

LONDON  
CANADA

CHATTANOOGA

12

TV

P. O. BOX 3757 PCP

VHF-UHF  
DIGEST

#11 - November, 1968

KOA  
TV

31 WMBD  
COLOR  
TV &

WNBC-AM-FM-TV

NEW YORK, N.Y.

CONFIRMING RECEPTION REPORT

CHRE-TV  
CHAB-TV

WWL TV

NB

WAKR-TV

23

WCIU-26

VISION 32

HALIFAX

TELEVISION

sj

madiso

KCPX

CKCK

TELEVISION

2-6-12

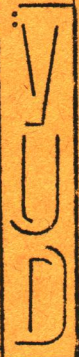
3B-TV-5  
010-1310

FBC  
STF TV

Sunspot counts now being sent by Henry Gac of Detroit, (from SBC):

March	156	52	92.4
April	122	48	81.0
May	157	80	128.5
June	150	87	114.5
July	152	26	97.3
August	*	*	*
September	78	189	120.7
Oktober	*	*	*

(\*not available at press time.)



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

Box 5001, Milwaukee, WI. 53204

Dues \$3.50 worldwide in US funds; Samples 30¢ or 2-IRCs worldwide.

Our "art department" wasn't too active this month, except to suggest a future cover for a planned article on exposing false and misleading advertising claims in antenna ads.

Every now and then I hear of someone not receiving a Digest or 2, (as I mentioned last month), and hence I am taking steps to eliminate this. In attaching the labels and stamps last month, I noticed that they do not adhere as strongly as I wud like, so I attached a piece of Scotch tape to each label as a precautionary measure. I also added the notation "return requested" in case the Digest is undeliverable. I am now positive of the disposition of every VUD, hence duplicate copies of missing bulletins shud not have to be provided free after this without sufficient reason. It can become a nuisance as well as an added expense when I am suddenly informed that so-and-so hasn'y received a VUD since April and didn't write Hq becuz he thought

WTFDA was defunct without notice.

So with extra care now, all undeliverable VUDS will be returned to Hq; hence, they are presumed delivered if they are not returned to Hq.

There have been some unfavorable comments about the durability of the color paper we use. We have enuff on hand to last 2 more VUDs but shall investigate finding better quality paper.

A cover was unexpectedly received from Bill Heusmann recently, but did not turn out quite as well as expected. However we greatly appreciate the time and effort, and its still much better than former covers.

Lack of time again has prevented typing a "polarization" article by Joe Gragg, and the VHF column was typed only becuz it is so important at this time. Others wud have given up by now but I still hang in at Hq. Gary Olson marvels that I had the time in the past year but it is becoming increasingly worse. Gary's help is much appreciated at Hq but I'm very pressed for time and the situation will deteriorate with the upcoming Christmas rush at the post office where I work. We work

10 hours a day now, and in Dec. we will be workink 7 days a week, as much as 12 hours a day. To top it off, I have a series of 4 tests to pass or I lose my job; I flunked the 3rd in Oktober and if I don't pass it by 21 Nov. I'm out of work. The December and possibly January VUDs will undoubtedly be late &/or small unless the burden is relieved considerably here at Hq. I'm al ready a month or so behind on mail so if you haven't heard from me of late that is why.

OUR STAFF:

- Hq/exec/publisher...F. Dombrowski
- FCC news.....Gary Olson
- CCI column.....Gary Olson
- Contest editor.....Bill Heusmann
- European Scene.....Roger Bunney
- FM news.....Roger Winsor
- VHF report.....R. B. Cooper
- Techna/Corner.....D. Janowiak
- Propagation.....Dennis Smith
- Western TV-DX.....Dennis Smith
- Eastern TV-DX.....L. S. Goldman
- ANARC-Scope.....Ambrose Maxim

Public Relations:

Curt Webber and Ambrose Maxim

sincerely & 73s,

*Ferdinand Dombrowski Jr.*

# FCC-NEWS & DATA

GARY A. OLSON  
5901 W. BROWN DEER RD.  
APT. #107  
BROWN DEER, WIS. 53223

STATIONS OPERATING (AS OF SEPT. 30, 1968)

Commercial FM 1387  
Educational FM 351

Total Authorized Stations On Air 2238

## FCC COMPLETED ACTION

### New Grants:

- Tuscola, Ill., (F.W.Sieobid) 93.5 mc., 3 kw.
- \*Dennison, Tex., (Grayson City-Jr. College) 89.7 mc., 28.5 kw.
- New Braunfels, Tex., (Comal Broadcasting Co.) 92.1 mc., 3 kw.
- Burlington, Vt., (N.Y. Broadcasters) 92.9 mc.,
- Bangor, Maine, (Univ. of Maine) 90.9 mc., 13.35 kw.
- Uniontown, Pa., (Warman Broadcasting) 99.3 mc., 3 kw.
- Due West, S.C., (Erskine College) 88.5 mc., .0063 kw.
- Erwin, Tenn., (WEMB Inc.) 103.9 mc., 3 kw.
- Mena, Arkansas, (Mena Broadcasting) 101.7 mc., 3 kw.
- Dunnellon, Fla., (Rainbow Communications) 102.3 mc., 3 kw.
- Saginaw, Mich. (Clark Broadcasting) 107.1 mc., 3 kw.
- Hannibal, Mo., (Great River Broadcasting) 92.9 mc., 96.8 kw.
- \*Moorhead, Minn., (Concordia College - St. Johns Univ.) no freq. listed
- \*Marshall, Mo., (Missouri Valley College) 88.7 mc., 10 w.
- \*Teaneck, N.J., (F. Dickinson Univ.) 89.1 mc., .55 kw.
- \*New York, N.Y., (New York Univ.) 89.1 mc., 8.3 kw. > share timers
- \*Blacksburg, Va., (Virginia Polytechnic Inst.) 90.7 mc.
- Hardinsburg, Ky., (Blancett Broadcasting) 94.3 mc. - Initial Decision
- New Orleans, La., (Loyala Univ.) no freq. listed - Initial Decision
- Miami, Fla., (Miami Broadcasting) no freq. listed - Initial Decision
- Winnsboro, La., (KMAR Broadcasting) 95.9 mc., 3 kw.
- Salem, Va., (WRIS Inc.) 93.5 mc., 3 kw.
- Lake City, Fla., (Deep South Broadcasters) 94.3 mc., 3 kw.
- Belevidere, Ill., (Belvidere Broadcasting) 104.9 mc., 3 kw.
- Oswego, N.Y., (Stat Univ. of New York) 89.9 mc., 41 kw.

### Call Letter Changes:

- |  |  |
|--|--|
| WFKO (FM) Kokomo, Ind. now WKFI (FM)     | WSFM (FM) Birmingham, Ala.,<br>now WDJC (FM) |
| KWEB-FM, Rochester, Minn. now KNCV (FM)  | KCRA-FM, Sacramento, Calif.<br>now KCTC (FM) |
| WCBM-FM, Baltimore, Md., now WMAR-FM     | WAEZ (FM) Miami Beach, Fla.<br>now WOCN-FM   |
| KPOJ-FM, Portland, Ore. now WXEN (FM)    | WLOE-FM, Leaksville, N.C.<br>now WEAJ (FM)   |
| WJWL-FM, Georgetwon, Del. now WSEA (FM)  | WRKT-FM, Cocoa Beach, Fla.<br>now WKBE-FM    |
| KATT-FM, Sacramento, Calif. now KRBT-FM  | KCLE-FM, Cleburne, Tex.,<br>now KFAD (FM)    |
| KBMW-FM, Breckinridge, Minn. now KKWB-FM |  |
| WKAU-FM, Kaukauna, Wis. now WVLX (FM)    |  |
| KUZZ-FM, Bakersfield, Cal. now KBBY (FM) |  |
| WAGR-FM, Lumberton, N.C. now WJSK (FM)   |  |
| WJMX-FM, Florence, S.C. now WSTN (FM)    |  |
| WHK-FM, Cleveland, O., now WMMS (FM)     |  |

### New Call Letters Issued:

- Angola, Ind. (J. Chase) WJCC (FM)
- Springdale, Ark. (A. Johnson) KSPR (FM)
- Merrill, Wis. (N. Central) WXMT-FM
- Hibbing, Minn. (Hibbing B-Cst) WMEG-FM
- Cleveland, Miss. (T.P. Conguista) WDSK-FM
- \*Indiana, Pa., (Ind. Univ. of Pa.) WIUP-FM
- \*Chattanooga, Tenn. (World Chris. Radio) WVMS-FM
- \*River Falls, Wis. (Wis. State U.) WRFV (FM)
- Roseville, Calif. (KPOP Radio) KPOP-FM
- Cordele, Ga., (S.E. B-Cast) WMJM-FM
- Waco, Tex., (KWTX B-Cast) KWTX-FM
- Hawkinsville, Ga., (Tri County) WCEH-FM
- Cynthiana, Ky. (WCYN Radio) WCYN-FM

### THANKS TO:

Bill Bens, Cincinnati  
Denis Smith, Wasco, Cal.  
Tom Mann, Milwaukee  
Bill Fait, Cleveland  
Morrie Goldman, Chicago

OUR CONTRIBUTORS  
TO THIS MONTH'S FCC  
COLUMN

New Call Letters Issued (Continued):

- North East, Pa., (JD Brownyard) WHYP-FM
- Vidalia, Ga., (Vidalia B-Cast) WVOP-FM
- Vacaville, Calif.(N.Calif Stereo) KVFS (FM)
- Warner Robins, Ga.(WRN) WRBN-FM
- Saginaw, Mich. (Booth American) WSBN-FM
- \*San Luis Obispo, Calif. (Cal. State Poly)KCPR-FM

Other Changes Allowed:

- KERR (FM) Salinas, Cal. ERP to 2.65 kw.- ant. 300'
- KEBC (FM) Okla. City, Okla. ERP to 22 kw.- ant 185'
- KDJV (FM) Amarillo, Tex., ERP to 53 kw.
- \*WHUS (FM) Storrs, Conn., ant to 360'
- KEYN-FM, Wichita, Kan., ERP to 58 kw.- ant. to 310'
- KSJN-FM, New Brighton, ERP to 16.5 kw-ant to 340'
- \*KCSB-FM, Santa Barbara, Cal., freq. to 91.5 mc.
- KONG-FM, Visalia, Calif., ERP to 10 kw.
- WPGC-FM, Morningside, Mo., ERP to 50 Kw.
- WNOE-FM, New Orleans, La., ERP to 100 kw.-ant.440'
- WYNK-FM, Baton Rouge, La. ERP to 100 kw.
- WSIP-FM, Paintsville, Ky., ERP to 670 w.- ant.570'
- WPER (FM) Terre Haute, Ind., ERP to 9.5 kw.
- \*WILL-FM, Urbana, Ill. ERP to 105 kw.-ant 850'
- KID-FM, Idaho Falls, Id., ERP to 100 kw.
- KMYR-FM, Denver, Colo., ERP to 100 kw.
- KSJO-FM, San Jose, Calif., ERP to 20 kw.-ant.-68'
- WCHO (FM) Camuy, P.R. ERP to 5.93 kw.
- KTUX (FM) Livermore, Calif., ant. to -152'
- WIAL (FM) Eau Claire, Wis., ERP to 100 kw.
- WDMP-FM, Dodgeville, Wis., ERP 1.1 kw.-ant.460'
- WESR-FM, Tasley, Va., ant. to 300'
- WANS-FM, Anderson, S.C. ERP to 100kw. -ant.120'
- WFMX (FM) Statesville, N.C., ERP to 52 kw.-ant.290'
- WFPG-FM, Atlantic City, N.J., ERP to 50 kw.-ant.300'
- KCMV-FM, Warrensburg, Mo., ERP to 27 kw.-ant. 165'
- WJIB (FM) Boston, Mass., ERP to 8.7 kw.-ant. 1010'
- WPER (FM) Terre Haute, Ind., ant. to 190'
- WTIM-FM, Taylorville, Ill., Ant to 150'
- WSMI-FM, Litchfield, Ill., ERP to 17.5 kw.
- KACE-FM, Riverside, Calif., ERP to 1.7 kw.-ant.-88'
- WFMD-FM, Wilmington, N.C., ant to 350'
- WOOR (FM) Oxford, Miss., ERP to 27 kw.
- WSTO (FM) Owensboro, Ky., Ant. to 340'
- \*WGVE (FM) Gary, Ind., ERP to 2.1 kw.-ant. to 91'
- WQXM (FM) Clearwater, Fla., ERP to 56 kw.
- WHVH (FM) Camden, Ark., ERP to 39 kw. - ant.185'
- KCMT-FM, Alexandria, Minn., ERP to 100 kw.-ant.930'
- KSEL-FM, Lubbock, Tex., ERP 100 kw. - ant. 740'
- WSJC-FM, Magee, Miss., ERP to 100 kw. - ant. 490'
- WBCN (FM) Boston, Mass., ERP to 20 kw. - ant. 440'
- KBEV-FM, Blue Earth, Minn., ERP to 3 kw.
- KWOA-FM, Worthington, Minn., ERP.27 kw.-ant.650'
- WLWM (FM) Nashville, Tenn., ant to 1280'
- \*KERS (FM) Sacramento, Calif., ERP to 5.4 kw.  
also change freq. to 90.7 mc.
- KCTC (FM) Sacramento, Calif., ERP to 50 kw.
- WRAG-FM, Carrolton, Ala., ERP to 31 kw.-ant.360'
- \*WREK (FM) Atlanta, Ga., ERP to 600 w. - ant.99'
- WKRX (FM) Louisville, Ky., ERP to 25 kw.
- WBBC-FM, Columbus, Miss., ERP to 3 kw. - ant.265'
- WRKB-FM, Kennapolis, S.C., ERP to 10 kw.-ant.320'
- KOKE-FM, Austin, Tex., ant. to 265'

- Unofficial  
Power Ups
- KTOD (TEXAS)  
100 kw.
- KIXK (TEXAS)  
40 kw.
- WZAK (OHIO)  
27.5 kw.
- KFJZ (TEXAS)  
100 kw.
- WFMS (INDIANA)  
50 kw.
- WHAD (WIS.)  
75 kw.
- WTUN (INDIANA)  
9.3 kw.
- WFMF (ILLINOIS)  
31 kw.
- WSTO (KENT.)  
10 kw.
- WNAP (INDIANA)  
29.5 kw.
- \*\*\*\*

- Reported Off  
The Air
- KXKX - San  
Francisco  
\*\*\*\*

- Reported Back  
On The Air
- KUZZ-FM 107.9  
Eakersfield
- KLBS-FM 95.9  
Los Banos  
\*\*\*\*

- New Stations  
Reported  
On The Air
- KINS-FM 96.3  
Eureka
- KLIL-FM 94.5  
Ukiah  
\*\*\*\*

Other Changes Allowed (Continued):

- KLEF (FM) Houston, Tex., ERP to 100 kw.
- KCFM (FM) St. Louis, Mo., ERP to 100 kw.
- KLIN-FM, Lincoln, Neb., ant. to 167'
- \*WTL (FM) Struthers, Ohio, ERP to 910 kw.-ant.26'
- WLRV-FM, Champaign, Ill., ERP 43 kw. - ant. 400'
- WPAG-FM, Ann Arbor, Mich., ERP to 3 kw.- ant 261'

ACTION APPLIED FOR OR REQUESTED

Applications For New Stations:

Wichita, Kan., 95.1 mc., 100 kw.	Waycross, Ga., 103.3 mc. 25.6 kw.
Louisville, Ky., 103.9 mc., 2.35 kw.	Gardiner, Me., 104.5 mc., 10 kw.
Murfreesboro, Tenn., 89.5 mc., .184kw.	Carthage, Mo., 104.9 mc., 3 kw.
Lancaster, Calif., 106.3 mc., 3 kw.	Harrisonville, Mo., 104.9 mc.
Columbus, Neb., 93.5 mc., 1 kw.	27.1 kw.
Las Vegas, Nev., 93.1 mc., 29.7 kw.	Dayton, Tenn., 104.9 mc.,
*Harrisonburg, Va., 91.1 mc., 10 w.	.923 kw.
Glendale, Ariz., 93.1 mc., 157 kw.	Palestine, Tex., 90.9 mc.,
Washington, D.C., 89.3 mc., 94.7 kw.	13.35 kw.
New Port Richey, Fla., 105.5mc., 1.65 kw.	Du Quoin, Ill., 95.9 mc., 3 kw.
*Wallingford, Conn., 90.1 mc., 10 kw.	Webster City, Iowa, 95.9 mc.
Gainesville, Fla., 105.5 mc., 3 kw.	(from 97.9 mc.)
Huntington, W.Va., 107.9 mc., 50 kw.	*Worcester, Mass., 90.5 mc.
Missoula, Mont., 100.1 mc., 2.87 kw.	2 kw.
Lawton, Okla., 98.1 mc., 55.5 kw.	Ocean City, N.J., 106.3 mc.
Egg Harbor, N.J., 104.9 mc., 3 kw.	3 kw.
Corvallis, Ore., 106.1 mc., 27.7 kw.	Orange, Va., 96.7 mc., 3 kw.
Altavista, Va., 105.5 mc., 3 kw.	Sheffield, Ala., 106.3 mc.
Waycross, Ga., 102.5 mc., 100 kw.	3 kw.
New Castle, Ind., 94.3 mc., 3 kw.	Centerville, Tenn., 104.9 mc.
*Mercer Island, Wash., 88.5 mc., 100 w.	3 kw.
Birmingham, Ala., 99.5 mc., 35 kw.	Dayton, Tenn. 104.9 mc.,
*Concordia, Calif., 91.1 mc., .0078 kw.	3 kw.
Greenville, Miss., 97.9 mc., 26.4 kw.	Pocohontas, Ark., 103.9 mc.,
Brinkley, Ark., 102.3 mc., 3 kw.	3 kw.
Henderson, Ky., 103.1 mc., 3 kw.	Tulare, Calif., 106.7 mc.,
Cleveland, Miss., 103.9 mc., 3 kw.	.870 kw.
Rushville, Ind., 94.3 mc., 3 kw.	Horseheads, NY, 100.9 mc., 3 kw.

Miscellaneous Requests:

KDUX-FM, Aberdeen, Wash., has requested to change its location to Ocean Shores --- applications was accepted by FCC

TIDBITS AND MISCELLANEOUS ITEMS OF INTEREST TO FM DXERS

- # Cleveland stations WCRF and WCJV (FM) have applied to the FCC for power increases to eliminate co-channel interference from WMUZ and WOMC.
- # The following stations were denied requests for a continued waiver of the 50% AM-FM non-duplication rule: WJD-FM, Chicago; WGEE-FM, Indianapolis; WNUS-FM, Chicago; KBey-FM, Kansas City; At the same time KTNT-FM, Tacoma, was granted an extension of time to Feb. 1, 1969 in order to comply with the rule.

\*\*\*\*\*

ed. note: to answer several club members questions: the data taken from Broadcasting (and sometimes other official sources) for this column is not always up-to-date. Often the information regarding changes in call letters, requests for changes in ERP, etc., appear in the Broadcasting "For The Record" column long after they were requested and sometimes well after the change has been made. In addition we have no way of know which items in the listings are completed or which stations are already on the air. It's not the most ideal system, but it's better than none at all I guess!!!

# CCI column

Gary A. Olson  
5901 W. Brown Deer  
Apt. #107  
Brown Deer, Wis. 53223

Response to last month's Unids in the first CCI column to appear in VHF-UHF Digest were surprisingly few --- as a matter of fact --- None! C'mon gang, now that the fall's setting in, it's time to get those mystery loggings from last summer explained!

This month, thanks to the help of Morrie Goldman who extracted some CCI stumpers from his EDX reports, we have some additional Unids to list.

Remember, if you can ID the mystery stations listed below, be sure to contact either the CCI column, the DXer, or both. (I'd love to publish some identifications of <sup>Unids</sup> it let's us know that CCI is being of assistance and also may provide some insight to other DXers about the previous months unidentified loggings).

Anyway here are the CCI loggings for November:

## Bill Heusmann - Steger, Ill.

9/24/68 - ch. 25 - (no time?) received what looked like the end of an educational program followed by a public service announcement (PSA) in station break - direction east. Station had a 10 kc. offset with WKNX-25. (WVIZ????)

9/25/68 - ch. 10 - 0529 CDST - received a unid ch. 10 showing Indian Head Test Pattern (IHTP) - direction East-South-East.

10/8/68 - ch. 10 - 0600 CDST, national anthem, promo for "Gene Williams Colorful World of Country Music", followed by Job Core promo - direction SSE (WBNS???????)

## Jerry Pulice, 143 Gibson Ave., S.I., New York, 10308

9/18/68 - ch. 11 - 0624 EDST, discussion program with two men (Jerry thinks it may be WTVD, Durham - are they on that early in the morning???)

## Morrie Goldman, 8046 S. Euclid, Chicago, Ill.

7/14/68 - ch. 4 - tropes - 6:26 A.M. CDST, "First Edition News" direction South East.

7/16/68 - ch. 3 - 5:25 P.M., CDST, "Lanne-3 News" direction ESE

8/23/68 - ch. 12 - 5:40 A.M. CDST, RETMA TP received followed at 5:45 A.M. by religious puppet show; at 6 A.M. station ided as "Tall 12". At 6 A.M. next program was "Discovery 68". direction SSE

10/8/68 - ch. 11 - tropes - 6:30 A.M. CDST, "American Educational Television Commission" announcement received followed after 6:30 break by another educational program which featured a doctor speaking and using a 3-sided swinging board - direction S.W (toward Cape Girardeau, Mo. which was in strong)

## Gary Olson, 5901 W. Brown Deer Road, Brown Deer, Wis. 53223 (these skips received at old DX location in Bloomington, Ill.)

6/20/68 - ch. 6 - skip - 6:30 P.M. CDST, ad for Larders on Oleander Drive - direction SW.

6/24/68 - ch. 5 - skip - 2:40 P.M. CDST, appeared to be a Canadian interview program; at 3 P.M. an ad mentioned the Wexburn Coluseum - direction North.

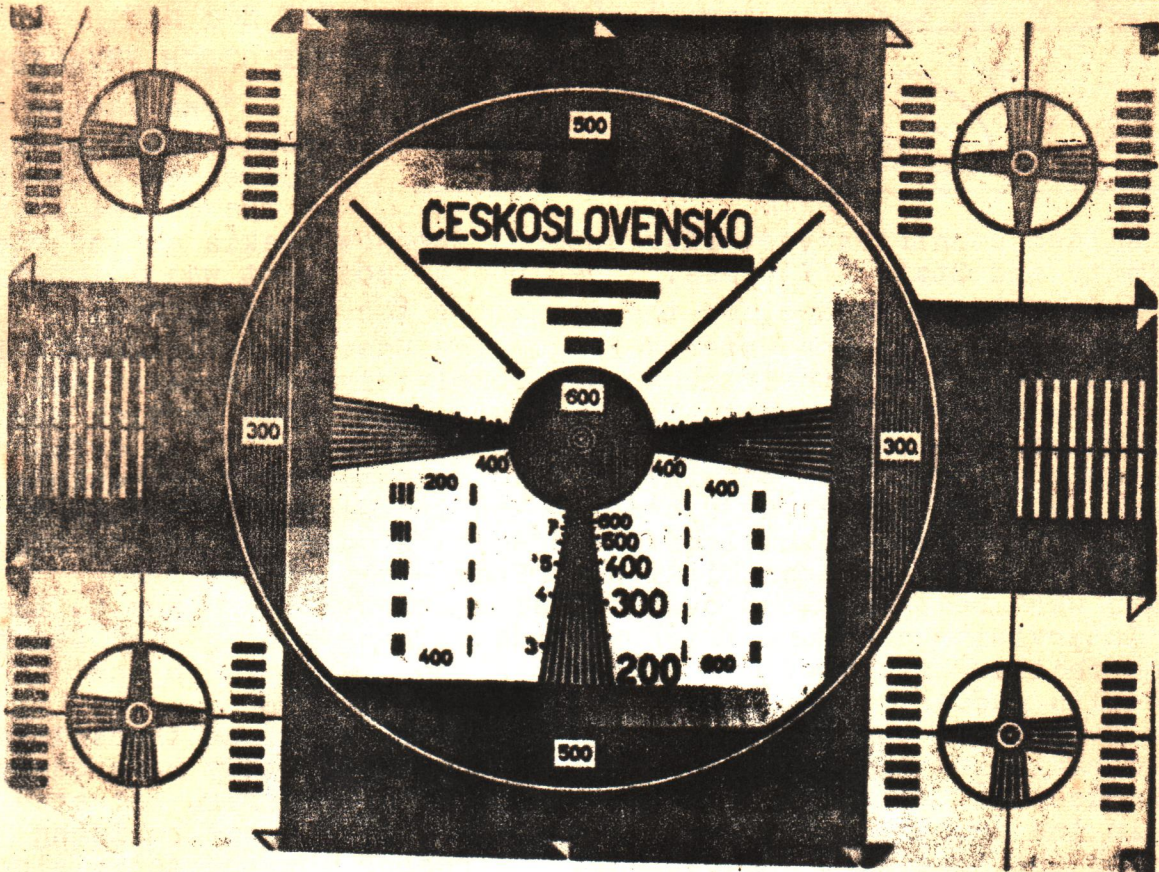
6/24/68 - ch. 5 - skip - 3 P.M. CDST, TV Bingo show (apparently Canadian) telephone number to call 763-7714 - direction North

6/24/68 - ch. 2 - skip - 3:05 P.M. CDST, promo for BBC Classic 'on "CK" television' - direction North

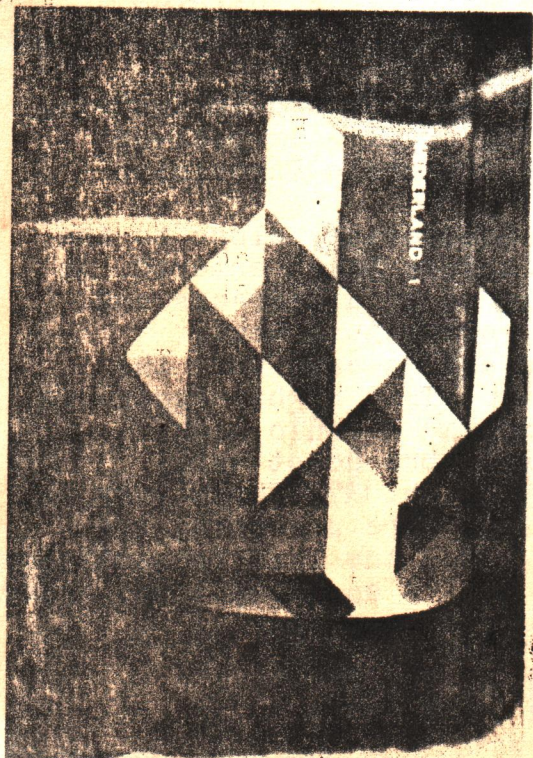
6/24/68 - ch. 6 - skip - 3 P.M. CDST, quiz called "\$50-A-Week" followed by an ad for "The Party" at the Odeon Theatre. (the same \$50 dollars-a-week show was simultaneously running on a skip station on ch. 2 at the same time) - direction North.

That' it for this time. Remember: a nickel for a post card for your DXer friends across the continent may save them \$10,000 worth of wondering ---- if you know their UNID!

W-2907-13



CZECHOSLOVAKIA T/C } of Henny  
"NEDERLAND 1" SLIDE } Demming.



ORTF (French TV) photo  
courtesy Roger Bunney

# THE EUROPEAN

## SCENE

Roger Bunney  
Trelawne,  
Cupernham Lane  
Romsey, Hants, England  
ZIP S05 8JH

### "THE CZECH INVASION"

"The Soviet News Agency TASS has announced that the troops of the Soviet Union

and the Allied countries yesterday entered Czechoslovakia at the request of its Party and State Officials. The troops' movement was Unimpeded." Thus announced Radio Moscow, on the day after the night before!

As the Russian troops entered Prague the Czech Television Service transmitted pictures of their progress, completely fearless of any repercussions that might eventually be dealt out. The service was being operated by a number of brave technicians, in defiance of the Russian invaders, thus showing to the World the true happenings in their country. As soon as news came of the invasion by the USSR on the 21st of August, these technicians gathered at studio centres in Prague to plan the clandestine transmissions. From early on the 21st, programmes were being put out over the air, and over the link to Austria via the Intervision and Eurovision service. These pictures showed the stark and chilling truth of the invasion. Soon after lunch that day, the line suddenly went dead.

The television engineers were not deterred. Various transmitters continued radiating the following day but one by one they were occupied. Three clandestine television transmitters were on the air, situated in Prague, in the country near Pisek, and another in a large building occupied by the Russians. Undoubtedly the reason why the television service continued for so long, was the fact that many of the studios were in different parts of Prague, unlike the main radio building. As the Russians approached one studio, so the occupants were able to make their way to other buildings.

Much of the output of the Czech stations was recorded in Austria, either over the normal radio link, and later by an off-air pick-up receiver. These recordings were relayed over the whole Eurovision network.

One of the ch. R2 transmitters at Ceske Budejovice, close to the Austrian Border continued for almost 5 days, before being entered. In Prague, a temporary ch. R1 transmitter was rigged in a barracks and continued to put out signals, although these were rather weak.

Possibly one of the most dramatic transmissions came when the final official transmitter was put off the air. That night, engineers climbed a Russian occupied building, and converted a radio link microwave transmitter, formally used for outside broadcast work. This modified unit radiated the following day on ch. R7, for a very short time. News came to hand that the Russians were searching the roof tops in order to find this transmitter. Thus the last transmission from occupied Czechoslovakia, showing scenes of the occupation, ended.

For Ceskoslovenska Televize, this was their finest hour!

## DX AT DEADLINE :

\*\*\*DXer Henry Gac of Detroit notes WXON-62 is now on the air. Program schedules are listed in Detroit News "TV Magazine". WXON runs about 10 hours daily with mainly syndicated off-network shows.

\*\*\*Henry also notes WKBD-50's tower recently caught fire (which may therefore delay the return of WJMY-20 which would share the tower).

\*\*\*KFIZ-34, Fond Du Lac, Wis. program listings are now carried in the Wisconsin edition of TV Guide.



# EASTERN TV

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

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

Few openings were reported this month, all being tropes. However, a few trope openings of excellent magnitude occurred yielding new loggings for most of this month's reporters. Trope distances up to 600 miles were reported.

Rod Luma reports that WXON-62 is now on the air with programming since 9-5 with tower and studio location NW of Detroit at Walled Lake. Air time is from about 3PM to 1AM currently. WXON appeared in four of this month's reports. Verie signer is Mr. Ken Clark (W8KZU).

Last month Gary Olson began his Co-Channel Interference Column for Un-ID stations. I have sent a number of this month's Un-ID stations on to Gary for use in the November CCI column. In the future send a list of your Un-ID's to Gary as well as in your EDX or WDX report. Since greater attention will be given to the isolated Un-ID list in CCI your chances for having another member recognize it are much greater. By supporting Gary's CCI column you could actually increase your totals.

November starts us into the beginning of the cold winter months ahead and the roughest weather for your antenna installation. Ice, snow and strong winds can demolish an unprepared array. Are you ready for winter? All hardware should be tightened down and twin line checked for cracks. It's no fun fixing your array in freezing weather, so better check it out now, if it's not too late already.

Gary Olson, 35 Lake View Lane, Barrington, Ill.

(CDT)

7-20: WEAU-13 tropes, 7-21: good medium range UHF tropes, 7-22: Un-ID Es in early evening; tropes WMT-2, WICD-15 (NEW), WDHO-24 (NEW), WTAF-31 (NEW), KEYC-12, KGLO-3, WLBC-49 and many other UHF's in 200 mile range. 7-23: tropes began to peak in mid morning, WAKR-23 (NEW) 9:30AM, tent WCMU-14 9:30-10:05AM, WUCM-19 10AM, WCAE-50 (NEW) 10:07 AM, WKBD-50 (NEW) 10:10AM, WJET-24 (NEW) and WSEE-35 (NEW) 11AM both 420 miles. 7-24: Un-ID skip in early evening ch.2-4. 7-25 many UHF in 200 mile range via tropes. 7-26 WIMA-35 (NEW) 6:25AM and WHIZ-18 (NEW) 6:30AM; evening tropes WMKG-54 (NEW). 7-30: More tropes, WILL-12, WICD-15, WAKR-23, WANE-21. 8-8 Morning tropes WKNX-25 (NEW) 7:30AM. 8-12 skip @ 5:45PM XEFE-2 (NEW with tp and MX) and tent KGBT-4. 8-14 tent WOI-5 by tropes. 8-15 WTOM-4 (NEW) 6:28AM, WWJ-4, KROC-10, KWVL-7 and WPBN-7 all by tropes. Barrington log at 251.

Bill Grant, 16 Goulding Street, Worcester, Mass. 01609

(EDT)

9-10: 1900 WNEP-16 Scranton, Pa.; 1900 WPHL-17 Philadelphia, Pa.; 9-16 2315 CBFT-2 Montreal, Que.; 2355 CBHT(3)-11 Yarmouth, N.S.; 9-17 0010 WPHL-17 Philadelphia; 9-20 2345 CBFT-2 Montreal, Que.; 10-2 2100-2300: WBOC-16 Salisbury, Md.; WPHL-17 Philadelphia; WIBF-29 Philadelphia; WXTV-41 Paterson, NJ; WKBS-48 Philadelphia and all VHF stations in NYC and all UHF stations in Conn. It would be a pleasant surprise if a DXer or two reported F2 skip on channel 2 this fall or winter. I've been watching the MUF slowly increasing over the last few weeks. As an example, today (10-6) I heard paging stations in Fresno, Calif and Boise, Idaho on 35.22 MHz and Long Beach, Calif. on 35.58MHz between 1300-1600 EDT. This will be the last chance for channel 2 F2 during this sunspot cycle. (Not only will it be the last chance for ch2 F2 for this cycle, it will be the last chance for BBC-1 ever! Roomer has it that by 1970 BBC will drop all its low channels. MG)

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

(CDT)

Not too much in the line of DX this time. The weather has cooled off considerably which caused the slackening off of tropes, however I did manage to get another new sta-

tion on UHF, so I guess I can't complain much. Sept. 13 Trop WYNX-25, 1950 WCMU-14, WUCM-19. Sept. 14 1905 WICD-15, WLFI-18, 2028 WYYP-26, 2058 WKNX-25. Sept. 15 0845 WANE-15, WPTA-21, WFMJ-21, WKNX-25, 0900 WDHO-24, WKJG-33, 0905 WKBD-50. Sept. 24 1840 WKJG-33, WIMA-35, WDHO-24, WKBD-50, WTVS-56, WXON-62 (NEW). Sept. 30 0615 WTTV-4. My station total is now at 386 which includes 98 on UHF. KFIZ-34 is in here daily with a next to perfect signal. They run 698/69.8 kw from a 549' tower (630' aat) which is 9.1 miles NE of Fon Du Lac (about 60 mi. from here.) Construction has been going pretty slow on that new water tower. This week however they completed welding the base together and that part is mounted on the foundation. The other sections are sitting there, but have yet to be put together. From the looks of things they might complete it before the snow begins to fly. I would say the height of it would only be around 70', unlike the old one at 120'. The old one has four legs, but this new one will be of a "mushroom" variety with a cylindrical base, narrow trunk and large ball shaped top. Will let you know next month if any progress is made. I see in the October Digest that aurora was noted on Sept. 7. I don't remember if I saw any that day or not. I see quite a bit of it here during the fall and winter months and it often gets up into the high channels. I don't always keep records of all the aurora I see unless it happens to be exceptionally strong or I am able to ID something. The only positive aurora reception ID that I have made was of WCBS-2. I've had other reception while aurora was present, but it looked more like Es. Well, I guess that's all for this month. Hope I have more next time. 73's.

Jeff Kadet, 8047 Park Overlook Drive, Bethesda, Maryland 20034 (FET)

I am pleased to be a new member of WTFDXA. As an introduction, I am a 21 year old college student and have been TV-DXing since June 1963. Before moving to Md. in August, 1965 I left my old QTH in Needham, Mass. (located just outside Boston) with a total of 111/104 stations in 30/29 states, 2/2 provinces and 3/3 countries using a 27 element VHF beam atop a 40' tower with rotor and 1960 Sylvania model 19P11T VHF and 1965 GE model RUN-2 VHF/UHF tv sets. My best Es and trop catches were KEW-2 (2295 miles) on 7-21-65 and CBHT's #3 relay on ch 11 in Yarmouth, NS (295) on 5-5-64 (412 ERP audio, 248 ERP video according to verie). Outside antennas are not allowed where I live here in Md so I must use rabbit ears. Using the same receivers as above I have seen 75 stations thus far. On vacation down south this summer I did see quite a bit of TV DX on motel sets and came with a few good results although none, of course, are being counted towards any of my totals. 6-13 from Miami Beach: WINK-11 2221 (123), WTVT-13 2228 (212), WFLA-8 2230 (212). 6-20 from St. Petersburg Beach, Fla: WGR-2 1730 (1050). 6-21 from Nahunta, Ga.: KCMO-5 1830 (880), WCSC-5 1930 (163), WESH-2 2100 (152), WFTV-9 2100 (180), WEBA-14 2125 s/off (150), WXGA-8 2210 s/off (23), WVAN-9 2210 s/off (80), WMAZ-13 2219 (145), WCIV-4 2231 (163). 6-22 also from Nahunta, Ga.: WSPA-7 (250) 0500 TP, WTV-11 (350) 0524 TP, WBTW-13 (210) 0525 TP, WJBF-6 (135) 0530 s/on, WSB-2 (225) 0535 TP, WTV-9 (200) 0545 s/on. From here not too much was seen this summer, mostly due to being away so much, but Es did appear to be somewhat less than in previous years. 73.

Jerry Pulice, 143 Gibson Ave., Staten Island, N.Y. 10308 (EDT?)

No skip seen since 8-22, but September produced plenty of trop openings (9-18 the best southern opening seen in two years!) that helped to make up for the loss. Sept. DX is as follows: 9-3 0650 WTTG-5 Washington, DC (190), WHDH-5 Boston (200), WNAC-7 Boston TP, WNHC-8 (NEW) Haven, Conn. (80), WJAR-10 TP, WPRI-12 color bars, both Providence, RI (160), 0620 WTEV-6 New Bedford, Mass. (180), WPRI-12 sign-on. 9-5 2200 WTIC-3 Hartford, Conn. (100) WNHC-8. 9-6 0600 WTTG-5 TP, WJZ-13 Baltimore, Md. (160). 9-9 0600 WTIC-3, WTTG-5, WJZ-13, all TP, 2355 WNHC-8, WGAL-8 Lancaster, Pa. (120) WJZ-13. 9-18 0624 WMAR-2 Baltimore TP, WTTG-5 TP, WTOP-9 Wash. DC TP, WRVA-12 Richmond, Va. ID card (275). On 11 I saw two men in some kind of discussion show, but I couldn't get the sound clearly, assumed it to be WBAL (160). I didn't wait for an ID. The shock came when WBAL did come on with color bars. The other 11 must have been WTV-11, Durham, NC (410) (NEW). The program seemed to match the listings in a Raleigh newspaper I bought in NYC the next day, but won't count it until I see a definite ID (maybe next year). 0720 WXEX-8 Petersburg, Va. TP (290), co-channel interference on all channels, some three stations deep. 0900 WHY-12 Wilmington, Del. (97), WITN-7 Washington, NC (380) over local WABC. Neither visible thru the hash, but a voice ID was clearly heard. 0940 WXEX now in with local quality. 9-19 0612 WRVA-12, WJZ-13, zero offset beat bars over locals KYW-3, WABC-7

(from WITN), 0624 WAVY-10 TP o/local 10. WMAL-7 TP Washington DC over WABC-7, along with WITN-7. 9-20 0601 WTTG-5, WNHC-8, WTOP-9, Wash. DC WJZ-13. 9-21 0100 WHDH-5, WTTG-5, 9-25 0612 WMAR-2 Baltimore, WRC-4 ID card and WTTG TP, WTOP-9 TP all WASH. DC. WRVA-12, WTVR-6 both Richmond, Va. WJZ-13 Baltimore, 0629 WMAL-7 Washington DC, WBAL-11, 0700 WPRI-12 RI., 0800 WHYY-12 color bars wiped out the other twelves. 10-2 0830 WHYY-12 TP & local quality. 1000 WTTG-5, WMAL-7, WTOP-9, all Wash. DC, WGAL-8 Lancaster Pa. WBAL-11, WJZ-13 Baltimore all excellent pictures except for 10 kc QRM while the ch 5, 7, 9, 11 NYC transmitters were on less than 3 miles away! When the antenna is pointing at Washington, the back faces NYC which helps to block off the locals. Some of the strongest trop signals I've ever seen. 10-3 0625 WTOP-9, WAVY-10 Va., WJAR-10 RI all with TPs. WPRI-12 resolution chart. WNHC-8, WJZ-13. 73's & Best DX.

Rod Luma, 154 37 Ashbury Park, Detroit, Mich. 48227 (EDT)

A good trop opening to the SE was experienced about 9:30PM on 9-8 with WJET-24, WSEE-35, WQLN-54 & WICU-12 all Erie, Pa. coming in nearly snow free. Also caught WKBN-27, WFMJ-21 & weaker WYTV-33 from Youngstown, O. Cleveland was also good with WVIZ-25, WKBF-61, WKYC-3, WEWS-5 & WJW-8 spilling in. On 9-15 I logged new WUAB-43 Lorain, O. whose xmitr is located at Parma along with the Cleveland Stations. Also on 9-15 received excellent signals from Clevelands 25 and 61 and WAKR-23 Akron. The Ft. Wayne trio of WANE-15, WPTA-21 & WKJG-33 were good along with WIMA-35 Lima, O. From South Bend came the more powerful WSBT-22 and weaker WNDU-16 and WSJV-28. WSJV's tall tower and high power really shows up here! The evening of 9-24, trop opened to the SW, turning in excellent pix from the Ft. Wayne trio 15, 21 & 33 and also from the South Bend group of 16, 22, 28 with 16 being afflicted by co-channel QRM. WICD-15 Champaign (NEW) was logged along with WAND-17 Decatur, Ill. and WLFI-18 Lafayette, Ind. WIMA-35 Lima, O. also made a good showing. 10-8 Caught WICD-15 Champaign & KFVS-12 Cape Girardeau, Mo. Strangely WICD was hardly interfered with by closer WANE-15 also in the same direction. I'd like to make a few comments about the low aural powers of the US television stations which can in some instances, aid the DXer. The positive aspect would occur when one is attempting to receive a weak DX signal on the higher adjacent channel next to a local station. The reduced aural power of the local, in effect increases the selectivity of the receiver by reducing the aural carrier interference in the DX signal by 6db, or one-half if the locals power was reduced by a factor of 4 (from 50kw to 12.5 for example). This reduction can be considered typical of many stations. Accordingly, such a typical station would have reduced its sound carrier signal strength by 6db throughout its coverage area. Another asset of this power reduction is improved color reception due to the reduction in amplitude beat frequency of 920kc which occurs between the aural carrier and the color subcarrier (this is the wormy effect one gets when the fine tuning is adjusted so that the color intensity increases). This, of course, is not important as far as dxing is concerned.

Roger W. Winsor, 718 N. Fremont Road, Valparaiso, Indiana (CDT)

All via trop. 9-22 WSWO-26 Springfield, Ohio, 10:40PM. 9-24 WUCM-19 Bay City, Mich. 6:00PM, WTVS-56 Detroit 6:30PM, WXON-62 Detroit 6:13-9:05PM, CFPL-10 London, Ont. 10:02-10:40PM, WUSI-16 Olney, Ill., 10:50-11:10PM. 10-8 KFIZ-34 Fond Du Lac, Wis., . . . WEAU-13 Eau Claire, Wis. 10:59PM, WHO-13 Des Moines, Iowa 11:30 PM. 10-9 KTVI-2 St. Louis, Mo. TP 6:15 no call, but ID @ 6:16AM, KMOX-4 St. Louis, Mo. 6:15AM, KSD-5 St. Louis, Mo. No call TP @ 6:15AM must be them, KFVS-12 Cape Girardeau, Mo. Extremely strong w/CBS net 6:20AM. Veries from CFPL-10, WUSI-16, WSWO-26, WLWT-5. No answer from WUCM-19, WTVS-56, WXON-62, KWLL-7, WWAY-3, WTCN-11, WLBZ-2, KGBT-4. Any help on verie signers for any of these? Total stations now at 200, veries from 66.

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

Although DX has slowed down lately, my total number of stations received has slowly been climbing. With the addition of five new stations this month, my total stands at 173. Still the openings were few and far between. 9-22 2127 KFIZ-34 Fond Du Lac (NEW), 2255 un-id 3&4; looked like Es to SE. 9-24 1745 WXON-62 Detroit MI (NEW), 1810 WUCM-19 University Center MI (NEW), 1840 WTAF-31 Marion Ind., 1915 WKNX-25 Saginaw MI, 1958 WVIZ-25?, 2155 CKLW-9 Winsor, Ont. s/local WGN, 2201 WXYZ-7 Detroit o/local WLS,

2221 WKBF-61 Cleveland, WIMA-35 Lima, O., WKJG-33 Ft. Wayne. 9-25 0529 un-id-10 Probably WBNS Columbus O. w/IHTP, 0536 un-id-4 RETMA TP via MS. Looked like Morrie's movie of WCIV. 0605 WKY-4 Oklahoma City on a strong 5 sec. or so MS burst. 9-30 0552 WCIV -4 Charleston SC, MS id in color (NEW), 0601 KRLD-4? Dallas, Tx MS couldn't quite make out call letters., 0607 WPBN-7 Traverse City, MI Local quality. 10-3 0546 Un-id-4 MS. Wedge tp, CLs upper right. 4 in black circle in center. (Your discription sounds like WSM. MG), 0552 WKY-4 Oklahoma City, 0600 un-ID-4 CBS eye 4 ID. Looked like MS burst from SW, more likely KMOX, St. Louis. 10-8 0552 KFVS-12 Cape Girardeau Mo. TP and s/on. Only light snow. 0556 un-id-10 SSE, 0620 KWWL-7? Cedar Rapids, Ia. wiped out by WLS-7 s/on at 0629. 2235 tent. KCRG-9 o/local WGN. 2238 tent. KHQA-7 Hannibal, Mo. o/WLS. 1730 KFVS-12 Cape Girardeau Mo., WGEN-10 Quincy (both IDs in passing), 1750 tent. WEAU-13 - gone by ID time. With luck I'll be doing much better by next month. I've got two Winegard Trans-coupler yagis on order (one high band and one low) and hope to mount them with an AP-220N booster around 40' high, providing I can keep them up there! I can't afford a tower and will have to make do with a guyed mast. In addition, if I'm real lucky, I might have F2 reception to report. Roger Bunney has sent me the RF and IF sections of a British TV and if I can get it wired into a US rcvr, I'll be all set for IDX. From what I've read about last years F2, I think I have a pretty good chance of at least audio reception of BCB-1 and ORTF. I don't know how the auroras are going to be. After that promising start a month ago, I've hardly seen a thing. But, I don't really mind. I've got plenty to look forward to!

Morrie Goldman, Editor

(CDT)

Sept. 24 4:30PM to 10:35PM WWJ-4 Detroit, WFBN-6 Indianapolis, Ind., WOC-6 Davenport Iowa, WJIM-6 Lansing Mich., WOOD-8 Grand Rapids Mich., WILX-10 Onondaga, Mich., WJRT-12 Flint, Mich., WILL-12 Champaign, Ill., WREX-13 Rockford Ill., WSPD-13, Toledo, Ohio, WZZM-13 Grand Rapids Very strong, WLWI-13 Indianapolis Ind., WCMU-14 Mt. Pleasant Mich., WMTV-15 Madison, Wis., WANE-15 Ft. Wayne Ind., WNDU-16 South Bend, Ind., WKTR-16 Dayton Ohio, WAND-17 Decatur Ill., WTVO-17 Rockford, Ill., WTVV-18 Milwaukee, Wis., WLFI-18 Lafayette, Ind., WUCM-19 University Center, Mich., WPTA-21 Ft. Wayne, Ind., WSBT-22 South Bend MUCH stronger than usual, WCEE-23 Freeport, Ill., WDHO-24 Toledo, Ohio, WSJV-28 Elkhart Ind. vry strong, WIMA-35 Lima, Ohio, WLBC-49 Muncie Ind., WCAE-50 St. John, Ind., WKBD-50, WTVS-56 Detroit, WXON-62 Detroit, Oct. 1 8:10PM Aurora Interference noted on channel 4. Oct. 7 10:50PM KTHV-11 Little Rock, Ark. 600 mile trop with good quality signal, KFVS-12 Cape Girardeau, Mo. strong as a local! Oct. 8 KFVS again in like a local. Un-ID-11 at 6:30AM Ed. pgm with ID of "American Educational Television Commision" 11:35PM KPLR-11 St. Louis, Mo., 20kc offset on 11 from same direction with another movie occasional coming in o/KPLR. KFVS also in. Oct. 9 KFVS-12 Strong again at 7:30AM, WTOL-11 Toledo also viewable. Oct. 15 about 6:15AM MS KGNC in about 10 rapid successive bursts from Amarillo, Texas. WKY-4 at about 6:20AM from Oklahoma City. The opening on Sept. 24 was really amazing. Unfortunately I still didn't see WKBF-61 and WAKR-23. The two have really been elusive! Due do the massive bleed over from local 32 I still havn't seen Fon Du Lac's 34. The two are in almost the same direction. School work has really kept me going, but since I've got to get up early for class I get a chance to take a look for morning DX. Since the 9th conditions have really looked poor, with no signs of aurora or Es and very poor trop. I again ask, if there are any of the clubs amateur radio operators that would like to set up a schedule for DX talk, please write. With the addition of my new 5BDQ by Hygain I can operate on 10 to 80 meters.

73's and BEST DX,

Morrie

WA9RAQ

PART II. ALL ABOUT TRANSMISSION LINES

HOW IT'S BUILT (Continued)

In addition to coaxial and flat T-line, there is one more basic type of T-line construction: open T-line. This type is constructed just as the name implies. Two stiff parallel conductors are supported every six inches by small insulating spacers to keep the conductors spaced properly. During manufacture, each conductor is forced partially into a slot in the spacer, and this slot is forced closed so the conductor cannot pull out. No insulation surrounds the conductors.

The conductors are copperweld wire: usually #18 steel wire with a copper coating. The steel provides tremendous tensile strength, and the copper makes an excellent, low corrosion conductor.

While this type of line has extremely low loss (to be discussed later), it is difficult to install since the conductors can easily short to the mast. Or, the conductors may not remain parallel, especially at midpoint between spacers. Open wire has been available in impedances up to 1000 ohms, but 300 and 450 ohm lines seem most common now.

Several improvements in the three basic types of T-line and hybrids are common. The flat line type of construction, for example, has graduated into oval, hollow tubular, and tubular filled types.

Advantages of these types are the lower signal loss per foot, especially when wet. This is achieved, basically, by providing a longer path for moisture, either due to the larger circular route moisture must take to get to the conductors or due to a thicker insulating web. (While the dry loss per foot of round types of T-line may be no better than that of a good grade flat line, the loss when wet of round types may only approach 50%, but wet loss of flat line approaches 90 to 95%.) Some types of tubular T-line have a foam center for improved performance when wet.

The most popular hybrid is the shielded 300 ohm line recommended for color TV. While construction varies, this type resembles the basic flat type, but several layers of insulator as well as an aluminum shield surround it, with conventional polyethylene insulator holding this "sandwich" in place. The shield, although increasing the loss per foot slightly when compared with other tubular T-line, improves reception by reducing the effects of metal gutters or masts. Also, man-made noise (ignition, etc.) is reduced, and the T-line does not serve as an antenna itself (a problem that could destroy a color picture.)

CONTINUED NEXT MONTH, PART III

TOP-PICS  
OF  
INTEREST

The October, 1968 issue of Radio Electronics magazine contains some interesting statistics and articles as well as one short item of more than passing interest.

In the "looking ahead" portion, R-E notes that a full scale engineering investigation is being conducted in an attempt to eliminate the major weakness of American color TV: the annoying variation of color intensity and hue from scene to scene, camera to camera, and station to station. In this investigation all components that could affect color reproduction will be evaluated, such as station equipment, film processing, broadcast standards, receiver and antenna design, etc. FCC standards might result from this study, says R-E.

To this, I would like to add by opinions. Whether TV broadcasters or equipment manufacturers like it or not, they must face the reality that the biggest problems in color TV are (1) the admittedly poor U.S. color TV system itself and (2) inability - up to this time - to control or compensate for the phase variations that occur during scene, camera, or station shifts. Anyone that has analyzed the electrical operation of U.S. color broadcasting and receiving techniques realizes that our U.S. system is a poor last when compared with the PAL and SECAM systems. Of course, PAL and SECAM have their drawbacks also, but not nearly as many as the U.S. system. In fact, engineers and technicians have not too complimentarily referred to the U.S. systems as "never the same color".

But the real culprit is the often uncontrolled phase variation. If a television camera monitors long enough a given scene so that proper adjustment can be made at the origin, if the color set owner is fast and educated enough to adjust his color controls before the camera changes, if his quality receiver is properly aligned, and (last, but not least) if an adequate receiving antenna and transmission line have been installed, his color picture is indeed satisfactory. But when the illumination changes or a new camera is switched in, our poor color set owner often notes a drastic change in color. After banging his can of beer to table, uttering a few four letter adjectives, and dedicating the TV-technician who aligned his set to a rather warm climate, our hero makes another trip to the set for some slight "modifications". After a while, he learns to live with this, and he's content with "perfect color" (his words) most of the time (also his words)!

My own experience with color TV has been most disheartening. In fact, I wouldn't give a bent Goldwater button for the daily color picture available even with the best receiver (Heathkit) and a fine color TV antenna and T-line. I have installed good color antenna systems for friends, with antenna line of sight with the transmitter, but still face the problem of explaining to them that the hue and intensity changes are not the fault of the receiver or antenna, but the fault of the originating station. Of course, movies and cartoons can be received well, but live or video-taped shows cause the trouble.

Often, however, the color set owner is "completely" (his words again) happy with the purple faces, blood, etc. of such winners as Bonanza, Peyton Place, and other drivel spewed forth by the major TV networks over our "vast wasteland". Such a satisfied owner is probably the same "status symbol" individual who, after purchasing his first expensive stereo console five years ago (\$50 worth of Japanese junk in a \$25 plywood cabinet, listing at \$399), tuned in his favorite FM stereo station in the living room and returned to the kitchen where he bragged to his neighbor about the obviously beautiful "seperation" and stereo effect! We all have met these "keep up with the Jones" experts; they certainly wouldn't admit that they spent \$700 for a color picture that is less than perfect.

In conclusion, there are really only two things that can be done about the poor color TV problem. The first is to change the system. One gun systems and systems immune to the present phase shift problems have been designed with excellent results. But John Q. Public and the Federal Government would never stand for obsolescence of millions of dollars worth of color equipment. The second and more logical answer is reduction of hue and intensity changes by controlling or minimizing the phase shift, which is what the investigation is all about. This could best be done -- although at a cost -- at the point of origin by using equipment capable of compensating for such changes, or continually correcting per a set "standard". Also, to correct for the color variation from network to network, a test pattern could be used briefly at the start of each new program so that the set owner could adjust his receiver for what he thinks is correct color. The crew would then attempt to maintain this color relationship throughout the program. But even this means loss of sponsor or network time, which is taboo.

So while I applaud this latest "study" mentioned by R-E, I will not hold my breath for immediate change. If color sales again increase rapidly (they have been considerably less than expected in 1968) and our public continues to accept the inferior product, the "you scratch my back, I'll scratch yours" clique of equipment manufacturers and broadcasters will term this a mandate from the people, and I'm sure, that this study" will result in a much abbreviated report filed in the miscellaneous section.

While color TV sales may not be as high as expected, black and white TV sales actually increased by 2.5% in the first half of 1968, notes R-E. This is contrary to the opinion of many "experts" who had forecast a "rapid decline in monochrome TV sales in view of the overwhelming acceptance of color TV". However, 25% of monochrome sales in the U.S. were for sets manufactured overseas! Many sets bear the familiar U.S. name, but are actually Japanese made per American specs. Japan, Taiwan, Hong Kong and, of course, Canada currently ship TV sets to the U.S. in quantity. R-E also notes that the 12" portable is most in demand, while the novelty-sized TVs are on the decline.

Two articles in R-E on tape recorders should be of interest to anyone considering the purchase of same. The "How to Buy a Tape Recorder" article is well written and should force the prospective buyer to examine his tape recording needs. Several dollars may be saved by selecting a recorder without some "features" that he may not need for his application. An article on the cassette tape revolution is included. Inexpensive cassette recorders with good specs seem to be available, and the market looks good indeed.



# FM DX

Editor: Roger T. Winsor  
718 N. Fremont Road  
Valparaiso, Ind. 46383

This column re-typed for Roger at VHF-UHF Digest headquarters!!!!!!!

DX in August was totally a washout in the Chicago area, per phone calls from Morrie and correspondence with other members. Not is the case in other areas, so here goes:

Bill Bens, 5575 Spruce Wood Drive, Cincinnati, Ohio 45239 EST

8/2	WMIL 95.7	Milwaukee, Wis.	25kw.	Nx end, cw mx @ 11:25pm
"	KDKA 92.9	Pittsburgh, Pa.	47 kw.	Pirate BB and P#omo-12
8/3	KADI 96.5	St. Louis, Mo.	24 kw.	Wx and 12:06A s/off
"	WEAU 104.5	Eau Claire, Wis.	34 kw.	s/off 12:59 AM
"	WFXI 92.7	Arlington Hts, Ill.	3 kw.	Stat. jingle 12:31
"	WFMF 100.3	Chicago, Ill	33 kw.	PSA 12:43
"	WJOL 96.7	Joliet, Ill.	3 kw.	PSA 12:58
"	WZMF 98.5	Menominee Falls, Wis.	3 kw.	News 1:30
"	WTMB 98.9	Tomah, Wis.	100 kw.	News 1:31
"	WKFM 103.5	Chicago, Ill.	100 kw.	PSA 1:45 (note power)
"	WSTO 106.5	Kalamazoo, Mich.	23.5 kw.	MI pgm. 2:01
8/5	WKUZ 95.9	Wabash, Ind.	3 kw.	Trading Post 9:19
8/11	WBNQ 101.5	Bloomington, Ill.	50 kw.	WX 12:25
"	WIL 92.3	St. Louis, Mo.	38 kw.	WX 12:25
8/12	WJBK 93.1	Detroit, Mich.	20 kw.	S/off @ 11
"	WMBD 93.3	Peoria, Ill.	27 kw.	PSA and Wx 11:30
"	WIZZ 97.7	Streator, Ill.	3 kw.	PSA and WX 11:03
8/13	WMS 100.9	??????? Ohio	3 kw.	Faam program thru WKNY
8/16	KOSI 101.1	Denver, Colo.	52 kw.	
"	WILL 90.9	Urbana, Ill.	300 kw.	s/off 9:59
"	WKKI 100.5	Kokomo, Ind.	5.1 kw.	Nx WFKO and mx 11:00
8/18	WOPA 102.7	Oak Park, Ill.	100 kw.	Rel. pgm. 7:30 WFBN off
"	WIEC 102.7	Sandusky, O.	5.9 kw.	" 7:50 "
8/22	WHIS 104.5	Bluefield, W.Va.	5.9 kw.	Promo for WHIS-TV
8/25	WSTR 99.3	Sturgis, Mich.	1 kw.	Nx 1:01
"	WKUS 92.1	Russelville, Ky.	2.7 kw.	Cw mx 7:32

Bob Astman, 191 Louvaine Drive, Kenmore, New York 14223 EDT

On 6/20 had 2 unids on 104.9 and 105.1mc. which were unlisted in White's Log. I have since purchased a VJ log and by using that plus the tape recording I had I can now positively ID both as WAQB 104.9 Atlantic Beach, Florida and WQOS 105.1 Orlando, Fla. Here current DX underlined means verified: 8/3 WBFA 107.3 Elyria, O., WBCU 97.3 Ithaca, N.Y. 8/10 WUBC 94.1 Canton, O. on late with Browns football game them at 2:03 AM sign off. 8/13 WCLV 95.5 Cleveland, Ohio 2:13 AM. Trops later that day and many new ones especially on 102.5 where local was off the air. WRAK 102.7, Williams port, Pa. 4 FM w/ID. WRFD 101.1 Youngstown, Ohio now WROT 1330 5:49, WPIT 101.5 Pittsburgh, Pa. 6:04 nx end, KQV Pittsburgh 102.5 8:50, WKSU 89.7 Kent, Ohio 9:23 and WGW Meadville, Pa., 9:44. On 8/14 WSTV 103.5 Steubenville, O. s/off At 101 and WKSU 101.7 Jamestown, N.Y. sign off at 1:16. 8/31 WFFT 101.9 and CHFX 101.5 Peterborough, Ont. both heard between 11:15-12:00. 9/3 WPUN Utica, N.Y. 9:30 PM. I will be leaving for college in two days and don't anticipate any more time for DX; season totals are 43 new FMers.

HEADQUARTERS NOTE: We regret the delay of the remainder of Roger's FM column, however, his first attempt at stencils did not turn out at all. We made attempts to copy them here, but much of the material is unreadable. Thus, Roger will re-type them and the rest of the column will appear next month.



# AROUND THE CLUBS

NOVEMBER, 1968

This column will return at least from time to time, depending on the time available for perusing other clubs' publications (which I do anyhow) and the time available to type the page (or 2) each month.

There is a new series of publications available entitled "Emergency Radio Services Monitoring Bulletins" available from Communications Research Bureau, Box 56, Commack, NY 11725. These 10 bulletins at \$1 each contain lists of police, fire and other VHF emergency services. Nine are for metropolitan areas: Boston, Chicago, Detroit, Florida, New York City, Philadelphia, southern California, San Francisco, and Washington-Baltimore. The tenth bulletin lists 107 other cities from Akron to Youngstown excluding Alaska, Hawaii, Puerto Rico, and terr. It sounds like just what we VHFers have been looking for!!

The Oktober 5th "TV Guide" had an article with pictures taken off a color TV screen. They recommend using ASA 50/64 daylight color film (Kodachrome X, Anscochrome 50, or similar); set camera at f2.8 and at 1/15 of a second for adjustable cameras.

Kodak has free leaflet #AC-10 entitled "Photography of TV Images" which is very good. Write Eastman Kodak Co., Consumer Markets Div., Rochester, NY 14650. The 3 1/2 page leaflet suggests a shutter speed of 1/25 or 1/30 second at f4 on Plus X or Verichrome Pan film-125 ASA. If you have a non-adjustable camera, they recommend using Tri-X film (ASA 400) and set the camera for flash but WITHOUT inserting a bulb.

They also recommend a close-up lens for clear focusing at less than the cameras minimum focusing distance so you can fill the viewfinder with the TV screen. The Brownie Hawkeye has always been popular for photographing TV-DX but whatever non-adjustable camera, they just aren't good enough for a really superb picture that can be used in the Digest--especially for color TV. Of course adjustable cameras cost more, but even an Exa I single-lens reflex can be purchased for under \$40; if you can't see the TV lines in the picture, it isn't as sharp as it could be with a good adjustable properly focused. Proper focusing at close distance is THE essential and can be achieved with almost any camera if care is taken; close-up lenses are essential for most cameras however; altho they are not expensive they may be hard to obtain for some cameras. (Lenses are readily available for Instamatics; Lafayette has a close-up attachment for only \$1.95.)

You need not use expensive film such as Tri-X; if you have a time exposure on your camera you can use any film. (I use to have an adjustable \$8 camera I bought at Sears, and I used Walgreens film. Then I used ASA-40 film in a Linolta until very recently when I switched to an Exakta SLR, (single-lens reflex).

Questions are continually asked of me and others as to what has happened to several clubs. ICDXC has just announced that they are now defunct. Ambrose Laxin has sent in ANARC dues for Fircrest DX Club until they can get on their feet again, (altho no such plans have been announced.) These two notes from the ANARC October newsletter.

CIDXC rejected merger with CDXC (which exec Ralph Irace insists is not defunct). I heard an unconfirmed report some time ago that Fircrest tried to merge (unsuccessfully) with both CIDXC and the NY State club. FRCE is also apparently defunct; it was founded by the execs of CDXC and Fircrest so it is quite understandable why it is also defunct.

CDXC/FRCE head Ralph Irace was defeated 15-1 for ANARC executive secretary by Gray Scrimgeour, (not to detract from Gray's qualifications). Gray will have assumed leadership of ANARC by the time you read this. Lots of luck Gray in an important responsibility. --fsd

# VHF RADIO

Robert B. Cooper, Jr. (KV4FU)  
P. O. Box 1355  
Frederiksted, St. Croix, V.I.  
00840

"The radio world from 30-54 MHz: VHF radio."

Our apology for missing the October issue; an oversight on our part.

Until conditoinis quiet down, we will hold off our continuation of the "mechanics of skip" and dive right into reports of VHF DX.

At this time no one knows for certain just when or if the peak sunspot count of the current cycle was reached. Since the peak month or 2 are computed as a MEAN (average) using the counts of months before and after as well, we have to wait several months before we can say that the peak occurred in the month of ---. Most educated guesses suggest the peak was reached during the Summer of 1968.

It is important to remember that once the peak is reached, the declining side of the cycle is much slower than the rising side. Therefore the MUF is highest at or just after the peak sunspot count, and hence we are now in that peak time.

Hence, conditoinis this Fall, Winter and Spring will average better than the comparable periods of 1967-8. Conditions in the Fall of 1969 will probably still be superior to the conditions in the Fall of 1967.

The MUF, (maximum usable frequency for skip), currently is this: A large area of the 46-52 MHz MUF is daily circling the globe at a latitude of approximately  $4^{\circ}$  south to  $10^{\circ}$  north of the equator. Parts of this highly dense MUF area will finger north during the peak days of November--as far north as  $40-45^{\circ}$  latitude. This will be the optimum period for east/west skip paths across North America, Europe/N.A., & N.A. to the Pacific. Best hours for reception will always be:

- A. For stations east of you: 2000 to 6000 miles:  
when its 1000-1400 LST at a point  $\frac{1}{2}$  way between xtr and rcvr.
- B. For stations west of you: 2000 to 6000 miles:  
when its 1000-1400 LST at a point  $\frac{1}{2}$  way between xtr and rcvr.

The table at the end of this column is a computer-program that projects general MUF conditions for daytime F2 for the period 1 Nov.68 to 1 Dec.68. F2 conditions after that will deteriorate rapidly.

## SIX METER DX:

The evening type TE-skip began in the western hemisphere on the evening of 4 Sept. with a contact at 2130 AST (same as EDT) between this writer and station CE3QG in Santiago, Chile. An hour later, OA4C in Lima, Peru was worked. Signals were 5X9 and typical TE. Distances involved were 2500 and 3700 miles.

During September, there was TE between the Virgin Islands and S.A. (Argentina, Brazil, Chile, Peru, Paraguay and Uruguay) on 23 of 27 dates observed. Six meters was open for 2500 mile-plus TE a total of 59 hours and 45 minutes during evening hours. At this writing, October looks comparable altho not yet complete. On seven known dates in Sept. the TE on 6 reached the southern USA; on 16 Sept. OA4C worked 50 stations in 8 southern states in a 2-hour period.

On 29 September, hams in Argentina, Chile and Uruguay worked a ham in the Hawaiian islands also. This was a combination of regular F skip and TE over the combined day/nite path. This type of contact was repeated on 10 dates thru mid-October and appears to be quite common now.

In mid afternoon on 5 Okt., 6 meter hams in Gibraltar (ZB2BO and ZB2BC) worked ZS3E in Windhoek, Southwest Africa via regular F skip. After dark they did it again via TE; on 13 Okt. they repeated the F skip (daytime) feat again. This writer also worked ZS3E on 13 Okt. at 1130 AST via regular F skip.

There are numerous other examples of 6 meter work, but the point is this: amateur radio operators using a band bordering on American TV channel 2 (and well above TV channels in some other countries) are reporting tremendous distance loggings on both regular F skip and evening TE skip. The opportunity for long-range channel 2 reception is coming up fast and will peak during November for N.A. DXers!

Personally, I observed my first evening TE TV-DX on 19 Sept. here in the Virgin Islands. Since that date I've logged ch. 2, 3, and 4 in Brazil, 2 from Argentina and 2 from Lima, Peru. Distances: 2500-4000+.

Evening TE peaks between 1900 and 2200 AST. It is entirely conceivable that if you live in the southern USA you may have a day or 2 of this TE. You must have at least one hop of regular Es toward S.A. to add to the TE which nightly reaches 17-19° north latitude. For most DX-amateurs in the southern USA the only Es stations south of you are in Cuba, major Antilles and southern & central Mexico, so if you see any of these from 7-10 PM LST, you have fulfilled the first requirement & you may start looking for TE+E from south of the equator.

Another word about TE skip. I am at approximately 17° here in V.I. and hence I have TE almost every night. I HAVE YET TO SEE A PICTURE I CAN EVEN MAKE OUT!! TE signals fade up and down over very wide signal levels at a rate as high as dozens of times a second. The signals you receive are jumbled and garbled and altho they may be extremely strong (as is often true), the picture is fading so rapidly and contains so many ghosts, that it is impossible to make it out. Therefore, concentrate on IDing the audio; tune the best sound and hope you can make something out. A tape recorder is invaluable for later playback for your own checking or to playback for a linguist who can help ID the language and what is said. If your skip comes earlier in the evening, it is likely to be Brazil where Portuguese is spoken. If your skip is later its more likely to be Argentina or Peru where Spanish prevails.

#### DAYTIME DX REPORTS:

DXer Bill Grant of Worcester, MA reports MUFs rising in all directions. "On 9/29, KMD342 in CA heard on 35.22 at 1230 EST along with Spanish up to 36 MHz. On 6 Okt. heard strong French stations between 32.0 and 34.5 MHz around 1045 EST.; from 11-1700, the 35 MHz paging channels were a mass of heterodynes...I identified KMD342-Fresno, KMD 344-Long Beach, and KOK344-Boise." Bill uses a Lafayette HA50A, Nova-Tech action portable, and a TRP 348X Tunaverter to monitor 30-54 MHz.

Pat Dyer (WA5IYX) of Austin, TX reports peak days for him in Sept were the 12th (MUF at 41 MHz to S.A.); 13th (MUF at 42 MHz to S.A.); 15th-45 MHz; 16th-44 MHz; 17th-42 MHz; 19th-44 MHz; 20th and 21st-44, etc. (All MUFs to South America, and all between 1225 and 1630 hours. Pat is uniquely located where he will receive S.A. stations at considerably higher freq than northerners would expect to receive.

In the VI here, most interesting logging is the Mexico City pager on 43.48 MHz, (not 43.58). It was noted on Oktober 13, 14, 15, 16 for as long as 6 hr straight. Sacramento & Los Angeles heard on 43.58, too.

#### DAYTIME F-LAYER PROJECTIONS:

The following dates have been computer-projected as being especially likely to produce unusual F-layer daytime DX. Accuracy in the past: 90%.

Nov. 8: possible east/west F2 (even up to 50 MHz); ditto on 9, 10, 11.

Nov. 15: possible S.A. reception from 11-1600 LST; ditto on 17th.

Nov. 22-23: disturbance of conditions.

Nov. 24: possible east/west and S.A. skip up to 50MHz; 10-1400 LST.

Nov. 25; ditto. Nov. 26: ditto except later in day.

Nov. 27: possible east/west skip.

NOTE: whenever times are not given, use times given earlier in column. That's it for this month. Lets have your reports! --rbc

NOV.  
1968

# STATISTICS

Vol. 7  
No. 11

EDITOR: Glenn Hauser, 1312 West Oak, Enid, OK 73701, USA. CHECK HQ SECTION FOR CHANGES!  
Deadline for channel 5 records, corrections, etc.: 5 December 1968

## CHANNEL 4 TVDX RECORDS

Call	Location	Miles	DXer, Location	Comments
WTVY	Dothan AL	1400	Ghislain Girard, Arvida PQ	
WRBL	Columbus GA (AL)	1860	Morris Foote, Middleton ID	now ch 3; now in GA
KVOA	Tucson AZ	1145	Doris Johnson, Longview WA	
KARK	Little Rock AR	1510	Robert Cooper, Fresno CA	
KRCA	Los Angeles CA	2150	Robert Seybold, Dunkirk NY	now KNBC
KRON	San Francisco CA	2150	Frank Hill, Gallipolis OH	
KOA	Denver CO	1370	King Schafer, Kenmore NY	
		tie	Norm Erint, Kenmore NY	
WRC	Washington DC	2295	Robert Cooper, Fresno CA	
WJXT	Jacksonville FL	1365	Ghislain Girard, Arvida PQ	was WMBR
WTVJ	Miami FL	1385	Carl Dabelstein, Omaha NB	
KULA	Honolulu HI	4230	Carl Lupton, Shelbyville IL	now KHVH
WHBF	Rock Island IL	1030	Dave Sidall, Hyannis MA	
WTPV	Bloomington IN	1900	Doris Johnson, Longview WA	
KTIV	Sioux City IA	1330	Doris Johnson, Longview WA	
WWL	New Orleans LA	1280	Alan Michalek, Springfield MA	
WBZ	Boston MA	2565	Robert Cooper, Fresno CA	
WTOM	Cheboygan MI	1245	Bill Stanley, Deer Park TX	
WWJ	Detroit MI	1955	Robert Cooper, Fresno CA	
WCCO	Minneapolis MN	1480	Robert Cooper, Fresno CA	
WUBI	Columbus MS	1305	Karl Aiken, Kingston Jamaica	
WDAF	Kansas City MO	1505	Doris Johnson, Longview WA	
KMOX	Saint Louis MO	1725	Doris Johnson, Longview WA	was KWK
KXLF	Butte MT	1215	Bill Draeb, Kewaunee WI	
KDUH	Hay Springs NB	1305	Mrs. W. E. Burnitt, Waterloo NY	
KHTL	Superior NB	930	Frank Wheeler, Erie PA	
KORL	Reno NV	1200	Glenn Hauser, Enid OK	
KOB	Albuquerque NM	1320	Walter Spaulding, Cardington OH	
-CATV-*	White Sands Missile Range NM	0	Fred Nordquist, W.S.M.R. NM *KROD-4, El Paso TX	
WBEN	Buffalo NY	1340	Jim Dillon, Regina Sask	
WRCA	New York NY	2440	Robert Cooper, Fresno CA	now WNBC
WUNC	Chapel Hill NC	1040	Glenn Hauser, Enid OK	
KXJB	Valley City ND	1355	Dennis Smith, Wasco CA	
WLWC	Columbus OH	2035	Doris Johnson, Longview WA	
WKY	Oklahoma City OK	1500	Doris Johnson, Longview WA	
KPIC	Roseburg OR	200	Doris Johnson, Longview WA	
WGAL	Lancaster PA	985	Bedford Brown, Hot Springs AR	now ch 8
WTAE	Pittsburgh PA	1120	Bill Stanley, Deer Park TX	
WCIV	Charleston SC	1055	Karl Aiken, Kingston Jamaica	
WFBC	Greenville SC	1250	Karl Aiken, Kingston Jamaica	
WSM	Nashville TN	1330	Jim Dillon, Regina Sask	
KGNC	Amarillo TX	1325	Doris Johnson, Longview WA	
KEDY	Big Spring TX	1290	John Parillo, Girard OH	now KWAB
KRLD	Dallas TX	1440	Norris Doyle, Pittsburg CA	
KROD	El Paso TX	1335	Bill Draeb, Kewaunee WI	
KGBT	Harlingen TX	1945	Doris Johnson, Longview WA	
KPAC	Port Arthur TX	1280	William Hider, Binghamton NY	now KJAC
		tie	Richard Italiano, Binghamton NY	
WOAI	San Antonio TX	1425	David Nieman, Buffalo NY	
KTVT	Salt Lake City UT	1665	Robert Seybold, Dunkirk NY	now KCPX
KOMO	Seattle WA	2105	Robert Seybold, Dunkirk NY	
KXLY	Spokane WA	1875	Robert Seybold, Dunkirk NY	

WTFDXA STATISTICS COLUMN for NOVEMBER 1968, GLENN HAUSER, EDITOR, AND THIS IS THE PAGE 2

WOAY	Oak Hill WV	1235	Fred McCormack, Des Lacs ND	
WTMJ	Milwaukee WI	1730	Dennis Smith, Wasco CA	
CFCN	Calgary Alta	1325	Ferdinand Dombrowski, Okauchee WI	
CHAT1	Pivot Alta	1135	Glenn Hauser, Enid OK	properly CHAT-TV-1
"CBWT"	Winnipeg Man	1430	Robert Cooper, Fresno CA	later ch 3, now ch 6
CHSJ	Saint John NB	1595	Bedford Brown, Hot Springs AR	
CJCN	Grand Falls Nfld	1300	Frank Wheeler, Erie PA	
CJCB	Sydney NS	1880	Bedford Brown, Hot Springs AR	
"CBOT"	Ottawa Ont	1390	Jim Dillon, Regina Sask	
CFCM	Quebec PQ	1410	Bedford Brown, Hot Springs AR	
CKRN	Rouyn PQ	1345	Donald Ruland, Holly Hill FL	
CHAB	Moose Jaw Sask	1425	Mike Tilbrook, Pittsburgh PA	
CMJ	Camagüey Cuba	1320	Bedford Brown, Hot Springs AR	
CMUR	La Habana Cuba	1445	Ferdinand Dombrowski, Okauchee WI	now CMBF
HIT	Ciudad Trujillo Dominican Republic			
	now Santo Domingo	1600	Frank Hill, Gallipolis OH	now HISD
YSU	San Salvador El Salvador	4125	Rodolfo Hasperue, Mar del Plata Argentina	
XHG	Guadalajara Jal	2090	Doris Johnson, Longview WA	
XHTV	México DF	1955	Morris Foote, Middleton ID	
OAX4U	Lima Peru	1910	Otto Morroy, Paramaribo Surinam	R. America TV
WAPA	San Juan PR	2115	Gary Olson, Barrington IL	
YVLV	Caracas Venezuela	3785	Robert Cooper, Fresno CA	
	TOTAL for 71 stations	113030	(tie counted once)	

Analysis. It's Dee Johnson in first place again, with 11 records. Bob Cooper is second with 8, Bedford Brown third with 5; and Bob Seybold fourth, with 4. By total distance, however, Cooper edges out Johnson for the top spot with 17460 miles, compared to 16700. Seybold also exchanges places with Brown, with figures of 7795 and 7190, respectively. As we ascend in frequency, there's a greater variety of record-holders. Cooper and Johnson each hold only about 15% of the channel 4 records, compared to 25-27% on channel 3. Some stations for which records are missing are CFCR Kamloops BC; CKBI3 Greenwater Lake Sask; XHOW Mazatlán Sin; and XELN Torreón Coah. And we could find no report of KPIC by skip! AIPA-reported records for KXLF and WAPA by C. Bay and for CMBF by J. Easter had to be omitted, since we have not been able to determine where these people DXed from??!!

ADDITIONS AND REVISIONS TO CHANNEL 2 TVDX RECORDS

KETS	Conway AR	1215	Bill Grant, Worcester MA	
KCKT	Great Bend KS	1455	Jeff Kadet, Needham MA	
KOOK	Billings MT	1385	Carlton Howington, Uniontown OH	
KNOP	North Platte NB	1230	Gary Kromer, Auburn NY	
KUSD	Vermillion SD	1260	Bill Grant, Worcester MA	
CHAU5	Percé PQ	800	Wayne Plunkett, Weston Ont	properly CHAU-TV-5
CHAUL	Sainte Marguerite PQ	879	Carlton Howington, Uniontown OH	proply CHAU-TV-1
PRG3	Rio de Janeiro Brasil	6615	Robert Cooper, Lafayette CA	
HIT	Santiago Dominican Republic	1410	Otto Morroy, Paramaribo Surinam	

ADDITIONS AND REVISIONS TO CHANNEL 3 TVDX RECORDS

WEDU	Tampa FL	1365	Thomas Sundstrom, Bernard ME	
KRTV	Great Falls MT	1760	Stephen Dionne, Binghamton NY	
KMTV	Omaha NB	1380	Norris Doyle, Pittsburg CA	
XHQ	Culiacán Sin	975	Glenn Hauser, Enid OK	
XEFB	Monterrey NL	1475	Bill Draeb, Kewaunee WI	
WIPM	Mayagüez PR	1660	Dave Siddall, Hyannis MA	

Thanks to Bill Draeb for pointing out our gross error last time in omitting XEFB, and a 546-mile error on KRTV! KMTV was also left out. I'll certainly try to avoid such goofs in the future! Mike Northam says there's a good reason for no KVUE-3 records: they probably never hit the air. He's checking. +++ By all means, don't fail to report translators you've picked up. Even at a few miles distance, it's probably a record.

WTFDXA FM DX SURVEY

Well, it's a start...but I'm sure there's a lot more interest in FM stats than the response size would indicate. Still, there are outstanding data here. Respondents were Frank Merrill, Milan MI; Hank Holbrook, Fair Haven and Chevy Chase MD; William H. Bens, Cincinnati OH; Frank Wheeler, Erie PA; and your editor, Enid OK, who decided to add his Albuquerque NM totals as well. They shall be known by their initials.

Category	FM	HH	GHE	WB	GHA	FW
Stations logged	546	500	496	276	196	65
US stations logged	524	487	468	272	185	52
Can stations logged	21	11	15	4	7	13
Mex stations logged	0	0	11	0	4	0
Other stations logged	1	2	2	0	0	0
Where from, pray?	Bermuda	Berm, PR	Cuba	—	—	—
Es stations logged	46 8%	80 16%	274 55%	26 10%	173 88%	0 0%
Trops stations logged	481 88%	416 83%	201 41%	250 91%	14 7%	65 100%
MS stations logged	1 0%	4 1%	34 7%	0 0%	10 5%	0 0%
Aur. stations logged	18 3%	0 0%	0 0%	0 0%	0 0%	0 0%
"A" channel stns lgd	94 17%	77 15%	76 15%	52 19%	17 9%	
Channel MOST stations logged on, how many	94.5 12	100.7 13	94.5 17	99.9 9	99.9 7	93.7 3
						94.9 3
		89.3 1	89.7 0			100.7 3
		90.5 1	89.9 0			107.9 3
Channel LEAST stns	106.3 1	100.9 1	90.3 0	88.1 0	many 0	xx xx
Superchannel MOST	92. 40	xx xx	94. 56	99. 24	97. 20	xx xx
Superchannel LEAST	88. 17	xx xx	89. 4	88. 4	107. 2	xx xx
	89. 17					
	90. 17					
That's stations; now by states/provinces:						
US states logged	28	31	38+DC	17	25	4
Can provs logged	3	3	4	2	3	1
Mex estados logged	0	0	5	0	2	0
Es states logged	10	13	24+DC	5	22	0
trops states logged	17	19	17	12	2	4
MS states logged	0	4	19	0	8	0
Aur. states logged	13	0	0	0	0	0
88-92 MHz states lgd	xx	20	12	7	7	1

Best FM station received: FM WSUP 90.5 Platteville WI 260567 aurora 275w; HH ZBM 89.1 Hamilton Bermuda 030766 trops lkw; GHE KUNR 88.1 Reno NV 230768 Es 10w; WB WOVV 95.5 Florida 210668 Es; GHA KLAU 101.5 Lawton OK 020666 Es at 475mi; FW WJFM 93.7 Grand Rapids MI 150766 trops. +++ Best by Es: FM ZBM 89.1 Hamilton Bermuda 170768 lkw; HH KUMD 89.1 Duluth MN 170768 190w; GHE as "best"; WB as "best"; GHA as "best". +++ Best by Trops: FM WBST 90.7 Muncie IN 051267 10w; HH as "best"; GHE WIFE 107.9 Indianapolis IN 301265; WB WEAU 104.5 Wisconsin 030868; GHA KGRD 103.9 Las Cruces NM 310767 3kw; FW as "best". +++ Best by MS: FM CJOB 97.5 Winnipeg Man 130865; HH WTJS 104.1 Jackson TN 131060 50kw; GHE CFCA 105.3 Kitchener Ont 120868. Most Distant: FM ZBM 89.1 Hamilton Bermuda 170768, 1270mi; HH WIPR 91.3 San Juan PR 530kw 1540mi; GHE CKGM 97.7 Montreal PQ 050866 1420mi; WB KROB 99.9 Texas 080668 1085mi; GHA WRFD 97.9 Worthington OH 130766 1355mi; FW WJFM 93.7 Grand Rapids MI 150766 292mi. Lowest Power: FM WCMU 90.1 Mount Pleasant MI 290467 10w ERP + 10 other 10w stns; HH WXAC 91.3 Reading PA 091066 13wERP; GHE as "best"; WB WFPL 89.3 Kentucky 060468 150w; FW WKSJ 101.7 Jamestown NY 150866 3kw; GHA CHEC 100.9 Lethbridge Alta 020666 245w. Best 3 states by # stations: FM OH 128, MI 84, IN 66; HH PA 89, NY 59, VA 42; GHE TX 53, CA 52, FL 35; WB OH 82, IN 61, MI 27; GHA WI 26, WA 26, IL 16; FW MI, OH, NY. Best 3 Es states: FM TX 17, FL 9, LA 4; HH TX 20, OK 11, MO 11; GHE CA 52, FL 35, NC 29; WB TX 11, FL 9, LA 3; GHA as overall 12. Best 3 by trops: FM as overall; HH as overall; GHE TX 53, OK 32, KS 23; WB as overall; GHA NM 12, AZ 2. +++ xx=not reported; --=not applicable. %s ref. total exc. "A": US total.

A N A R C S C O P E

Ambrose Maxim  
23 Lambert Street  
Winthrop, Maine 04364

The bi-yearly election count gave Scrimgeour: 15; Irace; 1. Not voting 4, thus the New ANARC headquarters will be moved to Canada for the first time with a new Executive Secretary K.G. Scrimgeour, 227 Hanna Road, Toronto 17, Ontario. Gray will be a genuine Asset to ANARC and will work diligently to advance and improve the Association.

With such Associations there's always the money question and here's are the new executive views of a while back, "Will ANARC become an organization like ARRL, with paid staff to look after the administration and the benefits to DX'ers eventually? Or will it continue to be a share-the-load operation with DX'ing reps. and volunteer workers doing all the work? Or hit a middle ground?" Gray adds that he thinks the biggest job now is to convince individual DX'ers of ANARC's usefulness.

Serge Neumann replaces Gray as EDXC liaison, since he will be in Europe for three years or more with the armed forces will be able to meet European club leaders personally.

Under the fine leadership of Gerry Dexter the ANARC has grown a great deal in the last two years. Gerry will still be working for DX'ers as NASWA representative replacing Frank Peters. Tom Holms replaces John Callaman for NRC. IRCA President Larry Godwin replaces Tom Stoltman. Curt Webber replaces Rick Olsen for CIDX; ICDXC is now defunct. WIDXA has been disbanded, NEDXA joined and folded right-away Fly by Night Communications was refused membership No-12 Yes-2. Communications Society of Williamsville, NY., Iowa SW DX club & NYSDXA applied, but were asked to reapply in 6 mos. Newest Clubs are Latin Brass Radio Club and Batesville SW Asso., FDXC is again publishing and the president says "the FDXC is FAR, F-A-A-R, from being dead and buried." NESWLC will be printing soon with their own printing apparatus. CDXC???

At the Boston convention, the National Radio Club announced the winners of their two yearly awards. Selected as 1967-68 Domestic DX'er of the year \*\*\* Jerry Starr of Youngstown, OH (who heads ANARC's BCB Committee). International DX'er of the Year award went to Richard Wood of Hawaii. (who is the new publisher of the ANARC bulletin "News Letter" Also heads the ANARC QSL Committee).

The 1969 edition of WPTH will have an article describing ANARC and it's goals.

\*\*\*\*\*

DID YOU SEE ?

Oh to be a California TV DXer!!!! At least that is the cry from those of our membership who live in the sunny, warm west.....especially in Palm Springs. As most TV DXers know, Palm Springs just recently got its first two local TV stations -- KMIR-36 and KPLM-42. Usually when local TV comes to your hometwon, it creates big news; when you get two new stations in one year it's big news. But Palm Springs made even bigger news as you may have heard.

A 25-year-old technician was arrested a few days ago for showing a videotape of a stag movie on the air. Nothing censored, indeed! It seems as though KPLM went off the air and viewers were greeted to the "nudie spectacular" in full, living black and white. Those viewing at home reported that the film ran between 4 and 12 minutes (apparently the viewers got so involved they lost track of time) of course with none of those nasty commercial interruptions! The guilty party made the mistake of running his "DX special" on one of the stations' tape machines; thinking the feed from the machine was patched out, he cued 'er up and viewed and viewed.

At last report the technician faced a fine of up to \$10,000 and a sentence of up to two years for his overtime viewing. Movies are getting more expensive all the time aren't they!!!!!!

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

# WESTERN TV

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

NOVEMBER 1968

Morton Meehan, PO Box 214, North Palm Springs, California 92258 writes that he saw the new KPLM-TV 42 Palm Springs testing on the air 27 September, and that it is the strongest signal ever to come into his location, in Desert Hot Springs. It was scheduled to start programs on 30 Sept., ABC and all-color. Mort also sent some news clippings about the station, and the sorrow experienced by the loss of the "Time-Temp. Revue" on CATV ch. 3 in the area cities, replaced by the new KPLM-TV on the cables. It was noted in the articles that KPLM-TV was often referred to as the "new ch. 3," and that another Palm Springs station that was to start at the same time--KMIR-TV 36 (NBC)--is delayed because of unresolved CATV agreements there. It is a shame when CATV's position is such that new local stations have to take it so fully into account. Thanks for the report, Mort--maybe KMIR-TV is on by this time.

This month's column has a few choice bits of tropes, but no Es was noted in September by those reporting this time.

Glenn Hauser, in the Air Force for a short time in the San Antonio area, writes the following noted in that area:

No DXing possible here--or hardly any. There are 4 or 5 TV sets and 1 FM tuner at service clubs, but either poor condition/heavily used/poor antenna. Most are equipped for UHF--so watched a bit of KWEX-41 (Spanish) and saw something, probably image, around ch 33. Austin U's should be possible, but KLRN-9 is weaker than other "locals"; not sure where xmtr is.... Discovered class. station KMFM 96.1 hurting badly, on air afternoons and evenings only. KITE-FM runs class. evenings, too.

(Thanks for info from San Antonio, Glenn. We'll look forward to news of your situation and station activity in your next location. dps)

The first report from new member:

Michael B. Northam, PO Box 605, Beaverton, Oregon 97005

Greetings group. I thought I ought to contribute something even though I've not been active in TV-FM DXing. One of the main reasons for this is that I live in an apartment house (basement apartment, naturally) which allows no external antennas. All the apartments are served with a MATV system, which I've found to be most unsatisfactory for DX purposes. MATV seems to increase the already intolerable co-channel interference problem here in the Portland area, which has locals on channels 2,6,8,10,12. Since I live less than two miles from all the local TV-FM transmitters, I can receive nothing but locals (and co-channel splatter) on the low VHF band and FM. It's impossible to null local interference with rabbit ears, also--perhaps wave traps would help. By the way, I believe that I may be one of the few persons in the club who has never seen a UHF station! There used to be KPTV-27 here in Portland, but now that has moved to channel 12, and it appears that the KPVC-24 CP will be deleted by the FCC because construction has not begun. I've tried for tropes at various times but no luck yet. Equipment includes a Motorola 19" color set, using rabbit ears or the MATV. For FM I use a Kenwood TK-140U (same antennas, plus a twin-lead dipole). The TK-140U seems to overload rather easily, producing many cross-modulation images, which is rather surprising since it uses a FET front end. This could perhaps be due to my location, though, because it performed admirably in Eugene using the dipole. I rather suspect that its sensitivity is just too high to perform well in a high-RF area such as I am in. I shall continue to try, though. Best of DX to all.



(Thanks very much for describing your area situation, Michael. It sounds as though the odds are against you in your present location with so many locals so close, but hope you get something sometime. Glad to meet you at NNRC Convention in Los Angeles in August. dps)

Dave Pomeroy, Lot # 279 Lake Quivira, Kansas City, Kansas 66106

We are temporarily living at the above address. My DX'ing days in Lawrence are over so the following will complete the DX there:

Aug 17	WMBD-31	Peoria, Illinois	7:30 am	Trops
	WAND-17	Decatur, Ill.	10:30 am	
	WICD-15	Champaign, Ill.	10:30 am	
	WEEK-25	Peoria, Ill.	11:30 am	

All DX below was received at Lake Quivira, Kansas City, Kansas location. DX in Kansas City was nil until Tuesday (Sept 24) when the UHF band produced some surprises. Biggest surprise was the appearance of three UHF translators on approximately channels 74, 76, and 79. The middle channel repeated WHO-13 as I was able to get the 10:00 ID. Signals were quite clear (little snow) when the stations were first seen at 9:50 am, but faded pretty well by ten. Best possibility seems to be Ottumwa, Ia. which TV Factbook lists with channels 74 and 76. Am checking with them for more info. Channel 76 there is translator for WHO-13. There seemed to be CCI on channel 74 which was probably transmitted that way. Channel 74 repeats KCRG-9 and I had CCI here on KMBC-9. Could have been channel 9 in KC giving the Iowa channel 9 some trouble.

Other results:

Sept 24	WQAD- 8	Moline, Ill.		
	WHA -21	Madison, Wisc.		
	KVFD-21	Ft. Dodge, Ia.		
	WKOW-27	Madison, Wisc.		
	WMTV-15	Madison, Wisc.		
	K74CO-74*	Ottumwa, Iowa	translator for KCRG-9	9:50 am
	K76BZ-76*	Ottumwa, Iowa	translator for WHO-13	9:50 am
	-79*	Ottumwa, Iowa	NBC	
	WCEE-23	Freeport, Ill.		
	WTVO-17	Rockford, Ill.		
	KUHI-16	Joplin, Mo.		

\* pending further investigation.

WKOW-27 came in over normally snow-free KTSB-27 while WHA-21 and KVFD-21 were available at the same time by turning an indoor UHF antenna a few inches.

Five new U's and a V highlight the latest tropes opening which began last evening and closed out this morning. The results:

Oct. 7	KXNE-19	Norfolk, Nebr.	8:30 am	Trops
	KMEG-14	Sioux City, Iowa		
	KMTC-27	Springfield, Mo.	9:00 pm	Trops color over KTSB-27
	KUHI-16	Joplin, Mo.		
	WEEK-25	Peoria, Ill.		color
	WMBD-31	Peoria, Ill.		
	WIRL-19	Peoria, Ill.		CCI noted before KCSD-19 sign-off
	UnID-17			CCI from 2nd UnID-17
Oct. 8	KFVS-12	Cape Girardeau, Mo.	12:10 am	color
	WMBD-31	Peoria, Ill.		TP at 4:10 am
	WEEK-25	Peoria, Ill.		
	WSPD- 6	Paducah, Ky.		1st Kentucky station
	KARK- 4	Little Rock, Ark.		
	WKZT-23	Elizabethtown, Ky.	8:30 am	steady/approx. 480 mi.
	WUSI-16	Olney, Illinois		TP
	-35	Madisonville, Ky.		weak with Ky. ETV net program
	-21	Murray, Ky.		Kentucky ETV network

Channels 21 and 35 were fairly weak, but I did get audio ID on channel 35 so I know it was channel 35. Couldn't get complete ID. WKZT-23 quite good at times and in for over an hour! Lowest of Ky. ETV's must have been channel 21 because KCSD-19 and WKZT-23 were seen at the same time with unID midway between the two.

Hope some others in this area were able to take advantage of this opening. KMTC-27 just on within the last week. I didn't know they were on until last night when they came in. An announcement at 9 apologized for poor picture on ABC programming which is now being picked up off air from nearby ABC channel (probably KODE-12).

DX was color on parents' Setchell-Carlson color set; B&W on my old Setchell-Carlson.

(I can't give you calls of Kentucky ETV's with my info scattered between here in Wasco, Dave--apologies. Maybe next month will provide further results from others on the 7-8 October trop. dps)

Fred Nordquist, 411 Dart, White Sands Missile Range, N. Mex. 88002

Very little TV DX since the 1st of August, so report will be brief. July 31: WDCN-2 TN w/NET prog. 1930, WLBT-3 MS ID & "Virginian" 1935, WRCB-3 ID 2000, unIDs on 4-5-6. Aug 4: KDIX-2 ND w/ID 1030, KXJB-4 w/ID 1059, unID-6 1030, KTVU-2 CA w/Boating & Fishing 1435, KUSD-2 1930. Aug 8: KDIX-2 1730, KTVS-3 (New) Colo. w/IDs 1730, KOTA-3 womens shoes ad 1737, KDUH-4 NB // KOTA 1737, KXJB-4 Sports 1815, unID-5 1805. Aug 11: unID-2-4-5 2030, KATC-3 LA w/NX 2032. Aug 12 - Sept 1: Vacation to NY. No DX in Sept. or 1st 10 days in Oct. It's all Es or nilch around here. Total TV seen/hrd: 115. w/31 on ch 2, 31 on ch 3, 18 on 4, 13 on 5, 17 on 6, 1 on ch 7-8-9-10-13, and 0 on ch 11 & 12. 97 were via Es, and 3 via MS. States/Provinces: 28/3. That's the stats. 73.

(Thanks for your last skip of the season, Fred. Perhaps you will see some off-season DX unless you are moving soon. dps)

Dennis Smith--about the only thing to report from here is that the coastal inversion along southern California has been good but not optimum. San Diego TV-FM has come in on these occasions but could have been better. On VHF TV, XETV-6, KFMB-TV 8, KOGO-TV 10, & XEWT 12 San Diego - Tijuana (175-200 mi) were there, with XEWT generally the best. My location in Santa Barbara doesn't seem to be the best for Los Angeles 2,4,5,7,9,11,13. The antenna may not help much; it is a 4-bay Gonset Rocket (performance similar to conicals) about 40 feet above ground, maybe 50 above sea level. It has been up for perhaps ten years so has certainly developed a nice coat of salt corrosion (we are a few blocks from the Pacific Ocean). Of course, KEYT 3 and its ch 8 translator are locals. On UHF, with Blonder-Tongue BTX-11A converter and the same VHF antenna with my Zenith 15" portable, the following has been seen:

KEBS-TV	15	San Diego	200mi	Very good on occasion, often nothing
KWHY	22	Los Angeles	95mi	Poor to very poor
KCET	28	Los Angeles	95mi	Good
KMEX	34	Los Angeles	95mi	Poor
KCST	39	San Diego	200mi	Fair on occasion, often nothing
KLXA	40	Fontana-LA.	95mi	Good-fair
KBSC	52	Corona-L.A.	95mi	Very poor

Some of these have announced powers, which I'm sure are directional: KEBS-15 has a million watts visual peak ERP, KCST-39 has 2.12 million watts visual and 426 kW aural ERP, and KLXA-40 uses 631 kW visual ERP. We appear to be coming into an early rainy season (winter half of the year) so that may be the end of regular San Diego trop until spring

And, a letter from:

Jim Stiles, 1820 Normandie Ave., Hollywood, California 90027

I joined WTFDXA in August. I've seen 59 stations not including locals which are channels 2,4,5,7,9,11,13,22,28,34,40, and 52 in Los Angeles, and 6,8,10,12,15, and 39 in San Diego. Four of the stations seen are the result of F2 skip. My antenna is a 25 element yagi mounted on a rotator 45 feet above the ground. My UHF converter gives 15 db gain.

Es has been excellent this summer. Trops have not been very frequent but when they do come they're excellent. Many signals have been strong enough to become readable over the locals.

If there is any doubt about the reception of the stations that are indicated as verified, I can supply a photocopy of the verification letter or card in question given two weeks notice. All stations listed have been positively identified.

Date	Call	Location	Time	PDT	Notes
Channel 2					
6/23/68	KATU	Portland, Ore.	1:15	PM	verified
	KREM	Spokane, Wash.	1:18	PM	verified
7/11/68	KFAR	Fairbanks, Alaska	4:00	PM	verified
8/ 3/68	KUTV	Salt Lake City, Utah	1:00	PM	verified
8/11/68	KDKA	Pittsburgh, Penn.	12:05	PM	verified
	WMAR	Baltimore, Md.	11:59	AM	verified
8/15/68	Armed Forces Korea Network	Seoul, Korea	5:58	AM	positively identified 6450 mi.
8/20/68	WUSN	Charleston, S.C.	12:00	Noon	very weak
8/22/68	WBAY	Green Bay, Wisc.	1:30	PM	very strong
Channel 3					
6/30/68	KARD	Wichita, Kansas	12:00	Noon	verified
	KLNE	Lexington, Nebraska	12:30	PM	verified
	WCIA	Champaign, Illinois	1:30	PM	verified
7/12/68	KGLO	Mason City, Iowa	12:30	PM	verified
7/23/68	KIEM	Eureka, Calif.	1:00	PM	verified
7/24/68	KEYT	Santa Barbara, Calif.	1:00	PM	fading like Es 80 mi.
7/28/68	WISC	Madison, Wisc.	3:13	PM	verified 1678 mi.
8/ 3/68	KRTV	Great Falls, Mont.	11:59	AM	verified
8/ 3/68	WSAZ	Huntington, W. Va.	12:01	Noon	verified
8/ 6/68	WSVA	Harrisonburg, Va.	12:00	Noon	very weak
8/15/68	KLEW	Lewiston, Idaho	10:30	AM	very weak
8/15/68	DYCB	Cebu City, Philippines	9:00	AM	positive ID 7550 mi. saw test pattern
8/24/68	WCAX	Burlington, Vermont	12:00	AM	strong signal
8/25/68	KFDX	Wichita, Texas	1:00	PM	very strong verified
8/26/68	Television of Iran	Tehran, Iran	12:30	PM	test pattern ID
Channel 4					
7/29/68	KDUH	Hay Springs, Neb.	11:34	AM	lasted 2 hours
7/30/68	KROD	El Paso, Tex.	11:05	AM	weak
8/ 1/68	WCBI	Columbus, Miss.	7:15	PM	verified
8/ 6/68	WBZ	Boston, Mass.	1:00	PM	very strong
8/10/68	WJXT	Jacksonville, Fla.	12:00	Noon	several seconds only
8/11/68	WTOM	Cheyboygan, Mich.	12:59	PM	verified
8/14/68	KMOX	St. Louis, Missouri	12:00	Noon	extremely strong
8/15/68	Armed Forces Network Korea	Pajuri, Korea	6:00	AM	verified by Hqs. Korea Network in Seoul. Extremely strong signal considering distance: 6500mi
8/17/68	KARK	Little Rock, Ark.	12:00	Noon	weak
8/18/68	WWL	New Orleans, La.	12:00	Noon	deep fades

Channel 5				
7/28/68	KENS	San Antonio, Tex.	1:15 PM	verified
8/ 3/68	KING	Seattle, Wash.	11:58 AM	verified
8/18/68	WMAQ	Chicago, Ill.	1:00 PM	very weak
Channel 6				
5/15/68	KREZ	Durango, Colorado	1:00 PM	weak
6/10/68	KTVC	Ensign, Kansas	1:15 PM	verified
	KOTV	Tulsa, Oklahoma	1:30 PM	verified
7/28/68	KPLO	Reliance, S. Dak.	11:58 AM	verified seen twice
	KFDM	Beaumont, Texas	3:09 PM	verified
8/ 3/68	WGSB	Portland, Maine	3:00.35 PM	verified
8/22/68	KOIN	Portland, Oregon	2:00 PM	verified seen twice
8/23/68	KTAL	Shreveport, La.	12:00 Noon	very weak
Channel 7				
8/ 9/68	WITN	Washington, N.C.	11:20 AM	positively ID by several local commercials and later by call letters. very weak
8/11/68	WDBJ	Roanoke, Va.	12:00 Noon	verified by QSL card signed by station eng. very good signal
Channel 9				
8/17/68	KBTB	Denver, Colo.	9:35 AM	strong trop signal
8/18/68	KEZI	Eugene, Ore.	3:00 PM	very strong positively ID by call letters
Channel 10				
8/ 4/68	WALA	Mobile, Alabama	4:15 PM	very strong positive ID verified
8/ 9/68	WJAR	Providence, R.I.	7:18 PM	weak but clear, pos. ID by 7:30 PM, verified, seen twice
8/19/68	KOOL	Phoenix, Ariz.	12:00 Noon	very weak trop
Channel 12				
7/28/68		Clovis, N. Mex.	7:10 AM	verified
Channel 13				
8/11/68	WLTV	Bowling Green, Ky.	12:03 PM	verified by general manager of station
8/23/68	KRDO	Colorado Springs	1:00 PM	strong trop
9/27/68	KELP	El Paso	7:00 PM	weak
Channel 28				
8/ 6/68	WSJV	South Bend, Ind.	7:00 PM	verified by letter by Chief Engineer of station. Signal was just to one side of my local ch. 28 station. 1822 mi.
Channel 29				
8/10/68	KBAK	Bakersfield, Cal.	1:00 PM	strong verified
Channel 48				
6/13/68	WCET	Cincinnati, Ohio	1:45 PM	clear sound, no picture. positive ID by announcement of call letters and affiliation

(It can be noted that Jim's location is 15-20 miles from the Los Angeles transmitters on Mt. Wilson. Comments??)

Best of DX to all Dennis

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

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