBIR-10 Knoxville, TN(549)
                                                        2100 WHMA-40 Anniston, AL (337)
           2455 WFTV-9 Orlando, FL(510)
                                                        2130 WCFT-33 Tuscaloosa,AL
                                                     2200 WKAB-32 Montgomery,AL
2215 WAAY-31 Huntsville,AL
           0105 WAAY-31 Huntsville,AL
           0110 WAPI-13 Birmingham, AL
           0130 WLBW-10 Miami, FL(686)
                                                        2230 WYEA-38 Columbus, GA
          1705 WJHG-7 Panama City,FL
1715 WTVM-9 Columbus,GA
                                                        2245 KLNI-15 Lafayette, LA
 12-18
                                                        2300 WCOV-20 Montgomery, AL
           1720WMAA-29 Jackson, MS
                                                        2420 WQXI-11 Atlanta, GA
           1730 WDIQ-2 Dozier,AL
                                                        0145 WBRC-6 Birmingham, AL
          1845 WSB-2 Atlanta, GA
                                              1-11
                                                        1830 KHOU-11 Houston, TX
           1850 WGIQ-43 Louisville, AL
                                                        2100 KTVE-10 El Dorado, AR
           2000 WFSU-11 Talahassee (350)
                                                        2300 WAOI-13 Birmingham, AL
           2015 WEIQ-42 Mobile, AL(138)
2345 WATL-36 Atlanta GA
                                                        2400 KENS-5 San Antonio, TX
                                                        2445 KBMT-12 Beaumont, TX
           2345 WATL-36 Atlanta, GA
           2355 WYEA-38 Columbus, GA(337) (Total now 157 stations)
 *Channel 11 in Atlanta identified itself as WAII-11 on 12-18 and as WQXI-11
  on 1-9. (According to TV FACTBOOK channel 11 in Atlanta was formerly WAII
  and is now WQXI which they have been for some time. Evidently someone used
  an old ID slide. Two different call letters for the same channel in the
  same city should not be counted separately. It's still just one station
  unless station has left the air and another has come back on using different
  facilities. dp)
  Jerry Pulice 143 Gibson Avenue Staten Island, New York 10308 (EST)
                  WNEP-16 Scranton, PA 11-1 Tr 2205 WJAR-10 WTEV-6 WPRI-12 WDAU-22 Scranton, PA 11-6 Es 2000 WLBT-3 Jackson, MS(tent)
  10-29 Tr 0800 WNEP-16 Scranton, PA
                  WBRE-28 Wilkes-Barre, PA 11-8 1825 WTVY-4 Dothan, AL WVIA-44 Scranton, PA 1840 WDIQ-2 Dozier, AL
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10-31 Tr 1730 WTIC-3 Hartford, CT 2000 WABG-6 Greenwood, MS

WTEV-6 New Bedford, MA

WNHC-8 New Haven, CT 12-29 1500 KOTA-3 Rapid City, SD WJAR-10 Providence, RI 1530 KDYO-3? (maybe KDLO-3, SDdp) WPRI-12 (Rehoboth, MA) Total now 153 stations in 33 states+DC

(Tiverton, RI) for skip. Two 98" folded dipoles, fed
16-22-28 Scranton, PA with coax. By phasing the two, a null
16-22-28-44 Scranton, PA can be produced for NYC and Philadelphia.

M. and

Es 1947 UNIB-2 & 4

developed your land of the said state of the

as to the second of the second of the second

odle o British e office contract contract 1900 WDSU-6 New Orleans, LA

I am now using a vertical dipole system

# WESTERN TY DX

March 1971

Dennis Park Smith Music Department Chico State College Chico, California 95926 Deadlines: 12th of each month

It has been a fairly good winter so far. Tropo has been fair in some areas, and there have been some interesting Es and MS loggings so far in 1971. Overall, Es was reported on January 4, 11, 12, 13, 14, 21, 23, 24, 25, 27, February 2, 7.

Bill Heusmann, 1527 24th Street, Des Moines, Iowa 50311 (9 Dec - 31 Jan) (CST 12 MS 0509 WCBS- 2 New York NY CBS tp (12)(MS) 0556 wway- 3? Milmington NC CBS tp 0516 wkyc- 3 ClevelandOH logo glimpsel4 Es 1728 WESH- 2 DaytonaBeachFL local nx 0546 WLW-D 2 Dayton OH 'LLW'-type tp 1737 wedu-3 & wtvj-4 tentatives 0550 WUSN- 2 Charleston SC logoslide 19 Tr 0730 KROC-10 Rochester MN Today 4555 0612 KPRC- 2 HoustonTK id color bars 24 MS 0546 WLW-D 2 tp, whoopee! 0617 KRIS- 6 Corpus Christi TX tp 16 Tr 0031 WREX-13 Rockford IL s/off 1345 Tr 0558 KCRG- 9 IA on early w/ bullseye 0616 KHQA- 7 Hannibal MO CBStp 2355 J12?MS 0528 WLW-D 2 Dayton OH tp 25 Es 2000 XEFB- 3 'Monterrey Al Dia' promo 0547 unID- 3 washed-out wedge tp unID- 3 ABC dominant o/XEFB New underlined, tentatives lower case type. Not sure if Jan-12 date is correct; neglected to note at time! Conditions are about what one would expect for this time of year. My UHF IF tube is bad; at least I'm not missing much. 73 and good DK.

Les Prus, 1615 Pierre Street, Manhattan, Kansas 66502 (CST) (January) 3 NS 0538 WLW-D 2 Dayton OH 2\_\_\_R650 (14)(Es) 1740 MSAV- 3 Savannah GA 34 R1000 0557 unid- 3 spiral tp/id 2 1745 unid- 2 Daniel Boone 31 0631 <u>KDLO- 3</u> watertown SD 3 8 MS 0543 <u>unid- 3</u> star-shaped id 3 1750 WESH- 2 DaytonaBeachFL 44 R1110 N390 1800 EDU 3 Tampa FL 11 Es 1155 WMAR- 2 Baltimore MD 31 R1060 E? 1630 KUSD- 2 Vermillion SD 41 N260 1820 WPBTorWTHS-2 Miami FL 34 R1310 1835 WTVJ 4 Miami FL 44 N1310 1845 unid- 3 Sp.audio, Cuba? 13 14 Es 1635 WUND- 2 Columbia NC 44 R1150 1640 WFM- 2 Greensboro NC 44 R950 20 Tr 0630 KTEW 2 TulsaOK(xKV00!)22 R210 1710 WWAY- 3 Wilmington NC 44 R1080 24 Tr 2220 KBMA-41 Kansas City MO 33 R100 1720 MUSN- 2 Charleston SC 44 R1015 25 Tr 1045 KCSD-19 Kansas City MO 23 N100 Notes: Jan 3, KDLO-3 is nearest MS. Checked several times on 2nd, 3rd, & 4th for Quadratids shower including late morning - early afternoon but I apparently missed it. Random bursts only were noted. South Dakota is my 28th state. Jan 11, KUSD-2 logging is puzzling—Es at 260 miles? Duration about 2 minutes after tune-in with steady picture not unlike Es, which rules out MS. Trops conditions were nil. Jan 14, 1635 tune

in, last DX faded 1850. See January CCI for unid details. A pretty good month for DX with a very good skip opening, four new stations and

one new state added to my log. Best of DX.

(Les also sent a map of the southeast US with a detailed illustration of the 14-January Es opening with the clouds, times, and stations as seen by Mssrs. Prus, Garber, and Heusmann. Some tentatives were determined after plotting positive ids. Map also notes double-hop id of WKAQ-2 Puerto Rico by Mary Garber; perhaps we'll see his report next time. Terrific, Les. dps)

Bob Cooper, Jr., 2609 Chaucer Drive, Oklahoma City, Oklahoma 73120 (January) (CST) I have been running so far behind schedule that many worthwhile projects have been put way way back. We did finally get a Channel Master large VHF array up above the plant some 30 feet late in December, as I needed it for on-air checking of CADCO CATV equipment before it was shipped. With it, and a monitoring system running here some 12 hours or so a day, I have seen just a little random skip. Busy as I've been, I haven't always had the time to catch an id but what has been seen is as follows:

Jan 4 Es 2125 WESH-2 WEDU 3 WPBT 2 Florida. WEDU last out at 2156.

Jan 11 Es apx 1100-0955 weak ch 2 from NE, NBC, no id.

Jan 12 Es 0948-0955 weak ch 2, E/SE, two stations, no ids.

Jan 13 Es 0900 tune-in to apx 0915, weak N/NE ch 2, two stations, no ids.

Jan 14 Es 1615 to after 2000, from north first, swung east, then back north again late in opening. WFMY-2 NC NTAR-3 VA NUND-2 NC ided.

(Bob Cooper, continued)

Jan 21 Es 1720-1950 to Mexico, XEM-2 ided with others in there.

Jan 23 Es 1504-1550 XEM-2 and SS on ch 3.

Jan 24 Es 1830 tune-in to apx 1931, XEW-2 plus unknown SS station ch 2 with "Siempre Domingo - Canal 2" program.

I have a March 15 target date for my home installation on VHF and UHF;

if I make it (or when!) I will start reporting regularly again.

Glen R. Neal, 1005 N. 5th, Sayre, Oklahoma 73662 (1 Jan - 7 Feb) The reporting period turned out well after all, with many modes good at times. Jan 1 AM tropo up slightly: KLTV 7 Tyler TX (3334R325). MS up in quality about 0700. Jan 2 Tr 0900 under cloudy skies, in very well; peaked early PM, KOSA-7 Odessa TX (4543R285) KUTX-10 Waco TX (2433R300).

Jan 3 MS, the Quadrentids storm was fairly good here, peaking today with the better bursts around 0630. 0640 WLBT 3 Jackson MS (2415R575 TP & tone. UnID ch 5 TP

many times. 1900, good burst on ch 7.

Jan 4 Tr 2000 KSEL-28 KMXN-34 Lubbock TX (3435R170). Es t/in 2055, from SE: WESH-2 Orlando FL (5534R1165) WEDU 3 Tampa FL s/on 2100 (4533R1125) WJXT 4 Jacksonville FL (4534R1090) @ 2112. Up through ch 6 quickly, by 2155 down to ch 2 and at 2217 all had faded out.

Jan 5 Tr 0600 With VHF dead, UHF translators in, chs 76 & 78 fair, unID. Despite my now having a TV Factbook, I am still unable to ID them; temporarily can't turn ant.

Jan 6 Tr early AM & late PM, KUPK-13 Garden City KS (3544R175) KFDW-12 Clovis NM (343R210), plus chs 76 & 78 poor.

Jan 7 & 8 Tr in AM good. Jan 8 MS 1400 bursts up Jan 9 MS Predicted random early morning noted good. Jan 8 MS 1400 bursts up substantially.

Jan 10 Tr 0630 KRBC-9 Abilene TX (4443R210), PM tropo also up slightly w/ unID

ch 80 this time. MS around 1000 very good, almost chower-like!

Jan 12 Tr 1300+ w/ cloudy skies, good signals: KTXT-5 Lubbock TX (3544R170) KOSA-7 Odessa TX (5554R285) KMOM-9 Monahans TX outstanding (5554R290), KCBD-11 KLBK-13 KSEL-28 KMXN-34 Lubbock TX al "intense" (5555R170). KMXN-34 is now easily as good as KSEL-28; KMKN seen w/ all-Spanish programming, IDing in Spanish followed by English. Random morning MS in AM w/ several good bursts noted.

Jan 13 Tr 0545-0900 Good again with many from last night, along with KTMS-12 Sweetwater TM (4545R200). PM tropo: SE & E excellent w/ KETA-13 Okla. City OK at 0700 (5555R175) KGTO-36 Fayetteville AR (3535N320 and at 2330 KTEN-10 Ada (5555R175) strongest signal during tropo I believe I've ever seen!, KODE-12 Joplin MO 3433R210),

plus unID chs 76 78 80 82 83!

Jan 14 Tr Still going strong when arose 0545, best signals to E: KOED-11 Tulsa OK (4544R220) 0645 KGTO-16 fair KMTC-27 Springfield MO hit air 0830 (4535N400) KCKH-25 Okla. City (4535N125) + translators. PM tropo very good. AEs noted 1818 w/ ant. aimed ENE: WESH-2 Orlando FL (4413R1165) KEY#T 3 Santa Barbara CA (5502R1125), up through ch 6 when I had to leave @ 1845.

Jan 15 Tr 0550+ to SE & E: KERA-13 Dallas TX (4533R230) KETA-13 perfect, and

unID translators chs 74 76 78 79 80!

Jan 16 MS 1000 count up considerably.

Jan 17 MS in early AM: Cyginids shower a complete dud here—not one ping noticed during entire monitoring period! However, in PM, good 2-second burst on ch 13.

Jan 18 MS 0559 NNEM-5 Bay City MI (2514R1005), good one-second burst right on audio ID! Other MS through ch 13 at times. Tr 2200 KLOE-10 Goodland KS 3542R300.

Jan 21 Tr Good to 200 mi all directions. Es about 1900 while at friend's house, noticed CCI on ch 4.

Jan 23 Tr 0600+ more good All tropo—nothing outstanding, though.

Jan 24 Tr 2000+ into early AM; this was peak tropo this month with VHF reaching almost 500 mi; many to 300 mi snow-free: KSLA-12 Shreveport LA (4544R395) KDTV 39 Dallas TX (3535M230) + translators chs 75 76 79. Then came best reception of evening: after local KFDO-8 s/off, I watched WFAA-8 Dallas s/off, then saw KTUL-8 Tulsa s/off, and finally KNOE-8 Monroe LA (3545N480 until 0040 s/off. Lasted 'til 0045 when I went to bed. Surprised to see the near-dead tropo cx of the next morning.

(Glen: Neal, continued)

(5544N995)

Jan 25 Es, t/in 1836 to south, MENO-2 Guadalajara JS (4434N995) MHG-4 Guadalajara w/ ID in Spanish, natch. It sure helps at times to know Spanish. Es gone by 1950. Jan 26 Tr 0600+ tropo up to east.

Jan 27 Tr 2100 tropo continuing good, KTVC-6 Insign KS (3443R175). Noted MS up substantially in PM. Est/in 1816 to E & NE, quickly up through ch 5, fair, gone 1855.

Jan 30 Tr 0930+ up late w/ excellent morning. "Locals" to 250 mi snow-free. Suspect KSLA-12 in again. KOCO-5 Okla. City (5555R125) KTEM-10 Ada (5555R175).

Jan 31 MS 1400 up in quality, several random bursts.

Feb 1 AN Tropo up slightly. Predicted random MS date noted fair.

Feb 2 Es t/in 1901 from NE, up through ch 5 quickly, signals on chs 2-4 extremely strong & clear at times. No IDs. CN were very sporadic w/ MUF changing rapidly.

Gone by 1934. Noted MS up very well; several good bursts on ch 13!

Feb 3 Tr 2000-2300 to SW dipped down to almost 450 mi briefly: KTBC-7 Austin TX (3441R360) KRBC-9 Abilene (5554R210) KSAT-12 San Antonio (3432R425) (between KXII-12 to SE & KTAS-12 to SSW). UnID translators in also. MS noted above normal in AM.

Feb 5 MS The first day of the Aurigids shower seen fair here.

Feb 6 MS Many very good bursts and super-bursts 2100+.
Feb 7 Es t/in 2008 to south. Spanish chs 2 through 5 w/ 2 & 4 the best, no IDs, gone by 2116. MS noted fair. Tr 2000+ to west: KGNC-4 KVII-7 KFDA-10 Amarillo TX

60 stations have been logged so far this year so no complaints lest they be in the area of mail service. I finally received the remainder of my order so now have all of my new system in operation. It includes an RCA VHF/UHF antenna @ apx 25 ft, 300-ohm line from ant to mast-mounted pre-amp, 75-ohm coax down to power supply and then to 75/300 transformer hooked to RCA VHF/UHF splitter to 1968 Zenith television receiver. Ant is rotated with Alliance rotor. What a difference the pre-amp made!

This January has been a record breaker around here with temperatures in the 70s and 80s many days of January, accounting for the good tropo. Kind of reminds one of the good old summertime; I can hardly wait for those warm summer nights with the tropo pouring in from all directions! Enough (understatement!). 73s desde Glen.

Pat Dyer, 327 Solar Drive, San Antonio, Texas 78227 (8 Jan - 7 Feb) (CST) Receiver: 1968 RCA color GJ7211. Antenna: Wards 11-el hi-low VHF, 15'up, fix-aimed SE. 12 Tr 0033 KHOU-11 Houston TX 185 (23)(Es) 2300 unid- 3 Mexico ? ?
0033 KWTX-10 Waco TK 165 27 Tr 2220 KHOU-11 Houston TX 185

18 Tr 0030 KRGV- 5 Weslaco TX 215 F6 Tr 0130 KHOU-11 Houston TX 185 Oll5 KGBT- 4 Harlingen TX 215 21 Es 1830 unid- 4 Mexico ? 23 Es 1900 unid- 4 Mexico ? 1845 unid- 3 Mexico ? 

It's been a long time since I got an Es ID. There's been a tremendous amount of Es around this Jan-Feb but it always seems to be Mexico whenever I try for IDs.

Jan 21 & 23 CCI on local WOAI-4 was very severe. I'm sure they got a few calls about it. It's over 25 miles from here to the transmitter so it doesn't take too much of an Es opening to mess them up. Stations should make announcements when heavy CCI is around, as I heard WESH-2 do once. Hams like myself operating 50 MHz often get the blame locally. During the same periods on 50 MHz, California was getting Guatemala. Some DXers out there may have gotten 2Es on the TV as well.

So far the Es has more than made up for the poor December around here. 130 190 the translation of the second of the Water and

Best of DX to all

Dennis



SEVERAL COLUMNS WERE NOT RECEIVED ON TIME THIS MONTH, AGAIN. THE EDITORS AS WELL AS YOU READERS KNOW THAT WE HAVE A DEADLINE. IF YOUR FAVORITE COLUMN IS MISSING, PLEASE WRITE THE EDITOR AND TELL HIM TO PLEASE TRY HARDER TO MEET THE HO DEADLINE OF THE 20TH SE YOU CAN READ HIS COLUMN ON TIME, NOT A MONTH LATE. EUROPEAN SCENE DID NOT ARRIVE DUE TO THE MAIL STRIKE IN ENGLAND. STATISTICS DOES NOT APPEAR BECAUSE THE EDITOR WAS SUDD-ENLY TRANSFERRED TO TEXAS. LACK OF INFORMATION FOR A CCI COLUMN IS THE REA-SOM FOR NON-APPEARANCE OF THAT COLUMN. NO THER REASONS WERE RECEIVED AT HQ. "... and I logged 40 new stations in 24 hours with my CADCO model VHF-DX IPA pre-amplifier ..."

So writes TV DX er Richard Clark of Fort Lauderdale, Florida. Dick goes on to say .....

"... and you sure were right. This is a very sensitive and selective unit. Included in my new loggings was WHTN-13 in Huntington, West Virginia ... 1,000 miles on channel 13 tropo!"

DX er Dick Clark is now one of three people using the DX TWIN PACK - the VHF-DX IPA low band and high band tuneable pre-amplifier. This state-of-the-art pre-amplifier combines ultra low noise figure, good gain (20-22 db) and very high selectivity into a single tuneable package that puts the DX er in control of his receiving situation at all times. With four controls, YOU tune in the station you want and tujne out the interference.

CADCO NOW HAS TWO MORE OF THESE CUSTOM BUILT VHF DX UNITS READY FOR SHIPMENT. BECAUSE THESE ARE CUSTOM BUILT, AND ARE NOT A PART OF OUR REGULAR CATV PRODUCTION LINE, WE DO NOT EXPECT TO BE ABLE TO BUILD ANY MORE OF THESE UNITS FOR SIX MONTHS OR MORE. IF YOU WANT THE VERY BEST FOR THE 1971 TV DX SEASON - YOU WANT THE VHF-DX-IPA.

The price is \$144.50 postpaid. First come, first serve ... when these two units are gone, there will be no more for six months or more.

### CADCO UHF-DXC-2

This is the super selective interdigital series post amplifier that goes between your UHF converter and your TV set, as a post amplifier to boost and filter out interference on UHF signals that are converted to either channel 5 or 6 by your converter. 20 db gain, interdigital bandpass filter built in. With power supply, just plug it in and turn it on. Only two are built up and ready for shipment - when they are gone, no more for six months or more. For REAL UHF DX, this is the unit. \$75.00 postpaid. (Note: Specify whether you use channel 5 or 6 for UHF.)

### CADCO FM-DX-IPA

Interdigital series pre-amplifier/tuneable bandpass filter for FM. 20 db gain, this is so hot it even improves the fabled AJ-15. Only one built up, no more for six months or so. \$75.00 post-paid.

### CONRAC AV-12E RECEIVER

Back in October we bought ten of these and offered them for sale to DX'ers. Now we have only one left. Everyone knows this is the best receiver there is for DXing. This has the 12 channel VHF turret tuner, and is brand new. We check them out and ship them, F.O.B. Oklahoma City for \$250.00 (regular net price over \$425.00). Only one left - and then no more!

CADCO - (The TV People)

Suite 107, 4444 Classen Blvd., Oklahoma City, Oklahoma 73118

Telephone - 405 / 528 7988

FM-DX

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

Deadline 10th of the month.

Jim Hayes 3 Henry Street Wilkes Barre, Pennsylvania 18702 EST

December sure contrasts with January when conditions were really good. Now beginning with 11/17 tr 0715 WBMR 89.7 Bedford, Pa. 10w, 0716 WJAC 95.5 Johnstown, Pa. 11/26 tr 2355 WEST 96.1 Easton, Pa. w/stronger sig. 11/30 Up at Thornhurst, high in the Poconos, I noted a lot more GW's that are usually blocked out by the mountains in WB among noted WVOS 95.9 Liberty, NY and WNBC 97.1 NYC. 12/14 Tr 2030 WGAY 99.5 Washington, DC. 12/29 Es 1550 weak noted to 99.1. 12/31 Tr 1400 WCLI 106.1 Corning, NY. 1/8 Tr 1650 WJBR 99.5 Wilmington, Del. (new state for me), 1651 WGAY 99.5. 1/9 Tr, first good trop opening since 9/16 began around 1800 here. 1845 WFRE 99.9 Frederick, MD, 1935 WEPM Martinsburg, WVa, 1945 WASH 97.1 DC, 2006 WVNJ 100.3 Newark, N J, WISL Shamokin in like a Tocal during period. Wilkes College is planning to set up an FM station on 90.7. There go some more freqs. That's it this time around. 73.

Fred McCormack

200 1608, North Landet 08701

CST

FM DX almost didn't happen in December here up north. On 12/29 I finally got some with the ground wave logging of new on the tir KCMT 100.7 in Alexandria, MN. They have been received daily since with weak signals most of the time, but it is occasionally good. It is now the most consistant 300 mile FM heard here. On the same date, an Es opening took place which reached FM for a short time. At 1546 CST, WLGN 98.3 Logan, Ohio was logged. Finally, on 1/3/71 at 1705, WLAC 105.9 Nashville, Tennessee was heard on MS. 73 and good DX in 71.

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

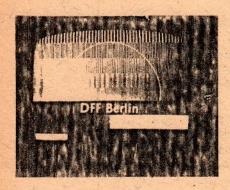
Some randomness, as I have no DX to report. From Russ Brown of Michigan, KCLN 97.7 IA is on RS now, // to AM, WAUR 90.9 to go RS 1/10 in stereo, WDOW 97.8 MI has been noted testing for awhile, now nothing more. WHFB 99.9 is now broadcasting in 4 channel stereo on a regular basis.....

Pat Dyer 327 Sclar Drive San Antonio, Texas 78227 CST

The December FM Es opening I expected didn't materialize here. In fact, compared to the previous years, this past month was a flop. The only new catches this time have been in state tropo. KIEF 94.5 Houston, KOUL 105.3 Aransas Pass. 12/8 @1245 KWFR??? San Angelo (94.7 RWW). I monitored the FM band during the Quadrantids meteor shower Jan. 3. I was really amazed to hear all the bursts that I did with just an 18 inch whip. There were literally hundreds of bursts during the 5 hours I listened 1200 to 1700 hrs. I stayed on one of the "clear" local freqs near 95mHz. At the peak there were up to 3 bursts a minute. Some of the super bursts lasted over 20 seconds, no IDs, however, just a lot of pieces of music with some ads and news once in a while. Some of the larger bursts brought in 3 or more stations at a time. 73.

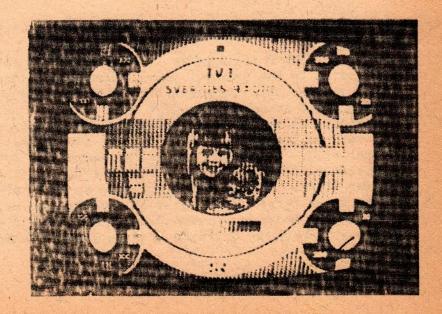
Carlon Howington 13880 Greenland Ave. Uniontown, Ohio 44685 EST

DX here in NF has not been real good the last few months with only one tropo opening on 11/30/70 from Il up to MN. The following were hrd: KGRC 92.9 , WIAI 99.1, WMIL 95.7, WMRY 101.1, WMAQ 101.1, WVEM 101.9, WMBD 93.3, WIFC 95.5 and best catch of AM was KEFY 102.1 at 650 miles, WSDM 97.9 on a ET. Big news here is I finally got my FM yagis and my Tead in working. Last summer at the convention, Bob Cooper showed me how to build a 75 ohm antenna and after about two months of experimenting I came up with a 9 element yagi for FM. It has four driven elements, fed with coax and now I have one on a pole behind the house and other up on my 90' tower. About two months ago I changed m y open lead. I had to make about 200 feet of open lead and I used #12 wire with nylon spacers about every two feet (the two wire are 1 inch apart). After I put up the open lead and turned on the AJ 15, I could not believe the difference in reception. Normal winter CX is better than last summer when I was using a commercial FM yagi. This is normal winter CX (rain or shine) day or night, hot or cold: WHKW 89.3 and WHAD 90.7 (410 and 390 miles) are readable about 50% of the time from the west, from the south WUOT and WFPK 91.9 fight it out most of the day @350 and 290 respectably, from the east and I still cannot believe this, WGTB 90.1 from Washington, DC with 771w and 23' AAT and this at 270 miles over the mountains. Also readable when channel is clear is WGSU 89.3 in Genesco, NY w/1750 w and 7' AAT at 250 miles. On 12/1 this was a sunday eve on 90.9 after WGUC s/off around 8PM, I heard WMCO in New Concord, Oh w/10 watts at about 100 miles and this turned out to be normal CX when WGUC is off. 12/13 ran across a MS and set on 92.1 from 8 to 11PMand heard many MS and a couple dozen super bursts, but only got one ID cut of it, but it was a nice catch NJGA in Jackson, Ga IDed @9:41 and it was a new state. I tried the shower on 12/22 and was up from 0200 to 0400 and added WBIL 93.7 Biloxi, MS and hrd CKIW 93.9 on MS with the antenna 90 degrees from the station. They are about 125 miles from here. Over the Xmas weekend, I changed my antenna on the pole benind the house. I put a rotor on the boom so I can change from vert. to horiz. orand pleace (???) in between plus the rotor on the mast. The system works very well so far and I can't wait until Es. My 500th FM verie came on 12/31 WDYL 92.1 to end a very good year. Carlon.



DFF BERLIN: RALF ERLER, PARCHIM, DDR (EAST GERMANY).

SVERIGES RADIO-TV (SWEDEN): TAKEN BY ENGLISH MEMBER ROGER BUNNEY.



CENTRAL TY DX

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

March 1971

Next Deadline: March 15

TV-DX as noted by enthusiasts in Wi, Il, In, Mi, Oh, Pa and Eastern Canada

For me, this is the toughest column of the year to compose...because there is rarely enough old business to review...and by the time YOU see it, we MIGHT have had a fair tropo opening. Let's hope so! As I write this, the forecast calls for a general warming trend. Most of Michigan has been under snow since the first of December and all most Central U.S. DXers have seen on their respective screens is likewise...snow!

During the next 60 to 90 days, we'll be moving gradually into a springtime tropo and Es conditions. If you reporters (and all others) in the Central area have time...why not give me a good description of your DXing set-up before the next deadline or two and I'll begin the season with that information.

Reports this month are limited in number...but high in quality. For instance...

### Harold Cooper, 29800 Ann Arbor Trail, Westland, Mi. 48185 EST

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12-1 Tr (	0630 V	LOS-13	Asheville, NC	1-3	MS (	0612 W	AGA-5 Atlanta, Ga.
				1-11	Es	1530	WPTV-5 Palm Beach, F1
12-11 Tr	1315	WFRV-5	Green Bay, Wi			1600	WEDU-3 Tampa, F1
12-12 MS	0305	KQTV-2	St. Joseph, Mo	1-14	Tr	1630	WBOY-12 Clarksburg, WVa
	0625	WFBC-4	Greenville, SC		Es	1700	WEDU-3, WPBT-2
	0655	WBAP-5	Fort Worth, Tx			1710	WESH-2 Daytona Beach
	0725	KOCO-5	Oklahoma City		Tr	1715	WFLD-32, WOUB-20
	0758	KORN-5	Mitchell, SD		Es	1725	WPTV-5 Palm Beach
	0812	KHAS-5	Hastings, Neb			1755	WTVJ-4 Miami
	1825	CBWFT-	Winnepeg, Man.			1800	WCIX-6 Miami
12-13 MS	0655	WJXT-4	Jacksonville, Fl			1830	WEAR-3 Pensacola, Fl
12-29 Es	1100	KACB-3	San Angelo, Tx		Tr	1845	WAND-17 Decatur, Il
	1130	KOCO-5	OKC, Okla		71	1900	WICD-15 Danville, Il
	1530	KMID-2	Midland, Tx	1-17	?	1400	KOCO-5 OkCity
	1600	KOTA-3	Rapid City, SD	1-26	Tr	1800	WFLD-32 Chicago (culminating
	1630	KDLO-3	Garden City, SD			a wee	k of good tropo to 150 miles)
		KLNE-3	Lexington, Neb	1-30	MS	0930	KBTX-3 Bryan, Tx
				1-31	MS	KDLO-	3 Garden City, SD

Totals on 1-31, 258 stations received in 3 countries, 31 states and 5 provinces. (Harold continues to see stations everyone misses. He's at the right place at that right time! RB)

### Gary Olson, 1203 Kenton Rd., Deerfield, Il. 60015 CST

1-13 Local 1845 KS2XBR Chicago, testing. Weak (grade B) signal noted also on 1-14 from 1830 to 1900. Thanks to Morrie Goldman for phone call alerting me to new station. Haven't seen them since the 14th. Hope I have more to report next time! (same here Gary. Except for Hal Cooper, everyone has had a pretty drab winter. RB)

That's it! No other reports were submitted for the month. I did receive communications from two gentlemen (and again spoke with Morrie Goldman by phone). Mark Lewis, Downsview, Ontario notes WUTV-29 Buffalo should be A/N by now! They began programming in late

December, with something like 1 1/2 million watts ERP. Mark says they put an "incredible" signal into Downsview...he can see "every speck of dirt" on their film! He also notes confirmation of KCIT reception during the tropo opening of late November. Congratulations!

Bill Draeb thawed out enough to send greetings. He saw no DX during the period but instead braved temperatures that finally "climbed into the 20's" and replaced his "ancient 14-year-old UHF antenna" with a 5 foot dish. Bill says, "I was on top of that tower for two hours and got frozen right down to the bone!" Whew! Regulars with the dish under poor conditions include Chicago and South Bend Us. Bill notes he's thinking of buying a BTX-lla convertor, and of replacing his old set. Great Bill. Now NONE of us Midwesterners will catch you!

Hereabouts, your editor awaits some type of thaw, to begin hauling down antennas and move them across town. Right now, time is well consumed by painting, moving and generally getting installed in our first buy-it-yourself, sell-your-soul, mortgage-your-everloving-future house! Hope to have a 7 foot dish at 40 plus feet, stacked HB yagis at 30-35 feet, a vertical antenna for skip and a single horizontal LB yagi. First, it has to get WARMER!

One last note...M. Goldman might be in the service by the time you read this. He'll be doing a 6 month stint in the USAR, but isn't sure at this writing where he'll be. We hope to have more info next time.

Now...back to that friendly paint roller. Best DX.....Rog.

## POP'TRONIES EDITORIAL

ELSEWHERE IN THIS VUD APPEARS COMMENTS ON THE WIFDA VS MAGAZINE PUBLISHER CONTROVERSY.

THIS MONTH'S COMMENTS WERE ALREADY TYPED UP WHEN I RECEIVED FROM AMBROSE MAXIM A COPY OF THE PE EDITORIAL BY OLIVER FERRELL WHO HAS BEEN THE SOLE PROTAGONIST OF THE PUBLISHER'S POINT OF VIEW IN THIS CONTROVERSY. ALTHOUGH I AM SEEING THIS EDITORIAL SECOND-HAND, I HOPE MOTHING WILL HAVE BEEN LOST IN THE TRANSFER OF INFORMATION. THERE WAS A SERIES OF EDITORIALS I UNDERSTAND, SO THIS IS ONLY A PART OF COPY SO FAR PUBLISHED. ALTHOUGH THE SML IS SPECIFICALLY NAMED, I FEEL THE OPINIONS EXPRESSED APPLY TO ALL DXERS, WHETHER SWLS, TV, FM, ETC. DUE TO LACK OF SPACE I MUST SUMMARIZE: (WITH SOME COMMENTS AND VIEWS OF MY OWN INTERSPERSED):

SWLING (DXING) DEFIES ANALYSIS: ARE THERE 5000 SWLS, OR PERHAPS A MILLION? MANUFACTURERS HAVE BEEN DESERTING THESE HOBBYISTS THE PAST DECADE, ALTHO A FEW HAVE STAYED IN THE RACE DUE MAINLY TO IMPORTED JAPANESE RECEIVERS. SHORTWAVE BECAME A PRESTIGIOUS PROPAGANDA TOOL DURING WORLD WAR II, AND AFTER THE WAR INTERNATIONAL BROADCASTERS POURED A LOT OF MONEY INTO RADIO TO TELL HOW GOOD THEY WERE AND HOW BAD OTHERS WERE. THE AVALANCHE OF NEW STATIONS AND COUNTRIES TO BE HEARD SENT PROFICIENT SWLS INTO A FRENZY OF DXING ACTIVITY. THE HOBBY PROBABLY PEAKED IN THE LATE 50s AND EARLY 60s. THERE HAS ALWAYS BEEN A GREAT ATTRACTION TO SWLING AMONG TEENAGERS, ALTHOUGH MOST OF THEM LOSE INTEREST IN A YEAR OR LESS. SOME DRIFT BACK WHILE IN THEIR 50s OR OLDER TO SEE HOW THE HOBBY HAS CHANGED, BUT THE BETWEEN 19 AND 35 AGE GROUP SEEMS TO HAVE LITTLE INTEREST IN SWLING.

PERHAPS THE OUTLOOK FOR THE HOBBY NEED NOT BE AS DARK AS IT APPEARS. SWLS HAVE NEVER MADE A STRONG CASE FOR THEIR ACTIVITIES, AS HAVE HAMS THROUGH THE ARRE FOR INSTANCE. EQUIPMENT MANUFACTURERS DON'T KNOW THE SIZE OF THE MARKET NOR THE KIND OF EQUIPMENT SWLS ARE WILLING TO BUY. INTERNATIONAL BROADCASTERS ARE PHASING OUT THEIR PROGRAMS TO NORTH AMERICA BECAUSE LISTENNERS APPEAR TO BE MORE INTERESTED IN QSLS AND FREQUENCY CHANGES THAN IN PROGRAM CONTENT, (WHICH IS WHY THE COUNTRY IS BROADCASTING TO US, AFTER ALL-TO TELL US ABOUT THEMSELVES). SWLS COULD DRAMATICALLY IMPROVE THIER LOT IF THEY FOUND A STRONG UNIFYING FORCE WITH PERCEPTIVE LEADERSHIP. A LACK OF POSITIVE DIRECTION ALONG WITH PETTY GRIPES, FRAGMENTATION, AND A VARIETY OF MINOR ANNOYANCES PLAGUR THIS HOBBY. ITS NOT SURPRISING THAT MANY TEENAGERS ARE FLOCKING TO CB WHERE THE FELLOWSHIP, UNITY, ORGANIZATION, ETC COMPENSATE FOR THE BOREDOM OF SWLING. A TURNAROUND CAN BE ACCOMPLISHED ONLY IF SWLS WORK TOGETHER AND STOP FIGHTING OVER WHO WILL PRESIDE AT THE WAKE.

EXCUSE MY LICENSE, MR. FERRELL. NOW WTFDAERS, LETS HAVE SOME CONSTRUCTIVE CRITICISM ABOUT HOW TO IMPROVE THE HOBBY, GET NEW MEMBERS AND HOLD THEM.

### GED-T I.F. FILTER

"Bridged-T IF Filter" : by Gerald Pulice

VTFDA Feature Article typed for VTFDA by G. Olson

A common problem in today's TV-DX is that of adjacent channel interference. Cheaply built modern sets cannot cope with today's saturated channels. For example, I live 18 miles south of maximum power locals in NYC on ch. 2,4,5,7,9,11, and 13. WCBS-2 comes in fine with a 6-inch wire antenna in my basement! It. becomes obvious what that does to the few vacant channels I have. Ch. 3,6,8,10 and 12 are useless unless one uses one or more of the following:

(1) outboard traps such as the Jerrold or Channel Master (I

use Channel Master)

(2) "Interdigital" or standard coil and capacitor preamplifiers

that tune sharply (I ue both)
(3) A television receiver with more than 40 db. adjacent channel rejection. I believe Conrac is this good, but no com ercial set is. (ED NOTE: NO, CONRAC ALSO HAS POOR ADJACENT CHANNEL REJECTION AS COMPARED IN SIDE BY SIDE TESTS VITH QUALITY MONOCHROME SETS PRODUCED IN THE EARLY L960's)

(4) Aim your directive antenna away from your strong locals.

This may not work if you are close-in.

Methods 1 and 2 are only for those who wish to spend 3 and have lots of time to waste for tuning out each offending carrier. This means valuable time during an opening may be lost fooling with controls. Method 4 requires you give up perhaps 900 of your DX

horizon along with many catches.

Fost people don't have Conrac demodulators, so what can they do with their home style receivers? Not much -- except improve them! It's easy to improve your TV, if you will follow the directions given in the remainder of this article.

Normally a TV set has 3 traps in its IF system. Two are tuned to reject adjacent channel video and sound. The third reduces the effect of on-channel audio, keeping sound bars off the screen. Of the three, adjacent sound is by far the worst offender. An adjacent sound carrier produces writhing "herringbones" on a TV screen, making DX impossible to copy. I recommand that you tune your new IF trap to reject adjacent sound. Remember, an IF trap will work on all channells at once, just by using your fine tuning control! Barring front end overload (which is very rare) the trap to be described is as effective as a \$45 set of channel. Master traps. Best of all it costs \$5.00 or less to build. Now that we've described it, how do you build it?

Very simple. It consists of a tuning capacitor, coil, two resistors, and a "volume" control mounted in a small metal box. This "Black Box" then connects between your TV's tuner and its lst IF stage. HOLD IT - don't go away! This doesn't even require soldering in most sets. An RCA jack on the tuner mates with a plug-in cable feeding the first IF.

If built properly there will be no effect on your set's alignment. If there is, you can connect it to the antenna like a "trap-ease" or Channel Faster unit, and tune out each channel by itself. It uses the long discarded by manufacturers Bridged-T circuit. It is many times more effective than the simple traps now in use. See the diagram.

The diagrams should be self-explanatory. As I have tried to make clear, the tuning capacitor should not be grounded to the comper board, nor should the coil touch any other metal parts.

The top plate can be made of inexpensive copper-clad printed circuit board. If your wiring is short and neat, you will experience no problems. To connect into your IF: (I) a shielded cable from the set's chassis is plugged into the set's tuner. Remove it from the tuner and plug it into the trap. (2) Flug the tran's cable into the TV tuner. (3) Place the trap in a safe place (mine sits on the set's power transformer:). (4) Turn on the TV and make sure it is still working normally. (5) Set your fine tuning so a weak station is received, but covered heavily by a strong local lower in channel. IE:6 next to local 5, not 14-13 or 7-6 or 5-4. An outboard trap may be useful in finding the center of channel. Once you have found the center of channel con't disturb the fine tuning (6) With an insulated screwdriver (a plastic diddle stick) set the "volume control" to midposition. (7) Using your plastic screwdriver, slowly tune the variable capacitor, watching for a drop in the overlap or RM (8) Tunn the volume control "notch depth" trying to reduce the DRM further. (9) repeat 7 and 8 at least twice.

Now try all the channels. The set should act the same as it did before, but critical adjustment of the fine tuning will now remove virtually all signs of the adjacent sound carrier, leaving the DK strong and clear. If you experience any difficulties (Oscillation, misalignment, etc.): (A) check all tube shields in the tuner and IF stages. (B) increase the Fixed resistors to 25 ohms (they act as buffers). (C) Contact me (Gerald Pulice)

directly.

If all this sounds a little frightening there is still a way. This unit can be connected as an outboard filter - like a "trap-ease" but it will work better: Replace the two fixed resisters and the .001 disc with plain copper wire, and make the coil smaller (7 turns taped at 3,4 and 5). Connect your 75 ohm coaxial antennaline to the in and out terminals (300 ohm with baluns) and tune up each channel separately. You now have nearly the best low band trap available.

You will be able to lay a 40 db or greater notch over any

interfering carrier from 50 to 100 mhz.

Although I have not tried it, this circuit should work at FM and highband frequencies with different LC values, that are best found by experimentation.

This IF filter was designed around a ch. By trap built by

Roger Bunney to whom I must extend my thanks.

73's - Best DX Gerry

PARTS LIST:

L1=5/8 INCH DIAMETER #16 COPPER WIRE COIL, TAPPED AT3,4,5 or 5,6,7 TURNS; 7 OR 11 TURNS, B3W PREWOUND SUITABLE, (FROM LAYFAYETTE).

C1=HAMMARLUND HAPC-50 MINIATURE 50PF VARIABLE CAPACITOR; (ROTOR MUST NOT BE GROUNDED).
C2=0.001UFD CERAMIC DISC CAPACITOR, 200 VOLTS OR GREATER, (I F MODEL ONLY).
R1, R2=15 OHM HALF WATT FIXED RESISTORS, (I F MODEL ONLY).

R3= MINIATURE 500 OHM CARBON CONTROL.

SMALL BOX TO FIT COPPER-CLAD BOARD

SMALL PIECE OF PHENOLIC COPPER-CLAD BOARD, 4X5 INCH SUFFICIENT.

24" SHIELDED WIRE WITH RCA PLUG ." ONE

END AND BARE WIRE ON THE OTHER END.

ONE THREADED PANEL-MOUNT RCA JACK.

ILLUSTRATION AT RIGHT SHOWS DECIBELS (DB) OF REJECTION AT DESIRED AND INTERFERING CHANNEL -5 FREQUENCIES, SHOWING THAT DESIRED CHANNEL IS UNAFFECTED BY BRIDGED-T 1.F. FILTER. NEXT MONTH WE WILL EXPLAIN WHAT AN IF IS FOR THOSE UNFAMILIAR WITH ELECTRONICS/RECEIVER DESIGN.

