

DECEMBER 1977

IN THIS ISSUE:

A CHANGE
IS COMING!

Part Two:



FM IN
YOUR CAR



VHF-UHF
DIGEST

the official publication of the Worldwide TV-FM DX Association

From The Staff :

WTFDA Headquarters, P.O. Box 202, Whiting, Indiana 46394

CONVENTION PROGRESS...As we go to press, still only one bid for the WTFDA 1978 convention site has been received (for Louisville KY). To give any prospective bidders one final chance to submit their offers in writing, the deadline has been further extended to January 20, 1978, the submission deadline for material appearing in the February VUD. All bids received will be printed in that issue for voting; if only the current bid is at hand, Ted Fleischaker and the Louisville crew will be declared the 1978 convention hosts. If you've considered but delayed sending in a bid, this is your final chance for action!

REGIONAL GET-TOGETHER...A last-minute note received from JZ reminds all DXers that there will be a DX gathering at the home of IRCAn and NRCer Paul Mount in Teaneck, New Jersey on January 15, beginning at 11 a.m. Activities will include general talk, meeting new and old DXers and displays of QSL cards and receivers brought by those attending. A buffet-style meal will be served in the early afternoon. For more information, you can call (201) 836-1137; be sure to let Paul know by phone if you plan to attend.

EDITOR'S NOTE...

After an enjoyable and successful two years as editor of this magazine, I have decided to relinquish this position to someone who is more capable of producing timely issues while at the same time maintaining professional standards. The unanimous choice for this position by WTFDA's Board of Directors, including your editor, is CGI editor Frank E. Aden Jr., 1535 NW Ithaca Avenue, Bend OR 97701, to whom all material for the February 1978 Digest should be sent. Next month's VUD--our heralded Tenth Anniversary Issue--will be my last.

This decision was a difficult one, but I make it with only minor regrets. My time problems have increased with each passing month to where I'm no longer capable of devoting adequate time to my WTFDA position. It is my utmost hope and belief that Frank will maintain high VUD standards as well as timeliness in his new post; he deserves the best.

More will be said in a final farewell to be printed next month. For now, I offer sincere thanks to those of you who offered assistance and support over the years.

CLARKE INGRAM

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MAILBOX

John Zondlo
6617 Maryland
Hammond, IN 46323
(219) 844-8694
Deadline: 15th

New Members:

Adam Horniak
Edward R. Sirovy
Larry Vehorn

182 Edgewood St.
311 S. Williams St.
P.O. Box 555

Aliquippa, PA 15001
Westmont, IL 60559
Carmel, IN 46032

Renewals:

Ruck Battin, Robert Foxworth, George Greene, Alan Hobson, Roy Horsley, John Jefferson, Deane McIntyre, William C. Palmer, Lee Prescott, Marvin Shults, Jim White, Thomas Yeazell.

Rejoins:

Ed Kowalski-3300 Chesterfield Road-Philadelphia, PA 19114
Andrew Smith-RD 3, Box 268-Dillsburg, PA 17019

Address Changes:

William Johnson-128 Carriage Way Drive-Burr Ridge, IL 60521
William Nicholson-2127 N. Parkside Ave., #8-Los Angeles, CA 90031
Rod O'Connor-USCGC Ironwood (WLB-297)-FPO Seattle, WA 98799

Renewals Due in January:

Robert E. Baxter, Ed Brindle, Wayne Covington, Bill Draeb, Bruce Goldsen, James R. Hastings, Daryl Herzog, Carlton Howington, Rod Luoma, W.J. Mansir, Clint McAuliffe, Walter McKean, Timothy Miller, L. Donald Richard, David Rogers, Craig Shura, P. Somerset, Robert Stear, Paul Traska, Morgan Williams.

29 year old ADAM HORNIAC is employed as a millwright. His main interest is TV DX, for which he uses a 19" portable TV. Adam found out about the club thru QST magazine.

EDWARD SIROVY is a computer programmer who DXs with a Zenith TV and a Sony receiver for FM and BCB

Tidbits.....

Rejoining after many years is Ed Kowalski. He's also a member of NPC, NASWA, and NNRC. Ed's DX interests include TV, BCB, shortwave and longwave.

We have several comments this month from Wayne Covington: 1) Pe the article by Peter Sawatzky on the Pioneer KP-500: He notes that the Heathkit AJ-15 claims better than 1.8uv IHF sensitivity and the Pioneer KP-500 specs state 1.1 uv IHF. But the AJ-15 has a 300 ohm input and the KP-500 has a 75 ohm input, so the 1.8 and 1.1 cannot be compared without taking this difference into account. In fact, 1.1 uv into 75 ohms is equivalent to 2.2 uv into 300 ohms. (The multiplying factor is the square root of the impedance ratio). Nevertheless, I thought this was a very useful and informative report on the KP-500. 2) Regarding getting an FM receiver for a car: I recently purchased a Datsun B-210, and I decided to install an FM receiver other than the factory-supplied unit. I had a very difficult time finding a reasonably-well-performing unit that would fit in the car. I finally got a Sony TC-24FA, which is OK but noticeably poorer than my Kenwood KT-8007 home receiver. Readers who are about to purchase one of the smaller cars and who wish to install their own FM receiver should be warned to check ahead to be sure the unit they have selected will fit in the dash or the console! A reputable car stereo shop should be able to give them this information. 3) Have any readers experimented on the optimum spacing between stacked yagi FM antennas? I have a letter from Winegard claiming 5 1/2 to 6', but "dividing 5440 by the frequency in MHz will give the half wave length in inches at which two antennas should be stacked." This not only contradicts the 5 1/2 to 6' figure, the correct number is 5905, not 5440, for a half wavelength. I am using 60 inches, but it is such a major project to change my antenna spacing that up until now I have not felt like fooling around with it. Yet if anyone has found that some "correct" spacing can make a material difference, the rest of the readers may want to know."

As noted earlier, the address for Rod O'Connor has changed. Rod writes that he's being transferred to a buoy-tender at Adak, Alaska....quite a change from Maine, eh?

Ve editor just received the latest catalog from CPB Research. Seems that they're offering quite a few interesting items on VHF monitoring, including a new Indiana listing. From what I've seen, tho, I'd have to agree with Terry Colgan's comments that Police Call is much better.....73.....12



FM NEWS

Bruce F. Elving, Editor

18 1/2 East Fifth Street

Duluth MN 55805

New FM Station Grants

AR Benton 107.1 3000 h,v; 146'
 CO Castle Rock 92.1 3000 h,v; 300'; k music
 FL Holiday (N. of New Port Richey) 106.3 3000
 h,v; 300'; middle of the road music
 ME Millinocket 97.7 3000 h,v; 190'; k
 MI Gaylord 95.3 1800 h,v; 370'; gospel music
 MN Winona *90.9 10 watts. St. Mary's College
 MS Eupora 101.7 3000 h,v; 300'
 MO Bethany 95.9 3000 h,v; 300'; kountry music
 MT Billings 102.9 100000 h,v; 500'; m
 NM Portales 95.3 3000 h,v; 300'; n
 OR Pendleton 107.7 27500 h,v; 610'; m
 PA Canton 100.1 500 h,v; 650'; n
 PA Mechanicsburg 93.5 3000 h,v; 300'; rock
 SC Beaufort *89.9 47000 h,v; 1100'; stereo, cr,
 P (Nat'l Public Radio); Ed. TV Commission
 TX Lufkin 99.3 1900 h,v; 360'; n [km/
 UT Richfield 93.7 27000 horizontal only; -820'
 VA Warrenton WORA 94.3 3000 h,v; 300'
 WI Oshkosh W21AD 92.1 \$, g [WRVM 102.7 Suring
 WI translator; 1 watt]
 WY Evanston K252AI 98.3 \$, r [KRSP-FM 103.5
 Salt Lake City UT; probably 10 watts]
 AT Manning 100.5 13500 CBC-AM, CBX repeater
 AT Peace River 92.5 732. CBC-AM, CHFA ", French
 ON Fort Hope 101.5 41 watts; CBC-AM, CBL
 ON London 100.5 22500, stereo, CBC-FM
 NWT Spence Bay 105.1 82 watts; CBC-English,
 with 2 hours local cutaway per day allowed

On Air and DX Ready (presumed)

AK None KICY-FM 100.3 84 watts h,v; 40'
 AK North Pole KJNP-FM 100.3 \$, c 25000 h,v;
 1570'. AK Petersburg KFSK *100.9 10 watts.
 AR Salem KSAR 95.9 2500 h,v; 325'
 FL Key West WJLS 107.1 2000 h,v; 96'
 GA Dublin WQZY 95.9 3000 h,v; 220'
 GA Eastman WUFF-FM 92.1 2000 h,v; 270'
 GA Springfield WGEK 103.9 3000 h,v; 300'
 GA Valdosta WJGA 95.9 3000 h,v; 300'
 IN Rensselaer WPIUM *90.5 10 watts
 LA Bastrop KJBS 100.1 3000 h,v; 180'
 LA Crowley KAJM-FM 102.9 100000 h,v; 450' [not
 HI Howell WHMI-FM 93.5 rnc; 3000 h,v; 300' Y./
 MN Collegeville KSJU *89.1 10
 MS Pascagoula WGD 106.3 2350 h,v; 350'
 MO Poplar Bluff KJEZ 95.5 100000 h,v; 410'
 NH Newport WCNL-FM 101.7 2800 (h); 51'
 NH Roswell KR5Y-FM 97.1 25000 (h); 235'
 TN Springfield WDBL-FM 94.3 3000 h,v; 300'
 TX Mineola KM00-FM 96.7 3000 h,v; 300'
 WA Spokane KWRS *90.3 10 watts

On Air with Changes (selected)

AC Tuscaloosa WDOA 95.7 50000 h,v; 320'
 CA Palm Springs KOLS-FM 104.7 42000 h,v; 540'
 ID Moscow KUBI-FM *91.7 1050; 1000'
 IN Washington WML 106.5 50000 h,v; 340'
 IA Charles City KCHA-FM 95.9 3000 h,v; 100'
 (from 104.9). CP for Hampton IA 104.9 extended,
 even though FCC is concerned KHJ 104.9
 Hampton is stalling and may not build.
 LA Ferriday KFNW-FM 107.1 (from 93.5)
 LA New Orleans WYLD-FM 98.5 100000 h,v; 360'
 MA Hyannis WCOO-FM 106.1 13000 h,v; 130'

NM Albuquerque KHFM 96.3 2150 h,v; 4130'
 KRKE-FM 94.1 19500 directional,
 4100'. KMYR 99.5 19500 h,v; 4100'
 OH Centerville WMT-FM *91.9 (from 89.5)
 TX Fort Worth KTCU-FM *88.7 (from 89.1),
 3000 h,v; 125'; stereo, jr.
 WA Centralia KELA-FM 102.9 29000 h,v; 300'

Non-Identifying Stations

AL Mobile WLPR 95.1 FM-95
 WKRG-FM 99.9 Stereo-100
 FL Lakeland WVFM 94.1 FM-94
 GA Macon WCRY-FM 107.9 FM-108 Much of the
 IL Mt. Vernon trip I took

ME Lincoln K278AD 93.5 (was a KGBI 100.7
 Omaha NE translator, but station had
 opposition to that frequency in Lincoln;
 plans to reapply later for another
 channel in Lincoln).

TX Dallas KCHU *90.9. Telephone discon-
 nected to station and to Lorenzo Milan's
 home. Station has been off about three
 months; could not get enough local
 support for its way-out programming. MN
 and TX actions not official FCC
 deletions, but for all intents and pur-
 poses one may assume them to be
 permanently off the air.
 news in this month's column is from a
 car with SCA to central Texas and back.

WMMX 94

AM & FM RADIO

Withers Broadcasting Company of Illinois
 Post Office Box 1238/Mt. Vernon, Illinois/62864

Call Letters' Changes?

WMMX-FM 94.1 Stereo-94
 IA Des Moines KMGK 93-FM
 LA Baton Rouge WAFB-FM 98.1 Stereo-98
 WQXY 100.7 FM-100
 KS Hutchinson KSKU 102.1 U-102
 KY Paducah WKYU 93.3 The Q
 KS Junction City KJCK-FM 94.5 FM-94 APAudio
 MI Flint WJCK 105.5 105-FM
 MS Jackson WJLN 95.5 FM-95
 MS Natchez WGNZ Rock 95(95.1; end of Hit
 Parade for that station?) [IDer.
 MO Kansas City KBEO 104.3 no longer a non-
 NE Omaha KGOR 99.9; no longer a non-IDer.
 NY Buffalo WJOL-FM 104.1 FM-104; asks one
 reporter: "The price you have to pay for
 non-simulcast [with AM]."
 OK Tulsa KWEN 95.5 Queen Stereo 95.
 TN Chattanooga WDEF-FM 92.3 FM-92
 WOOD-FM 96.5 Stereo-96

TX Dallas KKDA-FM K-104; stereo resumed.
 TX Fort Worth KFJZ-FM 97.1 Z-97. Has a
 news SCA, consisting of the "Continental
 News Service," Texas State Network and UPI
 Audio. At about :07 each hour gives id's
 for stations relaying this service, in-
 cluding also KJCS 103.3 Nacogdoches TX.
 TX Fort Worth KFWD 102.1 FM-102, not just
 "102."
 PQ Montreal CITE-FM-2 107.3 never uses
 calls: just "city," and "cent sept"
 (one hundred seven).

Dual-City Identifications

IN Rockville WAXI 104.9 adds Clinton IN
 IN Vevey WAVV 95.9 adds Warsaw KY [KY
 KY Hartford WLLS-FM 106.3 adds BeaverDam
 NH Dover WOKQ 97.5 adds Portsmouth NH

Deletions

MN Blue Earth KBEN-FM 100.9 (necessary
 because KBEN-FM's owner bought KEEZ 99.1
 Mankato-Blue Earth MN)

KS Leavenworth 98.9 heard as KTRO? (Has
 been KCLO-FM). SD Sioux Falls heard as
 KVLK? (was KCHF-FM.)

Call Letters' Changes

AK Fairbanks *104.7 KUAC-FM (KUAC)
 AR Little Rock 98.5 KLAZ-FM (KLAZ)
 IL Highland Park 103.1 WVVX-FM (WVVX-FM)
 IL Zion 96.9 WKZN-FM (not WKZN); dual-
 city identification with Kenosha WI.
 IN Muncie *90.5 WWS
 KS Hutchinson 102.9 KHUT (KWBN-FM)
 MA Charlton 100.1 WBPV
 MA Duxbury *91.7 WDBY 1 NH Zuni *90.9 KSHI
 NM Gallup 94.5 KOVO (KGLP) 102.9 WBCS-FM
 NY Brooklyn *90.9 WKRK 1 (WBCS)
 NC Fayetteville *88.1 WFS5-FM (WFS5)
 PA Philadelphia *90.9 WUHY (WUHY-FM)
 104.5 WSN1 (WBGP-FM)

now mostly m, but some k; mk.
 AT Grande Prairie *100.9 CKUA-FM [FM4]
 AT Peace River *96.9 CKUA-FM5 (not CKUA-
 ON Sault Ste. Marie 100.5 CHAS-FM (CJIC-
 FM)

Facilities' Changes

AL Andalusia WMOG 98.1 100000 h,v; 250'
 AL Carrolton WAQI 94.1 100000 h,v(360')
 AZ Lake Havasu City KBAS 95.9 3000 (h),
 -295'. CA El Cerrito KFCO *88.1 adds v.
 CA Lompoc KLPC 92.7550 h,v; 710'
 ID Sun Valley KSKI-FM 93.5 2130' (51wh,v)
 IN Elkhart WMAX 184.7 460' (50000 h,v)
 KS Wichita KWHM *89.1 has no vertical
 KY Henderson WDOQ 99.5 480' (50000 h,v)
 ME Ellsworth WDEA-FM 95.7 8700 h,v; 990'
 MD LaPlata WATR 104.1 50000 h,v; 500',
 presumably deleting directional antenna.
 A Springfield WAOY 102.1 17000 h,v; 790'
 MI Plymouth WSDP to *88.1 (from 89.3),
 200 watts horizontal; 73'.
 MN Alexandria KXRA-FM 97.7 3000 h,v; 150'
 MN Grand Marais K295AW 107.1 to K288BE,
 105.5.
 MN Moorhead KWMB-FM 98.7 380' (100000 h,v)

FCC-FM

MN St. Cloud KCLD-FM 104.7 100000h,v; 460'
 MN Silver Bay K288E 105.5 in K296AM 107.1
 NC El Dorado Springs KESM-FM from 107.1 to
 105.5. MO Joplin K06E *90.7 has vertical.
 MO Sedalia KCBW 92.1 3000 h,v (280')
 NT Great Falls KOPR 106.3 750 h,v; 300'
 NH Conway W6NC-FM 93.5 1450 h,v; 410'
 NJ New Brunswick WMGQ 94.3 1000 h,v; 530'
 NC Raleigh WRAL 101.5 97000 h,v; 1890'
 OH Ashtabula WRFO-FM 97.1 has vertical
 OH Eaton WJAI 20000 h,v; 106'; gives up its
 application for much higher power and a
 transmitter move to serve Dayton in the
 face of FCC hearing; unfortunate!
 PA Erie WERG *89.1 3000 h,v; -125' (from 89.9)
 PA Philadelphia WRIT *90.1 890 h,v (400'),
 reduces coverage significantly—why?
 PA Starview WRHY 435 h,v; 700' (reduces its
 coverage somewhat); rp (from p); has Burk-
 hart-Abrams' "AOR" format.
 PA State College WTLR *89.9 10000 h,v; 450'
 SC Easton WELP-FM 103.9 2500 h,v; 330'
 SC Laurens W6XL 100.5 760' (100000 h,v)
 SD Aberdeen K0AA 94.9 100000 h,v; 1280'
 TN Jackson WKIR 104.1 100000 h, 83000 v; 660'
 TN Springfield WUHL-FM 94.3 306' (3000 h,v)
 TX Cooperas Cove K00V 103.1 2500 h,v; 320'
 TX El Paso KIEP *88.5 94000 h,v; 730'
 KSET-FM 94.7 91000 h,v; 740'
 TX Killen KNCT-FM *91.3 adds vertical
 TX San Antonio KSYM from *90.3 to *90.1
 TX Tyler KTYL 93.1 460' (100000 h,v)
 VA Richlands W6TH 105.5 450 h,v; 800'
 WA Spokane KXLY-FM 99.9 25000 h,v; 3030'
 WV Clarksburg W6HF 92.7 620 h,v (670')
 WI Janesville WJVL 99.9 has only 200'
 (20000 h, 18000 v).
 WI La Crosse *W292AB 106.3 changes primary
 station line W6WC *102.5 Madison to W6IO
 103.7 Ladysmith WI; becomes commercial (*).
 ON Belleville CJBQ-FM 97.1 to 50000 watts.
 ON London, all new station reported to be
 on the air on 97.5, 50000; 497'.
 PC Jonquiere, CHOC 92.5; Chicoutimi, CHUT
 96.7, CBJ-FM 100.9, and CBUE 107.9, all are
 changing their cities of license to
 Saguenay. "Saguenay" is the name of
 several combined cities in the area, and is
 to take effect early in 1978.

Stereo, to be Stereo, \$ Resumed

AR Springdale KCIZ 104.9; music on SCA
 GA Chatsworth WQMT 99.3, k
 ID Boise KJOT 105.1, m
 IA Cherokee KCHE-FM 102.3 (may have to move
 to 92.7 in a few months).
 KS Chanute K0SM 105.5; m; no network (was
 ABC-Information); music on its SCA.
 KS Iola K10L 99.3, NE Lincoln KUCV *
 MI Colmauer WANG 98.5, *91.3
 NE Wayne KTCH-FM 104.9, m
 NJ Morrisran WJSV *90.5, r
 OK Ardmore KRRO 92.1, k
 OK Henryetta KHEN-FM 99.5; no SCA.
 TX Dallas KKDA-FM 104.5, "K-104."
 TX Fort Worth KTCU *88.7; jr
 TX Marshall KMHT-FM 103.9
 WV Wheeling WPMI 98.7 rp (from k); *FM-99M
 WI Milwaukee WKWM *89.7 tj; Stereo to take
 effect along with move to 1500 (h); 870'
 around January 1, 1978.

Formats/Networks

AL Montgomery WREZ 103.3 m (from rock)
 AR Fort Smith KMGY 99.1 Y(ABC Contemporary)
 CA Bakerfield KGFM 101.5 k from m.
 GA Savannah WXLN 97.3 rp (from m)
 HI Honolulu KQMO 93.1 rp (not m); has
 Burkhart-Abrams' "AOR" service.
 IL Caldwell KBLX 94.1 m (from mg)
 IL Chicago WJEZ 104.3 k
 IL Mattoon WLBH-FM 96.9 m (from m)
 IA Clarinda K8XN 106.3 rj, \$
 IA Denison K0SN-FM 107.1 m (not nr); now
 operates on correct frequency, not illegal
 107.3 plus!
 IA Sheldon K1NA-FM 105.5 mc [nights]
 KS Great Bend KVGB-FM 104.3 m (m days r /
 KS Marysville KNDY-FM 103.1 r (from m)
 KS Salina KYEZ 93.7 ABC-FM
 KS Topeka KDVV 100.3 g (not m); "K-Gove".
 LA Baton Rouge W6HF 102.3 pr ME Portland
 LA Lafayette KSMB 94.5 rp WNGX 93.1 m
 MI Bad Axe W6LW-FM 92.1 m (from m); has
 separate musical programming from its AM.
 MI Caro WIDL ("Ideal Radio") 104.9 r.
 MI Detroit WDRQ 93.1 no UPI Audio.
 WWW 106.7 no ABC Contemporary
 MI Lapeer WTHM-FM 103.1 m
 MI Mount Clemens WBRB-FM 102.7 m (from nr);
 now separate \$ programming from its AM!
 MN Mankato KMSU *90.5 nr (from ms)
 KYSM-FM 103.5 k (from m)
 MN St. Peter KRBI-FM 105.5 m (from k)
 MN Windom K00M-FM 94.3 m; no stereo.
 MO St. Joseph KSFT 105.1 k (from m); *FM-105'
 NE Beatrice KWBE-FM 92.9 k (from m); *9-93'
 NE Fremont KHUB-FM 105.5 r (not nr)
 NE Grand Island *KROA 95.7 gc (from m); AP
 Audio (from UPI Audio); SCA has FX (talk-
 ing and teleprinter noise farm news); this
 station was bought by "KGBI 100.7 Omaha.
 NY Potsdam WTSC *91.1 p OK Bethany KJIL
 ND Mandan KNDR 104.9 gm 104.9 U, g; some m.
 OH Akron WDDO 96.5 gm (was progressive rock)
 OH Alliance WFAH-FM 92.5 m (from nr)
 OH Cleveland WGLC 98.5 no network (was A)
 OH Mansfield WCLW-FM 105.3 k; \$.
 WVND 106.1 EA. OK Nowata KNFB
 OH Middletown W6FB 105.9 g 94.3 L.
 OK Bartlesville KYFM 100.1 I; no SCA.
 SCAs Continued from following column:
 OK Pryor KKMA 104.5 no SCA; had live mono
 bluegrass music on main channel!
 OK Stillwater K0SH *91.7 no SCA
 OK Tulsa KBEZ 92.9 no SCA
 KRAV 96.5 no SCA, *FM-96"
 KMOG 97.5 no SCA
 KGFQ 98.5 music
 KKUL 103.3 talking book
 TX Dallas KAFM 92.5 no SCA (was ABC relay)
 TX Mt. Pleasant KPXI 100.7 no SCA
 WA Bellingham KISM 92.9 music
 WA Seattle KEUT 94.1 no SCA heard, except
 for occasional telemetry tones.
 WA Seattle KSEA 100.7 gospel (Mormon church
 readings heard 8 to 8:45 p. m. one night)
 OFF AIR: OK McAlester KNEO-FM 101.5: xmr
 problems; hopes to be on now with \$, m, A, H.
 TX Denison KGCC *89.7, but had been or re-
 cently; technical/personnel difficulties?
 TX Hillsboro KHBR-FM 102.5: xmr parts being
 shipped in; not sure when would be back on.

OK Durant KSEF-FM 107.1 m; music SCA; \$
 OK Okmulgee KLLS 94.3 kr (from m)
 OK Sapulpa KXOJ-FM 100.9 g (from m); EI
 OK Tahlequah KEOK 101.7 kr
 OK Tonkaaa KAYE *90.5 rk; some c; has v.
 SD Sioux Falls KCHF-FM (calls may be
 "KLVK") 93.5 rp (not m).
 TN Memphis WZXR 102.7 rp (from k)
 TX Dallas WRB-FM 101.1 UPI Audio [SCA
 KMGZ 102.9 r (from rg); music/
 TX Denison-Sherman K0SQ 101.7 "Q-102" r
 (from m); A (from E).
 TX Marlin KLMT 96.7 k (not kr); U; mono.
 TX Temple KPLE 104.9 U.
 TX Waco KEFC 95.5 gm (from r); no SCA
 VT Burlington WRUV *90.1 pj
 WY Lyndell WLYN 106.5 me (ethnic is 10 pm
 to midnight with East Indian programming
 aimed at Vancouver BC).
 WI Menomonie Falls WZMF 98.3 Y (from A)
 WI Milwaukee WATI 94.5 ABC-FM
 WI Sherbrooke CITE-FM *1 102.7 nr or nr;
 non-ID's as "City."

SCA (67kHz) News

IL Andalusia W0HO 98.7 program relay
 (presumably ABC radio networks)
 AR Fayetteville KXNA 103.9 music
 AR Siloam Springs K0UA-FM 105.7 no SCA
 IL Chicago W41B 97.1 ethnic (Chinese)
 IL E. Moline WEMO 101.3 no SCA; carrier
 only heard.
 IA Fort Dodge KKEZ 94.5 FX—talking and
 teleprinter farm news.
 IA Twin Lakes KTLB 105.5 no SCA heard
 KS Junction City KJCK-FM 94.5—talking
 and teleprinter farm news.
 KS Kansas City KUDL 98.1 no SCA
 KS Lawrence KAMU *91.5 talking book
 KS Manhattan KMKF 101.7 music; r on main
 channel exclusively; music nr.
 KS Pittsburg KMRJ 96.9 music
 KS Topeka W1WB-FM 97.3 no SCA
 KS Wichita KARU 107.3 FX—talking and
 teleprinter farm news.
 MO Princess Anne W0LC 102.5 music
 MN Pipestone KLOH-FM 98.7 has quit
 its ABC news relay; no SCA in use.
 MO Florissant KSGF 97.1 to have gospel
 MO Kansas City KCUR *89.3 no SCA heard
 KMBR 99.7 no SCA
 KPRS 103.3 PRN (Q).
 KBEZ 104.3 no SCA; not a
 non-IDer. MO Warrensburg K0MW *90.9
 carrier only. NE Omaha K0WH-FM 94.1 PRN
 (Physicians Radio Network); E on main
 channel, not ZE networks.
 NE Seward KSRD 96.9 talking book, picked
 up from K10S *91.5 Omaha NE.
 NY Jamestown W6UG 101.7 adds SCA
 NC Durham WDCG 105.1 Muzak
 OH Cleveland WZAK 93.1 no SCA (was WZAK)
 OH Johnstown W6WJ 103.1 adds SCA
 OK Edmond K0HP 97.7 no SCA
 OK Oklahoma City KEBZ 94.7 music (muffled)
 KFJL 98.9 music (fair)
 KAT1 100.5 no SCA
 KFNB 101.9 " " (*FM-102")
 KZUE 102.7 talking book
 KDFM 104.1 music (bright)
 OK Ponca City KLOF 99.3 no SCA.
 [Continues preceding column.]

HBSR-FM 102.5 Millersville PA, listed on the preceding page as being on the air. It is a full power, marginal operation when it is on the air, duplicating the AM exclusively and signing off as early as 6 p.m. (along with the AM), when FCC rules clearly require FM stations to stay on the air until 10 p.m. local time. Abbreviations used in this column:

C classical, G gospel, H jazz, K country, M Middle of the Road, P progressive rock, R rock, RP rock and progressive, or "album-oriented" rock, S small station, N network, A ABC, B National Black Network, C CBS, F ABC Entertainment, I AIC Information, M Mutual, N NBC, P National Public Radio, S Associated Press Audio, U United Press Audio, V ABC Contemporary, Z Mutual Black; G is Physician's Radio Network (SCA exclusively). \$ is stereo; * noncommercial station; xtr is transmitter; vertical polarization is abbreviated "v"; horizontal polarization is "h." Powers given are effective radiated in watts (not kilowatts) and antenna heights are above average terrain in feet (hopefully meters exclusively in the near future). Readers Reports:

KXIQ 94.1 Bend OR may suffer a reduction in height if its plans to combine locations with **KICE** and **KTVZ**-channel 21 materialize, says Frank Aden. Reacting to John Ebeling's survey of stereo FM stations carrying monaural sports events in "stereo," Phil Boersma, who works at **WFMG 92.1 Grand Haven MI**, says: "It is probably not possible for some stations to turn off their stereo generator. At **WFMG**, . . . the STL has no provisions for turning a stereo generator on or off that I know of, so our football games come to you live and in pseudo-stereo." **WFMG** has a crack in its transmission line, resulted in leaking gas, with a "terrible low-pitched hum on the carrier." **Grand Valley State College**, licensee of **WSRX 88.5**, has plans to apply for a 50,000 watt educational FM, which in 1-2 years would replace **WSRX Allendale MI**. **Akron's Dave Grim** says: "The increasing practice of raising height/decreasing power has been questionable. . . **WQALs** [Cleveland] signal is more stable in Akron and will certainly help in some hillier areas but the signal is noticeably weaker in the car," implying the same could happen at **WMMS 100.7**, which is going the same route. "Maybe other DXers could comment."

WCML-FM *91.7 Alpena MI [xmtlr Atlanta MI] will soon be on in \$ with 100000 h,v; 1170'. A funny FM dial expansion put in the "Real Paper" by **WEEI-FM 103.3 Boston**, includes calling **WTK 100.7 progressive hillbilly**, **WROR 98.5 Doo-waa**, Doo-waa, and **WJIB 96.9**, I left my Heart in Des Moines.

Walter Patton does not believe **CBOB-FM 100.3 Brockville exists**. "The need for the station would appear to be marginal as the signal from Kingston travels well east of Brockville. A local station break for **CKCW-TV** in New Brunswick inadvertently fed to the network was advertising for a new "stereo 101" to begin in early November (?). The Canadian National Association for the Blind has been holding talks with the CBC with the intent of introducing programs for the blind on their SCMO subcarriers. Notice the lack of call letters in this CBC promotion (plus a bonus portion of **WEEI-FM's** dial card).

CBC STEREO 93.5

CBC Radio's AM Service is heard at 104.7 on the FM dial in Quebec City.

The Quebec Community Network: Weekdays from six to nine, Quebec A.M. is heard on the 21 stations of the Quebec Community Network, from Rouyn-Noranda to the Gaspé and from James Bay to Schefferville.

107.9 Chicoutimi
109.1 Fort George
106.1 Nouvelle-Comptoir

A nonprofit group has been formed in Kansas City MO to start a community-access FM station there. They have an antenna donated by **KUDL-FM**, and hope to move some 10-watters off their channels to make spectrum way for themselves.

Marv Robbins in FL says "I still belong to **WTFDA**, but only get time to read your column and not much else. Always interested in the changes taking place in FM. Too bad there isn't much variety on FM here—seems as if the good music stations are going to rock. . . All use slogans now: **WQYK 99.5 Tampa** is "K-99," **WRBQ 104.7 Tampa** is "Q-105," etc."

W. T. Ryan tried out his new **Karkota SCA** adapter on CFMS just as their main channel was advertising their "golden sound" music service. "I pushed in the tape monitor button and background music appeared! The May, 1971 **Electronics Illustrated** had an article about building an SCA adapter using a **CA 3023 IC**; perhaps the **CA3039E** is an improved version of that. **Budget Electronics (Electronics Hobbyist** in the U.S.) has a construction article for a "Super Soother" SCA by **Herb Friedman**, using two ICs, an **NE531T** and an **NE565A**. Also, the 1978 **Electronics Experimenter's** handbook has an article about phase-locked loops, including a circuit for an SCA decoder. **KRAB Seattle's SCA** has the best sound with its **Radio Cadena**, Spanish programming. . . I'm getting rather blasé about that adapter already. Anytime I want SCA, I just push in the tape monitor button and those mystery stations appear." **Heard testing: WBT 101.7 Attica (Batavia) NY**. On with a good \$!gal: **K272AK 102.3 Davenport IA**, translating **KUNI *90.9 Cedar Falls IA**. Contributors this issue: **Frank Aden**, Bend OR; **Phil Boersma**, Spring Lake MI; **Jim Cumbe**, Dallas TX; **Michael Davis**, Durham NC; **Pott. Fishner**, Fairbanks AK; **David Grim**, Akron OH; **Nick Lombardi**, Atlanta GA; **Walter Patton**, Montreal PQ; **Dave Romero**, Tampa FL; **David Reeder**, Joplin MO; **Les Purr**, Warren MI (who has temporarily left DXing until he gets more settled to Detroit life; his phone no. is 313-757-4498); **J. Robertson**, Crosswell MI; **M. Robbins**, Temple Terrace FL; **W. L. Ryan**, Victoria BC; **Mike Scheel**, Davenport IA; **Ker Simon**, W. Palm Beach FL; **Andy Smith**, Fayetteville MO; **Paul D. Traska**, Buffalo NY; **David Williams**, Morristown NJ (who announced at **WJSV 90.5** there; its on 11-10 weekdays and 4-10 on weekends), plus a person who did not sign his name but supplied much southern Wisconsin FM news from an address in Germantown WI.

The manager of **KPCG 102.5-Joplin MO** says he enjoys FM DXing, and hopes to have some QSL cards printed.



the Gospel Music Station

P. O. BOX 212 JOPLIN, MISSOURI 64801
(417) 791-8800

WBCN

Stop the War Now

Bonzo Dog Band, Electric Prunes, Country Joe MacDonald

WEEI/FM

Honest Soft Rock
Stevie Wonder, Carly Simon, Janis Ian, The Eagles

WCRB

Symphony
Cleveland Symphony, London Symphony, Cleveland Symphony

QSL CORNER

Thomas J. Vingling, Jr.
221 Pinewood Road
Baltimore, MD 21222
Phone # 1-301-282-5649
Deadline: 10th

- ON CJRT 91.1 Toronto, 297 Victoria St., M5B 1W1. Letter from K. Poling, Eng dept. Zank.
AL WRES 105.7 Troy, P.O. Box 708, 36081. Friendly letter & coverage map from R. E. Shelley,
Owner, in 1 week. Lowery.
WTVV 95.5 Dothan, P. O. Box 1089, 36301. Brief letter, 2 maps & business cards from
Jim Powell, PD in 3 weeks. Lindblade.
FL WQXQ 101.9 Dayton Beach. Dick Clark, Executive Vice Pres. writes, saying "To the best
of my knowledge, your letter represents the furthest distance was ever
heard" Letterhead shows AM calls, WMFJ & FM freq. but no fm call. Elving.
WJLQ 100.7 Pensacola. Gordon Towne, VP & GM writes on a unique letterhead that held
one way is for WJLQ, Q-100 & flipping it upside down is WCOA Radio-13. Elving.
GA WABE 90.1 Atlanta, 740 Bismark Rd NE, 30324. Letter from Van Joyner, PD in 5 weeks,
"...it boggles my mind to know that our signal was being received in
Canada, while some listeners in a thirty mile range complain that their
reception is not so snuff. Sawatzky.
IL WQFL 100.9 Rockford, 5500 E. Riverside Blvd, 61111. Letter in 5 months from Dwayne
Walker, W9NPAF, "I share your pleasure in DX work, probably more so in
the tv-fm bands than in the amateur radio bands. Sawatzky.
IA KSEZ 97.9 Sioux City, Box 177, 51101. Letter signed by Gerry Gibbs, CE. QSL was a
copy of a prepared QSL, but had note type to me on bottom thanking for
tape. Report for 6-10-77 arrived 6-25-77. Aden.
KY WLRS 102.3 Louisville A long-delinquent station, with verification from David C.
Burns, CE. Letter says "LRS-102" with no mention of a "W". Elving.
WVKVQ 93.3 Paducah, 218 N.6th, 42001. Letter from J. B. Fowler, CE in 5 days. "We
have received other reports from your country in the past, but under the
conditions you described." (meteor scatter) Coverage maps also. Sawatzky.
LA WWL 101.9 New Orleans, 1024 N. Rampart St, 70176. Letter from Hugh R. Burney, Dir of
Tech Services "Congratulations! This is the finest report on fm received
by us." Sawatzky.
WQUE 93.3 New Orleans, 1440 Canal St, 70112. Letter & sticker in 16 days from Larry
Getz, VP & GM. "I believe that your report is the most distant one we've
received." Sawatzky.
ME WPBC 92.9 Bangor, Box 1105, 04401. Letter from Donald S. Winslow, CE in 6 weeks.
"...our best dx report..." WPBC went on the air 6-9-76 & I caught them
on 6-16-76. Sawatzky.
MN K5JR 90.1 Collegeville, 56321. Send letter signed by Mark Killiam, Station Manager.
Mentioned received a report from Baltimore (?) (that was me, ed.) QSL
received June 23 for June 11 report. Aden.
K5JR 90.1 Same as above, only he says "I have received another report of someone
picking us in Bend, Oregon around the same time you reported us in
Maryland! Reply in 11 days. Vingling.
W5CD 92.9 Duluth, College of St. Scholastica, 55811. Letter from Alan Searle in 3
weeks. Station is a member of Minnesota Public Radio. Vingling.
KXRA 92.7 Alexandria, 56308. Letter & map from Wendell Sowers, CE. This was my
first Minnesota fm qsl'ed. Vingling.
NM KOPE 104.9 Las Cruces, Drawer X, 88001. Letter signed by Bill Bohart, PD, said if
I'm ever in Las Cruces to stop for a tour. Aden.
ND K5JB 93.3 Jamestown, P. O. Box 600, 58401. Letter from Harvey G. Van Eren CE.
in 2 weeks. Walker.
OR KOAP 91.5 Portland, Oregon Educational & Public Broadcasting Service, Box 1097,
97207. Letter & bumper-sticker from Bob Roberts, Producer/Announcer
& Bob Morris, Eng Dept. in 22 days. Samford.

Reporters are Neil Zank, Lincoln, NE; Grey Lowery, Cadwell, GA; Rolland Lindblade of Omaha,
NE; Bruce Elving of Duluth, MN; Peter Sawatzky, Waterloo, Ont; Frank Aden, Bend, OR; Bob
Walker, Westport, KY; & myself Tom Vingling. This was an all FM QSL month with alot of
states reported. I found some more reports that have not used, so I still have more to
use. I would like to thank all reporters for there support with this column. It looks
good to have a full page each month. Good news here for me, at work I got a promotion.
73's and good dx.

Tom

NEXT MONTH'S GALA TENTH ANNIVERSARY ISSUE IS NOT TO BE MISSED...NOR IS THE
NEW, EXCITING FACE OF THE VUD UNDER THE EDITORSHIP OF FRANK ADEN, STARTING
IN FEBRUARY. DON'T MISS OUT ON ALL OF THE 1978 EXCITEMENT! RENEW NOW!!

FM IN YOUR CAR

PART 2

In the previous CAR FM feature, we discussed FM reception and antennas. This last article will cover the most important subject, the receiver itself. Five major topic areas will be examined: major receiver qualities, set categories, special receiver features, accessories and buying your FM radio.



Major Receiver Qualities

In this section, we will cover some of the more important performance qualities that an FM auto radio should have and will examine a few of the descriptive terms used to define radio operation.

Sensitivity. Because receiver sensitivity is rather easy to measure, it has been given tremendous importance by manufacturers. Superficially, it appears that a more sensitive radio will pick up more stations or will hear stations that are farther away. This might be true if there were only one station on the air; however, in today's crowded FM band other factors are equally important. To add to the confusion, auto radio manufacturers use several different measures of receiver sensitivity: limiting, quieting and IHF. Although related, these are not the same thing; and comparisons are misleading unless the same types of measurements are used.

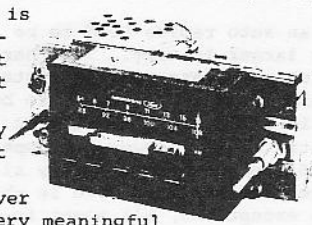
Selectivity. One factor having a heavy influence on receiver sensitivity is selectivity. Selectivity describes the ability of a receiver to reject unwanted signals. This occurs both in the receiver front end and the IF section. What we are primarily interested in at the moment is the IF since it provides most of the radio's selectivity. Because an overly narrow IF bandwidth creates distortion and stereo problems, receivers are not designed to provide much rejection of the adjacent channel (± 200 kHz). Numbers of 6 to 20 dB are practical; and, fortunately, stations at this spacing tend to be far away and weak. Two channels away (or ± 400 kHz) or farther, high selectivity is desirable and necessary. Only a few minutes study of the FM Atlas will convince you why this is so. When you consider that an auto radio can easily be driven by a station's transmitter that you don't want to hear, a good case can be made for even better rejection in the car set as opposed to a home set that never gets subjected to this condition. Rejection of 80 dB or more is practical and almost essential.

Capture Ratio. Capture is the ability of an FM receiver to ignore the weaker of two signals. The better a receiver's capture ratio (smaller number), the better it will listen when interfering stations (on or off channel) are present. Capture ratios of 2 dB can be considered average or good. Anything around or under 1 dB is excellent.

AM Rejection. During the process of multipath distortion, as was explained in Part I, an FM signal becomes both phase and amplitude modulated. These are the cause of the audible distortion. Since FM receivers inherently respond to frequency or phase changes, little can be done about that part of the problem; however, an ideal FM receiver does not respond to amplitude changes at all. In this regard, AM Rejection shows how close to ideal a particular radio is. Unfortunately, manufacturers seldom provide much information about AM rejection (or capture ratio, either). What you usually

get is a measurement at a single signal input level or some kind of average. You might even be the suspicious type and think that the level used is the one giving the best results! What is really needed is a curve showing AM rejection (and capture ratio) versus input over the 1 to 100 uV area. Obviously, the higher the AM rejection the better the set is. An additional benefit of both AM rejection and capture is in the radio's ability to suppress ignition noise, both yours and the other guy's.

Overload Rejection. Most people don't realize how easy it is for the designer to make his receiver have high sensitivity. (Read that over several times!) The real challenge is to design one that will also handle strong signals and yet not sacrifice sensitivity. While it is true that only a small percentage of the average listener's time is spent close to transmitters, the noises associated with overload are among the most annoying. When trying to enjoy one station, it is very frustrating to have one or more other stations suddenly pop in. Unfortunately, you can buy a receiver or tuner and find that the most expensive one is still severely overloaded; but the degree of severity is certainly a good measure of receiver quality. You will probably find little that is very meaningful in the way of overload specifications provided on receivers since the test procedures are not very standardized. Some of the important terms you may see are spurs (spurious responses), image rejection and IM (intermodulation) rejection. In all cases, the higher the numbers the better the radio; but be cautious of comparing different brands since the measurement method is probably different. A little later on in this article we will describe some receiver features that help to lessen overload.



Categories of Sets

Because of different design philosophies and marketing strategy, it is useful to categorize FM auto radios by their country of origin. Almost all the radios available come from Japan, Europe or the U.S.

Japan produces the widest variety of sets and aims mainly at the lower end of the price range. Performance is, therefore, the most variable in Japanese products. Radios tend to be small in size so as to fit the greatest number of different cars. While small size is not necessarily a penalty, it does restrict the designer's options in making a quality receiver. The fact that Japanese sets often include a tape player does imply crowding of radio circuits and almost inherent lower quality. On the other hand, Japanese receivers offer the greatest variety of types and features.

A fairly recent trend in Japanese receiver designs is to copy the fronts of U.S. original equipment sets. These radios are then sold through dealers. Many people are not even aware of what they are getting and think they have an original equipment radio. More about this later.

Typical Japanese radio manufacturers include: Panasonic, Audiovox, Boman, Pioneer, Automatic Radio, J.I.L. and Motorola.

European FM sets primarily show up in their exported cars and are mainly modified versions (altered frequencies and bands) of radios sold there for their considerably different radio systems. Because European stations tend to be located away from populated areas, reception there tends to be fringe. For this reason, European receivers tend to have high sensitivity. This almost always implies lessened overload performance. While these radios are likely to be good performers here in rural areas, their performance will not be as

favorable in our cities. The closer European frequency spacings require their radio designs to have narrower IF selectivity, and this tends to degrade stereo performance to some degree. While the overload characteristics and narrower selectivity problems might make these radios less desirable for the general listener, the DX-er might find them quite suitable for the same reason. The major European radio manufacturers are: Blaupunkt (Germany), Becker (Germany) and Philips (The Netherlands).

U.S. auto radios are almost exclusively manufactured by the major auto companies themselves. G.M., Ford and Chrysler each have separate radio divisions: G.M.'s Delco Electronics Division, Ford's Electrical and Electronics Division and Chrysler Electronics. Motorola, in addition, makes some radios for Ford, Chrysler and American Motors.

As a group, American auto radios tend to be larger in size than foreign sets since our cars are larger in size. This has allowed for greater ease of automatic assembly which is necessary to compete in price with foreign labor that costs much less. Receiver designs tend to be of very high quality and stress deluxe and automatic features especially in the AM/FM and stereo sets. For this reason, domestic radios occupy the upper middle portion of the price range. Because U.S. radios are virtually all original equipment, they are styled to match the particular vehicle in which they are installed. With perhaps only a few exceptions, all mount in-dash.

The second means of categorizing auto radios is by features other than FM. There are, of course, sets with no FM; but we will ignore them in this article. On the other hand, virtually all FM radios do include AM. In addition to AM tuning, the other major features include:

1. Manual Tuning
2. Pushbutton Tuning (with manual)
 - a. buttons shared between AM and FM
 - b. buttons select different stations on AM and FM
 - c. miscellaneous (buttons used for AM/FM selection, etc.)
3. Electronic Tuning/Signal Seeking
4. Tape Players
 - a. 8-Track (stereo and 4-channel)
 - b. Cassette
5. Tape Players/Recorders (Cassette only)
6. CB Transceivers *
7. Digital Clocks
8. Shortwave Bands

In addition to the above full feature radios, there are at least two other types. The FM converter can be connected to an existing AM radio to allow for FM reception. Since converters are very low in cost, their performance is virtually guaranteed to low in quality; and they should not be considered by the serious FM DX-er. The other type is the separate FM tuner which can be mated with an auto sound system of your own choice. Since only a few of these are currently available, your choice is likely to be very limited. One system worth special mention is that made by ADS which can include a synthesized FM tuner, high power amplifiers, two-way speakers and a top quality cassette player/recorder (by Nakamichi).

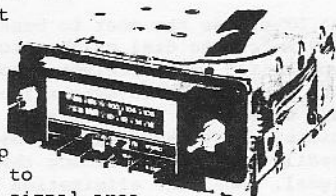
Special Receiver Features

In this section, we will discuss several receiver designs or features that will be of interest to the FM DX-er; however, the general listener may find these attractive, too.

Local Distance Switch. As stated earlier, overload is a serious nuisance to reception in many cities; and methods for reducing this problem have long been sought. The Local/Distance switch found on some radios is one attempt to do

this. Overload testing of receivers has shown that simply reducing the signal level at the input of the radio will help the overload problem. Unfortunately, signals likely to be bothered by overload are weak and will only become weaker in the "Local" mode. However, if the signal reduction is only a small amount, a highly useful compromise can be reached since it is much nicer to listen to a slightly noisy signal rather than one that may be stronger but frequently is interfered with. Looking at the Local/Distance switch from a different angle, it is fair to say that some receiver designs are more in need of help than others. Since L/D switches are more often found on low-price, lower-performance sets, one might suspect that in all cases one implies the other. This would be a dangerous generalization, but it would be reasonable to expect the designer of a more expensive product to do a better job.

Certain Ford and G.M. radios incorporate a feature that may be considered an automatic Local/Distance switch. This turns out to be a very useful compromise as radio sensitivity is adjusted in relation to the strong signals being received at the moment rather than just two positions as in the manual variety. While the problem of overload is not solved, break-in interference is greatly reduced making listening quality much more pleasing. The automatic feature also means that the user is not bothered by having to flip a switch when overload occurs nor does he have to remember to reset it when he leaves the strong signal area.



The G.M. set pictured in this paragraph is the one having this feature. Note the similarity of the radio on the first page of this article, which happens to be an after-market "equivalent."

Automatic Stereo Blend. The same models of G.M. radios having the automatic L/D circuits also have an automatic stereo blend. As the signal being received gets weaker, stereo separation in these radios is smoothly reduced from full stereo to mono. The abrupt stereo/mono switching found in many radios is thereby eliminated. Since this transition can be every bit as annoying as noise, the improvement in listening quality is quite evident especially in areas of rapid signal flutter.

Ignition Noise Blanker. A few radio models (notably Philips) include an impulse noise blanker which greatly reduces the annoyance of ignition noise. While not a substitute for good vehicle noise suppression, this blanker does make reception noticeably cleaner and more enjoyable.

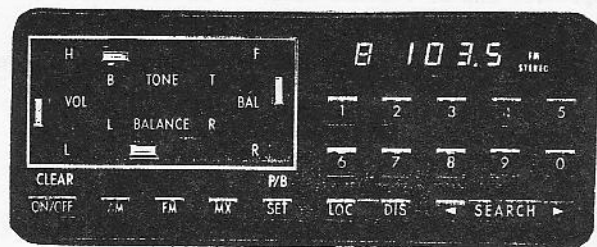
Digital Dial Radios. Of all radio listeners, the DX-er has the most to gain from the introduction of the digital dial receivers. G.M. introduced a combination digital radio/clock in their 1977 cars, and both G.M. and Chrysler now have some exciting new models in the 1978 cars. In these sets, both FM and AM frequency are displayed with full digital accuracy. If you've cursed at the accuracy of the mechanical pointer and dial, your troubles are now over. No more guessing at frequency, and you even have a digital clock to log by!

G.M.'s 1977 version (also available in 1978) uses a counter to measure both AM and FM oscillators and converts that to receiver frequency. Otherwise, this radio works in normal fashion with both push buttons and a manual tuning knob. (This same radio also has the automatic L/D switch and stereo blend systems described above.)

The 1978 designs offered by Chrysler and G.M. go one step beyond. These are frequency-synthesized radios. Tuning will be completely controlled by digital circuits with precise accuracy. The advantages of this tuning method are quite numerous. The inaccuracy of mechanical tuning is eliminated as is the mechanism needed for signal seeking. Other electronic tuning systems such as scanning and memory become fully feasible. The G.M. synthesized radio looks

much like a conventional radio in that it has a rotary tuning control and push buttons for station selection. Tape player and digital clock features are also included. The Chrysler synthesized radio is a total departure in styling. Its control panel is pictured below. Frequencies may be entered digitally from a keyboard or scanned automatically by a Search control.

No manual tuning knob is provided or necessary.



And, while the probable cost of these radios will limit them to only the more affluent DX-er or radio purchaser, they represent a probable direction for receiver designs to come that will be affordable by all of us.

The DX-er has the most to benefit. Gone will be the days of frequency drift and inaccurate dial calibration. Those of you who have been able to afford synthesized home receivers probably have some thoughts on the matter that run both pro and con to synthesized tuning. The main factor is the inability to tune off-center in reaching a weak station next to a strong one. It is very possible that there may be some compensating factors in the car. The car can readily be moved to reduce the unwanted signal's strength or favor the weaker signal. And, the elimination of AFC (automatic frequency control), which is needed on the usual auto FM set to improve tuning feel and reduce frequency drift, may make center channel tuning a big improvement. Clearly, it will be necessary to try these radios and find out.

Accessories

Since we've already covered antennas in Part I of this series, the only remaining accessories left are preamplifiers and speakers.

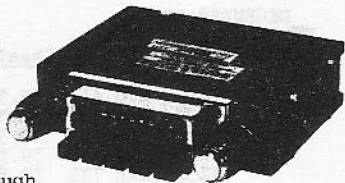
Preamplifiers. Intended to go between the antenna and radio, the preamplifier is simply an untuned amplifier. A long-winded argument can easily be conducted on the merits of these devices so instead let's just settle for some quick pro's and con's. The gain provided by a preamplifier could very easily have been put in the radio in the first place; and a radio needing this kind of help is not really DX equipment in the first place. On the other hand, should you be stuck with a particular radio for some reason and it lacks sensitivity, a preamplifier might just make the difference in sensitivity you need. But, be forewarned that receivers get much of their overload performance from tuned circuit selectivity, and an untuned preamplifier cannot possibly help you in strong signal areas.

Speakers. Auto radio speakers range in size from about 3 inches to 8 inches in diameter and include irregular shapes such as 6 X 9 inch oval. Compared to the 15 inch speakers some of us have at home, this sounds pretty spartan.

But, if you dig into the inards of your car and look for places to put speakers, you'll probably conclude that the designer did a pretty good job in getting in what he did. Fortunately, the car is a fairly good environment for sound. Car surfaces are mostly quite reflective, and sound can be made to penetrate the entire car with little trouble. And, speakers placed close to the ear act something like headphones. There are probably few of us who haven't heard the startlingly real sounds that those devices can produce. On the other hand, the noise environment of the car (even the ones advertised to be quiet!) makes it unlikely that you'd be able to hear the extended highs or lows that might result if you could find space for your home speakers in your car. For those who don't agree, several speaker manufacturers are now offer-

"hi-fi" speakers for the car. If the idea sounds attractive to you, be sure that you make a side-by-side comparison with your existing speakers on similar program material before you buy.

Speaker locations have quite a bearing on sound quality. Ideally, they should be located where they radiate directly at your ears without the sound being absorbed by the seats or your body. The front or top of the dashboard and the rear package shelf are the preferred locations. The top of the front door is also fairly good although sound from this position does not reach the rear seat quite as well. Mounting on the bottom of the doors or the kick panel underneath the dashboard results in sound that is muddled by the upholstery or the passengers themselves before it can be heard.



Buying Your FM Radio

There are FM auto radios to suit almost any budget. Prices range from under \$20 to over \$1000. Converters cover the low end of the price range; and one very elaborate remote-controlled radio/cassette recorder model for the Mercedes-Benz is in the \$1000 price class.

Auto radios are most generally bought in one of three ways: from the dealer as part of a new car, from a discount house for your own installation or one of the specialty shops that both sell and install. Should you compare prices, be sure that you include the cost of all items needed to make the radio work in your car. This includes the radio itself; an antenna; speakers; noise suppression parts required for your particular car; and any installation costs for the radio, antenna, speakers and suppression hardware. It would be wise to "test drive" a radio of the type you plan to buy to make sure that it suits your needs. Consider also the dealer's warranty plan for the radio. Some will have their own repair facility or can refer you quickly to a nearby one. The most desirable arrangement is for the dealer to merely exchange radios with you when problems occur within the warranty period.

One word of warning: When considering buying from a car dealer, be aware that some dealers will install either factory or after-market sets (usually a Japanese variety looking much like the factory set). Since the after-market set probably costs him less than the factory set, you should expect either a lower price or a factory set if no reduction is offered. If you are considering a hang-on radio to go below the dash, check first with your insurance agent to see if such an installation will be covered.



We do hope that this series of articles has provided something of interest to you whether you are on the



verge of buying FM for your car or are now on your tenth set.

As mentioned back in Part One, we would be happy to try and answer any questions this series has generated. Your question and answer will appear at a later date in VUD for the benefit of all readers. Send your questions to: VUD Editor, Clarke Ingram, 5201 Colewood Drive, Pittsburgh PA 15236. 73 and good listening.

NEXT MONTH: WTFM...S SPECTACULAR TENTH ANNIVERSARY ISSUE, FEATURING CLASSIC MATERIAL FROM VHF-UHF DIGESTS OF THE PAST. INCLUDED WILL BE AN EXTENSIVE "DX BIBLIOGRAPHY"...A LOOK AT "WHAT IS NORMAL FOR TV-FM DX"...ALL-TIME DISTANCE RECORDS FOR TV-FM...AND MUCH, MUCH MORE. THERE NEVER HAS BEEN, NOR WILL THERE BE, ANOTHER ISSUE LIKE IT. BY ALL MEANS...DON'T MISS YOUR COPY! RENEW NOW!



HF UTILITY DX

Pat Dyer
5315 Silvertip Drive
San Antonio, TX 78228
Deadline: 10th of month

DECEMBER 1977

Hank Holbrook, 7211 Chestnut St., Chevy Chase, MD 20015 QSLed, GMT used

<u>6-26:</u>	2045, KSG 461	42.38	Wausau, WI (State Patrol, 200', 150 watts)
	2047, KRB 464	42.38	Wittenberg, WI (S. Patrol, 160', 120 w)
	2047, KSB 432	42.38	Tomahawk, WI (S. Patrol, 280', 330 w)
<u>7-4:</u>	0127, KAD 966	39.58	Lyndon, KS (County Sheriff; 65', 100 w)
	0131, KAD 731	39.58	Cottonwood Falls, KS
	0133, KBU 520	39.58	Emporia, KS (sheriff, 100 w)
	0134, KAG 731	39.58	Seneca, KS
	0134, KAB 248	39.58	Ottawa, KS (County Sheriff)
	1626, XJB 226	42.06	Marathon, Ontario (Prov. Police; 603 w)

Martin J. Theil, 12 Princeton Dr. E., Holiday, FL 33589 Oct loggings

KDF 528	154.400	Clearwater, FL-f	KGB 839	33.94	Pasco, FL-f
KUN 498	154.445	Clearwater, FL-f	KIA 653	154.22	Tampa, FL-f
KFG 602	154.130	Hillsboro, FL-f	KFG 602	154.175	Tampa, FL-f
Clearwater pagers: 155.400, 152.240, 152.480 (KGB 921); 152.005.					
490.712	St. Pete. (WLCY)	487.750	Tampa (WUSF)		
170.15	New Port Ritchey (WGUL)	161.75	Winter Park (WPCV)		
152.540	St. Pete. (WSUN)				

"Am 6 ft above sea level ... and 4 blocks from TV Ch 10 tower 500' ..."

Now, my loggings. Hallicrafters SX-62, Hammarlund SP-600-JX-10; two 30' long wires at 12' run ne-sw & nw-se; all F2 unless noted with daily MUF's noted; bs-backscatter; t-tentative; new underlined; GMT used VOR's on Heathkit GR-98 with 6-el FM antenna at 20 ft with rotor

<u>10-11:</u>	2058, 38.85	<u>20:</u>	1600, 40.24	<u>30:</u>	1959, KEE 873
	2115, 30-32 US		1850, 31 1/2 US		2012, KEJ 451
<u>12:</u>	0004, AFRTS t	<u>21:</u>	1815, sol.noise		2015, KOA 796
	0013, KLF 527		2015, 38.29		2019, KUA 288
	1614, low-43		2027, 33.90 US		2027, KOK 418
	1759, KBZ 283		2317, KLF 527		2029, KCE 816
	1803, KCE 581-t	<u>22:</u>	1808, KLF 527-t		2030, <u>KRX 455</u>
	1806, KCB 897		1915, mid-30 US		2032, KCD 472
	1818, KCA 633		2012, 37.57		2034, KCA 611
<u>13:</u>	1635, 30.42 Can	<u>23:</u>	2030, 35.28		2039, KBZ 283
	2026, 37.57	<u>24:</u>	1755, 30.42		2055, <u>KCD 411</u>
<u>14:</u>	1955, hi-31 US		2045, 36.15		2059, KCA 695
	2003, 37.57	<u>25:</u>	2100, 35.28		2100, KFS 33.78
<u>15:</u>	1849, KKV 690 bs	<u>26:</u>	2030, 36.35		2103, <u>KBB 990</u>
	1854, <u>6WW</u>	<u>27:</u>	2015, 35.88		<u>KCA 585</u>
	1856, 38.85	<u>28:</u>	1328, KIM 905 (Es)		2105, KFS 34.05
	2028, <u>KSS 922</u>		1329, KGA 805 (Es)		2112, " 34.37
	2100, KCA 695		1442, KCA 585		2115, KPH 34.17
	2119, KCA 585		1710, "PNT" (Es)		2140, KOP 303
<u>16:</u>	1833, 30.42 Can		1712, "ISPI" (Es)		2155, KCC 825
	2120, 37.57		1945, 40.52		2205, KLF 527
<u>17:</u>	1810, 6WW		2140, KLF 527		2225, KSV 810
	1839, hi-33 US	<u>29:</u>	1830, 35.78	<u>31:</u>	1800, 30-32 US
	1930, 40.85		1855, hi-33 US		1930, 32.96
	2328, KLF 527		2223, KLF 527	<u>11-1:</u>	1930, mid-30 US
<u>18:</u>	1845, 30-32 US	<u>30:</u>	1916, KCD 353		2100, 35.28
	2020, 47.42		1921, KCC 672	<u>2:</u>	1940, mid-30 US
	2239, KLF 527		1924, KCD 244		2215, 35.78
	2315, KKV 690 bs		1930, KCA 378	<u>3:</u>	1800, 31 1/2 US
<u>19:</u>	1650, 31 1/2 US		1927, 35.90 US		2110, 35.78
	2010, 41.62		1933, KCC 957	<u>4:</u>	2105, KOH 894
	2122, KLF 527		1937, KLU 346		2139, KSV 810
	2343, OK City bs		1942, <u>KCB 897</u>		2150, 38.97

4: 2119, KOP 303	7: 1710, KKV 690 tr	10: 1749, KCA 585
2133, " 35.62	1730, 30.42 Can	1759, R. Canada
5: 1700, 31 1/2 US	1755, 35.88	1800, KJR 354
1903, 36.45	8: 1855, 30.42 Can	1808, KOP 303
6: 1655, 35.58 bs	1920, 38.76	1937, 45.42
1715, 31 1/2 US	9: 1715, 31 1/2 US	11: 0159, KAA 893 (Es)
1905, 35.28	1820, 35.28	

also some 30.21 and 30.52 BBC harmonics likely from the Ascension Is. relay; details hopefully later

APRTS 30.66	Delano, CA-ha	KEJ 451 33.78	Toms River, NJ-cf
KAA 893 35.22	St. Louis, MO-tp	KFS -----	Palo Alto, CA-hac
KBB 990 33.54	S. Deerfield, MA-f	KGA 805 35.22	Pittsburgh, PA-tp
KBZ 283 33.90	Orford, NH-rf	KIM 905 35.22	Charlotte, NC-tp
KCA 378 33.78	New Haven, CT-f	KJR 354 33.90	Seattle, WA-f
KCA 585 33.90	Plymouth, MA-f	KKV 690 35.62	Houston, TX-tp
KCA 611 33.90	Carver, MA-f	KLP 527 35.22	Honolulu, HI-tp
KCA 633 33.--	Middleboro, MA-f	KLU 346 33.78	Manchester, NJ-f
KCA 695 33.78	Manchester, NH-f	KOA 796 35.58	Portland, OR-tp
KCB 897 35.66	Portland, ME-mp	KOH 894 33.70	Winslow, WA-cf
KCC 672 33.94	S. Windsor, CT-f	KOK 418 35.46	(west)-mp
KCC 825 33.70	Kennebunk, ME-f	KOP 303 35.46	Langley, WA-mp
KCC 957 33.70	Bethel, CT-f		"
KCD 244 33.70	Falmouth, MA-f	KPH -----	Bolinas, CA-hac
KCD 353 33.70	Lancaster, MA-f	KRX 455 33.48	Highland, NY-f
KCD 411 33.94	Unionville, CT-f	KSS 922 33.10	Ipswich, MA-amb
KCD 472 33.94	Windsor Locks, CT-f	KUA 288 35.22	Portland, OR-tp*
KCE 581 33.70	Athol, MA-f	6WW 33.90	Senegal, Africa-hac
KCE 816 33.58	Southington, CT-f	- 35.58	OK City, OK-yp
KEE 873 33.86	Salem, NJ-cf	R. Can. 35.64	Sackville, NB-ha

amb-ambulance; f-fire, c-county, r-regional; ha-harmonic (c-cw);
mp-mobile phone; tp-tone pager (with A2 Morse ID) * voice ID;
vp-voice pager as well

The effects of solar fluxes in the 90's are well demonstrated in the amounts of US F2 showing up this fall. Consistent activity such as this has not been evident since 1973 (or even 1972). Judging by the 10-m openings (some days with all the continents in) the transoceanic DX above 30 MHz should have been plentiful, particularly for those on the coasts. The Oct 30 events were the most striking with 35-MHz into each coast simultaneously. The transcontinental MUF that afternoon should have been rather close to 40 MHz. And, most importantly, this didn't even require a magnetic disturbance to get it going.

So, again, I urge those members with the 30-50 equipment to start looking for the F2 DX that is now upon us. If you've only been listening in that range for just the last few years (and thus heard only Es) you're going to find a lot of differences. F2 MUF's are incredibly sharp, so much that there is a distinct time lag in the fade in/out of the low end of 33 MHz (hospitals, ambulances) and the high end (fire departments). So a few 100 kHz can make the difference between a lot of signals and nil.

Other things to shoot for are the pagers and mobile phones in 35-36 MHz; police/sheriff in 37-38 MHz; more police/sheriff 39-40 MHz. With all the "Police Call" books etc out, ID's should not be the problem they were a few years back.

In terms of solar flux levels, Cycle 21 is rising at a rate much better than Cycle 20 did, though not as fast as Cycle 19. If this continues, the prospects for 50-MHz paths to South America in March-April would be the best since 1972.

73. Pat

WA5IYX

PHOTO-NEWS

Jim Alexander
4 Brook Court
Parsippany, NJ 07054

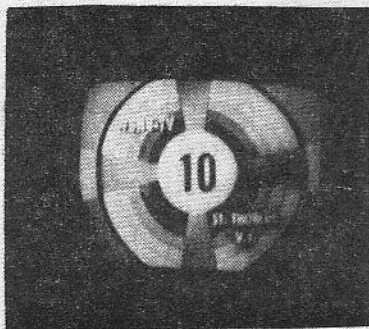
December, 1977

It would have been more appropriate to note last month (with the black-and-white remakes of Steve West's 870-mile catch of WSWB-35 in that column) that in general, color photos are not accepted for use in this column. Space did not permit, however, so your editor will take the opportunity to repeat this here for new members. Color photos are acceptable only in special cases. If you have something unusual, but it is a color print, send it to your editor and we'll see if a way can be found to use it.

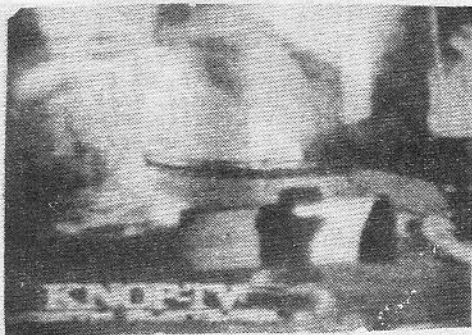
Editors have been asked to mention that in next month's 10th Anniversary issue of the VUD, regular columns will not appear. PHOTO-NEWS should return in the February VUD.

Guidelines for reporting: When sending photos for use in this column, please include as much of the following information as possible: 1) Call letters and location of the station photographed; 2) Location of reception and distance from station; 3) Mode of propagation by which the station was received; 4) Date (and, if possible, time) of reception. If a photo of equipment is sent, include details of the equipment shown.

This month, PHOTO-NEWS presents a column of TV-DX, including a photo of a station from an area most of us don't often get a chance to see. Be sure to see Richard Clark's photo of WBNB-10, St. Thomas, Virgin Islands!



WBNB-10 St. Thomas, Virgin Islands
450 mile tropo (Clark)



KNOP- 2 North Platte, NE
1,115 mile E-skip
6/28/76, 1410 EDT (Brindle)



KATU- 2 Portland, OR
745 mile E-skip (Pizzi)



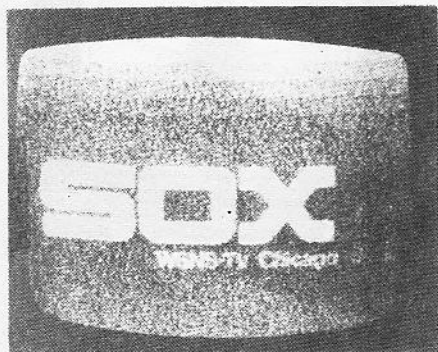
KQTV- 2 St. Joseph, MO
E-skip (Williams)



KOTA- 3 Lead, SD
E-skip Gaines)



WMBB-13 Panama City, FL
265 mile "built-in" tropo (Combs)



WSNS-44 Chicago, IL
405 mile tropo (Battin)



WLVT-39 Allentown, PA
555 mile tropo
9/27/74



CBWT- 3 Winnipeg, Manitoba
E-skip
5/22/71 (Aden)

Contributors:

Richard Clark,
Santo Cerro, Dominican Republic

Ed Brindle, Latrobe, PA

Jim Pizzi, Orcutt, CA

Robert Williams, Twin Falls, ID

Paul Gaines, Detroit, MI

John F. Combs, Orlando, FL

Buck Battin, Duluth, MN

Jim Gould, Kokomo, IN

Frank Aden, Bend, OR

Wishing a joyous holiday season
to all...

Jim

Memorabilia

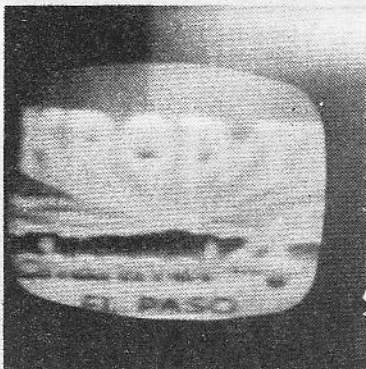
December 1977



Robert J. Williams
251 6th Avenue East
Twin Falls, Idaho 83301
Phone: (208) 733-3621
Deadline: 10th of Month

"MORE PHOTOGRAPHIC MEMORIES OF GREAT DX MOMENTS"

This month, MEMORABILIA once again takes you back through the corridors of time for a look at some more memorable DX catches, thanks to the magic of Man's great time machine, the camera. These photos submitted by Bill Draeb of Kewaunee WI. Thanks very much, Bill.



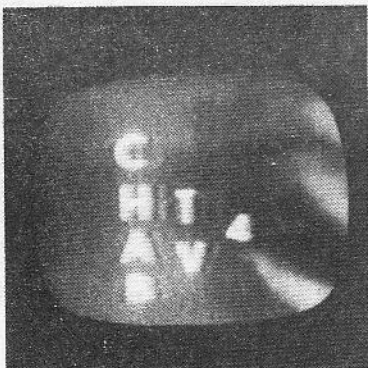
KROD-4
1355 mi Es

El Paso TX
(now KDBC-4)



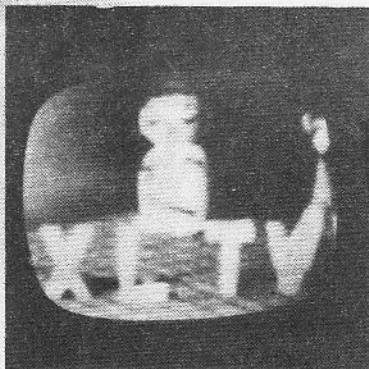
KGNC-4
1060 mi Es

Amarillo TX
(now KAMR-4)



CHAB-4
930 mi
Seen Dec. 5, 1960 at 1920 CST

Moose Jaw, Sask.
(now CBKMT 4)



KXLF-4
1275 mi
Dec. 5, 1960 at 2000 CST

Butte MT
(nicknamed "XLTV")

So we come to the end of this month's "time trip", guys. MEMORABILIA will not appear next month (Jan. 1978), due to the big TENTH ANNIVERSARY ISSUE. I hear it'll be a "biggie", guys! See y'all in Feb. 73a, Best DX,

Bob

Rick Samford continued...

is comprised of late summer skip and a few widely-spaced (in days) tropo openings. The best skip day noted here was the opening to south Florida on 7/21, while the best tropo day was seen on 7/25 with KLAA-14, WMAW-14, WAPT-16, and KXIX-19 noted tentatively. (Rick, stations should be reported in the body of your report in the order received, whether they are QSLed yet or not. This helps keep the report in the same time frame and avoids possible confusion...de) Considering the poor conditions I've noted lately, this may be my last report until next spring. Now that I've installed a U-100 rotor for the FM, I spend less time with TV DX. Unlike Buck Battin, I don't have great luck with smiling ducts. I imagine most ducts laugh at us poor souls who naively stare at snow expecting one... 73 = Rick (Ah, but keep watching! ..de)

<u>Doug Everitt, 1710 W Maine, Enid, Oklahoma 73701 (405) 233-4890 (CDT/CST)</u>		
<u>October 1977</u>		
<u>14</u> tr 0810 KCBJ 17 MO 350mi	<u>26</u> tr 0120 KETV 7 NE 355mi	<u>27</u> tr 0935 KBIN 32 IA 355mi
	0750 KXNE 19 NE 380mi	KHIN 36 IA 340mi
	KTIN 21 IA 465mi	<u>28</u> Es 0940 WUND 2 NC 1190mi
<u>18</u> Es 0959 WCBD 2 SC 1050mi	KYIN 24 IA 525mi	WCBD? 2 SC (T)
<u>25</u> tr 1910 KMEG 14 IA 430mi	KHIN 36 IA 340mi	1015 WWAY? 3 NC (T)
	1000 KYNE 26 NE 355mi	1135 WMAR? 2 MD (T)
	KBIN 32 IA 355mi	WRBC 3 TN 715mi
	KHNE 29 NE 290mi	WGYB 5 VA 875mi
1915 KSIN 27 IA 430mi	1115 KMEG 14 IA 430mi	WATE 6 TN 780mi
	KSIN 27 IA 430mi	1150 WUNC 4 NC 1075mi
	1200 KGIN 11 NE 315mi	1155 WBTW 3 NC 960mi
	KHGI 13 NE 315mi	1218 WSB 2 GA 785mi
1920 KGIN 11 NE 315mi	<u>27</u> tr 0925 KRIN 32 IA 515mi	1229 WSAV 3 GA 1005mi
1925 unID 17 nne	0930 KMEG 14 IA 430mi	<u>31</u> tr 0855 KGIN 11 NE 315mi
2345 KYIN 24 IA 525mi	KCBJ 17 MO 350mi	KHIN 36 IA 340mi
2350 KMEG 14 snowfree	KTIN 21 IA 465mi	0915 WOI 5 IA 450mi
<u>26</u> tr 0000 K18AA KS 170mi	KYIN 24 IA 525mi	0929 KCCI 8 IA 425mi
K34AA KS 170mi	0935 KYNE 26 NE 355mi	0933 WHO 13 IA 425mi
0110 KSFY 13 SD 500mi	KSIN 27 IA 430mi	0935 KDIN 11 IA 425mi
0115 KELO 11 SD 500mi	KHNE 29 NE 290mi	1010 KYIN 24 IA 525mi
0120 WOWT 6 NE 355mi		

I've recalculated some of my distances, and I believe they're now more accurate. I may take some time to find actual transmitter locations in TELEVISION FACTBOOK, and then recalculate them again, but for now I'll leave it as it is. Distances are by air to the nominal coordinates of the city, not directly to the transmitter. In most cases, this is close enough. KOET-3, the new Public TV outlet in Eufala OK, has been seen testing with color bars and tone, with a fairly weak but steady signal, at about 165 miles. The xmtr is on Blu Mountain, and they may be on with full sched by the time the mid-winter skip season begins, so watch out for another PBS target on channel 3. Enough for now....de

<u>Pat Dyer, WA5IYX, 5315 Silvertip Drive, San Antonio, Texas 78228 (CST)</u>		
<u>July 1977</u>		
<u>01</u> Es 1259 WMT 2 IA 945mi	<u>02</u> Es 1459 WKYC? 3 OH (T)	<u>04</u> Es 1858 KTCA 2 MN 1110mi
1329 KGLO 3 IA 985mi	1515 MUF 106.7 MHz	1900 KSTP? 5 MN (T)
1400 f/out	1705 f/out	WCCO? 4 MN (T)
1455-1520 ch.2 west	1800-0000 thru 6	1907 thru 6
1629 WPBT 2 FL 1150mi	2040 MUF 95.1 MHz	1955 f/out
1650 WTVJ? 4 FL (T)	KGFE? 2 ND (T)	<u>05</u> Es 0955-1130 ch.2
1754 WKZO 3 MI 1140mi	2310 WISC 3 WI 1065mi	also 1935-2105 & 2345-0000
1757 WBBM 2 IL 1045mi	<u>03</u> Es 0000-0130 thru 4	<u>06</u> Es 0000-0025 ch.2 spotty
1900 MUF 107.9 MHz +	0910-1310 thru 6	1030-1055 thru 6
2110 WAVE 3 KY 945mi	1105 MUF 107.1 MHz	1059 KMTV 3 NE 830mi
2117 WDTN 2 OH 1075mi	1400 WTWO 2 IN 935mi	1112 KDLO 3 SD 1070mi
2201 KUTV 2 UT 1080mi	(1420-1715: 50 MHz ham into Hawaii on 3Es...)	1125 KDIX 2 ND 1225mi
2215 f/out	1733 KTVK 3 AZ 835mi	1150 KOTA? 3 SD (T)
<u>02</u> Es 0800-0830 thru 4	1825 MUF 89.5 MHz	1310 WCIV? 4 SC (T)
0810 WTVJ? 4 FL (T)	2059 WUND 2 NC 1360mi	WCBD? 2 SC (T)
0829 WEDU 3 FL 985mi	2110 WKYC 3 OH 1250mi	WCSC? 5 SC (T)
WESH 2 FL 1055mi	2235 f/out	1315 MUF 98.9 MHz
0836 MUF 93.9 MHz	<u>04</u> Es 0020-0120 ch.2 spotty	1330 WSAV? 3 GA (T)
0959 WRBL 3 GA 830mi	0200 ch.2 brief	1428 XHTV 4 DF 690mi
WTWO 2 IN 935mi	0915-1215 thru 6	1500 KTVK? 3 AZ (T)
1029 KQTV 2 MO 750mi	0929 KTCA 2 MN 1110mi	1505 KVOA? 4 AZ (T)
1050 KOTA? 3 SD (T)	0959 WBBM 2 IL 1045mi	1559 WBAY 2 WI 1190mi
1137 KWGN 2 CO 810mi	1007 MUF 94.5 MHz	1659 KUTV 2 UT 1080mi
1145 KDA? 4 CO (T)	1029 WBAY 2 WI 1190mi	1700 KTVX? 4 UT (T)
1150 MUF 94.9 MHz	1101 WMT 2 IA 945mi	1708 MUF 94.1 MHz
1308 MUF 90.1 MHz	1730-35 KNXT 2 CA	1730 f/out
1328 KDIX 2 ND 1225mi	1820-55 thru 5	2110 ch.2 brief
		2210-2300 thru 5

Pat Dyer continued...

<u>07</u> Es 0940-1000 ch.2	<u>10</u> Es 0930-35 ch.2	<u>15</u> Es 2205 KVVU? 5 NV (T)
0959 KTCA 2 MN 1110mi	1540-45 thru 4	<u>16</u> Es 1110-1200 thru 3, nw
1035 WCCO? 4 MN (T)	<u>11</u> Es 1935-55 WFMY? 2 NC (T)	<u>17</u> Es 1520 WTAE? 4 PA (T)
1059 KTWO 2 WY 1015mi	2159 KTWO 2 WY 1015mi	1522 KDKA 2 PA 1280mi
1108 MUF 98.7 MHz	KTVQ 2 MT 1245mi	1559 WJBK 2 MI 1225mi
1129 KDLO 3 SD 1070mi	KXLF? 4 MT (T)	1605 CKCO 2 ON 1410mi
1148 CBWT 6 MB 1410mi	2325 f/out	1845 apx f/out
1156 KFYR? 5 ND (T)	<u>12</u> Es 0825-30 ch.2	<u>18</u> Es 0705-0850 thru 4
1159 KOTA 3 SD 1040mi	0900-59 ch.2	0859 WTWO 2 IN 935mi
1200 CBWFT 3 MB 1410mi	0959 KTCA 2 MN 1110mi	0910 thru 6
WDAY 6 ND 1210mi	1059 WCGN 2 CO 810mi	1157 MUF 105.5 MHz
1259 KTVQ 2 MT 1245mi	KTWO 2 WY 1015mi	1228 WBAY 2 WI 1190mi
1310 KXLF? 4 MT (T)	1130 KOA? 4 CO (T)	1420 f/out
1319 MUF 93.5 MHz	1205 KOTA 3 SD 1040mi	1715 WBAY 2 WI 1190mi
1411 WDTN 2 OH 1075mi	1220 KDSJ? 5 SD (T)	1720 WISC 3 WI 1065mi
1529 KOAI 2 AZ 855mi	1229 KDIX 2 ND 1225mi	1755 WMT 2 IA 945mi
1605 KVOA? 4 AZ (T)	1330 f/out	1850 MUF 89.5 MHz
1650 KNXT 2 CA 1190mi	1610 KDKA 2 PA 1280mi	1959 WSJK 2 TN 1010mi
KNBC? 4 CA (T)	1645 WTAE? 4 PA 1280mi	2059 KORK 3 NV 1050mi
1725 KTLA? 5 CA (T)	1728 WCIV 4 SC 1120mi	2157 XHBS? 4 SIN (T)
1759 WUND 2 NC 1360mi	(vid thru local)	2215 f/out
1859 WFMY 2 NC 1175mi	1732 WCBD 2 SC 1120mi	<u>20</u> Es 1258-1305 KTVK? 3 AZ
1925 f/out	1934 MUF 107.9 MHz	1625-50 WPBT? 2 FL (T)
<u>08</u> Es 0910 thru 6	tr 2059 KFDN 6 TX 275mi	<u>21</u> Es 0850-0940 thru 6
0925 MUF 105.9 MHz	Es 2330 apx f/out	0940 WESH? 2 FL (T)
0959 WEDU 3 FL 985mi	<u>13</u> tr 0005 KPLC 7 LA 325mi	WEDU? 3 FL (T)
1012 WESH 2 FL 1055mi	Es 0910 thru 6	WTVJ? 4 FL (T)
1029 WRBL 3 GA 830mi	1013 WAVE 3 KY 945mi	WPTV? 5 FL (T)
1035 WJXT? 4 FL (T)	1113 WITI 6 WI 1100mi	1129 WDBO 6 FL 1035mi
1150 Cuba 3	1114 MUF 107.7 MHz	1132 MUF 107.9 MHz
1155 Cuba 2	1210 KTCA? 2 MN (T)	1215 WCIX? 6 FL (T)
Cuba? 5 (T)	WCCO? 4 MN (T)	1259 KGLO 3 IA 985mi
1159 Cuba 6	KSTP? 5 MN (T)	WMT 2 IA 945mi
1259 WEDU 3 FL 985mi	1319 YSR 2 El S 1200mi	1759 KYTV 3 MO 615mi
1350 WEAR? 3 FL (T)	TGV? 3 Guat 1120mi	1825 MUF 93.5 MHz
1359 WDIQ 2 AL 730mi	1320 MUF 94.9 MHz	1859 WSJK 2 TN 1010mi
WRBL 3 GA 830mi	2110 f/out	WSIL 3 IL 810mi
WSAV 3 GA 1050mi	(much unID 2-4 Spanish)	1952 MUF 99.1 MHz
1417 WSB 2 CA 880mi	<u>14</u> Es 1005-10 ch.2	2015 WDTN 2 OH 1075mi
1515 KYTV? 3 MO (T)	1715 WMT 2 IA 945mi	2105 f/out
1557 WBBM 2 IL 1045mi	1720 KGLO 3 IA 985mi	<u>22</u> Es 0910-1000 thru 3
1725 WFMY 2 NC 1175mi	WCCO? 4 MN (T)	1000 WCBD? 2 SC (T)
1759 WSJK 2 TN 1010mi	1728 KTCA 2 MN 1110mi	1018 WRAL? 5 NC (T)
WHIS 6 WV 1125mi	1729 WBAY 2 WI 1190mi	1026 MUF 94.1 MHz
1841 MUF 98.7 MHz	1759 KDLO 3 SD 1070mi	1029 WFMY 2 NC 1175mi
2050 f/out	KLNE 3 NE 785mi	WNGE 2 TN 820mi
2135-2150 thru 5	KUSD 2 SD 920mi	1055 WSAV? 3 GA (T)
<u>09</u> Es 0305 KNXT 2 CA 1190mi	1815 MUF 99.1 MHz	1105 WCMH? 4 OH (T)
KNBC 4 CA 1190mi	1857 KOTA 3 SD 1040mi	1110 WAVE 3 KY 945mi
KTLA? 5 CA (T)	1900 KDIX 2 ND 1225mi	1129 WTWO 2 IN 935mi
0315 KEYT 3 CA 1270mi	1917 KPRY 4 SD 1035mi	1204 WCIA 3 IL 935mi
0340 f/out	(vid & aud thru local)	1237 MUF 96.5 MHz
0605-15 ch.2	1928 KTVQ 2 MT 1245mi	1259 WISC 3 WI 1065mi
0915-1000 thru 4	KORK 3 NV 1050mi	WMT 2 IA 945mi
0950 KMOX? 4 MO 790mi	1959 KTWO 2 WY 1015mi	1459 WBAY 2 WI 1190mi
0959 KTVI 2 MO 790mi	2012 KTCA 2 MN 1110mi	1529 WISC 3 WI 1065mi
1029 WCIA 3 IL 935mi	KSTP? 5 MN (T)	1559 WMT 2 IA 945mi
1050 thru 6	2058 MUF 93.5 MHz	1621 MUF 97.9 MHz
1051 MUF 95.1 MHz	2059 KTVS 3 CO 815mi	1629 KTCA 2 MN 1110mi
1130 KUSD 2 SD 920mi	2315 f/out	1729 KUSD 2 SD 920mi
1729 KOTA 3 SD 1040mi	<u>15</u> Es 0030-35 ch.2 north	1835 f/out
WMT 2 IA 945mi	0850 KEYT? 3 CA (T)	<u>23</u> Es 0955-1005 ch.2
1759 KQTV 2 MO 750mi	KNBC? 4 CA (T)	1300-05 ch.4.
WFMY 2 NC 1175mi	0859 KNXT 2 CA 1190mi	1353-1545 thru 3
1825 XHBS? 4 SIN (T)	0935 f/out	1353 KOAI? 2 AZ (T)
1934 MUF 89.3 MHz	1825-2110 thru 4	<u>24</u> Es on ch.2 at:
1959 WBAY 2 WI 1190mi	2110 KVOA? 4 AZ (T)	0935-1000, 1035-1100,
2100 f/out	2159 KOAI 2 AZ 855mi	1305-1320, 1745-1750,
2150 ch.2 north	2205 KORK? 3 NV (T)	and 1935-1940
<u>10</u> Es 0850-55 ch.2 north	MUF 95.5 MHz	2030-2140 thru 4

Pat Dyer continued...

(still July 1977...de)

24 Es 2125 KDIX 2 ND 1225mi
tr 2313 KLFY 10 LA 395mi
2334 KFDM 6 TX 275mi

25 Es 1520-1700 thru 3
1615 WESH? 2 FL (T)

26 Es 0940-1050 ch.2
1020 MUF 89.5 MHz
1029 KDIX? 2 ND 1225mi
1457 KDKA 2 PA 1280mi
1459 WTWO 2 IN 935mi
1517 WBAY 2 WI 1190mi
1550 MUF 89.5 MHz
1627 WBBM 2 IL 1045mi
1728 MUF 89.3 MHz
1759 WTWO 2 IN 935mi
1755 CBWFT? 3 MB (T)
1929 WDTN 2 OH 1075mi
1953 MUF 89.5 MHz
2105 f/out

27 tr 0025 XET 6 NL 275mi
Es 0855-0925 thru 4
0927 WWJ? 4 MI (T)
WJBK 2 MI 1225mi
0955 WCGO? 4 MN (T)
0959 WDTN 2 OH 1075mi
1000 MUF 89.5 MHz
1010 KSTP? 5 MN (T)
1029 KTCA 2 MN 1110mi
1059 WTWO 2 IN 935mi
1100 MUF 95.1 MHz
1136 WCBD 2 SC 1120mi
WWAY 3 NC 1250mi
WCIV? 4 SC (T)
1149 WJXT? 4 FL (T)
1320 MUF 106.7 MHz
1359 WSJK 2 TN 1010mi
1433 KWGN 2 CO 810mi
KOA? 4 CO (T)
1435 KTWO 2 WY 1015mi
1514 KEYT 3 CA 1270mi
1528 KNXT 2 CA 1190mi
1535 KNBC? 4 CA (T)
1650 KTLA? 5 CA (T)
1740 KORK? 3 NV (T)
KVVU? 5 NV (T)
1829 WPMY 2 NC 1175mi
2052 MUF 107.1 MHz
2330 f/out

28 Es 0000-0015 KORK? 3 NV
0050-0102 KOAI? 2 AZ
1129 WTHS 2 FL 1150mi
1159 WESH 2 FL 1055mi
1350 WAVE? 3 KY (T)
1359 WDTN? 2 OH (T)
1430 MUF 96.9 MHz
1459 WBAY 2 WI 1190mi
1800-10 thru 4
1810 KLNE? 3 NE (T)
1940 f/out

29 Es 0950-1055 thru 6
0957 MUF 88.1 MHz
1059 WNGE 2 TN 820mi
1201 WSAZ 3 WV 1100mi
1229 WDTN 2 OH 1075mi
1259 WSJK 2 TN 1010mi
1328 WCBD? 2 SC (T)
1329 WDIQ 2 AL 730mi
1403 MUF 94.1 MHz
1429 KQTV 2 MO 750mi
KTVI 2 MO 790mi

29 Es 1452 KMTV 3 NE 830mi
1459 KUSD 2 SD 920mi
1500 MUF 89.7 MHz
1507 KDLO 3 SD 1070mi
1513 KORN 5 SD 1055mi
1524 KLNE? 3 NE (T)
1525 KPLO 6 NE 955mi
1655 MUF 107.9 MHz +
2015 f/out

30 Es 1250 Cuba 2
XHTV? 4 DF (T)
1320 TGV? 3 Guat (T)
1347 MUF 98.6 MHz
1420 Cuba? 5 (T)
1459 WEDU 3 FL 985mi
WPBT? 2 FL (T)
WTVJ? 4 FL (T)
WPTV? 5 FL (T)
1504 WESH 2 FL 1055mi
1509 WDBO? 6 FL (T)
1512 WJXT? 4 FL (T)
1523 MUF 105.9 MHz
1553 WCBD? 2 SC (T)
1646 WCIX 6 FL 1150mi
1729 Cuba 6
1759 WPBT 2 FL 1150mi
2125 f/out

tr 2243 KFDM 6 TX 275mi
WRBT 33 LA 450mi

31 tr 0028 WRBT 33 LA 450mi
Es 0045-0130 thru 4
0106 WBAY 2 WI 1190mi
0910 thru 6
1023 MUF 106.9 MHz
1133 WBBM 2 IL 1045mi
1142 WBAY 2 WI 1190mi
1258 KUTV 2 UT 1080mi
1300 KTVX? 4 UT (T)
1330 f/out
1612 CKCO 2 ON 1410mi
1629 WBBM 2 IL 1045mi
1638 thru 6
1650 MUF 89.5 MHz
1710 WCML? 6 MI (T)
1759 KTVO 3 MO 835mi
1829 WISC 3 WI 1065mi
1830 MUF 98.5 MHz
1935 f/out

August 1977

01 Es 0015-0110 thru 4
0037 KSTP 5 MN 1110mi
tr 0625 WRBT? 33 LA (T)
WGNO? 26 LA (T)

Es 0940-1210 thru 4
1029 KTVQ 2 MI 1245mi
1134 KBCI 2 ID 1370mi
1240-1320 thru 5
1258 KORK? 3 NV (T)
1307 KNXT 2 CA 1190mi
KEYT? 3 CA (T)
1430-50 ch.2 spotty
1655-1705 WDTN 2 OH

02 Es 0810-0830 thru 3
0829 WTWO 2 IN 935mi
WBAY 2 WI 1190mi
0843 KQTV 2 MO 750mi
0929 KDKA 2 PA 1280mi
0940 WTAE? 4 PA (T)
0958 WESH 2 FL 1055mi
1108 WBAY 2 WI 1190mi

02 Es 1110-1335 thru 5
1445-1525 ch.2
1529 WPBT 2 FL 1150mi
1703 WDAY 6 ND 1210mi
1709 MUF 97.9 MHz
1729 KUSD 2 SD 920mi
1740 KPLO 6 SD 955mi
1759 KNBC 4 CA 1190mi
(vid over local)
1800 KNXT 2 CA 1190mi
KEYT 3 CA 1270mi
1801 KTLA? 5 CA (T)
1805 KVOA? 4 AZ (T)
1815 XEWH? 6 SON (T)
1835 KORK? 3 NV (T)
1843 KOAI? 2 AZ (T)
1855 XHBS? 4 SIN (T)
1925 XHBC? 3 BCN (T)
1940 XHAQ? 5 BCN (T)
2059 WMT 2 IA 945mi
2105 f/out
2345-50 ch.2

03 Es 0940-1000 ch.2
1000 WJBK 2 MI 1225mi
1010 WWJ? 4 MI (T)
1013 CKPR 2 ON 1400mi
1029 WBAY 2 WI 1190mi
1110 WISC 3 WI 1065mi
KDLO? 3 SD (T)
1358 WBBM 2 IL 1045mi
1515 f/out
1640-1730 ch.2
1805-1810 ch.2
1920-2115 thru 5
2032 KVVU? 5 NV (T)
2045 MUF 95.5 MHz
2057 KORK 3 NV 1050mi

04 Es 0930-1000 thru 3
1000 WESH 2 FL 1055mi
1229 WPMY 2 NC 1075mi
1255 KWGN? 2 CO (T)
1458 KUTV 2 UT 1080mi
1529 KNXT 2 CA 1190mi
1615 f/out
1800-1920 ch.2 w, sw
2115-2145 ch.2
2145 KTVX? 4 UT (T)
2202 KUTV 2 UT 1080mi
2305 f/out

05 Es 0950 KORK? 3 NV (T)
0959 KOAI? 2 AZ 855mi
1015 KTVK? 3 AZ (T)
1030 f/out
1250-55 ch.2
1345-50 ch.2
1603 KOAI 2 AZ 855mi
1629 KORK 3 NV 1050mi
KVVU? 5 NV (T)
1830-1950 thru 3
2020-2025 ch.2

06 ms 0744:30 WMAB 2 MS
07 Es 1815 WCBD? 2 SC (T)
2050-55 ch.2

08 ms 0053 KOAA?/KREX? 5 CO
1256 WSB 2 GA 880mi

09 Es 1915-2005 ch.2
1929 WPMY 2 NC 1175mi

10 Es 0900-0950 ch.2
0945 WTHS 2 FL 1150mi
ms 2240:30 WCIA 3 IL

11 ms 1113 KWGN? 2 CO (T)

Pat Dyer continued...

<u>11</u> ms 1228 KTVI 2 MO 790mi	<u>13</u> Es 1959 WSJK 2 TN 1010mi	<u>14</u> Es 0925 f/outs
Es 1325 WCCO? 4 MN (T)	2107 KUTV 2 UT 1080mi	1920-2020 thru 3
1329 KTCA 2 MN 1110mi	2110 f/outs	2025 WCCO? 4 MN (T)
1359 KNOP 2 NE 815mi	2240-45 KNXT? 2 CA (T)	2029 KTCA 2 MN 1110mi
1559 KUTV 2 UT 1080mi	<u>15</u> Es 2140-55 KNXT? 2 CA (T)	ms 2053 KUSD 2 SD 920mi
1630 f/outs	2325-30 ch.2	<u>15</u> Es 0905-0940 ch.2
<u>12</u> Es 0759 WJBK 2 MI 1225mi	<u>16</u> Es 0943 KOAI 2 AZ 855mi	1030-1140 thru 2 spotty
0859 KTCA 2 MN 1110mi	0945 KNBC? 4 CA (T)	1200-1245 thru 4
WCIA 3 IL 935mi	0957 KNXT? 2 CA (T)	1247 KTVX? 4 UT (T)
WCCO? 4 MN (T)	1010 KUAT? 6 AZ (T)	KSL? 5 UT (T)
0929 WFMY 2 NC 1175mi	1020 KPHO? 5 AZ (T)	1255 MUF 94.1 MHz
WDTN 2 OH 1075mi	1029 KTVK 3 AZ 835mi	1259 KUTV 2 UT 1080mi
0950 f/outs	1140 f/outs	1329 KID 3 ID 1215mi
1655 WCCO? 4 MN (T)	1405-30 thru 3	1335 f/outs
1659 KTCA 2 MN 1110mi	1429 KORK 3 NV 1050mi	<u>16</u> Es 0928-1000 ch.2
KDAL 3 MN 1250mi	KVVU? 5 NV (T)	<u>20</u> tr 1950 KETS? 2 AR (T)
1722 MUF 90.1 MHz	1445 KOAI 2 AZ 855mi	<u>21</u> tr 1710 KETS? 2 AR (T)
1729 KMTV 3 NE 830mi	1515-30 thru 5	2000 KODE? 12 MO (T)
1759 KDLO 3 SD 1070mi	<u>17</u> tr 0021 KFDM 6 TX 275mi	<u>22</u> tr 0058 KSLA 12 LA 356mi
KUSD 2 SD 920mi	Es 1035-1150 ch.2	<u>27</u> tr 0129 KNOE 8 LA 440mi
1800 WBAY 2 MI 1190mi	1138 WNGE 2 TN 820mi	0130 KSLA 12 LA 350mi
1840 f/outs	<u>18</u> Es 1835-1940 ch.2	Es 1040-50 KNXT? 2 CA (T)
<u>13</u> Es 0805-0830 ch.2	<u>19</u> Es 0928 KTCA 2 MN 1110mi	1925-2005 ch.2 n, ne
0829 WBMM 2 IL 1045	0955 WCCO? 4 MN (T)	(heavy trop CCI)
1032 KDKA 2 PA 1280mi	0959 KIMT 3 IA 985mi	tr 2341 KLFY 10 LA 395mi
1035 WTAE? 4 PA (T)	1005 thru 6	2359 WRBT 33 LA 450mi
1157 MUF 94.5 MHz	1030 f/outs	<u>28</u> tr 0019 WAFB 9 LA 450mi
1228 WDTN 2 OH 1075mi	<u>21</u> tr 2303 KPLC 7 LA 325mi	0022 KFDM 6 TX 275mi
1258 WJBK 2 MI 1225mi	<u>22</u> tr 0010 KFDM 6 TX 275mi	Es 2010-35 ch.2 north
1303 WTWO 2 IN 935mi	<u>27</u> Es 1900-30 ch.2 sw	2125-2210 thru 3, ne
1320 f/outs	2020 ch.2 brief	<u>29</u> tr 0002 WVUE 8 LA 510mi
1712 WBAY 2 WI 1190mi	<u>28</u> Es 0930-1015 ch.2	KATC 3 LA 395mi
1750 Canadian 2	September 1977	0007 WRBT 33 LA 450mi
1755 WCML? 6 MI (T)	<u>12</u> Es 2025-30 ch.2	WGNO? 26 LA (T)
1800 KTCA 2 MN 1110mi	<u>14</u> Es 0842 KORK 3 NV 1050mi	0020 KFDM 6 TX 275mi
1842 MUF 107.3 MHz	0857 KEYT? 3 CA (T)	WAFB 9 LA 450mi
1929 KDIX 2 ND 1225mi	0858 KNBC? 4 CA (T)	0021 WLPB 27 LA 450mi
1935 KOTA? 3 SD (T)	KTLA? 5 CA (T)	0058 KSLA 12 LA 350mi
1950 WCB? 2 SC (T)	0859 KNXT 2 CA 1190mi	<u>30</u> tr 1825 KETS? 2 AR (T)

Es slowed down into August, even though a few openings did pop up in September. Meteors produced a few relogs. Hot September weather (most days in 90s F) helped along the trop. The Texas All-Night Network (TEXANN), which had Sunday 1 am - 6 am on some five stations, is now apparently defunct. It did, however, mess up the Perseids some, with local 5 on. (A word of explanation regarding loggings of Es "thru 4", etc... these usually denote a good number of unID loggings thru the channel indicated, which would not otherwise appear due to the policy on unIDs. Tropo unIDs are more likely to be unusual, so these are occasionally left in, minus details, in some reports...de)

***Since there will be no WTV in January, we'll be back in February with more DX reading. In the meantime, the mid-winter Es season should be getting underway, particularly for more Southerly DXers. Auroral conditions should be looking up for DXers in the North, and perhaps some winter hi-pressure systems will trigger some good tropo for reporters in the Midwest. At any rate, don't forget to report! Happy Holidays.... Doug

STATION BREAK

Noncommercial member ads welcome!
Limit 100 words. Send ads to HQ
(address on page 2 of this issue).

FOR SALE: Sears 5-band programmable scanning monitor for 30-50, 150-170 and 450-512 MHz. Uses program cards. No crystals needed. Car adaptor included. \$270 plus postage. Michael W. Scheel, 4126 Nobis Drive, Davenport IA 52802.

STILL WANTED: Airchecks of Top 40 stations from across the country (Canada too) for a composite which until recently had been put aside. Cassettes or reel-to-reel tapes fine. Contact Clarke Ingram (address on back cover).

(Ads for STATION BREAK should be sent to Frank Aden after January 20, 1978.)

EASTERN TV-DX

Bill Thompson
1907 Seneca Street
Buffalo, NY 14210

December 1977

Deadline: 10th

October tropo activity in most of the reporting area was not up to par again this year, mostly due to cold weather making an early appearance in many places. There were a few good days though, and in areas of the Northeast and Midwest nearest to the Great Lakes, some interesting catches were made. Most of these were logged around October 10th-11th and 26th-27th. Among the more interesting loggings are Jim Gould's catch of K1AA-14 at 650 miles on the 10th. Also, Bob Seybold informed your editor of some loggings into Iowa and Missouri at distances of up to 900 miles during the 26th-27th ducting sessions. Things changed quickly by early November, with heavy rains along the Appalachian Mountains destroying any chance of a continuation of fairly good late October conditions; and by the 10th of November, the first big winter-type storm of the late Fall was crossing the northern Midwest. There may have been a bit more out-of-season E-skip activity than usual in October--and an interesting E8 opening on November 10th was noted by your editor. Don't forget about upcoming meteor showers!

Roger Gravelle 60 Valerie Street St. Thomas, Ontario N5R 1A8 (EDST)

May		5 Es	1800 CBHT-3 NS	18 Es	1800 CKCW-2 NB
30 Es	1900 KOTA-3 SD	6	2130 KOAA-5 CO		unID-2 NBC
31	1916 KPRY-4 SD		"At this time,		"suspect WLBZ"
June			Denver chs 2,4,6	1830	CBHT-3 NS
2	1800 CBHT-3 NS		excellent, also		unID 2-5 FF
5	1200 KATC-3 IA		south Florida in	August	
	1230 WPBT-2 FL		--Miami & Tampa"	3 Es	1920 KCMO-5 MO
	WTWJ-4 FL	7	2002 CHSJ-4 NB		KDUR-4 NE
	1300 WBRZ-2 IA		CBHT-3 NS		

"Much work seems to limit my time so very drastically--I never seem to have time to enjoy DXing anymore...no DX on UHF. The damn dial is so full of RTV stations, Global, and French 'test patterns & garbage' I have no interest in trying to decipher it."

Jeff Wolf 1131 University Blvd. W. Apt. 701 Silver Spring, Maryland 20902 (EDT)

June		27 Es	2035 WBRZ-2 LA	950	24 Tr	1030 WAVY-10 VA	160
5 Es	1900 KPHX-3 TX		2037 Cuba 3			WSET-13 VA	167
	Wichita Falls 1183	28	1100 WBRZ-2 LA			"under WJZ"	
6	1630 KUSD-2 SD		1128 KATC-3 LA	1000		"Great tropo opening; one of the best I've seen."	
	Vermillion 1050		1230 WRBL-3 GA?	T		2238 unID-69 NBC	
	1658 KTCB-2 MN	867	1311 KCKT-2 KS?	T		2244 WVFC-13 VA	159
	1705 WBBM-2 IL		1330 KTCB-2 MN	867		2300 WTAR-3 VA	159
	Chicago 567		1401 KTEW-2 OK	1000		2244 WVFC-13 VA	159
12	1128 WBAY-2 WI?	T	1632 unID-3 testing			2300 WTAR-3 VA	159
14	1300 KARD-3 KS	30	2000 KCKT-2 KS	1100		2306 unID-12 ABC	
	Wichita 1050	31	1129 KFDX-3 TX	1183		"over WWBT"	
20	1200 WMT-2 IA		1900 KMTV-3 NE			2340 WAVY-10 VA	160
	Cedar Rapids 750		KLNH-3 NE			0805 WHAG-25 MD	
21	1300 KMTV-3 NE		1930 KCKT-2 KS		25	0809 WTAR-29 PA	
	Omaha 950	August				0817 WAVY-10 VA	
24	2002 Cuba 2	3 Es	1330 KTEW-2 OK	1000		0823 WUNK-25 NC?	T
27	1400 KIII-3 TX		WBRZ-2 LA			"slide looks like 'WUNC Network'"	
	Corpus Christi 1317		1730 WPBT-2 FL?	T		0904 WHRO-15 VA	
			1930 WMT-2 IA?	T		0920 WCWV-57 VA	111
July						0921 WNJB-58 NJ?	T
7 Es	1600 KMTV-3 NE?	T	October			0928 WCVE-23 VA	111
17 Tr	0930 WLVA-13 VA		23 Tr	2300 WWBT-12 VA	110	0930 WNJT-52 NJ?	T
	Lynchburg 167	24	0030 WYAH-27 VA	158		1030 WHYI-12 DE	96
26 Es	1200 KLNH-3 NE	1133	0118 WCTI-12 NC	269		1033 WKBS-48 PA	121
	1930 KTCB-2 MN	867	0800 WSET-13 VA	167		1048 WNJS-23 NJ	
	"many unIDs on this date"		WXXI-12 NC			1100 WWBT-12 VA	
27	1130 WPBT-2 FL	900	Winston-Salem 268				
	1630 KFDX-3 TX?	T	0830 WRDU-28 NC	235			
	1909 KTBS-3 IA	983	0850 WHAG-25 MD?	T			
	1926 WLBZ-3 MS?	T	0854 WUNK-25 NC?	T			
	1931 Cuba 3		0905 WVIR-29 VA	107			
	2000 WPBT-2 FL	900	1000 WTVB-11 NC	235			
	2016 KATC-3 IA	1000	1030 WWBT-12 VA	110			
			WTAR-3 VA?	T			

"This is my first report. I DX on a 1969 12" Westinghouse B/W and a 1971 19" GE color set...I use a wire as the antenna. For the GE's antenna I use the set's built-in rabbit ears and a partial hook-up to the apartment building's master antenna. In my report the mileages are approximate."

William J. Draeb Ellis St. R.R.#2 Kewaunee, Wisconsin 54216 (CDT/CST)

September		4 Tr 0730		KINL-30 MO 432		26 Tr		1235		KCPT-19 MO 525	
21 (continued)				WTTU-30 IL 376				1251		KMBG-14 IA 463	
Tr 2015		WKEB-53 KY 530		WBAK-38 IN 348						KSIN-27 IA 463	
2053		WHMT-19 AL 685		WVUT-22 IN 405						KHNB-29 NE 617	
2059		WYUR-48 AL 685		"snow free o/WSBT"				1257		KOZK-21 MO 588	
		WCBT-48 OH 400		0750 WAAV-31 AL? T						KMTG-27 MO 588	
		WXTX-19 OH 400		2110 WCFB-38 IL				1715		WUSI-16 IL 402	
2102		WPBO-42 OH 461		"over WPNE-38 with no antenna snowfree"				2025		WVUT-22 IN 405	
		WHIQ-25 AL 685		1920 KHIN-36 IA 457				2031		KTCI-17 MN 280	
		WANG-21 NC? T		2053 KINL-30 MO 432						"snow free"	
2130		WATI-36 GA? T		1852 KINL-30 MO 432				2035		KAVT-15 MN 288	
		WHEAR-46 GA? T		2123 WMUL-33 WV 498				2120		WFIE-14 IN 420	
		WTCG-17 GA? T		1735 KINL-30 MO 432						WHBT-25 IN 420	
		WCLP-18 GA? T		1738 WMUL-33 WV 498						WTTU-30 IL 376	
2214		WFIE-14 IN 420		1753 WKPT-22 KY 554				2323		WUTV-29 NY 445	
2255		WEMA-40 AL 762		1709 KINL-30 MO 432				0653		KINL-30 MO 432	
2300		WFIQ-36 AL		1845 WUTV-29 NY 445						WFIE-14 IN 420	
		Florence 675		Youngstown U's						WHBT-25 IN 420	
2305		WVUT-22 IN 405		WJET-24 PA 405						W39AA-39 IN 268	
2310		WBMG-42 AL 768		WQLN-54 PA 405				0713		WLKY-32 KY 437	
2322		WAPT-16 MS 866		CICA-19 ON 410				0722		KHIN-36 IA 457	
22		1909 WKPI-22 KY 554		1912 CGLFT-25 ON 410				0737		WKMU-21 KY 551	
		1934 WKSO-29 KY 538		1912 CKGN22-22 ON 413						"snow free"	
		WKHA-35 KY 551		1920 WHIZ-18 OH 400				0748		WVUT-22 IN 405	
		WUTV-29 NY 445		2008 WPGH-53 PA 480						WTTU-30 IL 376	
23		0713 WLKY-32 KY 432		2011 WQEX-16 PA 480						WKMA-35 KY 499	
		WKYT-27 KY 473		2017 WUSI-16 IL 402				0815		KPOB-15 MO? T	
		WKHA-35 KY 551		2020 WVUT-22 IN 405				1220		WUSI-16 IL 402	
		0720 WKLE-46 KY 473		2035 KMTG-27 MO 588				1757		KTSB-27 KS 560	
		WDRB-41 KY 437		0456 CKNC1-7 ON 270				1855		WKPC-15 KY 437	
1834		WMUL-33 KY 498		WJKW-8 OH 355				0611		WHBT-25 IN 420	
		WKAS-25 KY 486		CKCO-13 ON 345				0713		WFIE-14 IN 420	
		KINL-30 MO 432		0511 CKNC-9 OH 350				1824		KINL-30 MO 432	
		1841 WKPI-22 KY 554		0514 CBPST3-12 ON 270						KHIN-36 IA 457	
		WHIZ-18 OH 400		1902 KINL-30 MO 432						WDRB-41 KY 437	
		WOSU-34 OH 395		1820 KINL-30 MO 432						WLKY-32 KY 437	
		1954 WKPC-15 KY 437		2140 Toronto U's				1850		Brie U's 405	
26		2004 WANG-21 NC? T		WJET-24 PA 405				0524		WHO-13 IA 371	
		2140 WDCA-20 DC? T		WQLN-54? T				0530		KPLR-11 MO? T	
		WGSP-50 DC? T		0543 WUAB-43 PA 340						WHIO-7 OH? T	
27		2108 KINL-30 MO 432		WKRN-27 OH 340				0544		WBNS-10 OH 395	
		2139 WKYT-27 KY 473		WJET-24 PA 405						WBIR-10 TN 626	
		2142 WLKY-32 KY 437		0550 WPGH-53 PA 480						WCPO-9 OH 400	
		2145 WKSO-29 KY? T		WAKR-23 OH 380				0548		WHAS-11 KY 437	
		WKHA-35 KY? T		0553 WFMJ-21 OH 420				0549		KFVS-12 MO 512	
		2154 WMUL-33 WV 498		0555 WYTV-22 OH 420				0550		WTHI-10 IN 348	
		2157 WKAS-25 KY? T		1955 WSEE-35 PA 405				0613		WLIX-18 KY 473	
28		1924 KHIN-36 IA 457		WKYT-27 OH 473						WLKY-32 KY 437	
		1944 WKPI-22 KY 554		WKLE-46 KY 473						WDRB-41 KY 437	
		WLKY-32 KY 437		2020 WLKY-32 KY 437				0617		WBAK-38 IN 348	
		2213 WKPC-15 KY 437		WDRB-41 KY 437				0619		KINL-30 MO 432	
29		2018 WUTV-29 NY 445		1844 KINL-30 MO 432				0816		WFMJ-21 OH 420	
				WKYT-27 KY 473						WKBN-27 OH 420	
October				1918 CICA-19 ON 410				1845		WJET-24 PA 405	
2 Tr		1827 WKPI-22 KY 554		CHEFT-25 ON 410						WUSI-16 IL 402	
		1830 WKSO-29 KY? T		KINL-30 MO 432						WKPC-15 KY 437	
		WKHA-35 KY? T		WLKY-32 KY 437						WKYT-27 KY 473	
		1833 WLKY-32 KY 437		WDRB-41 KY 437				1900		WOSU-34 OH 395	
		WDRB-41 KY 437		1922 WKLE-46 KY 473				1910		KHIN-36 IA 457	
		1857 WMUL-33 WV 498		WKYT-27 KY 473				1914		WAAV-31 AL 685	
		1902 WCBN-27 OH 420		WKSO-29 KY 538				1920		WXLX-19 OH 400	
		1929 KINL-30 MO 432		1935 WBNP-16 NY? T						WKON-52 KY 437	
		2037 WKAS-25 KY 486		2211 KHIN-36 IA 457				31		WKBN-27 OH 420	
3		1956 WKYT-27 KY 473		0650 KHIN-36 IA 457				0751		Erie U's 405	
		WKLE-46 KY 473		1235 KINL-30 MO 432						KINL-30 MO 432	
4		0700 WFIE-14 IN 420		KCBJ-17 MO 450							
		WHBT-25 IN 420		KBMA-41 MO 525							
		WLKY-32 KY 437									
		WDRB-41 KY 437									

Donald B. Ruland 4448 68th Place Kenosha, Wisconsin 53142 (CDT)	
September	25 Tr 0615 WKYT-27 KY 360 27 Tr 0530 KINL-30 MO 300
25 Tr 0530 WCPO-9 OH 300	0700 W63AH-63 OH
WKRC-12 OH 300	Maplewood 250
WHAS-11 KY 330	(WPTD-16 xltr)
WHNS-10 OH 320	WKLB-46 KY 360
0545 WCIX-19 OH 300	WTPQ-62 KY 360
WHIZ-18 OH 360	WCON-52 KY 330
WLAX-18 KY 360	WCVN-54 KY 310
0600 W67AJ-67 MI	WKMJ-68 KY 330
Ann Arbor 220	0715 WKHN-27 OH 380
(WJTH-6 xltr)	WVLZ-25 OH 330
WLKY-32 KY 330	0730 WGBT-48 OH 300
WDRB-41 KY 330	October
WUAB-43 OH 330	26 Tr 2200 WUAB-43 OH 330
WAKR-23 OH 340	W63AH-63 OH 250
0615 CICO18-18 OH 340	2300 WJET-24 PA 400
KPLR-11 MO 300	0530 WSEB-35 PA 400
	0530 CICO18-18 OH 340

Bill Johnson 5595 Clarendon Hills Road Clarendon Hills, Illinois 60514 (CDT)	
July	26 Es 1900 CKOS-3 SK 1000 28 Tr 0155 WREX-13 IL 80
19 Tr 2325 KTHN-12 IA 180	1915 WEDU-3 FL 1025 31 0746 WOC-6 IA 160
26 Es 1800 KDUB-4 EB 700	27 Tr 1830 WZEM-13 MI 120 0800 WTHR-23 IN 180
1830 KOTA-3 SD 760	Es 2100 WEDU-3 FL 1025 0830 WBBF-4 IL 150
1930 KYW-3 PA 680	28 0150 WISN-12 WI 80 Es 1741 KMOL-4 TX 1050

Equipment includes 1968 8 1/2" Singer TV with whip antenna.

Bob Zent 1835 Fruit Street Huntington, Indiana 46750 (EST)	
October	10 Tr 2100 WOUB-20 OH 205 27 Tr 1800 WKSO-29 KY 275
10 Tr 1730 WKPT-19 TN 350	17 Es 2205 unID-2 W.
WSVN-47 VA 325	"suspect KWGN"
WKSO-29 KY 275	20 Tr 1900 KRIN-32 IA 375 29 0700 WKPT-19 TN 350
WKMR-38 KY 215	26 2000 KRIN-32 IA 375 30 1305 KRIN-32 IA 375
WKAS-25 KY 230	2200 KDUB-40 IA 295
2005 WTVK-26 TN	WHIA-31 WI 360
Knoxville 360	Madison U's
2040 WKYB-57 KY 275	2205 WKOW-19 WI 360
WKHA-35 KY 275	2207 KINL-30 MO 305
2100 unID-66 S.S.B.	KBTC-9 MO 305
"KET network"	KPLR-11 MO 305
WOUC-44 OH 215	27 1800 WKSO-29 KY 275
	2158 CFPL-10 OH 260
	2200 CHFT1-76 OH 300

Jim Gould R.R.#3 Kokomo, Indiana 46901 (317)452-9585 (EST)	
October	10 Tr 2100 WFIQ-36 AL 405 26 Tr 1900 unID-11 CBS W.
5 Tr 2300 KBMA-41 MO 458	"@2100, no trace
2305 W49AA-49 IL	of WAAV-31 AL"
10 1800 WAAV-31 AL 410	2120 WSBA-43 PA 492 2225 K??-33 IA
1900 WKKO-13 KY 252	2135 WBBF-45 MD? T
WGHQ-26 IA? T	"weird opening!"
"under WGLU"	18 Es 1130 KPRC-2 TX 920 28 Es 1100 unID-4 NBC S.W.
WIIQ-41 AL? T	1200 KTVR-2 CO 990 1200 KDFW-4 TX 825
"under WUHQ"	1815 KTTG-10 MN 396
2020 K1AA-14 IA 650	KYLN-24 IA 402 29 Tr 0940 WAAV-31 AL 410
2040 WATI-36 GA? T	1823 KMEG-14 IA 540 1124 WBMG-42 AL 490

Paul L. Gaines 15920 Puritan Street Detroit, Michigan 48227 (EDT/BST)	
October	26 Tr 2315 WREX-13 IL 300 27 Tr 0859 KDUB-40 IA 375
11 Tr 0016 WLKY-32 KY 310	2320 KDUB-40 IA
0033 WDRB-41 KY 310	Dubuque 375
0219 WQWK-13 WV 280	0104 WIGS-20 IL 375
MS 0305 WNL-4 LA 940	0142 KCRG-9 IA 415
26 Tr 2213 WAND-17 IL 340	0232 WQAD-8 IL 375
2216 WILL-12 IL 305	0336 WLUX-11 WI 275
2223 WARD-31 IL 345	0337 WTTW-11 IL
2224 WRAU-19 IL 345	Chicago 225
2228 WIFR-23 IL 325	0842 Madison U's
2235 Madison U's	08504 Freeport-
2253 WTVO-17 IL 300	Rockford, Peoria U's
	November
	4 Tr 2238 WFTV-17 IL 300
	5 0005 Madison U's
	0028 WIFR-23 IL 325
	0044 KDUB-40 IA 375

C.C.I. [UNIDENTIFIED DX]

Frank Aden, Jr.
1535 NW Ithaca
Bend OR 97701
(503) 389-5488
Deadline: 10th

DECEMBER 1977 CCI NOT TO APPEAR IN JANUARY!

WTFDA will be celebrating its 10th anniversary next month and a special VUD will be published which will not contain the regular columns. CCI will return in February.

Unidentified TV DX

Jeff Wolf, 1131 University Blvd. W., Apt. 701, Silver Spring MD 20902 (1977 unIDs)
Tue Jul 26 Es ch 2 1930 EDT- -Audio of "Mary Tyler Moore Show" beginning under KTCA.
(WBAY checks. ---FEA)

ch 2 1958 EDT- -End of "Mary Tyler Moore Show" with TV 2 News Promo,
WBAY-TV/2 "Chuck Ramsay, News, 6 and 10." (Probably WBAY. ---FEA)

Robert Williams, 251 6th Ave. E., Twin Falls ID 83301 (1977 unIDs)

Thu Jun 9 Es ch 5 1158 MDT- -Ending of "Sesame Street" KPYR? CJFB? CKCK in at 1200.
(CKX, CJFB, CKBI all check. ---FEA)

ch 3 1222 MDT- -"Teleforum Sports" CKOS? (Nothing listed for SK, Alt and ND. ---FEA)

ch 2 1255 MDT- -"Newservice Sports", logo seen with a newsman on right.
CKCK? CKSA?

Fri Jun 10 Es ch 3 1333 MDT- -Tornado Watch in progress. Slide seen with "Tornado"
above "Watch" with drawing of a tornado at bottom.
KORK-TV*
3
LAS VEGAS

ch 3 1958 MDT- -"TV-3" and then "Gunsmoke". XHBC in at 1949. (KORK checks. ---FEA)

Sat Jun 11 Es ch 2 2023 MDT- -Slide with "2LA". KNXT? (That is it. ---FEA)

ch 3 1701 MDT- -"Lawrence Welk Show" KFDX in at 1745. (KFDX checks. ---FEA)

ch 2 2040 MDT- -"Billy Graham Carolina Crusade", PTA: Alt., SK,

Sun Jun 12 Es ch 4 1609 MDT- -"Sergeant Bilko" KDFW? All TX 4s and KTVY are negative.
---FEA

ch 4 1620 MDT- -Program about painting or art. PTA: TX. (TX stations are negative. ---FEA)

ch 2 1853 MDT- -Classical music program. KFMS in at 1800. (KETS checks. ---FEA)

Wed Jun 12 Es ch 2 1125 MDT- -"Gong Show" KOAI? KTVK in at 1200. (KOAI checks. ---FEA)

Roy D. Horeley, Rt. 10, 169 Lakeshore Dr., Gadsden AL 35901 (1977 unIDs)

Thu Jun 2 Es ch 4 1130 CDT- -"Hollywood Squares". PTA: NE US. (CHBT-5 checks. ---FEA)

Mon Jun 6 Es ch 2 1630 CDT- -"Star Trek" PTA: NE US. (WLBZ checks. ---FEA)

ch 3 1630 CDT- -"Dinah" PTA: As above. (WFSB checks. ---FEA)

ch 3 1630 CDT- -"Country music type show. Under above. (Nothing listed for the area. ---FEA)

ch 3 1630 CDT- -"Gunsmoke". (WCAX checks. ---FEA)

ch 2 1630 CDT- -"Adam 12". (CKGN-2 checks. ---FEA)

ch 5 1815 CDT- -"Brady Bunch" (WNEW checks. ---FEA)

ch 2 1845 CDT- -"Muppets" (GBIT checks. ---FEA)

ch 5 1920 CDT- -"Billy Graham Tennessee Crusade" PTA: As above.

ch 3 1859 CDT- -"Lets Make a Deal" (Nothing checks in the area. ---FEA)

ch 4 1930 CDT- -Local game show. PTA: SD, ND.

Tue Jun 21 Es ch 2 0930 CDT- -Religious Service. Phone 416-9.... Detroit and Ottawa mentioned. (Nothing listed but 416 is area near Lake Erie and Ontario in Ontario. ---FEA)

ch 4 1045 CDT- -"Behind the Scene" Canadian produced show. (Nothing listed in E. Canada. ---FEA)

ch 3 1100 CDT- -"Bewitched" (Nothing listed in area. ---FEA)

ch 5 1225 CDT- -Weight loss program. KDAL and KWGN seen.

ch 2 1900 CDT- -Newscast with Robbie Timmons.

ch 2 1910 CDT- -"Barney Miller"

Wed Jun 22 Es ch 2 0825 CDT- -"To Tell the Truth" PTA: North Central US and Canada.

ch 2 0830 CDT- -CB with digital time in right corner.

ch 2 0835 CDT- -Religious program.

ch 3 0835 CDT- -"This Morning"

ch 4 1000 CDT- -ID as "channel 6, cable channel 2, CBC". (this is GBWT-2. ---FEA)

WCAX-TV

Roy D. Horsley continued.

Wed Jun 22 Es ch 3 1105 CDT- --"Bewitched" PTA: Central Canada. (Nothing checks. ---FEA)

Thu Jun 30 Es ch 2 1730 CDT- --"Gilligan's Island" PTA North Central US. Mention of Littlefield. (there is a Littlefield in N. Texas but nothing checks for any ch. 2. ---FEA)

ch 2 1855 CDT- --"2000 \$ Pyramid"

ch 3 1855 CDT- --"Hollywood Squares"

ch 2 1855 CDT- --"Adam 12"

ch 3 1950 CDT- --Ad for "Mike's Food Stores"

ch 4 2025 CDT- --Interviewing Jack Ramsey. Canadian show.

Fri Jul 1 Es ch 3 1640 CDT- --Clock ticking and news. Could this be TGV. Guatemala was mentioned.

ch 2 1800 CDT- --"Great Sports Legends"

Sun Jul 3 Es ch 3 1230 CDT- --Yankies vs. Tigers. **3 WKYC-TV NBC**

ch 3 1305 CDT- --Marx Brothers movie.

ch 2 2315 CDT- --"Mary Hartman". Canadian, also on 3.

Wed Jul 27 Es ch 5 2228 CDT- --"Eyewitness News with Mark Jones"

Thu Jul 28 Es ch 2 1200 CDT- --"Gong Show" also on 3. (WGR, WKYC check. ---FEA)

ch 2 1200 CDT- --"Tattle Tales" also on 3. (Nothing checks. ---FEA)

Mon Aug 8 Es ch 6 2215 CDT- --National Basketball game with Detroit Tigers Emblem. WJIM?

Fri Aug 12 Es ch 2 1810 CDT- --"Lucy" KGFE seen.

Sat Aug 13 Es ch 2 1230 CDT- --"Soul Train" PTA: NE, MO, IA. (Nothing checks for these areas. ---FEA)

ch 2 1855 CDT- --"I Dream of Jeannie" (Same results as above. ---FEA)

ch 3 1920 CDT- --"Lowell Thomas"

ch 4 2000 CDT- --"Roger Morrow Motors" KWGN seen.

Identifications

Steve West, June 8, KTDY is in Lafayette LA and WGMO is the new call for Shell Lake WI. July 6, WMRq 92.1, Brookhaven MS. From Roger Winson.

Ron Wing, June 25, call letters are KDXT 93.3. From Roger Winson.

Tom Yingling, unID on June 24 is KIMT 96.7 Marlin TX. From Roger Winson.

Scott Levitt, Jun 12, ch. 6 was WBRG. From Roy Horsley.

Frank Wheeler, Sept., Could that be WMT with a Cedar Rapids -Iowa City ID? From Roy Horsley.

Mike Reid, June 20, PTL Club was seen on 7-4-77 on KWGN at 0115. They may run 700 Club after PTL. From Roy Horsley. (That could be possible as TV GUIDE does not list anything for KWGN after 0110.

Michael Scheel, Jun 21, WPTV runs 25,000 \$ Pyramid at 1900 EDT. July 1, WESH runs Celebrity Sweepstakes at 1930 EDT. From Roy Horsley.

Steve Shaffer, Oct. CCI. Station is WWTW ch. 9 Cadillac. They ID as TV 9 and 10" as WWTW has sat. WWUP in Sault Ste. Marie. The calls mentioned were inter-city relay stations such as KSR-56, KSX-42 etc. From Bill Draeb.

Volunteers are now needed to help organize the translator list for the 2nd Edition of the WTPDA STATION GUIDE. Help is also needed for the Latin America and Canada lists.

When reporting to CCI please include Possible Target Area (PTA) as it is almost impossible to do any research with some idea of where the unID might be.

HAPPY HOLIDAYS AND HAPPY NEW YEAR,

Frank

KIVI/Nampo-Boise-Caldwell





Post Office Box 202 - Whiting, Indiana 46394
WORLDWIDE TV-FM DX ASSOCIATION

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TO BEAT!**

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