

VHF-UHF DIGEST

the official publication of the Worldwide TV-FM DX Association

OCTOBER 1977

IN THIS ISSUE:


- Convention '77 Wrap-Up
- Tips for the DXer/Builder
- Photos of an Illegal FMer
- 'WCKR' Silenced by FCC
- More Tropo and E-Skip DX!



From The Staff:



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



MEMBERSHIP UPDATE...Club circulation manager John Zondlo, who also keeps the WTFDA membership rolls, has informed your editor that the total number of WTFDAers last month reached 342. In reaching this figure, we have set a new all-time high for our club--a goal we've sought for many months, and which is illustrated in graph form on the VUD front cover this month. Special thanks on this occasion must go to both John and Mike Hogan, responsible for a recent mass mailing to members of BCB DX clubs which helped to bolster the membership rolls, and to BCBers themselves, who inspected our magazine and publications and felt our club worthy of their membership. Thanks for joining us, and for bringing the number of WTFDAers to a record high!

CONVENTION '77...A comprehensive report and photo feature on WTFDA's first Western convention, in Portland, Oregon, begins on page 16 of this issue. Many thanks to hosts Frank Aden Jr., Bill Block, Pat Martin, and Paul and Dave Wardell for a splendid job with what will hopefully be only the first of many Western WTFDA gatherings to come!

EDITORIAL VACANCIES...Active and able WTFDAers are needed to fill several openings which will be occurring in our Digest within the next few months. Fred Nordquist (NFM editor) has filed his resignation to be effective no later than December 31. Dave Cox of SFM is also uncertain as to whether he will be able to continue after December. Andy Bolin has resigned from FM STATISTICS, leaving both the FM and TV statistics posts vacant once again. Meanwhile, Doug Everitt (WTV editor) expects to relinquish his column to a successor sometime in mid-1978. Finally, there is the possibility that even your editor-in-chief will not be in his current position come the New Year. If you are able and willing to handle any of these editorial positions, please drop a line immediately to Clarke W. Ingram, 5201 Colewood Drive, Pittsburgh PA 15236, expressing interest. We hope these columns can continue without an undue break in service. You can help!

NOTES OF NOTE...CCI editor Frank Aden Jr. has been chosen as chief compiler for the upcoming new edition of the TV STATION GUIDE. Interested members should write to Frank directly...SFM and WTV will both return next month...Dave Janowiak's polarization series has again been delayed. We are still hopeful it can be resumed shortly.

73, *Clarke* for Pete, John, Mike and Morrie

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MAILBOX

John Zondlo
c/o PO Box 202
Whiting IN 46394
(219) 844-8694
Deadline: 15th

New Members:

Dave Bissell	4128 Broughton	Niagara Falls, ON
R.S. Broadhead	57 Briar Path	Bramalea, ON L6T 2A3
David Legler	128 E. Magnetic St.	Marquette, MI 49855
Denis Orlando	5034 Sylvia Road	Drexel Hill, PA 19026
A. Robert Pantazes	809 Burk Court	Ventnor, NJ 08406
Jari Pitkanen	Kartano 49300	Tavastila, Finland
Robert Ross	Box 4373, Station C	London, ON
Carlos Saenz	2018 Santa Ursula Ave.	Laredo, TX 78040
Robert Sowinski	Route 5, Box 399	St. Clairsville, OH 43950
Tracy Wood	220 S.E. 32nd Ave.	Hillsboro, OR 97123
Henry Zikuda	5239 S. Archer Ave.	Chicago, IL 60632

Renewals:

John Anderson, Alex Berman, Charles Boehnke, Mike Bugaj, Roosevelt Crawford, Albert Ellis, James Filler, Robert Fischer, Glenn Hauser, J.O. Mallinson, Kurt Nelson, Paul Petosky, Peter Sawatzky, Michael Scheel, Randy Schnepf, Richard Segalas, Paul and Dave Wardell, John Wierhasz, Michael Wimer, Steven Wiseblood.

Rejoin:

Ted Pinski-747 Kipling Drive-Toledo, OH 43612

Address Changes:

Donald Marshall-801 4th Ave. N, #103-Great Falls, MT 59401
Timothy Miller-P.O. Box 370-Glen Ellyn, IL 60137
Kenneth Van Tassell-Riggs Hall Room 2-C.W. Post Center-Greenville, NY 11548
Robert Walker-2220 W. Highway 52A-Westport, KY 40077

Renewals Due in November:

B.W. Battin, Artie Bigley, Peter Campbell, Don Erickson, Robert Foxworth, Mark Gregor, Richard Hawkins, Alan Hobson, Roy D. Horsley, John Jefferson, Tom Little, Deane McIntyre, Joe Perge, Dave Pomeroy, Lee Prescott, Marvin Shults, Dennis Smith, Lexington Smith, Thomas Yeazell.

New member DAVID LEGLER writes: "You've got me hooked! After seeing the sample VHF-UHF Digest, as well as your Beyond Shortwave booklet, I would like very much to join your club. What really got me, however, was when, on Thursday, August 4, during the early evening, I picked up WACL-FM Waycross GA, WMAZ-FM Macon GA, WPCH Atlanta GA, and WIVK-FM Knoxville TN. I just recently purchased a Pioneer SX450 stereo receiver and I was amazed that I was receiving the above stations in stereo for a good part of the time that I was receiving them. You may like to know that I am 18 years of age and a member of both the IRCA and the NRC."

Three other clubs claim DENIS ORLANDO as a member: NRC, NNRC, and NASWA. Denis uses a Sony ICF 5900W receiver. He found out about the club from a mailing we sent to IRCA and NRC members.

FM and PSB radio are the DX interests of A. ROBERT PANTAZES. His gear includes a Fisher tuner and Sonar scanners.

From Scandanavia comes JARI PITKANEN, who found out about WTFDA from the World Radio-TV Handbook. Jari does his TV DX with a Luxor Llorisont color TV and a 5 element yagi antenna.

Many other clubs claim ROBERT ROSS as a member. He belongs to IRCA, ARRL, CIDX, LWCA, and the London Amateur Radio Club. DX wise, his gear includes a General Electric TV with rabbit ears and an FM tuner connected to a 10 element yagi. Both Communications World and the FM Atlas provided Robert with info on the club.

ROBERT SOWINSKI says he's interested in many broadcasting bands, but his primary interest is FM. He found out about WTFDA from Communications World. Robert's FM DX gear includes a Pioneer SX737 receiver hooked up to a 10 element yagi with a rotor.

Our Portland convention hosts did a fine job in getting TRACY WOOD to join the club. Tracy also belongs to ASWLC, and uses a Pioneer SX434 receiver for FM and a Zenith Chromacolor TV for TV DX.

Chicagoan HENRY ZIKUDA has plenty of time for DX since he's retired. He DXs with a Grundig receiver and a Realistic DX160. We've got Hank Bennett's book, The Complete SWL Handbook, to thank for getting Henry interested in WTFDA.

Tidbits.....

George Sherman is back in the fold, this time with a new address (see the September VUD). George's DX interests include SW, FM, TV, and MW, in that order. He's a member of NRC and NASWA, and for FM uses a Pioneer TX1000 tuner connected to a Winegard SC650 antenna with a rotor.

Magic City member James Filler says his interest is primarily TV: "My interest lies in TV, mainly UHF, because UHF provides more of a challenge, despite the fact that my VHF total is 68, to a UHF total of only 34. My equipment consists of a Zenith b/w model F1335-3, a P-7 (temporarily inoperable), and a UPW26 for UHF, and also a V-180 (also temporarily inoperable) and a 9 element Winegard for VHF. I belong only to WTFDA but thinking of joining IRCA." Magic City, by the way, is a nickname of Muncie, IN.

Some kind words in from new member Mike Mitock: "Let me take this time to say that as a new member, and having just read my first copy of VUD, I am very much impressed! I think my membership in the WTFDA is the best move I've made!!" Glad to have you aboard, Mike!

Our slow scan TV fan, Harvey Woodworth, files this report: "Lodge and fraternal functions have been keeping me quite busy, but I still plan to stay with the all band DX hobby. Although these present commitments will keep me busy for a year, I hope to be into slow scan TV (amateur) within six months, as retirement for me is just 46 months away. AM high fidelity stereo will be here soon, as will be the new generation of $\frac{1}{2}$ inch home video-cassette recorder/player units, and it will be fun to get on the "ground floor" of this hobby."

New foreign member Bernd Trutenau takes an opportunity to introduce himself: "I'm 18 years old and finished school in June this year. I've been DXing (MW/FM/TV) since several years, seriously since 1975. My receivers are: Siemens RG405 (FM 87-108.5 MHz, MW 518-1620, LW 148-185 kHz, SW 49mb). This is only a table radio, but I had very fine DX catches. TV: Universum SK 2752 b/w portable (European standard). The radio receiver is connected with a rotatable indoor antenna as well as an all band roof antenna (plus 25m longwire and central heating system for MW and LW). The TV receiver is connected with one VHF antenna (directed toward Holland, west that is) and two UHF antennas (directed toward the north and south). This provides us with 6 programs (5 German and 1 Dutch) - we are located here in the north of the German Federal state Northrhein-Westfalia, very close to the Dutch border. Until now I've had almost all European countries on my screen (on the VHF bands). The whole antenna system also includes several amplifiers. In July this year we had terrific FM DX conditions and they brought the finest catches I've ever had, including Denmark, Great Britian, Sweden, Yugoslavia, Italy (including a lot of Italian private stations, especially on 101-106 MHz), and Spain. The greatest distance was some 800 miles, which is quite unusual here on the European continent (in contrast to North America). Well, besides the WTFDA, I'm also a member of the DSWCI (Denmark), Medium Wave Circle (Great Britian), NRC and IRCA."

For the time being, please send all Mailbox contributions to club HQ in Whiting, rather than to me directly. I, along with many west coast IRCA members, have fallen victim to a prankster who is sending change of address cards to our post offices. The P.O. was given a Cleveland address for me, and other people have wound up in such picturesque spots as Milwaukee, Houston, and Detroit.

That about wraps it up from here. Keep those cards, letters, and phone calls coming in, folks. See y'all in November.....jz

STATION BREAK Noncommercial member ads welcome!
Limit 100 words. Send to Clarke
Ingram (address on back cover).

FOR SALE: Realistic Pro-3A lo-hi VHF/UHF 3-band receiver. 5 and 15 kHz selectivity. Tape and phone output, instruction manual. \$75 plus shipping. Linda Brodsky, 245-16 149 Ave., Rosedale NY 11422.

WANTED: Cassette airchecks of beautiful music FMs. Will be glad to exchange. Ted Fleischaker, 3023 Tremont Drive, Louisville KY 40205.



VHF UTILITY DX

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

OCTOBER 1977

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

<u>4-14:</u>	1745, N6149R	119.7	ov S.Rvr. nr Annapolis, MD (Bly Gey, Ltd.; Cessna T20P)
(73)			
<u>5-7:</u>	0150, KLM 477	164.075	Wash., DC (Veterans Adm. Hospital; pager; 100 watts; antenna at 150 feet)
(77)			
<u>8:</u>	1245, N2WL	133.0	ov DC (Warner-Lambert Co.; Lear Jet 240; 2e8s)
<u>28:</u>	1827, N10255	122.8	vic Easton, MD (Mr. George H. Hughey, Jr.; Cessna 150, 1-engine, 2-seat)
<u>29:</u>	1410, N78T	118.1	nr Gaithersburg, MD (Mr. Gerald J. Tobertello; Cessna 310, 2-e, 5-s; 7 watts)
<u>30:</u>	1238, KSK 209	161.95	Prince Frederick, MD (Marine Op.; 50 w; 410' ASL)
	1824, N8891X	128.7	ov Del. Bay (Ardsley Rental Corp.; Cessna 182; 1-engine, 4-seat; 7000 feet)
<u>6-6:</u>	2348, KAH 516	42.06	Carthage, MO (MO Highway Patrol; 300 watts)
<u>11:</u>	1206, N2070Q	125.3	5 mi se Bal. (BWI) Arpt. (Mr. James F. Walters; Cessna 177RG, 1-engine, 4-seat)

Martin J. Theil, 12 Princeton Drive East, Holiday, FL 33589 Bearcat 210 with indoor rod antenna; Aug 15-Sep 5 period

KRC 646	45.92	Brooksville, FL (ambulance)
KIB 660	155.13	Hillsboro, FL (police)
KFG 602	154.175	Tampa (fire)
KIA 653	154.430	Tampa (fire)

155.160	Clearwater (ambulance)	37.98	Clearwater (Superior Amb.)
155.220	Hillsboro (ambulance)	155.290	Largo (H&H Ambulance)
155.295	St. Pete. (ambulance)	155.280	St. Pete. (Owens Ambulance)
155.340	Clearwater (Comm. amb.)	154.400	Clearwater (fire)

My loggings, Hammarlund SP-600-JX-10 with 30' long-wire at 12 feet (new run); peak F2 MUF noted (bs-backscatter); GMT used

<u>8-19:</u>	2225, 30.30	<u>26:</u>	2045, 30.30	<u>5:</u>	2012, 30.30
<u>21:</u>	2220, 32.96	<u>27:</u>	2005, 30.30	<u>7:</u>	2200, 30.30
<u>22:</u>	2110, 32.96	<u>30:</u>	2040, 30.30	<u>8:</u>	2023, 30.30
	35.22 bs	<u>31:</u>	1905, 30.30	<u>9:</u>	2112, 32.96
<u>23:</u>	2230, 35.58 bs	<u>9-1:</u>	2045, 30.30		2130, 35.62 bs
	35.28	<u>2:</u>	2100, 30.30	<u>10:</u>	2210, 35.28
<u>24:</u>	2200, 32.96	<u>3:</u>	2308, 30.30		35.62 bs
<u>25:</u>	1920, 32.96	<u>4:</u>	2359, 30.30		

very strong solar noise bursts 9-7: 2232 and 9-9: 1635

32.96 and 35.28 believed to be medical paging systems in Argentina

Solar activity is picking up (as noted by the noise bursts above). The flux near mid September was the highest for any Sept since 1974. If such levels can be maintained, the fall F2 VHF season may be the best in the last few years. (The flares associated with the solar noise bursts above did cause blackouts on h.f., i.e., D-region absorption of signals preventing their reaching the E or F layers).

With this in mind, it is important that members who can monitor for US F2 effects (i.e., 33-MHz fire, 35-MHz pagers, etc.) carefully log and report the DX they get. Even approximate ID's (states etc.) are of some use in calculating MUF's.

73, Pat

WA5IYX



FM NEWS

Bruce F. Elving, Editor
18 1/2 East Fifth Street
Duluth MN 55805 218-727-6916

New FM Stations Granted

AZ Cottonwood K208AA *89.5 \$, m [KMCR *91.5 Phoenix AZ translator]; P; 10 watts
 AZ Tucson (10 miles north of Tucson) K276AL *103.1 \$, c [KUAI-FM *90.5 Tucson], UP; 32-12-53; 111-00-21, probably 10 watts.
 CA Sacramento *89.7 10 City College
 CA Walnut Creek K101-1 101.3 \$, rm(10-watt booster station of K101 101.3 San Francisco CA); 1
 CA Weaverville K276AM \$, g [KVIP-FM 98.1 Redding CA translator], 10 watts
 FL Gainesville 100.9 3000 h,v; 300'; initial decision, subject to reversal
 ID Boise 104.3 50000 h,v; 1795' 51, 97; k
 ME Monticello *89.5 10 Community Bcstg.
 MO Monett 95.9 3000 h,v; 270'; m
 NV Lund (also serving, through a 2-way split, Preston and Ruth NV) K280AO 103.9 \$, m [KSL-FM 100.3 Salt Lake City UT FM translator station] 10 w; 5 w each lobe.
 NY Cazenovia *90.9 10 Cazenovia College
 OH Jefferson *90.9 \$, g 5500 h,v; 372' Agape
 OH New Lexington 106.3 3000 h,v; 300'; kg
 UT Kanab K221AL 92.1 \$, k [KSUB-FM 92.5 Cedar City UT], CBS, 10 watts
 UT Moab K272AL \$, m [KREX-FM 92.3 Grand Junction CO], 10 watts
 UT Panguitch K221AK 92.1 \$, k [KSUB-FM 92.5 Cedar City UT], C, 10 watts
 WA Port Townsend K292AX 106.3 \$, m [KIXI-FM 95.7 Seattle WA]; NBC.
 WY Dubois K296AZ 107.1 [KDLY 97.5 Lander WY] \$, m; C; WY Jeffrey City K292AY 106.3 [KRAI-FM 93.7 Craig CO], \$,rm, 1 watt
 WY Rawlins K288BG 105.5 (also serving Sinclair and Rural Carbon County WY) [KRAI-FM 93.7 Craig CO]; \$,rm, 10 watts
 AT Banff CJAY-FM-1 95.1 1 watt; news format
 NB Saint John CBZ-FM, frequency, power unknown; CBC is the licensee
 ON Hamilton 93.3 50w; McMaster Students
 ON Waterloo 94.5 50w; U. of Wat. ", both quasi-commercial [repeater].
 PQ La Malbaie 92.9 805 watts; CBC-CBV /

Call Letters

KS Derby 95.9 KDRB
 PQ Lac Boyd 95.1 CHLG*-FM*-3
 PQ Duplanti 100.1 CHLG*-FM*-5
 PQ Eastmain 105.1 CHLG*-FM*-4
 PQ Petite Opinaca 100.3 CHLG*-FM*-2 to 54 w
 PQ Montreal 107.3 is apparently CITE*-FM*-2
 PQ Sherbrooke 102.7 is CITE*-FM*-1

Non-Identifying Stations

AR Little Rock KLAZ 98.5 98-Z
 DE Bethany Beach WWTR 95.9 FM-96, r
 FL Miami WAIA 97.3 no longer uses WAIA non-ID, I am told.
 IL Arlington Heights WWHM 92.7 WW-92
 IL Elgin WJKL 94.3 The Fox
 IL Woodstock WXR0 105.5 "The Crossroads"

IA Burlington KGRS 107.3 Rock 107
 IA Des Moines KOMI 97.3 FM-97
 IA Iowa City KICG 100.7 G-100
 KS Topeka WIBW-FM 97.3 Rock-97
 MI Grand Rapids WMLW, "Mellow," FM-101
 MO Jefferson City KJMO 100.1 J-100
 MO Springfield KWTO-FM 98.7 Rock-99
 NJ Atlantic City WNGM 103.7 Rock 104
 NJ Pleasantville WGRF 99.3 FM-99, r
 OH Cincinnati WSAI-FM 94.1 I-94
 OH Lancaster WHOK-FM 95.5 K-95
 OH Westerville WBBY 103.9 Y-104; rj; may go all j
 OR Portland KJIB 99.5 FM-99

Formats/Networks

AK Anchorage KKLK 103.9 S (AP Audio)
 AR Blytheville KHLS 95.1 k (from m)
 AR Jonesboro KBTM-FM 101.9 r (not nr)
 AR Little Rock KXXA 95.7 still all news
 CA Bakersfield KKXX 107.9 rp (from k)
 CA Inglewood KACE 103.9 js and ON THE AIR
 CA Lodi KWIN 97.7 r (from m)
 CA Los Angeles KPQL-FM 93.9 rp
 CA Oxnard KPMJ 104.7 ("K-105"), rm
 CA Redondo Beach KKOP 93.5 rm
 CA Santa Ana KYMS 106.3 rg (from p)
 CA Santa Barbara KTMS-FM 97.5 rp
 CA Truckee KEZC 101.7 mk (from r) [94"
 CO Colorado Springs KPIK-FM 93.9 rk, "K-/
 CO Craig KRAI-FM 93.7 rm
 CO Lakewood KPPL, "K-People" 107.5 mr
 CO Sterling KSTC-FM 96.7 r (not nr); mono
 CT Storrs WHUS *91.7 cr (c until 11 a. m.)
 CT West Haven WNHU *88.7 p ["D-FM"
 CT Westport WDJF 107.9 rj, "108-FM," or /
 IL Chicago WNET 95.5 no S
 IL East Moline WEMO 101.3 mr
 IL Elwood Park-Chicago WJFM 105.9 pc, also e; "Triad" non-id used during rock times.
 IL Moline WHTT 96.9 A; returning to A after a hiatus, presumably dropping S
 IL Peoria WWCT 105.7 pr (not n); non-ID: "The Album Station."
 IL Park Ridge WNTH *88.5 r
 IL Rock Island WHBF-FM 98.9 C (WHBF-FM, WHTT and WEMO have transmitters in Orion IL).
 IA Carroll KCIM-FM 93.7 rp (from m)
 IA Davenport KLIK 103.7 N, has some NBC newscasts, but not all of them; ditto for CBS on WHBF-FM.
 KY Manchester WWXL-FM 103.1 m
 ME Caribou WFST-FM 97.7 kr

Seemingly on 24 hours a day:

KOPN radio 89.5 mHz
915 E. Broadway
Columbia, Mo 65201

ME Houlton WHOU-FM 100.1 r (not rk)
 ME Presque Isle WDHP 96.9 mr (some p)
 MA Boston WBUR *90.9 only j (no c)
 WCOZ 94.5 pr
 WTK 100.7 heard as rp, but still mis-identifying as TK-101; it is apparently dropping k
 MA West Yarmouth WOCB-FM 94.9 mr (r in evenings)
 MI Allendale WSRX, jp; \$
 MN Albert Lea KCPI 95.3 r (not rm)
 MN Mankato KEEZ 99.1 E
 MN Winona KQAL *88.5 r (from rc); still \$
 MO St. Louis KMOX-FM 103.3 rm
 NJ Atlantic City WAYV 95.1 rm

ALL MUSIC. ALL THE TIME.

WAYV

FM 95 No, not Schulke!

NJ Bridgeton WSNJ-FM 107.7 mr (not mk)
 NM Albuquerque KRKE-FM 94.1 pr; still on low tower
 NY De Pew WBLK 93.7 B (from S)
 NY Riverhead WRON-FM 103.9 pr
 OH Columbus WVKO-FM 94.7 sm
 WMMI-FM 99.7 rm
 OH Sylvania WXEZ 105.5 r (from m); Z-105
 PA Allentown WXXN 104.1 k (from n); gives frequent, full id's.



PA Braddock WFFM 96.9 rm; uses above logo.
 TX Corsicana KXCL 107.9 U (not Y)
 TX Hillsboro KHBR-FM 102.5 k (from m)
 TX Wichita Falls KNTO 103.3 r (from m)
 MEXICO Tijuana XHRM 92.5 has English rs at night; Spanish, L, days
 Tijuana XHQF 98.9 no English

Facilities' Changes

AL Huntsville WAHR 99.1 10000 h,v; 540'
 AZ Nogales 98.3 (new) 230 h,v (225')
 CA Pacific Grove KOCN 104.9 950 h,v (550')

FL Boynton Beach WHRS *90.7 33500 h,v (195')
 apparently deleting directional antenna.
 GA Dublin WQZY 95.9 220' (3000 h,v)
 IL Waukegan WCFA 102.3 adds v, 190' (3000)
 IA Fort Dodge KKEZ 94.5 50000 h,v; 600'
 KS Garden City KBUF-FM 97.3 adds v
 MA Lynn 101.7 adds v, 175' (3000) [370']
 MI Battle Creek WKFR-FM 103.3 27000h,v; /
 MI Zeeland WZND 99.3 94' (3000 h); \$, gk
 MN Rochester KRCH 101.7 710 h,v (560')
 NE Omaha KEZO 92.3 85000 h,v (1210')
 NC Asheville WLOS-FM 99.9 46000 h,v(2670')
 for maximum Class C coverage: 57, 107 mi.
 ND Minot KCLB-FM 97.1 65000 h only; 840'
 OH Cleveland WMMs 100.7 7700 h,v; 1060'
 WQAL 104.1 7000 h,v; 1100',
 both of above reduce coverages somewhat.
 OH Hillsboro WSRW-FM 106.7 50000 h,v (160')
 PA Waynesboro WANB-FM 113.1 550 h,v; 620'
 TN Nashville WNAZ *88.9 500 h,v; 120'
 TX El Paso KUOE 95.5 88000 h,v; 1390'
 TX Plainview KPLA 97.3 100000 h,v; 440'
 UT Orem KORM 107.4 -920' (3000 h,v) [1200']
 WA Seattle KRAB *107.7 63000 h, 27000v; /
 WI Milwaukee WYMS *88.9 1500 h (870')
 MI Milwaukee WZLU-FM 95.7 34000 h,v; 610'
 SA Regina CFMQ 92.1 1000000; new, un-
 announced antenna height.

Deletions

CA Bishop K221AD 92.1
 MA Lisbury WVOI 92.7 or 95.3 (it finally
 happened; station was long silent)
 OH Ironton W237AB 95.3
 PA Media 100.3; back in application status,
 along with two other Media 100.3 app's.

On Air and DX Ready (presumed)

AL Greenville WKXN 95.9 3000 h,v; 226'
 AR Lake Village KLVA 95.9 3000 h,v; 300'; g
 CA Ridgecrest KZIQ-FM 92.7 km 3000 h,v;
 -120' (translator in Ridgecrest-China Lake
 on 92.7 requests move to 99.3)
 FL Tallahassee WOND 103.1 3000 h,v; 300'
 GA Camilla WGBI 105.5 3000 h,v; 300'
 ID Sun Valley KSKI-FM 93.5 51 h,v; 2145'
 IN Rockville WAXI 104.9 1200 h,v; 440' [10 w
 IA Decorah KLCD *89.5 \$, c (MN Public R.), /
 KS Hiawatha KNZA 103.9 3000 h,v; 300'
 KS Oberlin KFNF 101.1 100000 h,v; 420'
 MA Worcester WCHC *89.1 10 w
 MS Gulfport WGUF-FM 96.7 3000 h,v; 260'
 MO Montgomery City KVCM 103.9 3000 h,v;
 241', \$, rm, U [295']
 MO Mountain Grove KLRS-FM 92.7 2400 (h); /
 MO Tarkio KTRX 93.5 3000 h,v; 235'
 MT Billings KBMS 98.5 25500 h,v; 400'; \$, k,
 l and SCA. NJ Lawrence Township WLCR *89.7
 10 w. NC New Bern WRBK 101.9 100000 h,v;
 580', \$, m. OK Weatherford KWEY-FM 97.3
 69000 h,v; 400'; \$. OR Albany KRKT-FM
 99.9 100000 h, 50000 v; 1075', \$, k
 TN Saddy Datsy WZDQ 102.3 3000 h,v; 286'
 TX Ballinger KCWB 103.1 3000 h,v; 300'; \$,
 m, has "Continental News."
 TX Marshall KMHT-FM 103.9 3000 h,v; 300'
 TX Port Lavaca KGUL 95.9 \$, kr (Calls, too),
 3000 h,v; 175'
 UT Logan KELW-FM 92.9 29500 h,v; -720'
 VT Windsor WVPA-FM Power, ht., frequency
 not known! [\$. g
 WA Wenatchee KIAM-FM 104.9 105 h,v; 1330'

WA Walla Walla KSXT 97.1 50000 h,v;
 1340'; \$ (height changed from that
 which was originally announced)
 WA Yakima KYBO 98.3 700 h,v; 560'
 WY Gillette KOLL-FM 93.5 3000 h,v;
 272', r
 VI St. Thomas WIUJ *88.9 10

On Air with Changes (selected)

AL Florence WQLT 107.3 100000 h,v; 700'
 FL Leesburg WHLY 106.7 100000 h,v; 800';
 gs; GA Savannah WTOG-FM 94.1 89000 h,v;
 1320'. IL Kankakee WBYG 99.9 10000 h,v;
 230'. IN Elkhart WYEZ 104.7 50000 h,v;
 500'. KS Dodge City KGNO-FM 95.5
 100000 h,v; 430'.
 MN Park Rapids KPRM-FM moves from 103.7
 to 97.5, 100000 h,v; 413'
 ME Bath WIGY 105.9 50000 h,v; 500'
 NJ E. Orange WFMU *91.1 1450 h,v; 360'
 NY New York WYNY 97.1 4600 h,v; 1300'
 WCRS-FM 101.1 4600 h,v; 1300'
 NC Burgaw WPJC 99.9 100000 h,v; 520'
 ND Fargo KFNM-FM 97.9 100000 h,v; 350'
 OK Oklahoma City KZUE 102.7 98000h,v;900'
 OR Lake Oswego KMJK 106.7 94000h,v;860'
 PA Philadelphia WCAU-FM 98.1 12500 h,v
 SC Darlington WJAR-FM 105.5 3000 h,v;
 260', k
 VA Exmore WEXM 107.5 50000 h,v (260')
 WI Shawano WTCH-FM finally moves from
 100.1 to 99.3 (3000 h, 180')

New Transmitters—Stereo ?

KS Winfield KSWC *88.3 NY Brookville
 MO Columbia KTGC 96.7 WCWP *88.1
 NE Lincoln KUCV *91.3 - 1 WV Fort Gay
 NC Whiteville WENC-FM 99.1; WFGH *89.9
 SD Madison KJAM-FM 103.1

67 kHz (SCA) Activities

AL Albertville WQSB 105.1 adds SCA
 AK Fairbanks KUAC *104.7 adds SCA
 CT Hartford WTIC-FM 96.5 Q
 WDRG-FM 102.9 no SCA heard
 IL Mt. Carmel WVJC *89.1 adds SCA
 IL Watseka WQFA-FM 94.1 no SCA heard
 TN Valparaiso WLJE 105.5 adds SCA
 KY Hazard WSGS 101.1 no SCA heard, only
 strange garblings at times
 MI Muskegon Heights WKJR-FM 101.7 no
 SCA; used only for telemetry
 NY Albany WAMC *90.3 no SCA heard
 NY New York WKCR *89.9 adds talking book
 WFUV *90.7 talking book
 NY Syracuse WNTQ 93.1 Muzak; identical
 to Muzak on WHHR 102.9 Syracuse.
 NY Watertown WNCQ 97.5 music (not Muzak)
 NC Davidson WDAV *89.9 adds SCA
 OH Cincinnati WGUC *90.9 no SCA heard
 WBOE *90.3 adds talking
 book; identical to WZZP, WKSU's SCAs.
 OH Hamilton WHSS *89.5 adds SCA; but
 what would a 10-watter be doing with an
 SCA?
 OH Wooster WNST-FM 104.5 no SCA; weather
 reporting system alluded to last month
 is carried only on their main channel.

WWST AM 960 FM Stereo 104.5
 P. O. Box 384
 Wooster, Ohio 44691

PA State College *89.9 (new) adds SCA
 UT Salt Lake City KWHO-FM 93.3 music (pr
 on main channel)
 VA Front Royal WIXV 95.3 adds SCA
 WV New Martinsville WRGI 103.9 adds SCA
 WV St. Albans WMLC-FM 105.1 adds SCA
 WI Ladysmith WWIB 103.7 teleprinter noise
 ON Burlington CING 107.9 adds talking book

\$tereo, or to be \$(tereo)

AR Arkadelphia KDEL 100.9, r
 CO Steamboat Springs KBCR-FM 96.7, m
 IL Ottawa WRXX 95.3
 IA Clinton KCLN-FM 97.7 r (not rm)
 IA Pella KPLL 103.3 mr, A
 SD Rapid City KGGG 100.3 k, Y
 WA Walla Walla KEXI 93.3 m
 MEXICO, Tijuana BCN XHFG 107.3

Abbreviations: c classical, e ethnic, g
 gospel, j jazz, k country, L Latin, m is
 middle of the road, p progressive rock, r
 rock oldies and top hits, s soul, A ABC-FM,
 B National Black Network, C CBS, E ABC
 Entertainment, I ABC Information, M Mutual,
 N NBC, P National Public Radio, S Associ-
 ated Press Audio, U United Press Audio, Y
 ABC Contemporary, Z Mutual Black Network;
 Q Physician's Radio Network (on SCA).

FM Stations of Brazil R=Radio.

88.1 R. Gazeta, Sao Paulo 5 kw
 89.3 R. Manchete, Rio de Janeiro, CP
 89.7 R. Record, Sao Paulo, CP for 50 kw
 89.9 R. Cultura " " (at 200 kHz spacing?)
 90.1 R. Brasil Central, Goiania, Goias
 90.5 R. Excelcior, Sao Paulo
 90.7 R. Jornal, Belo Horizonte, 10 kw
 91.3 R. Difusora, Sao Paulo
 91.7 R. Educadora, Campinas, Sao Paulo
 91.7 R. Triunfo, Porto Alegre, 1 kw
 91.9 R. Cultura; Apucarana, Parana
 92.1 R. Imprensa, Brasilia; CP for 10 kw
 92.3 R. Universo, Curitiba, Parana; 5 kw
 92.5 R. Globo \$; Rio de Janeiro
 92.7 R. Transamerica, Recife; 20 kw
 92.7 R. Jornal Integracao, Dracena SP; CP
 92.9 R. Eldorado, Sao Paulo
 93.1 R. Cultura; Botucatu, Sao Paulo; CP
 93.5 R. 31 de Marco; Aracaju, Sergipe; CP
 93.9 R. Verdes Mares, Fortaleza, Ceara
 94.1 R. Roquete Pinto, Rio de Janeiro
 94.3 R. Centro; Campo Grande; CP
 94.5 R. Princesa do Sul; Pelotas; CP
 94.5 R. America, Sao Paulo
 94.9 R. Difosora, Porto Alegre; 5 kw, CP
 95.3 R. Globo Capital; Brasilia; 10 kw, CP
 95.7 R. D'el Rei, Rio de Janeiro, CP
 95.7 R. Itatiaia, Belo Horizonte
 95.9 R. Porvir; Aracaju, Sergipe CP
 96.1 R. Sul, Barra Mansa, Rio de Jan. CP
 96.5 R. Tupi, Rio de Janeiro, 3 kw
 98.1 R. Eldo Pop; Rio de Janeiro
 98.5 R. Cultura; Caxias do Sul, CP
 98.7 R. Colombo, Curitiba, Parana; 1 kw
 98.9 R. MEC, Rio de Janeiro
 99.3 R. Tropical, Manaus
 99.5 R. Municipal; Pocos de Caldas, CP
 99.7 Radio JB, Rio de Janeiro
 100.1 R. America, Salvador, Bahia
 100.1 R. Universidade; Porto Alegre
 100.5 R. Nacional, Rio de Janeiro

100.9 R. Pan America, Sao Paulo, 50 kw. 101.3 R. Transamerica, Rio de Janeiro, CP. 102.1 R. Imprensa, Rio de Janeiro. 103.1 R. Cultura de Bahia, Salvador, Bahia. 103.1 R. Floresta Negra, Joinville, Santa Catarina, CP. 106.1 Emiss de Educ Rural, Caico, Rio Grande do Norte. 106.1 R. Nacional, Brasilia, 1 kw. 106.3 Emiss Rural, Petrolina, Pernambuco, 6 kw. 107.7 R. Assuncao Cearense, Fortaleza, Ceara. 107.9 Emiss. Continental, Recife. The preceding Brazilian list from Luiz Roberto de Medina, president, DX Club de Brasil, via Mike Donner. The preceding is not a complete list; CP means "construction permit." No calls? Where have all the P's gone? Now, on to members' and FM Atlas readers' reports:

Dual-city id's: PA York WSBA-FM 103.3 adds Lancaster PA. TX Sinton KOUL 103.3 FCC sets aside grant to Sinton-Corpus Christi; also denied continued use of Sinton-Portland TX i. d.

After being notified by WTFDAer Dick Clark HIBI San Francisco DR moved from 101.9 to 102.3 where they belong. Other DR doings: HIRJ 107.7 is on with 100 w in La Romana (100 w). 97.7 HIME with 120 watts in La Romana, "Radio Guia." Dick stopped in and talked with the owner; he is the farthest one who picked up his station. It is FM only, and HIME is not interested in AM whatsoever!

On air and DX ready is WAZY-FM on 96.5, having moved from 96.7 (Lafayette IN). Transmitter is 18 miles SW of Lafayette near Attica IN; operating on reduced power (probably 5 kw) pending FCC approval for the change; and by the time you read this they'll probably be on with their full 50 kw. Tom Cornell called WAZY-FM to find out this information after hearing them on 96.5, and seeing them—yes seeing them on the digital display of an FM car radio that Delco produces!

KSCF 97.1 Florissant MO is aiming for "early January" as its target date, says Rich Eddie. It took 8 1/2 years to get on; studios will be at Lafayette and Dunn Road in Florissant with remote studio at Noah's Ark Motor Inn, St. Charles MO; transmitter in Grafton IL. Will be mor, but not wall-to-wall. Quitting SCA? No SCA heard recently on WNAF 93.1 Indianapolis (and WWKI 100.5 Kokomo IN). Also, says Ted Fleischaker, WEKU Richmond KY continues 10 watts, and not heard in nearby Lexington.

San Francisco FMs have problems because of terrain, says David Grim, who traveled and sent much FM news this month. "Stereo in the car is almost ruined in many areas on most stations due to blockage/reflections. Oddly enough, KFOG which is one of the lower-power stations had one of the more stable signals. Same with KYA-FM. WTOF Canton and WCLV Cleveland have both dropped their SCAs." Apparently the Greek programming that was on them has been discontinued." He asks if anyone knows what kind of r KNBQ 97.3 Tacoma WA has?

Glenn Hauser says in pushing SCA. I am espousing a "something for nothing" philosophy; that there is a trade-off. Main-channel coverage is reduced when a station adds SCA, and in mountainous areas like east Tennessee SCA is not practicable. Yet, I charge that SCA must be fairly tested, and that even in TN and in San Francisco it should work, even in a car. Using WUOT *91.9 Knoxville as an example with 100 kw h & v at 590', I find with 100 kw and no SCA they get out 38 miles primary and 82 miles secondary. If they added an SCA and reduced modulation to a maximum of 90%, they would still wind up with a main carrier of 90 kw effectively and coverages of 37 and 81 miles. For such a slight (theoretical) reduction they gain a radio station (SCA) with 10,000 watts ERP and having coverages of 25 miles primary and 62 miles secondary. And SCA's static-suppressing qualities are infinitely better than AM within the primary coverage area of an SCA transmitter (or more properly a main-channel transmitter having an SCA), and its fidelity better, too, than virtually any AM station! And now Clarke Ingram updates the "WCKR" story:

At 8:29 pm Tuesday, Aug. 15, "WCKR-FM" 98.7 Carrick PA and its AM adjunct on 1200 kHz were caught and silenced by the FCC, who had no help from me. I was listening to "WCKR" when it happened, and in fact joked that the FCC had probably picked them up, after the station had gone dead. Calling the station to find out the difficulty, I was told that the FCC mobile unit was indeed at the door. The operator, whose first name is Bill, was not present at the time; it must have been quite a shock for him to return and find "WCKR" had been shut down. I'm told that he didn't have to forfeit his First Class license, which is fortunate; apparently he received only a reprimand from the FCC field engineer for the unfiltered AM harmonics in the SW band (did you hear them, Glenn Hauser?) which seem to have been the downfall of "WCKR." I do not expect them to return to the air. Meanwhile, "WBJO" 88.7 Midland PA was heard and taped again on Aug. 14 with a surprisingly near-perfect signal, the owner being inspired to sign 89Q on for a few hours of rock music after I'd called to report good reception of his equipment test around 9 pm. This may well have been the last night on the air for "WBJO"; its owner, after learning from me what happened to his friends at "WCKR," states that 89Q will not return either. Says he: "I have a First Class license, a ham license, and a CB license, and I don't want to lose them all." So ends the only "local" radio service to Pittsburgh's South Hills, illegal or otherwise, since my own "KXN-AM-FM" (actually legal at 100 milliwatts) closed in 1974 to move to a nearby high school, where we were stymied in our plans for 10w on *88.7. . . There is talk that one of the "WCKR" folk may start another illegal FM locally, and 89Q's owner mentions a proposed "WXLE" 90.1 Canonsburg PA, but these may never exist. It seems ironic that the FCC would promote localism in radio-TV and yet adopt regulations prohibiting such stations as small as "WCKR," forcing the Carrick fellows to operate "extra-legally" and thus be silenced. . . The absence of a station to which I've listened to constantly for more than a month may be enough to prompt me (and other "WCKR" listeners) to petition the FCC for less restrictive rules permitting such strictly local outlets. The loss of "WCKR" is mourned here. I will do everything within my power to legally revive it. [How about putting "WCKR" on cable, or on SCA?]

The CRTC, in licensing so many new CBC FM transmitters, has a job on its hands, as a letter to Fred McCormack from the Winnipeg office of the CBC says Brandon and Baldy Mountain transmitters are only "two of over 650 transmitters being planned for installations over the next several years as part of the CBC's program to extend the national service to all unserved or inadequately served communities in Canada and the north—a program which has justifiably been called the greatest engineering feat of its kind in the world. . . Because there are not enough suitable AM frequencies available, the CBC is using FM frequencies in order to extend the AM national program service." Why, I ask, do they embrace FM only as seemingly a last resort, and not capitalize in their letters and promotion on FM's high fidelity and static-free qualities, and why is the national program service called an "AM"

(rather than a "radio") service?

Rick Samford, Burnet TX, noticed a Mexican station on 107.7 during a recent tropo opening to northern Mexico (Monterey, etc.). "No Mexican stations are listed on this frequency, and there are no Texas border stations on this frequency. Monterey was quite strong, and the antenna bearing was about the same. The station played English-language rock." If anyone has knowledge of such a station, please write in and let us all know. Rick is within 200 miles of the Rio Grande, and has the potential to tune in Mexican FM whenever tropo is up.

Also contributing: L. Weil, North Babylon NY; Ron Wing, Wichita KS; Roger W. Winsor, Hobart IN. (List continued from lower on this page.)

Andy Smith says Pacifica's WFPW *89.3 Washington DC is in danger of going off the air. "I would not care if it did. The staff is about 75% black and they seem to have their ideas of what 'black music' is. They say that they are trying to bring about racial harmony; but their policies do everything to discourage it. It would not hurt to give this license to someone else, like the University of Maryland, who would like it. Pacifica fought five years to get the license. Now it appears to be losing it through faulty operations which disgust and discourage listeners and contributors. I contribute to WGTB and WAMU, but am frustrated by WFPW. Richard Steinberger sent an article from the May, 1977 Audio showing prototype McIntosh equipment being demonstrated in the home of Harold Colt, who lives near the WTIC-FM 96.5 Hartford CT transmitter, and tries to listen to WQXR-FM 96.3 New York.

Ken Van Tassell is in college this year and plans to work at WCWP *88.1 Brookville NY. "It's probably in the top 10 college stations in the country. We are planning to go stereo sometime around December or January!" Larry Weil, who DXes SCA with a Karkota adapter, says in the July article, both input and output stages are emitter followers, which match impedance (high in, low out) but do not provide voltage gain. WFUV 90.7 New York supposedly runs talking book SCA only 10 to 10:30 pm on Mondays, Tuesdays, Thursdays and Fridays, while WKCR 89.9's will be on noon to 8 pm, including Saturdays and Sundays. In-Touch Networks will offer this service.

And Clarke Ingram is not the only WTFDAer with news of illegal stations. Ron Wing saw my column in which I speculated that the extralegal Leadville CO translators are deleted. Not so! He was in Leadville Aug. 8 and they were on, sometimes sending out stations in addition to the intended ones. Here they are. "K299" 107.7 carries KVOB 99.5 Denver, KUAD 99.1 Windsor, KVMN 98.9 Pueblo, and KIMN 98.5 Denver, in frequencies descending from 107.7. Similarly "K292" 106.3 has KAVI 95.9 Rocky Ford, KKKX 95.7 Denver, KRDO 95.1 Colorado Springs. He also heard some stations, such as KQIX 93.1 Grand Junction on about 106 MHz, and wonders if that one was cable radiation? Now, I ask, should I or any of you notify the FCC and have these illegal "stations" shut down? Or is the Leadville situation a wonderful new way to spread FM programming around the continent?

Roger Winsor was on a trip to New England, and notes stations there seem to give their call letters a lot in the morning, but at night, forget it. Both New Bedford stations, WMYS 98.1 and WJFD 97.3, were having troubles, WJFD off almost all the time; only heard once with the usual Portuguese programming. WGBH *89.7 Boston had by far the best Boston signal; "I guess you can't beat that 100 kw!" WDSO *89.1 back on the air with similar programming, hum like last year [Chesterton IN]. "I can't believe WAUS Berrien Springs MI is switching from 90.9 to 90.7 with WHAD so close, but at least I'll be able to hear WDHS or whatever it is sharing time in Glen Ellyn IL. Hi."

The Canadian Radio-Television and Telecommunications (CRTC) Commission came up with an unusual and almost prophetic argument in approving a talking book for CING Burlington ON on SCA. "The library plans to supply print handicapped people in the area with fixed frequency SCMO receivers in order that they may receive the proposed programming. The Commission is concerned that if for any reason the current three-year agreement between the library and the licensee is not renewed, and the library enters into a similar agreement with another FM station in the area, the entire stock of SCMO receivers supplied to its listeners would have to be either replaced or substantially modified. In order to promote the use of SCMO channels for broadcasting to the general public, and in order to help maintain continuity of valuable services such as the one proposed, the Commission would prefer to see the development and distribution of variable frequency SCMO receivers. The Commission therefore recommends the use of this latter type of receiver." Amen!

Contributors: R. J. Steinberger, Hudson MA; Phil Thomae, Port Lavaca TX; K. Van Tassell, Greenvale NY; D. Walcutt, Carbon IL.

In other news, the FCC is allowing KRNB *-FM" *90.1, a 10-watt Indian Reservation station at Neah Bay WA to broadcast classified ads at no charge to persons. The FCC approved the program, stating that Neah Bay is an isolated community with a population of 663. FCC says "no" to KFMP 102.9 Cape Girardeau MO seeking to change from a Class B to a Class C station, charging it is the only Class B station in Zone II; but the FCC said Malden MO would lose its Class A assignment (92.7) if Class C status were given KFMP. And the FCC approved new owners for WLCB-FM 106.3 Hodgenville KY, to the same ownership as WIEL (AM) Elizabethtown, with most programming to shift to Elizabethtown. A WIEL competitor, WQXE (AM) filed a petition to deny this transfer, but was overruled by the FCC. Contributors: Phil Boersma, Spring Lake MI; R. Clark, Le Vega DR; Tom Cornell, Greentown IN; Dwight Crabtree, Lafayette NY; F.S. Dombrowski, Jr., Milwaukee WI; Mike Dorner, Jr., Metairie LA; R. Eddie, St. Louis MO; A.H. Ellis, Brantford, Ont.; Ted Fleischaker, Louisville KY; D. Grim, Akron OH; Harry J. Hayes, Gouldsboro PA; G. Heubel, Little Ferry NJ; G. Hauser, Knoxville TN; C. Ingram, Pittsburgh PA; F. McCormack, Fargo ND; Rod O'Connor, SW Harbor ME; Jim Pizzi, Orcutt CA; John Robertson, Crosswell MI; Allen Rockford, Syracuse NY; R. Samford, Burnet TX; M. Scheel, Davenport IA; A. Smith, Hyattsville MD, etc.

NORTHERN FM-DX



Fred Nordquist
7945 Boxford Road
Clay, NY 13041

October 1977

Deadline: the 10th

For FM DXers in Canada, the Northwest-Central states of WA OR ID WY ND SD NE MN IA, and all states east of the Mississippi River and north of the Mason-Dixon Line. Report your DX now.

The bottom dropped out of the Es activity after 8/3, with no openings noted by reporters since then. This year's Perseids meteor showers on/about 8/12 were very active, with many bursts noted on FM. Some tropo was noted, however nothing was spectacular about them. Keep on the lookout for those few excellent general coverage tropo openings that occur in Oct/Nov. Now to the reports:

Harry J. Hayes - Star Route - Box 226c - Gouldsboro, PA 18424 (EDT)

Eq: Zenith Trans Oceanic w/whip.

7/31

Es 1642 Unid 101.5 CL sounded like WIXZ
1742 KOGO 94.9 IA Des Moines
1825 KJCK 94.5 KS Junction City
1901 KGNO 95.5 KS Dodge City, L&C for 1/2 hr
1700 Es peaked into Ch. 7 briefly.

8/3

Es Very intense at 1725. Some channels 2 or 3 deep at 1925.
1725 KBEQ 104.3 MO Kansas City, ID
1725 KTPK 106.9 KS Topeka, "FM-107", lcl wx
1742 KRNY 98.9 NE Kearney, ID
1745 KGMR 100.3 AR Jacksonville
1756 KWEN 95.5 OK Tulsa, "Queen"
1759 K TEN 93.3 OK Ada, rock, ID-Ada/Atoka

8/3

Es 1800 KSRD 96.9 NE Seward
1800 KMRJ 96.9 KS Pittsburg, o/KSRD, CBS NX
1806 KSOZ 91.7 MO Pt. Lookout, News, ID
1820 KRAV7 96.5 OK Tulsa, Tulsa lcl ad.
1831 KOYY 99.3 KS El Dorado, ID
1841 KOFM 104.1 OK Oklahoma City
1858 KNOI 103.9 IL Flora, "In Flora" heard
1900 KCHI 103.9 MO Chillicothe, many IDs
1915 KJSK 101.1 NE Columbus, "Nice place to
1921 KMGK 93.3 IA Des Moines /be"

8/12 MS

MS 0200 KQKQ 98.5 IA Council Bluffs, "It's 1 o'clock, this is KQKQ-FM" 15 sec. burst, album oriented. (1020) logged w/Zenith on Log Periodic antenna.

August turned out to be a lousey month for tropo here. The bursts on the morning of 8/12 were something else.. Not too many reports after this, as it's getting to be BCE time again.

Michael L. Hogan - 9224 Cottage Grove Avenue - Highland, IN 46322 (Phone: 219-924-2361)

Eq: Panasonic RF-877 receiver, single CM Probe 9 (Model 4408) antenna mounted horiz. at 17' hand rotated. 75 ohm coax with matching baluns. The lack of time has reduced the no. of new loggings for this reporting period. 152 new stations have been added to the log this year bringing the totals to the following: Hrd: 223; 88-92: 41; Es 15; 10w 5; MS 0 CN 1; USA 16; TPU 17. Stations verified on tape 148. All stations new to log:

8/8

Gw 0500 WGMZ 107.9 MI Flint, nx, ads, ID

8/10

Tr 2200 KQCR 102.9 IA Cedar Rapids, "Q-103"

8/11

Tr 1959 WJIM 97.5 MI Lansing, NBC nx
2230 WIFF 105.5 IN Auburn, 700 club

8/12

Tr 0800 WDFP 95.3 MI Battle Creek, ID
1005 WFLB 107.3 MI Greenville, ID

8/13

Tr 1011 WXUS 92.7 IN Lafayette, o/lcl WMMM

9/5

Tr 0600 WKXK 100.9 IL Pana, capsule nx - 73's

8/15

Tr 0745 WZZR 95.7 MI Grand Rapids, "new Z-96"
0747 WCBA 95.7 IL Effingham, Berts TV/ant. service ad (A good ad for TV DXers, hi!)

8/25

Tr 0913 WJVM 94.3 IL Sterling, ID
1059 WPNE 89.3 WI Green Bay, NPR

8/30

Tr 1100 WYMS 88.9 WI Milwaukee, ID, nx
1135 WIBI 91.1 IL Carlinville, ID

9/1

Tr 1053 WVJC 89.1 IL Mt. Carmel, ID

9/2

Tr 1733 WRTL 95.3 IL Rantoul, m

Mark & Scott Levitt - 3132 Woodland Ave - S. Plainfield, NJ 07080

Eq: Panasonic portable AM/FM with rabbit ears. Log totals: Mark's 110, Scott's 84

8/21

Tr 2215 WBOC 104.7 MD Ocean City (160)
Gw 2230 WRFY 102.5 PA Reading (87)
2245 W DVR 101.1 PA Philadelphia

8/26

Tr 2330 WMAL 107.3 DC Washington (180)
2345 WSLT 106.3 NJ Ocean City (100)
2350 WTKK 105.7 MD Catonsville (144)

8/27

Tr 0020 WBAB 102.3 NY Babylon
2355 WSNJ 107.7 NJ Bridgeton

8/28

Tr 2125 WJEJ 104.7 MD Hagerstown
2200 WNCE 101.3 PA Lancaster (104)
2230 WLAN 96.9 PA Lancaster
2245 WSTW 93.7 DE Wilmington (86)
2300 WCTX 92.1 PA Palmyra (120) WPVI
2310 WCWP 88.1 NY Brookville, o/ACI ch6-/

8/29

Tr 0030 WNAV 99.1 MD Annapolis (158)
0035 WPLR 99.1 CT New Haven (95)
0040 WGRF 99.3 NJ Pleasantville

(Thanks for the report -- Hope you report your DX as you receive more distant stations - fjm)

Convention Report On Page 16

NORTHERN FM-DX

October 1977

John Ebeling - 9209 Vincent Ave. So. - Bloomington, MN 55431 (CST)

Bloomington location-Eqt: Heathkit AJ-15 & Sony ST5130. 10-el. horiz yagi & vertical dipole. Prosit location-Eqt: Sherwood S2200 (tube) & 5-el. FM antenna in attic.

From Bloomington:

8/1

Tr 2130 KPRM 97.5 MN Park Rapids, ex-103.7

8/2

Es 1047 WBEU 98.7 SC Beaufort, rock
1558 WPCW 94.9 GA Atlanta, m
1600 WCSE 92.3 NC Asheboro, mx on SCA
1601 WQXI 94.1 GA Smyrna, country, "94Q"
1606 WHPE 95.5 NC High Point, gospel
1610 WSTS 96.5 NC Laurinburg
1631 WYYD 96.1 NC Raleigh, "Wide"
1641 WNCT 107.7 NC Greenville, m, mx on SCA
1644 WXRI 105.3 VA Norfolk, g, Sunshine Radio
1645 WYFI 99.7 VA Norfolk, gospel
1646 WQDN 97.7 NC Kinston, rock
1648 WGBB 97.7 SC Georgetown, r, "98 rock"

8/7

MS*2315 WDCX 99.5 NY Buffalo, good burst ID
*2330 WKSX 99.5 OH Cleveland

Paul D. Traska - 64 Weaver Ave. - Buffalo, NY 14206

Total: 176, States 22+DC, Prov 3, For 1, Educ 67

8/30

Tr 2150 WAEZ 97.5 OH Akron
2355 WJJ 97.1 MI Detroit

8/31

Tr 1215 CBEE 95.1 ON Chatham, Tone Testing

Patrick Martin - PO Box 14192 - Portland, OR 97214 (PDT)

Eqt: Pioneer TX-9100/Winegard SC-650 approx. 200' above sea level.

7/18

Es 0732 KVMY 104.7 CO Vail, m (850)
0736 KLGK 102.3 CO Breckenridge (850)
0736 KLAK 107.5 CO Lakewood, country (900)
0742 KBPI 105.9 CO Denver, rock (900)
0744 KOAQ 103.5 CO Denver, ID
0746 KTEX 103.9 CO Canon City, ID (940)
0749 KSFM 102.5 CO Woodland, ad (900)
0751 KZLO 100.7 CO Pueblo, ID (930)
0753 KPUB 99.9 CO Pueblo, ad
0754 KVMN 98.9 CO Pueblo, ad
0757 KDJQ 97.9 CO Pueblo, ID, rock
0759 KGLS 92.7 CO Glenwood Springs (900)

7/20

Es 1720 KLLL 96.3 TX Lubbock, ID (1300)
Tr 1725 KIT 94.5 WA Yakima, rock, ID (150)

7/25

Tr 0305 KSND 93.1 OR Eugene, rock, ID (100)
0330 KPNW 99.1 OR Eugene, EL, ID (100)
0020 CKLG 99.3 BC Vancouver, rock, ID (250)

7/26

Tr 1930 CFRO 102.7 BC Vancouver, ID (250)

7/27

Es 1638 KBIM 94.9 NM Roswell, ID (1150)
Tr 1641 KRKT 99.9 OR Albany, country (65)
Es 1650 KGLP 94.5 NM Gallup, ID (1100)
1659 KLEK 94.5 TX Lubbock, ID (1300)
1701 KLLL 96.3 TX Lubbock, ID

Robert Eddy - Box 338 - Newport, OH 45768 (EST)

6/2

Es 1241 CBC 96.9 PEI Charlottetown, contest

6/3

Tr 1756 WSOF 89.9 KY Madisonville, gospel, ID

6/5

Es 0916 KIOV 104.7 SD Sioux Falls, country, ads
0924 KMIT 102.3 SD Mitchell, wx, ad
0928 KOLY 99.5 SD Mobridge, gospel, ID, wx

8/8

MS*0130 KQWH 94.1 NE Omaha
*0230 WTOG 94.1 GA Savannah, k, "94-WTOG"
*0430 WGFA 94.1 IL Watseka /long burst.

8/9

MS*0345 WOOD 105.7 MI Grand Rapids, "OOD-FM"

8/10

MS*0130 WPXI 95.1 SC Charleston
*0215 KRDO 95.1 CO Colo. Sprgs, "\$95, KRDO"
Tr*0300 KRDO 95.1 CO Colo. Sprgs, in 2 minutes

From Prosit:

7/23

Es 0227 WKLH 92.3 AL Montgomery, rock
0230 WRAS 88.5 GA Atlanta

8/22

Tr 1700 KPRM 97.5 MN Park Rapids
* Times approx. as timer turns tape on for ~
5 min. every 1/4 hr. 73's - John.

9/1

Tr 0320 WDSB 94.7 DE Dover
1200 WAMC 90.3 NY Albany
1500 WDBN 94.9 OH Medina

9/2

Tr 1155 CHAY 93.1 ON Barrie

7/27

Es 1709 KMTY 99.1 NM Clovis, ID (1150)
1715 KTQM 99.9 NM Clovis
Tr 1830 KWIQ 100.3 WA Moses Lake, k, KQFM off, / (200)

7/31

Tr 0050 KMBI 107.9 WA Spokane, g, ID (300)
MS 0120 KRFW? 92.9 AZ Tucson, mx, ad (1000)

8/6

Tr 0112 CFMI 101.1 BC New Westminster, r/m (250)
1600 KUUZ 96.9 ID Nampa, rock, ID (310)
1640 KPMY 97.9 OR Eugene, rock (100)

8/7

Tr 2330 KRSE 103.1 OR Roseburg, ID (160)

8/14

Tr 2325 KXDD 106.3 WA Richland, rock, ID (200)
2350 KICN 98.9 WA Spokane, ID (300)
2359 KMBI 107.9 WA Spokane, news, ID

8/15

Tr 0009 KHQ 98.1 WA Spokane, rock, ID (300)
0011 KREM 92.9 WA Spokane, rock, ID
0015 KBOI? 97.9 ID Boise, ET w/EL mx (300)
0702 KEZE 105.7 WA Spokane, music, ID

8/27

Tr 2219 KONA 105.3 WA Kennewick, ad, ID (200)
2227 KZUN? 96.1 WA Opportunity, k (300)

8/28

Tr 0050 KREM 92.9 WA Spokane, ad, ID
That's all for now. Good DX....73's, Patrick

6/5

Es 0931 KIXX 96.1 SD Watertown, nx, wx, "96Kicks"
0941 KQAD 100.9 MN Luverne, lcl news
1005 KGGG 100.3 SD Rapid City, rock, "KG100"

6/6

Es 1848 KHOO 99.9 TX Waco, news, ad, weather
1855 KEFC 95.5 TX Waco, gospel program
1936 KRNY 98.9 NB Kearney, PSA, rock music

Robert Eddy report - continued.

6/6

Es 1938 KSRD 96.9 NE Seward, advertisement
 1943 KEFM 96.1 NE Omaha, music, promotion
 1947 KGRI 96.5 NE Grand Island,wx,country
 2001 KERN 98.3 WY Torrington,ad,country
 2002 KOAQ 103.5 CO Denver,ID, rock music
 2003 KROA 95.7 NE Grand Island,nx,wx,ID
 2006 KGOR 99.9 NE Omaha,rock mx,promotion
 2006 KVOO 99.5 CO Denver, ads, ID
 2018 KADX 105.1 CO Denver, FM netw. nx,wx
 2027 KLMO 104.3 CO Longmont, rock,"Super O"
 2029 KDMN 98.5 CO Denver, ID, rock music
 2031 KCOL 107.9 CO Ft. Collins,weather,ID
 2032 KIOZ 102.9 WY Laramie, weather
 2047 KRAI 93.7 CO Craig,news,sports,ads

6/9

Es 1626 KOLL 93.5 WY Gillette, rock, ads
 1636 KQSW 96.5 WY Rock Springs, wx, k
 Tr 1658 WVJC 89.1 IL Mt. Carmel,wx,ID,rock

6/14

Es 1622 WBLX 92.9 AL Mobile,ads, soul music
 1725 KSKG 99.9 KS Salina, ads,rock,"99KG"
 1731 WIBW 97.3 KS Topeka,weather,rock mx
 1801 KJHK 90.7 KS Lawrence, ID, news
 1804 KNEK 96.7 KS McPherson, PSA,instrum
 1817 KHCC 90.1 KS Hutchinson,sports,rock
 1936 KLOQ 106.1 KS Lyons, advertisements
 1945 KVGB 104.3 KS Great Bend, PSA,wx

6/20

Es 2018 KBBB 104.3 TX Borger, promo,country
 2020 KATT 100.5 OK Oklahoma City,"Cat 100"
 2029 KZUU 102.7 OK Oklahoma City,"K-Zoo"
 2034 KWHP 97.7 OK Edmond, ad,r,"K-whip"
 2039 KQIZ 93.1 TX Amarillo, ads, rock mx
 2101 KSIW 93.5 OK Woodward, weather,cl mx
 2105 KKKX 100.3 KS Colby, ads, Royals BB

6/21

Es 1831 KIVY 92.7 TX Crockett, program promo
 1841 KSLI 96.9 LA Alexandria, rock music
 1848 KAYD 97.5 TX Beaumont, rock,PSA, nx
 1859 KTRU 91.7 TX Houston, ID,news, rock
 1904 KOUL 103.3 TX Sinton, news, country
 1906 KIOF 106.1 TX Orange, ad, rock
 1930 KEAZ 101.7 LA Deridder, ads
 1932 KMAR 95.9 LA Winnsboro, ad, lcl BB

6/23

Es 1856 KAMU 90.3 TX College Station,ID

6/30

Es 1728 KUMM 90.1 NM Albuquerque, rock
 1758 KIPC 91.5 NM Albuquerque,ID,nx,sports
 1817 KBMF 98.3 TX Spearman, ad,ID,music
 2001 KVNO 90.7 NE Omaha,feature,concert
 2004 KQWH 94.1 NE Omaha, rock music
 2005 KWBE 92.9 NE Beatrice, promo,k

7/3

Es 1830 WEEJ 100.1 FL Port Charlotte, ad
 2204 KGTN 96.7 TX Georgetown, ad, BB

7/4

Es 1649 KAOH 94.9 MN Duluth, country music
 1650 WAKX 98.9 MN Duluth, weather,rock
 1703 KFJM 89.3 ND Grand Forks, 4th celebr

7/7

Es 1156 KUAD 99.1 CO Windsor, nx,ad,ID,rock
 1500 CEH 102.7 NS Halifax, news
 1502 CKCL 100.9 NS Truro, weather, music
 1523 WQDY 92.7 ME Calais,rock, ad
 1525 WMGX 93.1 ME Portland,ad, weather
 1529 WCOU 93.9 ME Lewiston, ads
 1529 WPEC 92.9 ME Bangor, ads, wx, music
 1533 WJBQ 106.3 ME Scarborough,rock, ad
 1536 WIGY 105.9 ME Bath, rock, ads

7/7

Es 1540 CFQM 103.9 NB Moncton, news, ad
 1544 WGAN 102.9 ME Portland, advertisement
 1545 CBZF 102.3 NE St. John, FFC, mx annt
 1551 WKXR 107.1 NH Exeter, bulletin board
 1552 WELM 107.5 ME Lewiston, ads, weather
 1556 WKME 104.3 ME Gardiner,promo,rock
 1556 WXLQ 103.7 NH Berlin, ad, sports
 1558 WFAU 101.3 ME Augusta, news, PSA, wx
 1600 WLKN 99.3 ME Lincoln, news, ads
 1602 WHOU 100.1 ME Houlton, news, PSA, wx
 1610 WRUM 96.3 ME Rumford, ad, sports
 1615 WEZF 92.9 VT Burlington, ads
 1617 WQCR 98.9 VT Burlington, promo, rock
 1620 CFQR 92.5 PQ Montreal, wx, ads,ID
 1637 WMEA 90.1 ME Portland, news
 1643 WBGW 97.1 ME Enagor, country music,ads
 1645 WLNH 98.3 NH Laconia, ad, weather
 1707 WQRC 99.9 MA Barnstable, news, ad
 1720 CFEC 98.9 NB St. John, ad, instrum mx

7/9

Tr 2157 WEEA 88.9 MD Baltimore, rock, ID

7/12

Es 2004 KHIM 98.3 TX Palestine, weather
 2030 KFRD 104.9 TX Rosenberg, baseball
 2044 KNCN 101.3 TX Sinton, ads,r,"C-101"

7/14

Tr 2017 WMRV 105.7 NY Endicott, advertisement
 2036 WQIX 100.9 NY Horseheads, music
 2038 WAAL 99.1 NY Binghamton, weather, ads
 2043 WQYT 98.1 NY Binghamton, ads
 2112 WQIV 105.1 NY Deruyter, ad,g, CBN netw.
 2159 WHCU 97.3 NY Ithaca, rock
 2215 WICB 91.7 NY Ithaca, rock
 2240 WIBQ 98.7 NY Ithaca, beautiful music
 2245 WKGW 104.3 NY Utica, rock, promotion
 2255 WJIV 101.9 NY Cherry Valley, g, //WOIV

7/23

Tr 2151 WSEI 92.9 IL Olney, advertisement

7/27

Es 2057 WTUL 91.5 LA New Orleans, PSA,mx summary

7/29

Es 1722 KGRA 103.7 LA Lake Charles, rock ,ad
 1725 KUFO 106.5 TX Galveston, ads
 1739 KNOE 101.9 LA Monroe, ads, rock music
 1743 KTXJ 102.3 TX Jasper, advertisements
 1751 KMBS 96.1 TX Harlington,SS/EE ID,annts
 1832 KSFA 92.1 TX Nacodoches, promotion
 1913 KPUP 97.7 TX Kingsville, PSA,ID,"K-Pup"
 1950 KOYE 94.9 TX Laredo, ads, rock

7/31

Es 1847 KFOR 102.7 NE Lincoln, ad, ID
 1855 KSNF 101.1 KS Oberlin,"Proud Country"
 1914 KLIN 107.3 NE Lincoln, ad,promo,instrum
 1916 KHAT 106.3 NE Lincoln, ad,ID,country mx
 1922 KFMQ 101.9 NE Lincoln, ads, rock music
 1924 KAWL 104.9 NE York, ads, baseball game
 1932 KJSK 101.1 NE Columbus, weather,PSA,ad

8/3

Es 1628 WWSA 89.9 WI Brule, NPR feature, ID
 1728 KCMT 100.7 MN Alexandria, country mx,ad
 1740 KOOO 104.5 NE Omaha, ad, country music
 1742 KBEM 88.5 MN Minneapolis,weather,rock
 1753 KTWN 107.9 MN Anoka, local news, ads
 1756 WIXX 107.1 WI New Richmond, ad, rock
 1758 KKWS 105.9 MN Wadena, advertisements
 1801 KJAN 103.7 IA Atlantic, ad, news
 1804 KDUZ 107.1 MN Hutchinson, wx, farm news
 1807 KNEI 103.9 IA Waukon, news
 1808 WOSH 103.9 WI Oshkosh, promotion
 1814 WWJO 98.1 MN St. Cloud, promo,country

C.C.I. [UNIDENTIFIED DX]

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

OCTOBER 1977 Is this the largest column of the year?

Unidentified TV DX

- Eric Fader, 23-35 Bell Blvd., Bayside NY 11360 (1977 unIDs)
Thu Aug 4 Tr ch 3 2204 EDT- -Station zoomed in on large map of USA with Chicago and large cities lettered on it. Words then seen on screen "This morning" and large 3. Went into movie later not network programing. May have been NBC station which elected not to carry the "Sam Sheppard Murder Case". WSYR? PTA: To NE. (TV GUIDES no help but logo drawn does look somewhat like WSYR's. ---FEA)
- Mike Reid, 109 Arjay Cr., Willowdale, ONT M2L 1G6 (1977 unIDs)
Wed May 4 MS ch 2 0423 EDT- -"Phil Donahue Show" Ant. WSW, SW
Thu May 5 MS ch 2 0504 EDT- -Slide with AR address seen. Looked like end of record commercial.
Fri May 27 Tr ch 33 0721 EDT- -Res-C seen and sign on at 0731. New England TVGs say WETK not on. There is a ch 33 xltr in Utica NY but its primary is WCNY-it was running a 3/4 GB at 0721. Ant. E.
Thu Jun 9 Es ch 3 0404 EDT- -2Es? "Tomorrow Show". Ant. W. MDT ch 3's do not run it this late. KCRA? KORK? (Both KCRA and KORK have it at this time. ---FEA)
ch 3 0412 EDT- -2Es? Final news. Ant. W. Looked like replay of 11pm news (to 0430). CO, NE, WY in earlier.
Mon Jun 20 Es ch 2 0141 EDT- -"PTL Club" Ant. W, NW. (TV GUIDES no help. ---FEA)
Sun Jul 3 Es ch 2 1827 EDT- -"Big 2 News", NBC affiliate. Ant. SW, KATC on 3. (Probably KPRC but may also be KMID. ---FEA)
Mon Jul 4 MS ch 2 0219 EDT- -"700 Club" to 0230. Ant. WSW. (Does anyone have a "700 Club", "CBN" station list? ---FEA)
Es ch 3 1329 EDT- -"Big News" CBS station. KNOP and WDAF in. (No help from TV GUIDES. ---FEA)
- Dean Markoshan, 10636 Ave. B, Chicago IL 60617 (1977 unIDs)
Tue Jul 17 Es ch 4 1830 CDT- -Station ID "Voice of the South". Ant. S. (Ok you guys in Dixie---who is it? ---FEA)
Tue Jul 26 Es ch 3 1929 CDT- -Malcolm Poindexter. Boxing in background. Ant. W. (Nothing in any Western TV GUIDE. ---FEA)
Sun Jul 31 Es ch 3 0210 CDT- -"David Susskind" Antenna SW. (KENW runs it at 0645. ---FEA)
ch 3 0215 CDT- -Dean Martin Movie. PTA: SW.
- Robert Goodman, 2030 Hering Ave., Bronx NY 10461 (1977 unIDs)
Sat Jun 4 Es ch 4 1200 CDT -"Big News" program or promo. PTA: Texas. (No help from TV GUIDES. ---FEA)
Mon Jun 6 Es ch 3 1640 CDT- -Slo-mo bird flight on program. Cowboy picture also seen may have been "Bonanza".
1707 CDT- -Man standing with mike; interview, subtitle: "Leopold .."
1845 CDT- -Dialogue between two women.
1900 CDT- -Promo for "Best of Donny & Marie." Much of the audio on 3 for this date was French but not necessarily from same station. Who else programs in French on 3 besides Rimouski? (I have CBWFT, CBHFET, CBVT2, CBFT2 listed as French on 3. ---FEA)
Wed Aug 3 Es ch 3 1130 CDT- -"Marcus Welby" PTA: S and Central. MO and FL seen. (GA and LA stations negative. ---FEA)
1800 CDT- -"Family Feud" PTA: Same as above. (GA, LA, AR & MO stations negative. ---FEA)
- Michael Scheel, 4126 Nobis Dr., Davenport IA 52801 (1977 unIDs)
Fri Apr 29 Au ch 29 0815 CDT- -Kids singing, PBS type show. In for about 30 sec. KHNE? WRSO? (KET and NETV stations are both negative; KET listed as not on at this time, NETV runs "Nova" at this time. ---FEA)

Michael Scheel Continued,

- Fri May 27 Es ch 2 1015 CST- -"NBC Today Show" Man with wire frame glasses, medium cut dark hair. Pat Dyer saw KTCA at 0959. PTA: West (KOAI lists it from 0800 to 1000 CST. ---FEA)
- Tue May 31 Es ch 2 1530 CST- -Delayed "Hollywood Squares" PTA: West (KTVQ checks, KBCI is negative. ---FEA)
- Mon Jun 6 Es ch 2 1613 CST- -"Brady Bunch" PTA: NE States. (WKTV runs it at 1600 CLT. ---FEA)
- WKTV**
ch2
- 1617 CST- -"Gomer Pyle" PTA: NE (Nothing in NE checks. ---FEA)
- 1631 CST- -"Adam 12" (WKTV has it at 1630 CLT. ---FEA)
- 2102 CST- -"The Jeffersons" (KTVN runs it at 2100 CLT. ---FEA)
- 2139 CST- -"Little House on the Prairie" PTA: West. (KOAI has it from 2100 to 2200 CLT. ---FEA)
- Tue Jun 7 Es ch 3 1813 CST- -"Barney Miller" (TV GUIDES no help. ---FEA)
- 1833 CST- -"MASH" PTA: Quebec and Maritime Provinces. (Same results as above. ---FEA)
- Thu Jun 9 Es ch 2 1710 CST- -"Match Game" PTA: South
- 1714 CST- -"Beverly Hillbillies" PTA: South
- Tue Jun 21 Es ch 3 1545 CST- -"Virginian" or ?
- ch 2 1741 CST- -"Gilligan's Isle"
- ch 5 1817 CST- -"25,000 \$ Pyramid" with Loretta Swift & Mike Farrell.
- 1820 CST- -Interview program.
- 1831 CST- -"Wildkingdom" Program location was Colorado.
- 1837 CST- -"To Tell the Truth" PTA: For this and above South.
- Thu Jun 23 Es ch 5 1827 CST- -Interview program. PTA: South, same for below.
- 1853 CST- -"New Treasure Hunt"
- ch 2 1854 CST- -Astromery lecture.
- Fri Jul 1 Es ch 2 1850 CST- -"Celebrety Sweepstakes" PTA: South
- Tue Jul 12 Es ch 2 1415 CST- -"PTL Club" or similar type show PTA: Middle Atlantic states. (TV GUIDES negative. ---FEA)
- Tue Jul 26 Es ch 5 1835 CST- -"100,000 \$ Name that Tune" PTA: See Below
- 1840 CST- -"Hogan's Heros" Suspect WTTG or WNEW. (Both negative. ---FEA)



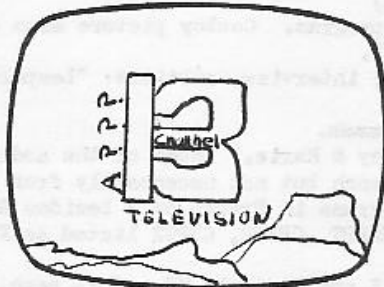
KTVN-2
RENO

Steve Shaffer, 10956 Indpls. Blvd., Box 4, Hammond IN 46326 (1977 unID)

- Wed Jul 27 Tr ch 9 0600 CDT- -TP with Sault St. Marie. At 0600 "this is ... using channel 9 for purpose of identification." 9 or 10 K calls were then read. One was for a Gun ... Springs. Could it be a new CDN station? (No as there are no allocations for this channel in Sault St. Marie ONT, I have no listings for a new station on US side. Anyone have any ideas? ---FEA)

Edward Cotton, 4106 2nd St., Chesapeake VA 23324 (1977 unID)

- Thu Jul 21 Es ch 5 1730 EDT- -Ant. SSE News in unrecognized language. Had slide for ch 13 with "channel" printed in center of 3. Mountains drawn in background. "DEL" over 1 of 13 and A??? up left side of 1. See drawing to left. (Does anyone recognize this slide? None of my lists has anything like this. ...FEA)



Unidentified FM DX

Frank Aden, Jr. address on first page of CCI (1977 unID)

Tue Jun 28 Es 97.3 2205 PDT- -Weather for Medicine Hat on what appeared to be CBC net station. None of my listings have a CBC station on this frequency in Alberta.

Michael Scheel address on first page of CCI (1977 unID)

- Tue Jul 12 Es 94.1+1 2000 CST- -Phillies/St Louis Ball game. Offer for Phillies helmet heard.

Harry Hayes, Star Rte., Box 266c, Gouldsboro PA 18424 (1977 unIDs)

- Mon May 30 Es 96.1 1720 EDT- -Station QRMing KWAT w/baseball game with mention of

Harry Hayes continued.

Lake City. PTA: MN, SD (There is a Lake City MN north of Rochester MN on the Miss. River but I can not find any stations on 96.1 in that area. ---FEA)

Sun Jul 31 Es 105.5 1727 EDT- Station calling itself "KGB-105" PTA: IA, NE
101.5 1747 EDT- Call given as KSID or KSIP. PTA: IA, NE

Wed Aug 3 Es 101.7 1905 EDT- Station giving call as KBKB or KDKB. Some parts heard were "Whenever News breaks "KB" (or "KD") gets it on". Then into WABC type jingle with group saying "Start the Music ---KBKB" Station was top 40 format. PTA: MO, IL, IA or NE. (Not KDKB as it is on 93.3 in Mesa AZ. ---FEA)

Identifications

Robert Williams, Jun 8, ch. 3, 1853 MDT. KLINE schedules are positive.

TV Guide Information

John Combs reports that the Florida Editions of TV GUIDE have been changed and a new Orlando Edition lists WDBO-6, WFTV-9, WMFE-24, WESH-2, WEDU-3, WFLA-8, WTVT-13, WUSF-16, WLCY-10, WTOG-44, WJCT-7, WCIX-6 and WKID-51 (partial schedule). John mentions that there still maybe a Central Florida Edition or may have been split into three parts. He reported that more information will be sent in as he learns more about the changes.

PERSONNEL

- Fred Stewart President
- Harvon Mathanson Vice-President, Operations
- John Wood Vice-President, Sales
- Gordon Johns Manager, CJCH-TV, Halifax
- Joe Irvine Manager, CKCW-TV, Moncton
- Ken Boyce Manager, CJCB-TV, Sydney
- Ethel Roach Atlantic Television System Traffic Co-ordinator, Moncton



Up-dater on ATV

ATLANTIC TELEVISION SYSTEM

If you notice any changes in your local issues of TV GUIDE please let me know as I am planning a regional office up-dater for early 1978.

cjch-tv Halifax	CJCH-TV CJCH-TV	Halifax Canning	CJCH-TV CJCH-TV	Caladonic Yarmouth
ckcw-tv Moncton	CKCW-TV CKCW-TV CKAM-TV	Moncton Charlottetown Newcastle/Chatham	CKAM-TV CKAM-TV CKCB-TV	Becharle Dunkin Campbellton
cklt-tv Saint John	CKLT-TV CKLT-TV	Saint John Woodstock	CKLT-TV	Becharle
cjcb-tv Sydney	CJCB-TV CJCB-TV CJCB-TV	Sydney Inverness Antigonish	CJCB-TV CJCB-TV CJCB-TV	Dingwall New Glasgow Bay St. Lawrence



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\$17 wired **\$13** kit

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Now just \$17 wired; \$13 in kit form, postpaid by first class mail from: Bruce Elving, 18 1/2 East Fifth Street, Duluth MN, 55805.

PORTLAND: THE WAY IT WAS...

WTFDA's first West Coast convention seemed beset with tragedy at first with John Zondlo's car breaking down in Laramie WY, Bill Frahm stranded at his station and Dr. Bruce Elving also unable to make it. Overall, the 1977 WTFDA Convention was enjoyed by all who attended, with many interesting activities occurring during August 5th, 6th and 7th.

About 30 DXers attended the convention at the Flamingo Motel in Portland, Oregon, coming from many parts of the country. Bill Grant was the first to arrive--on the 1st after a tour of many western National Parks. Frank Aden, Jr. and Joe Gragg arrived the morning of the 3rd, and later that night with the arrival of Bill Block, the four watched skip from Los Angeles, Las Vegas and Phoenix. Late Wednesday night, hosts Bill Block and Frank Aden, Jr. picked Don Erickson up at the airport.

Thursday morning saw some of the early arrivals touring the city, with the Portland Rose Gardens, Washington Park, transmitter sites of the Portland TV outlets, downtown Portland and the famous Lloyd Center as sites seen. With John Zondlo and Bill Frahm calling in their bad news that afternoon, part of the group chose to see the new James Bond movie, "The Spy Who Loved Me." After the show, Bill Block, Joe Gragg, Frank Aden, Jr., and Bill Grant went to Pat Martin's place for a look at his DX equipment. While Bob Rusk was preparing the Convention Packet, the group saw some interesting aurora and tropo DX, with the Au reception being Joe Gragg's first exposure to that unusual form of DX.

Friday morning was the official start of the Convention, with the arrival of a majority of the conventioners. Host Frank Aden, Jr. opened the meeting room at 9 a.m. At 10 a.m. part of the group led by Bill Block and Frank Aden, Jr. were given an extensive tour of the KGW Building, which houses KGW-AM-TV and KINK(FM). Returning to the motel, the conventioners were interviewed by Janis Gray of the Portland Oregonian for a newspaper feature. Friday afternoon saw many of the DXers on the Flamingo's roof, where host Pat Martin and others helped to erect an antenna for the meeting room's receivers. Pat Martin donated a mast and antenna, Paul Wardell contributed a color TV set and Frank Aden, Jr. gave a rotor for the installation. Friday evening had the traditional gab sessions, showing of DX slides, looking at QSL collections and listening to DX tapes. Dr. Bruce Elving's ANARC 1977 speech was also heard by the convention delegates.

Phil Bytheway was auctioneer for the WTFDA auction later Friday night, with over \$35 collected for our club. A large quantity of club supplies were also sold to DXers during the Convention.

Saturday morning brought what many felt was the highlight of the Convention, a DXpedition to Oregon's highest peak, Mt. Hood. The conventioners assembled in the parking lot of Timberline Lodge at the 6000-foot level. Dale Connolly's DX van equipped with FM receiver, color TV and antennas became the convention center on Mt. Hood, with many DXers trying out the equipment. FM DX was heard from as far away as Sacramento CA (KFBK) and UHF TV was seen from Pasco WA (KEPR-19). Before leaving Mt. Hood, the group toured the lodge and ate lunch in the lodge's restaurant.

Returning from Mt. Hood, the conventioners gathered for a group photo in front of the Flamingo's fountain. 6 p.m. brought the first guest speaker, KATU-TV 2 chief engineer Bill Vandermay. Mr. Vandermay brought along reception reports collected over the years; a few were from well known WTFDAers! His talk included translators, reception reports, technical aspects of KATU and how they deal with the public about E-skip interference. At 7 p.m. a majority of the DXers convened in the Flamingo's banquet room for the traditional feast. Returning to the meeting room, the second guest speaker was introduced: Dave Primuth, station operations manager of KWAX, the University of Oregon's classical FM station. Mr. Primuth covered public radio, station programming policy and the history of KWAX (whose call letters were chosen because it is the voice of the U of O "Ducks"!).

At 8:30 p.m. an informal business meeting was conducted with John Zondlo and Mike Hogan connected by phone from Indiana. While Frank Aden, Jr. asked for comments and suggestions, Pat Martin relayed the information to John and Mike. The hottest topic was late VUDs and what solutions existed. It was announced that a new edition of the WTFDA TV STATION GUIDE is being planned. Frank Aden

followed the meeting with a talk on identifying those unidentified DX catches. Joe Gragg then spoke on what causes TV and FM DX. His talk lasted over two hours, taking credit for being the longest speech ever at a WTFDA Convention!

Sunday morning the conventioners broke off into groups of five and six and headed for Portland's Mt. Tabor Park for a picnic and a DX session in Dale Connolly's van. Dale also played some of his DX tapes, including his unusual MS catch of Cuban FM. By Sunday afternoon many of the conventioners were on the way home. The remaining DXers kept the meeting room open until 6 p.m. when the Convention officially closed, but not before a visit from a bewildered man dressed in only a towel who was believed to be looking for the steam room!

Results of the WTFDA prize drawing:

GRAND PRIZE: A Sanyo AM-FM Stereo Portable Radio, won by Evelyn Portzer.

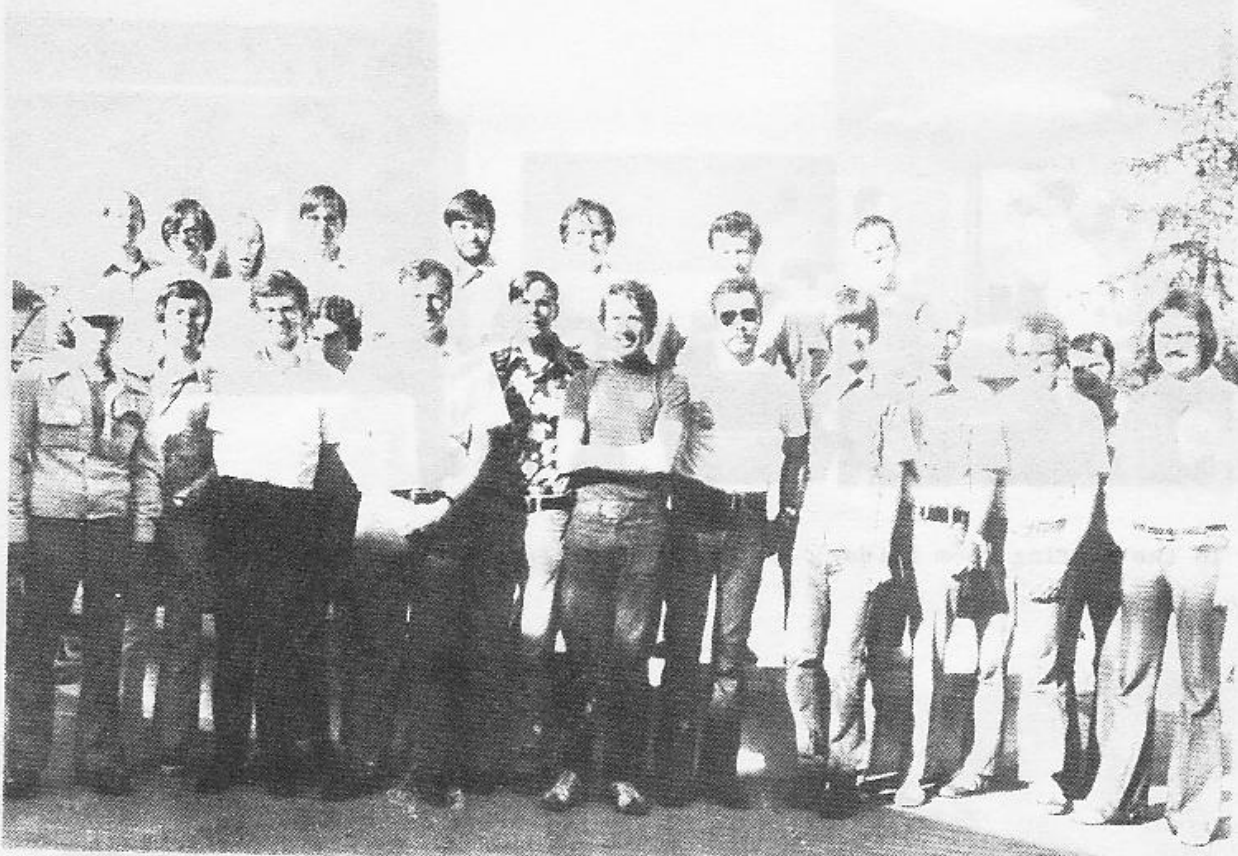
SECOND PRIZE: A Realistic Weather Radio, won by Don Erickson.

THIRD PRIZE: A TV/FM Antenna Book, won by Jim Korn.

A color photo package of the Convention is available from Bill Block. For more information, write Bill at 133 SE 31st Street, Portland OR 97214.

On behalf of Convention hosts Bill Block, Pat Martin and Paul Wardell, I would like to thank Bob Rusk for his work and research on the Convention Information Packet, and Bruce Elving, who donated a copy of his FM Atlas for the auction.

Frank Aden, Jr.

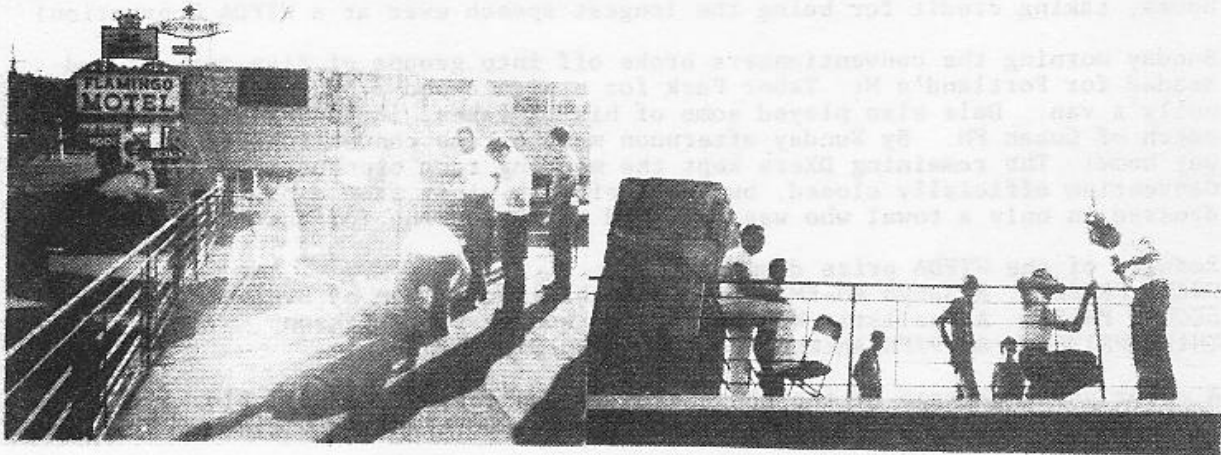


The Portland People!

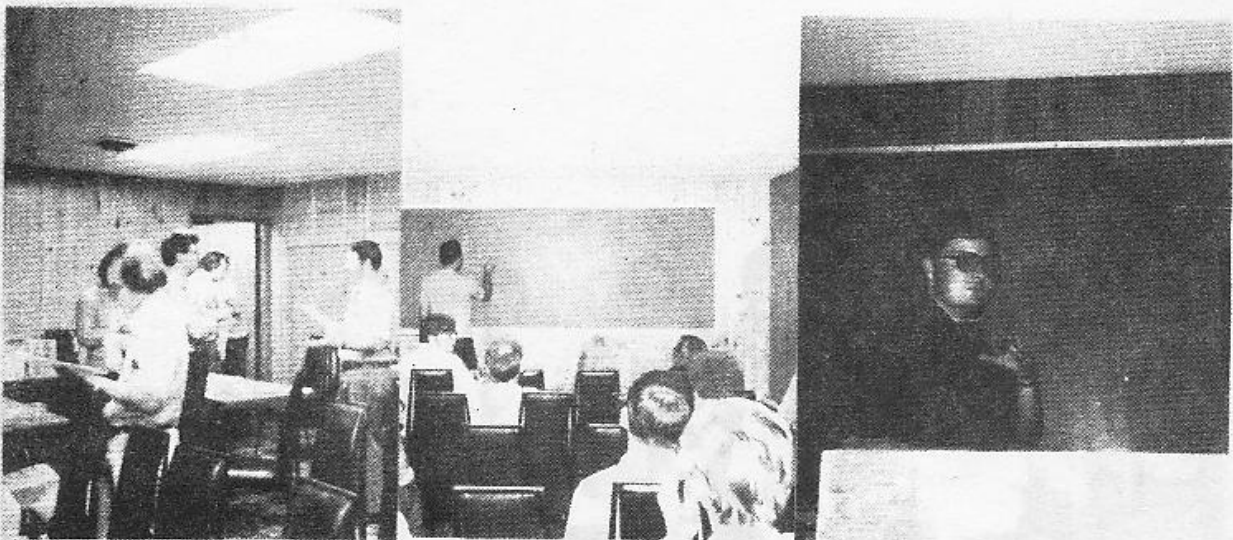
FRONT ROW: Eldon Luoma, Bill Block, John Jefferson, Bo Somerville, John Clements, Mark Campbell, Clint McAuliffe, Dale Connolly, Tracy Wood, Bill Grant, Danny Buntin, Ron Wing, Dave Primuth.

BACK ROW: Don Erickson, Bruce Portzer, Evelyn Portzer, Rich Segalas, Phil Bytheway, Paul Wardell, Jim Korn, Joe Gragg.

NOT SHOWN: Frank Aden Jr., Pat Martin, Bob Rusk, Mike Northam, Bob Bodell, Dave Williams, Mel Hickman.



DXers look on as Convention co-host Pat Martin constructs and completes the antenna installation atop Portland's Flamingo Hotel (the 1977 convention center).



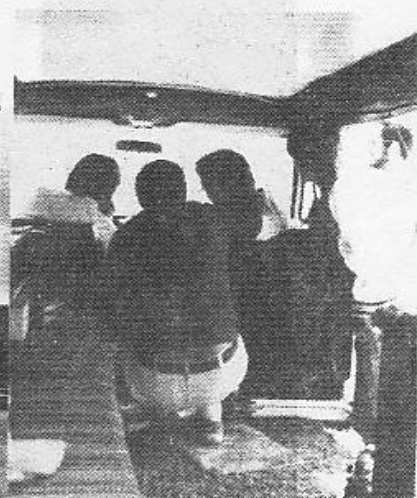
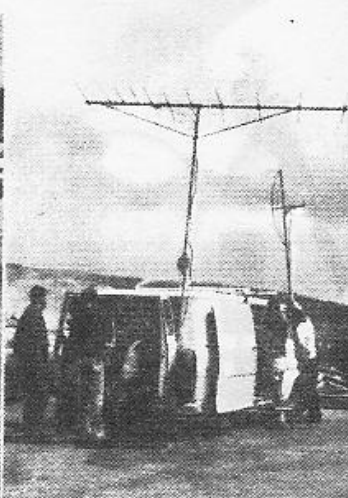
In the meeting room Friday; Joe Cragg on DX causes; Frank Aden on IDing unIDs.



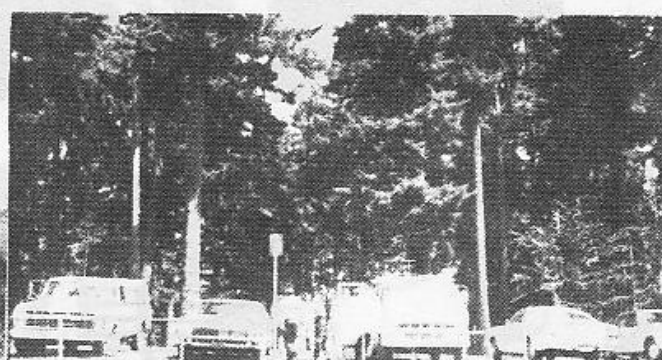
Scenic Mt. Hood, 6000 feet altitude, as seen from the Timberline Lodge (right).



That's Clint McAuliffe stepping out of Dale Connolly's well-outfitted "DX van" (complete with "FM DX" California license plates!) at the Mt. Hood DX session.



Bill Grant, Dale Connolly, and Tracy Wood erect the TV/FM antennas, others help to mount them atop Dale's van, and all present participate in the mobile DX fun!



LEFT: W1FDAers pose briefly after a very productive DX session up on Mt. Hood. RIGHT: A DXpedition to Portland's Mt. Tabor Park ended the Convention for many.

PHOTO-NEWS

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1 Brook Court
Fair Haven, NJ 07034

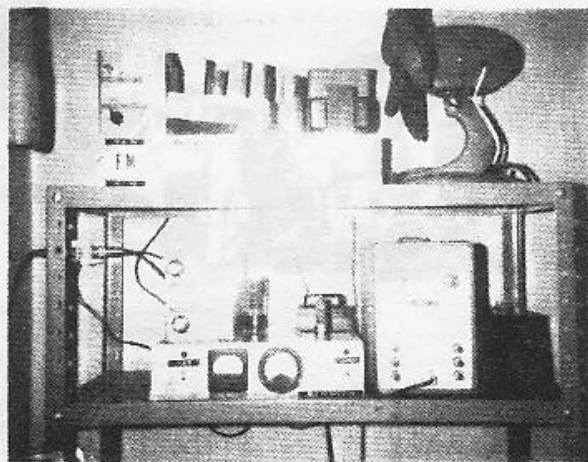
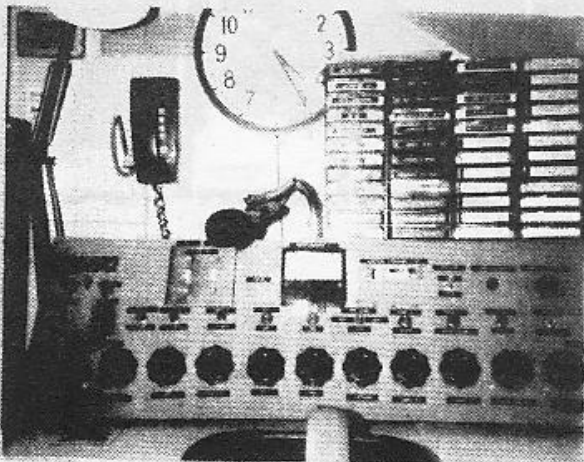
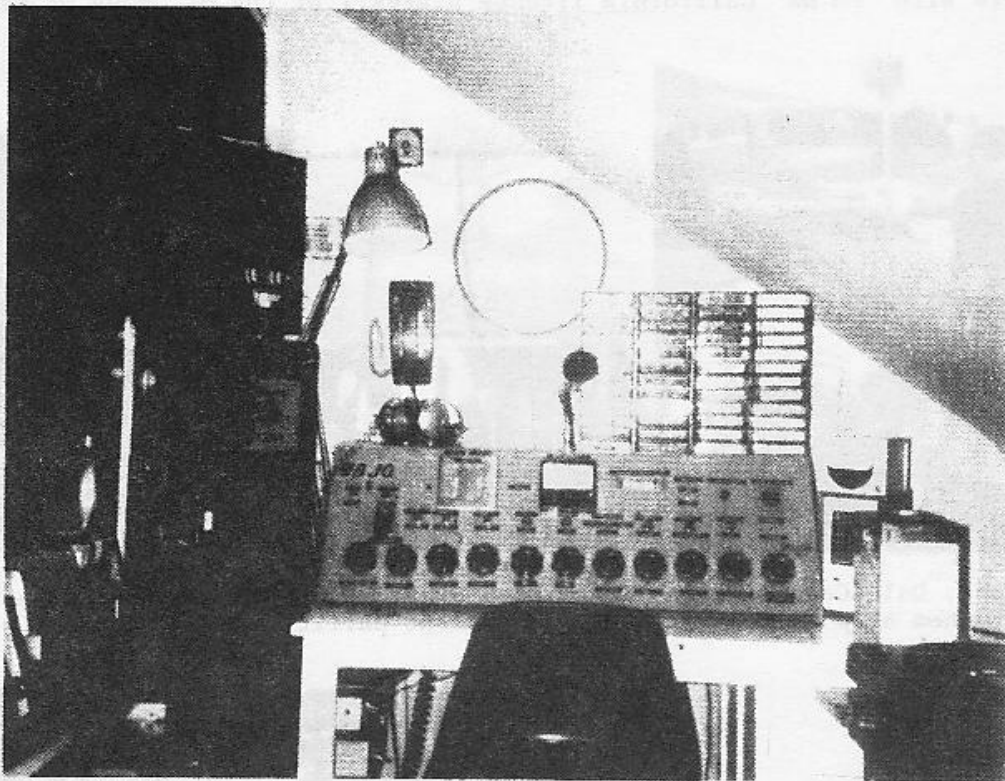
October, 1977

Feature: It's not your average, everyday FM station

This month, PHOTO-NEWS pays a visit to illegal FM radio station "WBJQ" 88.7 Midland PA. VUD editor Clarke Ingram visited "WBJQ" on July 29, and, with the owner's permission, took the photos which appear on this page. First is shown an overall view of the "WBJQ" air studio (which, Clarke notes, "compares well to many small commercial stations"). At bottom left is a close-up of the "WBJQ" control board and cart rack. At bottom right are, on the bottom rack (from left to right), the FM amplifier, multiplex generator, and transmitter transfer unit; and on the top rack, the "WBJQ" transmitter, complete with an electric fan to keep it cool (sounds like my TV set, hi - jja). For further information on "WBJQ," see recent FCC FM NEWS columns.

My thanks to Clarke Ingram for this month's feature.

73 and good DX, *Jim*



TECHNI-

CORNER

conducted
by
Dave Janowiak

PART ONE:

Tips and Techniques for the DXer and DXer/Builder

Even nearly ten years after its founding, the nucleus of WFFDA is formed of AIPAers. But more and more new TV or FM DXers come along and display a real interest in all phases of DXing. That is, they want to know more about the "whys." Also, the average age of members is much higher, as illustrated by the recent WFFDA member survey. Whereas AIPAers were almost entirely made up of 16-20 year olds in the 1950s plus a few middle-aged (but most active) members like Art Collins, B.J. Bingham, and Tom Hidley (all deceased), most members now seem to be in their upper twenties and early thirties. Most have what I might call "dollar power"; that is, besides an intense curiosity, they are able to purchase sophisticated DX gear.

The purpose of this series might be summed up as follows: To allow DXers to self-educate themselves by using inexpensive devices (or, in many cases, devices they already have) and utilizing techniques that will allow them to get more out of the hobby and the equipment they use. True, most benefit will be for those who like to dabble and learn a little more about the "whys." But I think I can convince even the "non-dabbler" that an awareness of certain techniques will result in more satisfying DXing.

It is most disturbing when a DXer cheats himself by failing to apply the devices (or build them) with material he already has. It's one matter to compute the value of X dollars of equipment against the probable benefit. It's another matter to sacrifice performance due to unawareness.

What can you expect from this series? Well, we'll be looking at signal strength indicators (you may have one and not know it), attenuators that you can make for pennies, reference dipoles you can construct, etc. At the end of each topic, you'll see how the device and techniques can aid your DXing. After all these devices are discussed, we'll put them together and see just how they help your DXing efforts.

The Need for Signal Strength Indication

Most DXers at least once must have said, "Gee, that station is strong. It must be X times as strong as usual." The ability to tell, at least comparatively, differences in signal strengths seems well worthwhile. Let's list just a few benefits:

- 1) Curiosity. Even for the nontechnical, it would seem quite interesting knowing just how much stronger, for example, a semi-local becomes during improved conditions. Or, it might be interesting noting how much stronger a station becomes compared to a nearby DXer's similar reception.
- 2) The ability to tell how fast an opening is building up, or decaying, by using fringe stations in various directions as indicators.
- 3) Knowing and recording the daily signal strengths of locals and semilocals. All of us are aware of increased tropospheric (tropo) reception in the warmer months. Recording this info in normal and DX conditions might prove interesting. It might be possible to evaluate conditions on a day-to-day, month-to-month basis, from one season to the next. You might more clearly see which paths are most likely to open under certain conditions.
- 4) Detecting amplifier malfunction. Any amplifying device, especially tube type, can run down. If this occurs slowly and you aren't aware of it, you could be running with a less than totally efficient TV RF amp or a half-dead mast mounted amp. The strong locals, of course, will not seem affected. Periodic signal strength checks should create suspicion of such problems.
- 5) Equipment evaluation and checks. Antenna comparison is easy if you know how to translate the signal strength readings into meaningful data. (This will be discussed later when we combine meters, attenuators, etc. and "calibrate" our meter.) Also, amplifier gain, filtering, trap loss, or equipment insertion loss can be easily checked. Gain, F/B ratio, and directivity of antennas can be at least roughly measured using the techniques described in this series.
- 6) Adjusting DXing aids for optimum performance. Some DXers might have no interest in the topics mentioned above. They may, however, use selective tunable traps like the old CM and Jerrold types. Without a signal meter to see what's happening, you might be missing several dB of attenuation, and that just might be enough to miss a weak adjacent channel ID. In fact, I've tuned my Jerrold by watching the TV screen only, then returned with a signal strength meter, and the difference was as much as 6 to 8 dB. (NOTE: Some may not be too thrilled with the idea of using a meter to read signal strength because one can see signal difference on the tube. However, I doubt if more than a few DXers realize what a 6 dB increase (twice the voltage) would look like. In fact, a 10 times voltage gain (20 dB) of a strong signal might seem minor, but a 6 dB improvement in a weak signal might be enough for an ID. Also, it is next to impossible to remember the signal level of a station from day to day. Something to hang your hat on--a number--is needed.)

The professional field strength meter (FSM) simply measures a select signal in microvolts. A microvolt is one-millionth of a volt (0.000001). As you might expect, an FSM is quite costly. It's great if you have one or access to one, but otherwise hardly worth the cost.

Several articles have been written previously describing construction of signal strength meters (S-meters) for connection into some part of your receiver. Many of these S-meters have some disadvantages and limitations, but it may be worth the cost. (Price may vary from maybe \$5 up to around \$30 depending on the type, availability of junk box parts, etc.)

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

Signal Strength Detection Via AGC Line

Every TV receiver has an AGC (automatic gain control) circuit. Although circuits vary, all have one thing in common: They sense input signal level and control the RF and IF amplifier gain. Basically, AGC action is much like a teeter-totter. A 200-pounder on one end of a center balanced teeter will not get off the ground with a 100-pounder on the other end. Similarly, a weak signal may not be seen unless all amplifiers are told to amplify. But if amplifiers were run at full gain, they would overload when strong signals arrive. The AGC provides the adjustable gain necessary for all conditions by supplying a varying DC voltage to the bias circuits. For any value of input, therefore, a given AGC voltage is fed to the amplifiers. Normally, one voltage range feeds the RF amplifier, another range feeds the IF.

You can read AGC voltage conveniently (usually) at the tuner itself. Most tuners seem to have a terminal block or lug strip that accepts wire for B+, heaters, and AGC. If you have a VOM or a VTVM, you can easily determine B+ and the rest, and isolate the AGC line. When you connect from AGC to ground, you should see a varying low DC voltage when antenna is rotated. Or, you should see a voltage change from strong and weak signal.

Range of AGC voltage will vary. With no signal received, RF amp will be fully on; with strong signal, amp will be nearly off. However, tube type RF amps are often biased so that they need an AGC voltage of changing polarity to control adequately over the range needed. Typically, the AGC voltage might be +0.5 volts with a blank channel monitored (full gain). As signal received increases, voltage goes toward zero. A stronger signal causes -0.1, -0.2, etc. readings. You must change meter polarity when you pass through the zero point. My Zenith's AGC range is from about +0.6 to -7.0 volts. Ranges will differ with individual design.

NOTE: For the technically curious, reason for the "dual polarity" AGC action is quite simple. A tube RF amplifier without an external bias voltage in the popular grounded cathode circuit will have some negative potential (usually less than a volt) on its grid. This is because of the so-called "contact bias" due to diode action between grid and cathode. Consequently, a tube so connected is almost fully on because it is almost biased for maximum gain, the only thing not allowing maximum gain being that small diode drop from grid to cathode. A small positive signal, however, being slightly less than the small "contact bias," will buck the diode drop and cause a total bias that makes the tube full on. At one value of received signal, the AGC voltage is 0, and the tube operates entirely on "diode drop." As received signal increases, of course, a negative AGC voltage is added to the negative diode drop to turn the tube further off.

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

S-Meter Limitations, Calibration, and Uses

The common dual-polarity TV AGC voltage mentioned above is a small nuisance rather than a limitation. If switching from + to - on the meter is cumbersome, you can simply re-zero your meter so that voltage swing is entirely negative. That is, simply select the DX meter scale you need, obtain a completely blank channel, and reset the zero adjust for 0 volts. Now, meter deflection will increase negatively as signal strength increases. You must re-zero if changing scales.

I don't re-zero since changing polarity is no problem. However, I do check occasionally that the needle points to zero when disconnected from the AGC line. If you record daily local signal levels, be sure your AGC control is set in the same position—usually "distant" is used.

I have not discussed the so-called speed of the AGC action. Some receivers (RXs) have fast AGC where a sudden change in signal input produces fast AGC action. Some RXs are "slower." Both can be helpful for certain forms of reception. Although I never calculated time constants of various AGC circuits, fast or slow, I don't think these differences will affect signal readings.

Calibration

AGC voltage in itself does not indicate how many microvolts are at the tuner input. However, you possibly can calibrate your meter to tell relative differences (twice, 50%, four times, 25%, etc.) And if you're lucky, you may be able to translate AGC voltage into an equivalent micro-volt reading. On the next page are some methods which may accomplish this:

FSM METHOD: If you can borrow a professional FSM, you're in. Simply note FSM reading and AGC voltage for several values from rock solid to weak signals. Draw a chart or curve from these readings. The more readings the better, naturally. (NOTE: It's tricky calibrating a meter if signal input is unsteady, but these values are of prime interest because much of your weak distant tropo will produce signal levels of this type. If you're familiar with test equipment you may be able to feed a known signal level from an RF generator into the TV for calibration.

CHART METHOD: Some TV manufacturers may have curves that plot tuner and IF amplifier AGC voltage versus input signal in microvolts. I've seen a few of these curves, but frankly don't know if you could obtain one for your particular receiver.

ATTENUATOR METHOD: This method does not give you actual microvolts, but it is effective for determining relative indication. If you can obtain a variable attenuator, you can select several signal levels and note what AGC voltage becomes when the attenuator is added. Since this is the most likely calibration method, let's go through an example.

Assume you have an attenuator (or individual pads) so you can get 3, 6, 12, and 20 dB of attenuation at the receiver.

- 1) Select a strong, stable signal. Assume the resultant AGC voltage is -2.6.
- 2) Add 3 dB attenuator and note AGC voltage. Assume it decreases to -2.4 volts.
- 3) Repeat by adding other steps of attenuation.
- 4) With no attenuation, select a new value by rotating antenna, changing channels, etc. and then repeat. Do this as often as necessary until several readings are taken for weak/strong signals. Assume that the result is a table as shown here: (All figures voltages unless noted otherwise)

dB Attenuation

0	2.6	3.0	3.4	4.6	3.5	4.5	.35	0
3	2.4	2.8	3.2	4.3	3.2	4.2	.3	+1
6	2.2	2.6	2.9	4.0	3.0	3.8	.25	+2
12	1.8	2.3	2.5	3.4	2.6	3.3	.1	+5
20	1.0	1.7	1.9	2.7	2.0	2.7	+2	+8

Now, when you note a signal change, you can approximate the difference. For example, if signal level is normally +0.2 volts but increases to 0, you have seen a 6 dB change, or 100% increase. If signal strength increases from -1.0 to -2.5, you fudge a little and determine that increase was between 17 and 20 dB from column one. (For those who've missed previous WUD articles on dB, a 3 dB increase means 50% more signal, 6 dB is 100% more, 20 dB 10 times more. Conversely, 20 dB loss is 1/10 of signal left, etc.)

METER USES

TRAPS: You'll get the most out of Jerrold, Channel Master, or just T-line traps with the meter. True, you relate the trapped channel to numbered dials on the CM, but this isn't enough. Jerrold types require some fishing. I've missed many an ID because I was too lazy to recheck and reset the traps for maximum attenuation. You can't necessarily set and forget these traps. They must be checked often as TV oscillator drift due to heat or voltage variation is common. Sometimes vibration causes trap misadjustment, especially with the Jerrold types.

When trapping the video carrier, always set the trap by tuning on the channel you want trapped. That is, select channel to be trapped and tune for maximum attenuation. Tuning by watching the tube isn't that accurate, unless you can completely eliminate the local. Trying to tune out my local channel 4 while monitoring a channel 3 E-skip station that is changing signal level almost constantly is impossible. Of course, if you have no meter, you must tune on the adjacent channel, since it's hard to determine just where maximum attenuation is on the local channel. (Much of this might seem strange to you lucky DXers who live in DX paradises; that is, areas with no local VHF stations within 20 miles. But trapping or filtering is really necessary if you want a good station total but are located in a metropolitan area. It's bad enough that you generally can't get DX through a local 10 miles away, but losing the adjacent channels too is ridiculous.)

ANTENNAS: Due to the wide beamwidths of most antennas, the meter seldom helps in aiming one. You can see the results on the tube. However, I have found the meter helpful when aiming the 7-foot UHF dishes because of their sharp beamwidth and the poor 10-degree movements of my Alliance U100 rotor. Sometimes the station peaks between notches on the rotor dial.

Polar plots of antennas can be made using the meter. From this you can compute front-to-back ratio, front-to-side ratio, directivity, etc. You might even have some fun by checking how near actual gain (versus a reference dipole), F/B ratio, etc. really are when compared to the claims. If antenna specs are received, they often give the "best case" rather than the "worst case" condition. Thus, an all-channel antenna with claimed F/B ratio of 25:1 might well have 25:1 rating on channel 10, for example, but on channel 2 or 13 it might be 1:1!

OTHERS: Obviously, preamp gain can be seen by reading AGC voltage with and without the preamp connected (I mean disconnect the preamp; don't just turn it off!). Sophisticated gear such as the Interdigital Preamplifiers (IPAs) can be tuned for maximum gain and filtering by using the meter. Rapid knob rotation to calibrated channels will get you in the ball park, but the meter will allow optimum results. Sometimes the desired weak signal is between two very strong locals. In this case, it might not be best to use the meter, since off-tuning slightly will cause a bit of adjacent channel slop and, therefore, meter indication.

Insertion loss of converters, traps, 72 or 300 ohm connectors, etc. can be detected with meters. However, unless your meter is calibrated to detect small changes (5 to 20%), all you can do is approximate the loss. Often, VHF loss going through a converter is 2 to 3% on some channels, as high as 25% on others.

FOR FM DXERS

The "uses" section applies to FM DXers also. In fact, AGC voltage through an amplifying network is used to drive most S-meters on FM receivers. I haven't emphasized external meters for FMers because almost all good receivers have S-meters. Do not confuse the tuning meter with S-meter. Some so-called high quality receivers have offered tuning meters only. Truly excellent tuners and receivers offer both. You need both: the tuning meter for exact tuning on strong local signals that pin the S-meter (non-DXing) and the S-meter for DXing.

S-meters on FM receivers probably follow the ham philosophy, where numbers or dots indicate 6 dB changes (100%), except at the ends. That is, between 0 and the first dot (or number) and the last number and upper end, change is greater and usually exponential. Above the last major mark, you usually refer to so many S units above S9. Unfortunately, built-in S-meters often suffer either because you can't tell changes in weak signals adequately (the needle barely moves) or because the needle pins at maximum with only a mildly strong signal. In the latter case, you can always add an attenuator just to get signal indication within the limits of the S-meter.

You can calibrate your meter against an FSM, also. To compare the readings of two "identical" receivers is tricky, however. Component tolerance, especially because of the unpredictable transistor characteristics, might produce a big S-meter reading difference even if signal received by the tuners is identical.

Use of an S-meter for TV or FM can only add, at least a little, to the DXer's totals or pleasure in the hobby. Everyone with a usable VOM or VTVM should give it a try and judge its use.

ATTENUATORS, PADS, ETC.

The textbook definition of an attenuator is a group of fixed and variable resistors used to reduce the strength of audio and radio frequency signals by a desired amount. Attenuator ohmage (impedance) should match the circuit to which it is connected so as to produce very little distortion. Since these devices are purely resistive, they attenuate both high and low frequencies.

A non-adjustable attenuator is correctly called a "fixed attenuator" or "pad." However, I often hear people call any pad an attenuator. Rather than get into a hassle over semantics, the items discussed here will be called pads if they are non-adjustable, and attenuators if they have the provision for switching to two or more attenuator values, or if they are continuously adjustable.

USES

TV OVERLOAD: If the radio frequency (RF) or automatic gain control (AGC) circuits of a receiver are incorrectly designed, overload on the desired channel is common in strong signal areas. An overload can produce one or more of the following: (1) extreme contrast, (2) severe distortion, (3) audio buzz, (4) horizontal and/or vertical roll. Simply, the signal is amplified more than one or more amplifying stages can handle. (Applying excessive input voltage to an RF amplifier often changes important operating parameters of the device.)

Typically, inexpensive portables suffer from overload. Some have local/distant switches in the AGC circuit, but even in the "local" position, overload is common in strong signal areas. A serviceman might clip a pad between antenna and receiver to reduce signal. Hopefully, no TV DX enthusiast has this problem.

CROSS-MODULATION: Any two signals (A and B) beating together in a tube or transistor can produce (1) the original A and B signals, (2) A + B, or (3) A - B. This process, called modulation, when intentional produces a process vital to most radio equipment. However, undesirable cross-modulation or cross-mixing (CM) can occur if many high energy signals arrive at a mixer or an amplifying device. What happens is that the device loses its ability to amplify (if an RF amp) or modulate the desired signals (intended signal and local oscillator). The device literally quits because of the mass of input, the result being modulation of several signals. On FM, you might have Bach and rock; on TV, you might have Kojak chasing a thief and Charlie's Angels.

CM process is a function of many things: gain, selectivity of tuned circuits, physics of mixer or amplifier, etc. In fact, two identical FM receivers fed by identical antennas can produce different CM when tuned to identical frequencies, depending upon the nonlinearities of various receiver stages. Many members have the false idea that transistors alone are responsible for CM. This isn't entirely correct. True, transistors are small-signal devices, and early versions of these could not handle large signal levels. Consequently, when solid state FM receivers first appeared some years ago with conventional RF transistors, CM was a major problem. The cause was a combination of (1) high stage gain, (2) rather broad coil-capacitor tuned circuits, with respect to 0.2 MHz channel width, that permitted considerable voltage pickup from stations other than the one desired, and (3) low signal handling ability, compared to tubes, of these early transistors. The transistors alone were not at fault. To illustrate my point, a close friend and once very active and successful 6-meter ham once purchased an elaborate tube-type Collins communications receiver intended for government use. He paid a few hundred dollars, although

the original cost was about \$2000. In addition to double or triple conversion, bandwidth that spread a MHz over about 20 feet, etc., a high gain dual-RF stage was used. He got quite a bit of CM (not images) due to local AM stations in the 5 to 10 mile range, and these were not 50 kw!

Improvements in field effect transistors (FETs), both metal oxide semiconductor (MOSFET) and the junction (JFET) types, however, reduced most CM problems. These devices had noise figures equal to or better than the best tubes, and could handle larger signals better than conventional transistors. Gain, however, was modest at best, but often two FETs were used in RF design for added gain over tube types.

Yes, you'll still get plenty of CM with a FET type FM receiver if you point your high-gain FM DX array at several high-powered locals a few miles away, primarily because of poor RF selectivity (coil/capacitor) which still exists in many receivers. Readers should not confuse RF section selectivity with intermediate frequency (IF) selectivity. Heath made the major leap some years ago by replacing unselective coil/capacitor tuned circuits with crystal filters in the IF of the outstanding AR15 FM receiver. This made IF selectivity better. Though crystal filters are now in more common use, RF selectivity still needs improvement. Odds are that FETs will improve to a point where CM is eventually no problem at all. We shall see.

What all this means is that if CM makes your receiver go crazy, the easiest solution is to connect an attenuator. True, all signals are reduced, but the DX station might still be strong enough to ID, whereas otherwise it would have been lost in the CM. The trick is to determine just how much attenuation you need to eliminate the worst case of CM, then connect pad as needed. Of course, if only one or two stations cause CM, you can trap them. But traps will also trap FM stations several MHz away. If you're "surrounded" by several high-power locals that cause CM in several directions, an antenna with high F/B and F/S ratio plus an attenuator are needed. Or, you'll have to wait for the locals to sign off!

For TV, CM seldom occurs, especially in tube models, because of the less "total" voltage pickup from locals (fewer TV stations in 10-mile range). However, the previously described rules apply.

PREAMPS: The same overload and CM problems that plague TV and FM receivers are more common with preamps, especially non-tunable broadband types. The tuned circuits here are "flattened" so they accept signals across the band. This enhances CM when these are used in strong signal areas.

Tube models suffer less from CM than transistor types since manufacturers have been slow to use state-of-the-art devices, though this has improved in recent years. However, I remember well purchasing a Winegard Twin Nuvistor tube type VHF preamp many years ago that "could not possibly overload under the severest of conditions," the ad claimed. Tried out in my Milwaukee site, it had CM and overload problems in almost every direction! Also, since the gain was low anyway (and most important, the noise figures were no better than that of my RF amplifier in my Zenith TV), the device helped very little when tried before locals signed on. Exit one preamp to my bulging junk box!

If overload and CM are common with your preamp, you can: (1) live with it, (2) switch it in and out (though with a mast-mounted type), or (3) add an attenuator and pad. Even if attenuation is greater than amplifier gain on some channels, you might benefit if the noise figure is improved, i.e. lower, or if the preamp is narrow-band. Sometimes a little attenuation between amplifying devices in series will eliminate interaction, overload, or CM.

MEASURING: With an S-meter and attenuator, you can measure gains and losses. Gain of a preamp, for example, can be computed for a given channel by noting signal increase when preamp is connected, then adding attenuation until signal drops to what it was before the preamp was added to the system. The amount of attenuation equals preamp gain. Similarly, gain, front-to-back ratio, front-to-side ratio, and directivity differences of antennas can be measured. For gain, rotate each antenna toward station and note differences in signal. Add attenuation to equalize signals and compute the gain differences. Exact antenna gain can be computed by building a dipole or folded dipole (described later).

PADS AND ATTENUATORS: BUY 'EM

Most MATV/CATV suppliers offer several types of 72 ohm and 300 ohm attenuators. Costs vary with frequency range, steps of attenuation, construction, etc. Your best bet here is to consult the major MATV/CATV and electronic supply catalogs. Don't think that MATV/CATV devices will always work better than commercial types; both Bob Cooper and I have noted poor contact on some MATV/CATV slide-switch types, for example.

Professional, multi-switch position types can be far more expensive. However, you might look in surplus stores, hamfests, and other "gathering places" for used electronic gear, which traditionally have been good sources for such devices. Some DXers have obtained professional type pads, attenuators, and the like very cheaply with a little "hunting." If possible, try to locate any devices with connectors that match your equipment (BNC, UHF, F-fitting) if you have a 72 ohm system with preamps, traps, patch system, or other devices with similar impedance. If you find such items at a discount price, you've really discovered a DX "bargain"!

Incidentally, anyone with an average-sized "junk box" should be able to build a few pads easily. I'll discuss this further when the series continues next month.

EASTERN TV-DX

Bill Thompson
1907 Seneca Street
Buffalo, NY 14210

October 1977

Deadline: 10th

May E-skip dates:	3	5	6	7	9	11	12	13	14	15	16	17	18	19	20	21	24	28	29
number of reporters	1	3	2	15	4	5	9	2	9	7	5	2	4	3	6	10	1	1	6
MUF reported into: ch	3	3	2	FM	4	6	4	4	5	5	6	2	6	4	6	5	4	2	4

30	31	June:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
18	8		3	14	11	7	18	25	5	17	14	7	7	9	7	18	5	4	5	3	9	15	18	11
FM	5		4	6	4	FM	FM	7	6	FM	7	3	5	7	5	8	6	4	FM	6	FM	FM	FM	FM

23	24	25	26	27	28	29	30
15	11	11	13	9	6	9	10
FM	FM	FM	FM	FM	5	4	FM

By mid-August, most Es activity had ceased--but for the first week or so, it was beginning to seem like the skip season was getting started all over again in some areas. Nevertheless, the season tapered off to a close more or less in a normal manner. Many reporters who saw Es on August 3rd considered that day to be the last truly "super" days of the Summer season, with an apparently unusual amount of short skip noted by some--and of course, high MUFs--which seem to have been the most impressive factor of this unusual season. The Es chart above tells much of the story itself; there wasn't one day in June when E-skip was not reported. Also, on even the worst June skip days, the MUF did get up to at least channel 4. Next month, the Es chart for July and August will be run. There's a lot more recent and newsworthy information to catch up on this month, mainly about tropo. In wide areas of eastern North America, there was a distinct lack of tropo in August. In many areas of the U.S. Midwest and Northeast, August was unusually rainy. Most areas experienced some periods of good tropo in that month, but in general, it was a washout--no pun intended. In the Great Lakes area of the Midwest, there was some excellent late August--early September tropo; and in early September, some impressive ducting was reported. Take for example the fine coastal catches reported on UHF at over 500 miles by Philadelphia DXer Richard Eckman. Bill Draeb also reports some fine catches from over 600 miles to central New York and northeastern Pennsylvania on September 3rd and 4th, and to Nebraska on the 5th and 6th. But even for a super-DXer like Bill, there hasn't been any 900-mile or beyond ducting yet this year. Mid-September weather in many areas is very poor as this is being prepared, so unless things change drastically soon, there won't be much of anything interesting tropowise. There appears to have been almost no activity as far as meteor scatter goes; the Perseids shower in mid-August was not very prominent to those of us who watched for bursts on TV and FM.

Bill Hepburn 5659 Highland Avenue Niagara Falls, Ontario L2G 4X2 (EDF)

May	5 Es	0828	KLNE-3	NE	1075	9 Es	1250	KMTV-3	NE	875				
27 Tr	0820	WVIZ-25	OH	165			1646	KDIX-2	ND	1185				
30 Es	1540	KARD-3	KS	1030	0955	KCKT-2	KS	1075	12	1142	WMT-2	IA	755	
		KCKT-2	KS	1075		KARD-3	KS	1030		1159	KMTV-3	NE	875	
		KTIV-4	IA	880	1711	CKCK-2	SE	1355		1753	WMT-2	IA	755	
	1630	KMTV-3	NE	875	1729	KYUS-3	MT	1340	14	1400	KFDX-3	TX	1220	
	1659	MUF	ch	6	1803	CKOS-3	SE	T		1534	KDFW-4	TX	1200	
	1705	KLNE-3	NE	1075	6	1600	KCKT-2	KS	1075	1603	"chs 2,4 with			
	1737	KUSD-2	SD	880		KYTV-3	MO	855		same programming &				
	1759	KDIX-2	ND	1185	1635	KLNE-3	NE	1075	20	1815	WESH-2	FL	970	
	1848	KOTA-3	SD	1205		KARD-3	KS	1030		1823	WEAR-3	FL	980	
	2029	MUF	to	ch 6	1759	CBWF-3	MB	1000	21	1230	WEAR-3	FL	980	
31 Tr	0740	WJBK-2	MI	205	1810	KMTV-3	NE	875	22	0942	KARD-3	KS	1030	
		WWJ-4,	WXYZ-7		1813	KUSD-2	SD	880		1022	KLNE-3	NE	1075	
		WJIM-6	MI	T	1826	KTIV-4	IA	880		1032	KYCU-5	WY	1335	
		WJRT-12	MI	T	1900	KOTA-3	SD	1205		1039	KCKT-2	KS	1075	
		WOTV-8	MI	T	1929	KDIX-2	ND	1185		1056	KWNB-6	NE	1150	
		WILX-10	MI	T	2000	WCCO-4	MN	725		1105	KTWS-3	CO	1255	
June					2030	KPLO-6	SD	1035		1206	KWGN-2	CO	1365	
3 Es	1632	KARD-3	KS	1030	8	1920	WEDU-3	FL	1065	24 Tr	0816	WTVS-56	MI	205
		KCKT-2	KS	1075		1953	WEAR-3	FL	980	July				
	1700	KLNE-3	NE	1075	9	2006	WRBL-3	GA	800	3 Es	2000	KIII-3	TX	1485
	2100	KOTA-3	SD	1205		1236	KDAL-3	MN	690	7	1745	CKCW-2	NB	755
4 Tr	0727	WUTR-20	NY	200			KDLO-3	SD	905			CBHT-3	NS	785
	0738	WEYI-25	MI	245			KPLO-6	SD	1035					

"It seems that the skip season has really been rolling...From my location, and with my equipment, it seems that this is a lousy season for tropo. May was normal, but so far June and July have awarded me nothing. Farthest tropo so far this year is still WGTQ-8 Detour, MI at 315 miles on May 13th. A good opening developed on the morning of May 31st, but unfortunately I could only ID the Detroit stations, but none of the farther channels 6, 8, 10, and 12. Hope tropo gets better soon. I'm satisfied with the skip. 73s and good DXing."

John F. Combs 2485 Ivan Ct. Orlando, Florida 32807 (EDT)

July		22 Es 1745		WGR-2 NY		30 Es 1828		XHD-4? Tams T	
6 Es	1800	unIDs 2-4		Buffalo	1006		1949	XHTV-4? DF	T
7	1135	"CCI chs 2, 4"		WBEN-4 NY	986		2017	XHY-3? YUC	T
8	0820	KQTV-2 MO 1089		CKGN-2-2? ON	T	31	1813	"CCI ch 2"	
	0825	KTEW-2 OK 1006		1751	CBOT-4 ON	1205	August		
	0828	KARD-3 KS 1129		1754	WPSX-3 PA	856	2 Es	1300	WTMJ-4 WI 1069
	0947	KCMO-5? MO T		1803	WSER-3 NY	1036			WISC-3? WI T
		WDAF-4? MO T			KYW-3 PA	868		1405	CHFD-4? ON T
		KTVO-3 MO 1039			1806	WPVI-6? PA T		1415	WFRV-5? WI T
		KATC-3 LA 670	23 Tr	0030	WALA-10 AL	415		1433	WBAY-2? WI T
	0950	KMOX-4? MO T		0031	unID-7 NBC		3	0948	WKAQ-2 PR 1184
	0955	KGLO-3? IA T		0035	WEAR-3 AL 401			1004	WAPA-4 PR 1184
	1000	Tele-Rebelde-3 CUBA		0040	WKRQ-5 AL 417			1016	WORA-5 PR 1161
		Holgün 615			"Pensacola FM in on			1027	KQTV-2 MO 1089
		Tele-Rebelde-5 CUBA			Panasonic portable!"			1043	HISD-4? D.R. T
		Santiago 665	Es	0958	unID-2			1124	WNEB-5? MI T
	1006	ICR2-2 CUBA 665		1630	unID-2			WTOM-4 MI 1195	
	1030	KMTV-3 NE 1209	27	2250	t/in			1143	CKVR-3 ON 1096
	1038	KCKT-2 KS 1209			KFSM-5? AR T			1145	WKZO-3? MI T
	1043	KENS-5? TX T			KTEW-2? OK T			1151	CHNB-4? ON T
	1055	unID-5 "RTC"			KTVY-4 OK 1059			1228	CKCO2-2? ON T
	1100	KMOL-4 TX 1025			KARD-3? KS T			1230	WTMJ-4 WI 1069
	1102	KWAB-4? TX T			KOTV-6? OK T			1230	KQTV-2? MO T
	1104	XHAB-5? Coah T	29	1530	KTVY-4 OK 1059			1230	KTVO-3 MO 1039
	1107	KRIS-6? TX T			KDFW-4? TX T			1530	unID-2 Spanish?
	1138	XHD-4? Tams T			KFDX-3 TX 1078			1700	WPTV-4? IN T
	1200	KTVY-4 OK 1059			KTEW-2? OK T				"MUF ch 6 plus"
	2007	unIDs 2, 3			KKAS-5? TX T			1709	WCVB-5? MA T
9	1500	"CCI ch 2"		1546	KETS-2? AR T			1730	WNEB-5? NY T
	1900	"CCI chs 2, 3"		1550	KOTV-6? OK T			1731	WNBC-4 NY 942
11	1055	unID-2 CCI		1652	CKCO2-2 ON 1133			1750	"had to leave"
21 Tr	2255	WCTI-12 NC 508		1700	KQTV-2 MO 1089		4	1015	unIDs 2-4
		WITN-7 NC T	30	1300	"in, but was busy"			1020	KARD-3? KS T
	2300	WJWJ-16 SC 290		1617	X--- 4 YUC 800?				KTEW-2? OK T
	2305	WRJA-27 SC 373			TGV-3 GUAT 1155			1024	KTVY-4 OK 1059
		WTVN-11 NC T			YSR-2? E.S. T			1628	KPRC-2? TX T
22	0600	WTOC-11 GA 242		1632	KGBT-4 TX 1023				KBTX-3 TX 910
	0655	WFSU-11 FL 230		1727	KRGV-5 TX 1020			1630	KJAC-4 TX 767
		WJHG-7 FL 274			X--- 5 YUC 800?			1633	KIII-3? TX T
		WMBB-13 FL 263			Merida "(Net13)"			1634	KPDM-6? TX T
		WBCA-27 FL 221		1823	KIII-3 TX T				
		WYRA-38 GA 341			KRIS-6 TX T				

"The E-skip continues, though not as frequently as May and June. My VHF antenna will definitely be the rabbit ears--I have found that the Archer antenna I have is almost not even worth erecting, the reception on it is so lousy. I do finally have a working UHF system, though. Instead of the stacked 4-bays I had at my old QTH, I have a single antenna driving an AC-4990. It's about 5 feet higher than I had at the other house, so it'll be interesting to compare results...Has anyone else noticed the current trend of NBC-affiliated stations to run ID slides consisting of a large channel number, a huge NBC logo, and sub-microscopic call letters?? I've seen many by Es that are doing this and it is getting extremely frustrating."

Paul D. Traska 64 Weaver Avenue Buffalo, New York 14206 (EDT)

August		31 Tr 1100		WUCM-19 MI		2 Tr 0030		WPMZ-69 PA	
12 Es	1930	KATC-3 LA		WKAR-23 MI			1535	WNVT-53 VA	
	1957	KTBS-3 LA				3	1200	WKY-32 KY	
	2000	KXAS-5 TX					1230	WKYT-27 KY	
28 Tr	0030	WCDC-19 MA		1 Tr 0050	WEZF-22 VT		1235	WKMR-38 KY	
	0035	WKBS-48 PA			Burlington		1209	WEYI-25 MI	
		WLVT-39 PA		0230	WJZ-13 MD	4	1210	WHMB-40 IN	
30	1230	WJNL-19 PA		0231	WTTG-5 DC		1211	WLFI-18 IN	
	1235	WOPC-38 PA		0246	WRC-4 DC		1212	WICD-15 IN	
	1300	WHP-21 PA			Washington		1219	WFTI-20 IN	
		WTPA-27 PA		0305	WCAU-10 PA		1230	WNIT-34 IN	
	1535	WUUC-44 OH		1600	WLVT-39 PA		1900	WFLD-32 IL	
31	0010	WNDU-16 IN		1606	WDCA-20 DC	8		WSNS-44 IL	
		WANE-15 IN		1607	WSBA-43 PA			WCFC-38 IL	
	0115	WEYI-25 MI		1850	WNVT-53 VA			WCTU-26 IL	
		WUHQ-41 MI		2120	WBTA-26 DC			1930	WCAE-50 IN
	0118	WPHL-17 PA	2	0020	WPHL-17 PA			1955	WUHQ-41 MI
				0027	WTAF-29 PA				

Ken Simon 528 Pilgrim Road West Palm Beach, Florida 33405 (EDT)

Month	Day	Time	Station	Notes	Month	Day	Time	Station	Notes
June	29	Es	2000	KDFW-4 TX	6	Tr	2013	unID-33 GCI	
28 (continued)				MUF to 88.5	7	Es	1810	WKYC-3 OH	
Tr	0803		2100	KPRC-2 TX	12		1742	unIDs 2, 3, 4	
				Birmingham	13		0646	unIDs 2, 4	
	0815		T	1 Es 1715	unIDs 2, 3, 4	17	1230	WFWO-2 IN	
				1730	KPRC-2 TX			WCIA-3 IL	
	0830				KIII-3 TX	18	2000	KFVI-2 MO	
					KATC-3 LA	20	1923	KATC-3 LA	
	0855			1814	KNOL-4 TX		1930	KPRC-2 TX	
				1901	KIII-3 TX	22	1931	WPSX-3 PA	
					Qochran			WKYC-3 OH	
			2	0940	unID 2-4			CKVR-3 OH	
				1500	unIDs 2, 3		2000	unIDs 2, 3	
	1806			1730	WPSX-3 PA	27	1712	unIDs 2, 3	
	2124			1802	KYW-3 PA	T	2058	MUF to 94 MHz	
				1900	WTAB-4 PA	28	1000	unIDs 2, 3	
				1000	KQTV-2 MO		1300	KEBT-4 TX	
29	0413		3	1832	WKYC-3 OH		1600	WCBS-2 NY	
				1835	MUF 107 MHz		1616	KYW-3 PA	
				1933	CKGH-6 OH	29	1509	unIDs 2, 3	
			6	1924	unIDs 2, 3, 4		1911	MUF to 100 MHz	
				1930	WPSX-3	T	30	1530	unIDs 2, 3, 4
				Tr	1955	WRJA-27 SC		1824	MUF 94 MHz
							31	1030	unIDs 2, 4 CCI

"Not too much on TV...no sign of ZNS-TV (Nassau, BAHAMAS) that signed on in 2nd week in July...Probably due for a tuner overhaul here...73's etc."

Thomas J. Yingling, Jr. 221 Pinewood Road Baltimore, Maryland 21222 (EDT)

Month	Day	Time	Station	Notes	Month	Day	Time	Station	Notes
May	12	Es	1400	unIDs on 3	6	Es	2000	MUF to 98.3	
18	Tr	0730	WYAH-27 VA		14		1250	KYTV-3 MO	
			2100	WULF-39 NC		7	1730	CHBT-3 NS	
				Wilmington				CHSJ-4 NB	
				to				GJOX-3 NF	
				2130	WUNK-25 NC			2030	MUF to 100.1
20		0740	WRBT-36 NC				1730	MUF to 107.1	
		0800	WCCB-18 NC		21		1900	MUF to 103.1	
			Charlotte		26		1800	MUF to 91.3	
		0815	WANC-21 NC		30		1700	MUF to 103.3	
		0830	WRBQ-28 NC					14	Tr
		0230	WVNB-8 CT					2300	WAKR-23 OH
21					July			2330	WJET-24 PA
June					1	Es	1700	WOI-5 IA	
3	Es	2000	KATC-3 LA					0009	CHLPT-25 ON
4		1800	unIDs to 91.3						Toronto
5		2100	KTBS-3 LA		2		1730	WHAR-3 FL	
		2130	WTVJ-4 FL					0020	CKGH22-22 OH
6		1500	KATC-3 LA						Uxbridge
		1700	KIHO-3 SD					0030	WJAN-17 OH
			KPLO-6 SD					0035	WKRP-22 OH
			WDAY-6 ND		3		2100	MUF to 98.3	
			to				1000	WEDU-3 FL	
			CBWFT-3 NB				1100	WCIX-6 FL	
			CBWT-6 NB					0105	WICZ-40 NY
			WABG-6 MS		4		1700	MUF to 104.7	
			WCBI-4 MS		6		1800	MUF to 98.7	
			2130	MUF to 97.5					to
									WBJA-34 NY
									WHAG-25 MD
									WVIA-44 PA
									WRRB-28 PA

"Lot's of skip in at last! I DX the FM more than TV when skip is in. I was quite surprised to get Canada on UHF-TV. Steve West gave me a call about the tropics when he had Ohio, and then I found that Canada was in."

Randall Clark West Virginia Rehabilitation Center Box 325 Institute WV 25112

Month	Day	Time	Station	Notes	Month	Day	Time	Station	Notes
At Parkersburg WV:	7	Es	2314	KPTX-3 TX	19	Es	1049	KNOP-2 NE	
May	11		2158	KWGN-2 CO	July				
5	Es	2108	"Cuba CCI ch 2"		1	Es	1800	KPRC-2 TX	
6	Tr	1800	"All or most OH & PA stns in, including some above 62!!"				1925	KLNB-3 NE	
							1936	KJAC-4 TX	
							1959	unID 2-5	
7	Es	1536	WPRT-2 FL		2		1900	Texas ch 2-6	
		2024	KWGN-2 CO		3			unID-8 PBS	
		2040	KWGN-2 CO				4	1100	KDIX-2 ND
		2129	WDIQ-2 AL						At Institute WV:
							8	Es	2000-2300 "mild"

"Still no confirmation on that July 3rd ch 8 Es report as I'm not sure of the precise calls seen, etc...saw a Ø beat station over WCHS..."

Harry J. Hayes		Star Route	Box 226c	Gouldsboro, Pennsylvania 18424 (EDT)	
June			21 Es	1310 KARD-3 KS	15 Tr 2030 WHAG-25 MD 155
2 Es	1100 unID 2-6 FL			1319 KQTV-2 MO	2045 WBOY-12 WV
	1200 WEDU-3 FL			1625 WMAB-2 MS	Clarksburg 280
	1230 WBTW-3 NC			2000 KTAL-6 IA	WPSX-3 PA 150
	1715 "Intense Es 2-6 to Maritimes"	23	2059 WBSH-2 FL	Shreveport	"on ch 9 yagi"
3	0900 CJOX-3 NF	26	1600 WMT-2 IA		2330 WTAJ-10 PA 155
	2100 KETS-2 AR		1630 unIDs 4 & 6		WHP-21 PA
5	0905 "Intense Iowa"		"ATV net"		Harrisburg 90
6	1933 KDAL-3 MN		1700 KLINE-3 NE		"no sign of 27 or 33"
	1935 WDAY-6 ND		1928 WMC-5 TN	16	2100 WPHL-17 PA
	Fargo		Memphis		Philadelphia
	2000 KBIR-6 "???"	30	1505 CJGN-4 NF		WTAF-29 PA
	(KBJR-6 MN? -bt)		1700 WCBL-4 MS		Philadelphia
	KTCA-2 MN		1835 "intense thru channel 6"		WLVT-39 PA
8	1903 CBWFT-3 MB				WKBS-48 PA
	KTBS-3 IA				Philadelphia
	2000 WMAB-2 MS	July			
	KDAL-3 MN	1 Es	1925 WPTV-5 FL	26 Es	2000 KHAS-5 NE
	2015 KTFV-2 MO		1928 WUFT-5 FL		2130 KHOS-6 MO
	2100 KGFB-2 ND	3	1931 KFDM-6 TX		Sedalia
	Grand Forks	6	2030 "intense 2-4"	27	2100 WDSU-6 LA
9	1230 KDLO-3 SD		1900 "Intense 2-6 to MS, MO, IA"	28	1500 KCMO-5 MO
	1310 KFVR-5 ND	7	1730 "Very intense 2-5 to Mari-times to 2000"	29	1502 KQTV-2 MO
	Bismarck				1725 KDLO-3 SD
	1323 WDAY-6 ND				1730 KTCA-2 MN
12	1100 WMT-2 IA		1800 CBHT-3 NS	31	1733 KMPV-3 NE
	1800 KGFB-2 ND		1830 CJCB-4 NS		1900 CBHT-3 NS
	1900 WBAY-2 WI		2000 CBIT-5 NS		1700 WOI-5 IA
20	1730 KTEW-2 OK				Ames
	1735 MUF ch 6	15 Tr	1005 WUTR-20 NY		1725 WQWT-6 NE
	1800 WNGE-2 TN		Utica	140	1728 unID-7 "skip up to here briefly"
	Nashville		1050 unID-7 NBC		1800 KHAS-5 NE
	1830 WTVJ-4 FL		WROC-8 NY	175	KCMO-5 MO
	WPBT-2 FL		1101 WFTS-9 NY	140	1830 KQTV-2 MO
	1900 KFSM-5 AR		"thru WOR-9 NY"		KCKT-2 KS
21	1230 KMOX-4 MO		2030 WWPB-31 MD		KARD-3 KS
	1310 KCKT-2 KS		Hagerstown 155		

"I have a strong suspicion that the NBC news station on ch 2 at 1835 on 7/7 was WLBZ-2 ME because Richard Eckman of Philadelphia got a positive ID on them at 2000, I believe, on that date. Complicating matters was that Florida skip started in on FM after 2000, so possibly FL skip was in on ch 2 at 1835. Since I use rabbit ears I could not tell directions...at the beginning of the opening around 1800 I had French stations on 2 thru 4 with mentions of Quebec. I have not talked to Mr. Eckman directly about this as yet so my information may not be too accurate as far as times are concerned. (See report on next page -bt) What was interesting about the Maritimes opening of 7/7 was first of all the intensity of the thing, which rarely got above ch 5 (at 1852 French was heard on 93.5) and secondly the amount of 'short skip' on low channels. It's widely believed that the more intense a skip opening becomes, the shorter the distance becomes. Can some of the experts elaborate on this further? Is short skip the result of multiple clouds in a relatively small area which bounce signals back and forth to each other? (In other words, is it plausible to assume that in this opening a cloud was over Connecticut, say, and that cloud intercepted ch 2 in Maine, and bounced it to another cloud which was over, say, Massachusetts, and thus a more favorable refraction angle for my area, and relayed it here that way?) Or is it the result of direct refraction from a close cloud for some reason? I know no one knows for sure the mechanics of skip, but I would be interested in hearing some conjecture on this. (I don't think short skip is as complex as you propose. All the research material I've read on it indicates such short skip is the result of either one very intense cloud (causing unusually short paths due to the very steep angle of refraction that will result from such a cloud) or two close Es clouds on the path, neither one of which would be able to give you such short skip by themselves. When there are two Es clouds in a single path, the signals travel from transmitter to cloud, to the second cloud, and from there to your location; but I've never heard of signals changing direction 180° twice within a single path, as a ME-to-CT-to-MA to PA path would call for! Any comments from the propagation experts in WTPDA would be welcome -bt) That skip seen on ch 7 on 7/31 lasted about 45 seconds. Skip reappeared at 1735 for a few seconds. 73"

Brian L. Cartwright 106 Leila Street Johnstown, Pennsylvania 15905 (EDT)
 "This is my first report as I have just joined. My receiver is a 1963 Zenith 23" B/W with 2 wire antennas, one N. - S., one E. - W. Season started for me night of June 5 with tropo reception of WTTG-5. June 6 and July 5 were outstanding, as well as July 31. Last night I couldn't get KDKA on CATV because of KCKT CCI. Others seen besides KCKT on the CATV are KNOP-2, Cuba-3, WEDU-3, WBRZ-2. I also have tentatives on KTVS-3 and KUSD-2, couldn't find record of dates. Log at 87, 23 USA, 4 Canadians, 1 Foreign."

<u>June</u>		3 Es 2335	KTBS-3 LA 1000	27 Es 1300	KMTV-3 NE	
5 Tr	2300 WTTG-5 DC 140	5	1400 KARD-3 KS 1000	1856	WSB-2 GA	
6 Es	1658 KTVY-4 OK 1060	7	1630 WSSH-6 ME 510		MUF ch 3	
	1722 KTCA-2 MN 800		1648 CFCR-4 QB 600	1900	WDIQ-2 AL	
	1815 WTVJ-4 FL 1000		1700 CHAU-5 QJ 880	1902	WRBL-3 GA	
	1816 WPTV-5 FL 970		1707 CHSJ-4 NB 700	1930	MUF ch 2	
	1830 WEDU-3 FL 890		1710 CJPR-6 QB 690	2000	WESH-2 FL	
	WPBT-2 FL 1010		1720 CJCH-5 NS 800	2025	WPBT-2 FL	
	1842 KATC-3 LA 1030		1735 CJBR-3 QB 780	2030	WEDU-3 FL	
	1900 WCBT-4 MS 720		1740 CBFT-2 QB 450	2057	KPRC-2 TX	
	1903 WBRZ-2 LA 990		1742 WFBZ-2 ME 610	2130	WBRZ-2 LA	
	1910 WKRG-5 AL 860		1751 CKCV-2 NB 790		MUF ch 3	
	1914 KTEW-2 OK 980		1800 CJCE-4 NS	28	1200 WTHS-2 FL	
	1932 WEAR-3 FL 860	8	1300 Cuba-3	1330	29	1702 CBHT-3 NS
	1946 WWL-4 LA 990		1305 WEDU-3 FL 890		1826	KPRC-2 TX
17	1100 WPBT-2 FL 1010	25	2335 CKPR-2 ON	31	1200	WJXT-4 FL
	1630 WTVI-4 AL		2358 KDAL-3 MN		1828	KHTL-4 NE
<u>July</u>		26	1900 CFCL-2 ON		(call now KSNB -bt)	
1 Es	2030 KCKT-2 KS 1050		1902 WHT-2 IA		1859	KNOP-2 NE
	1900 WFO-2 IN 460		2100 KCKT-2 KS			KCKT-2 KS
3	2320 KPDK-3 TX 1150	27	1130 WSSH-2 FL			

Steve West 432 Kenmore Road Havertown, Pennsylvania 19083 (215)449-1472

<u>June</u>		<u>July</u>		18 Es	0900 WBRZ-2 LA
4 Es	1800 WPBT-2 FL	6 Es	1920 unID 2-6	22	1930 WBRZ-2 LA
5	0845 KTCA-2 MN	7	1200 WSSH-2 FL	23	1100 WNGB-2 TN
	WOL-5 IA		1230 ICR6-3 FL		1600 "Cuba 2 & 4"
	1000 CKPR-2 ON		1700 CHSJ-4 NB	24 Tr	0100 WITN-7 NC 320
	KHAS-5 NE		St John 600	27 Es	1630 Cuba-2
	1700 KQTV-2 MO	11 Tr	2130 WLVI-56 MA 275	28	1200 WMAB-2 MS
6	1000 WMAB-2 MS	12 Es	1100 KQTV-2 MO		KTVI-2 MO
	WTVI-4 AL		1800 KETS-2 AR		1300 KTEW-2 OK
	2200 WDIQ-2 AL		KALB-5 LA		WWL-4 LA
8	0845 WKRG-5 AL	14 Tr	2243 WUAB-43 OH	29	1830 KCKT-2 KS
9	1900 WPBT-2 FL		Cleveland 360		KPRC-2 TX
10	1845 CKPR-2 ON		WENY-36 NY 180	31	1600 WDAF-4 MO
12	1200 KTCA-2 MN		WSKG-46 NY 160		1700 KXON-5 SD
	1700 WPBT-2 FL		WBJA-34 NY 160		Mitchell
14	1330 unID 2,4,5		CKGN 22-22 ON		KSNB-4 NE
21	2000 unID 2-6		Urbridge 350		KCKT-2 KS
27	1030 WSSH-2 FL		ChLFT-25 ON	<u>August</u>	
	WJXT-4 FL		Toronto 340	1 Es	1000 WMAB-2 MS
	WPBT-2 FL		2400 WAKR-23 OH	3	1230 KHAS-5 NE
	1130 WKRG-5 AL		Akron 350		1300 KCKT-2 KS
	KPRC-2 TX	15	0230 WJAC-6 PA 200		KDFW-4 TX
28 Tr	2245 WUNK-25 NC 320		0700 WPTV-33 OH 300		WBAP-5 TX
	2330 WITN-7 NC 320		WPGH-53 PA		(now KXAS -bt)
	WCTI-12 NC 350		Pittsburgh 250	4	1900 unID-2 "LA"
30 Es	1700 KTVI-2 MO		2300 WMBG-26 ME 340		

"The TV skip hasn't been very exciting, only two new ones logged. This may be due to FM DXing though. The tropo on 7-14 to Ohio and Ontario was hard to believe; that area is hard to receive over the mountains, but there they were! It seemed awful easy. I was tipped off by Jim Alexander...I tipped Tom Yingling. The TV wasn't very strong but the FM's were. There's been a lot more Boston and a lot less southern tropo this year. I hope the Perseids yield a few ch 3 & 6 loggings when the locals go off. 73"

Clinton T. Day 22 Cross Street Westerly, Rhode Island 02891 (EDST)

<u>April</u>		21 Tr	0145 WJZ-13 MD	30 Es	2000 unID-3 CTV
20 Tr	0000 WHP-21 PA	<u>May</u>		<u>June</u>	
	0015 WAPB-22 MD	2 Tr	0015 WAPB-22 MD	6 Es	1930 WCCO-4 MN
	WBFF-45 MD	30 Es	1700 KTIV-4 IA	18	1930 KTCA-2 MN
	0130 WWBT-12 VA		1730 KXON-5 SD		

Richard Beckman 2328 Griffith Street Philadelphia, Pennsylvania 19152 (EDT)

June		19 Es		1110		WTVJ-4 FL		T		3 Es		1300 MUF to FM	
2	Es	1643	CJCN-4 NF			1710	WTVY-4 AL		T			1330	WHAB-2 MS
		1645	unID-2 NF			1752	WDIQ-2 AL					1357	KARK-4 AR
		2000	KTEW-2 OK			1806	WSB-2 GA					1400	KETS-2 AR
			KTVY-4 OK		T		WBRZ-2 LA			4		1320	KTCB-2 MN
		2002	ICR2-5 CUBA			2100	KPRC-2 TX					"Es in all day;	
		2020	WTVJ-4 FL			2102	KETS-2 AR					quite weak--several	
		2021	ICR2-4 CUBA		23	1918	unID-2					from Canada though	
		2025	KETS-2 AR			2055	ICR2-2 CUBA					no IDs. Several TPs	
			WPTV-5 FL		24	2042	KETS-2 AR		T			noted as well--	
		2034	CJCB-4 MS		T	2130	WBRZ-2 LA					likely PBS stns"	
		2155	WUPT-5 FL		T	25	0909	WPBT-2 FL		6		1847	WDAF-4 MO
3		1814	ICR2-2 CUBA				WESH-2 FL		T				KSD-5 MO
		1828	WPBT-2 FL		T	0930	WTVJ-4 FL						KTVO-3 MO
		1858	WESH-2 FL				WPTV-5 FL						KQTV-2 MO
4		1745	WPBT-2 FL		T	26	0958	WPBT-2 FL					KETS-2 AR
		1800	WTVJ-4 FL				WESH-2 FL						KMOX-4 MO
		2038	WESH-2 FL		T		WTVJ-4 FL						KOMO-5 MO
		2132	KTCB-2 MN		T		1600	KETS-2 AR				1900	KARK-4 AR
5		0945	WPBT-2 FL				1858	KTVI-2 MO				1917	WDIQ-2 AL
			WTVJ-4 FL				2103	KETS-2 AR		7		1645	CRRN-4 PQ
			WPTV-5 FL		29	1919	WPBT-2 FL					Rouyn	
		1103	WESH-2 FL		T		WESH-2 FL						CRRS2-2 PQ T
		1245	WHAB-2 MS				1933	WTVJ-4 FL				1659	CHFD-4 ON
			State College				1956	ICR2-2 CUBA				1700-1750 "Incred-	
		1638	WBRZ-2 LA		30	1700	WBAY-2 WI					ible amount of unID	
		1657	WCCO-4 MN		T	2051	WPBT-2 FL					stns on 2-5; no IDs	
		1825	CJCN-4 NF				WESH-2 FL		T			possible"	
6		1624	"Numerous unIDs				WTVJ-4 FL		T			1758	unID-3 CBC
			...very intense				WPTV-5 FL		T			1800	WLBZ-2 ME
			opening"				WKRK-5 AL					Bangor	
			KJJB-4 ND			2104	unID-2 w/TP					"Incredible sur-	
			Valley City			2123	KTVI-2 MO		T			prise here with	
		1800	WNGE-2 TN									taped ID and into	
		1810	WTVY-4 AL									local newscast.	
		1815	WTVJ-4 FL									Roughly 465 miles"	
		1830	WJXT-4 FL		T							1812	CJCB-4 MS
		1838	WKRK-5 AL		T							1930	CJCN-4 NF
		1900	WESH-2 FL									2055	WFT-2 IA
			WPBT-2 FL										KTIV-4 IA T
			WTVJ-4 FL									2155	WOI-5 IA
			WPTV-5 FL									Ames	
8		1721	KETS-2 AR									1648	unID-2
		1805	KARK-4 AR							9		1736	WPBT-2 FL
		1759	WNGE-2 TN							12			WTVJ-4 FL
		1918	unID-2 Canada										ICR2-2 CUBA
		1943	unID-5 "CBWCT?"		2							1925	WSB-2 GA
		2031	KQTV-2 MO									2100	WWL-4 LA
		2058	WKRK-5 AL										WCCO-4 MN
		2115	KTCB-2 MN										WBRZ-2 LA
9		1930	unID-2									2200	WFPB-31 MD
10		1903	unID-2 in French							15	Tr	2126	WHAG-25 MD
11		1143	unID 2-5									"Incredible, snow-	
		2000	KQTV-2 MO									free reception"	
12		1200	WCCO-4 MN		T	1740	WUPT-5 FL					2126	WITN-7 NC T
		1836	WBAY-2 WI			1800	WTVY-4 AL					"WTRF-7 WV also a	
		1842	WTMJ-4 WI		T	1829	WKRK-5 AL					possibility"	
13		1928	WPBT-2 FL			1835	WWL-4 LA					2128	WESH-2 FL
		1929	ICR2-2 CUBA			1853	MUF to FM			16	Es	2133	WEDU-3 FL
		1930	ICR2-4 CUBA			1912	WBRZ-2 LA					2201	WJXT-4 FL T
		1955	ICR2-5 CUBA			1915	KALB-5 LA		T			2207	WUFT-5 FL
			ICR6-3 CUBA			2100	KATC-3 LA		T			2239	WKRK-5 FL T
			"thru KYW-3"		3	0957	WPBT-2 FL					1825	WDIQ-2 AL T
		2005	WTVJ-4 FL			1100	WTVJ-4 FL			19			WTVY-4 AL
14		1747	KCKT-2 KS				WESH-2 FL					1830	WNGE-2 TN T
16		1928	WPBT-2 FL			1232	WPTV-5 FL					1704	WPBT-2 FL
			WESH-2 FL				WUFT-5 FL			20			WTVJ-4 FL
			WTVJ-4 FL			1253	WWL-4 LA						WBRZ-2 FL
19		1110	WPBT-2 FL		T	1300	WBRZ-2 LA						WESH-2 FL
			WESH-2 FL		T		WKRK-5 AL					1730	WPTV-5 FL

Richard Eckman (continued)

July

22 Es	1827 WESH-2 FL		28 Es	1637 WPTV-5 FL		3 Es	1054 KETS-2 AR	T
	1829 WJXT-4 FL			WESH-2 FL			1730 WUPT-5 FL	
	1853 WEDU-3 FL	T	29	1642 ICR2-2 CUBA			1738 WESH-2 FL	
	1928 WBRZ-2 LA			1759 WCCO-4 MN			WTWY-4 AL	
	1930 WPBT-2 FL			KTCA-2 MN	T		1809 WJXT-4 FL	
23	1024 KETS-2 AR	T	30	1830 CKRN-4 QB			WPTV-5 FL	
	WCBI-4 MS			1555 WBRZ-2 LA			1836 WMT-2 IA	
	1029 WDIQ-2 AL			1745 WTVY-4 AL			WOI-5 IA	
	1059 WESH-2 FL			WDIQ-2 AL			KTIV-4 IA	T
	WBRZ-2 LA			WKRK-5 AL	T		KQTV-2 MO	
	1300 WTVJ-4 FL			1750 ICR2-5 CUBA		4	0956 KQTV-2 MO	
	1405 ICR2-2 CUBA			2150 WNGE-2 TN			1837 WBRZ-2 LA	
24	1118 unID-2		31	1014 KETS-2 AR	T		1856 WWL-4 LA	
25	1747 WBRZ-2 IA			WPBT-2 FL			1900 KETS-2 AR	T
	2059 KQTV-2 MO	T		WTVJ-4 FL			KALB-5 LA	T
	2159 WMAB-2 MS			WESH-2 FL			1939 WDIQ-2 AL	
26	1921 WESH-2 IL			1100 WJXT-4 FL		5	2256 unID-2	
	Chicago			1157 WTVY-4 AL		12	1856 KTCA-2 MN	
	1926 WMT-2 IA			1210 WKRK-5 AL	T		KKJB-4 ND	
	1929 KUSD-2 SD			1215 WBRZ-2 LA			1900 WMT-2 IA	
	1935 KTIV-4 IA			1252 WMAB-2 MS			1922 WBAY-2 WI	
	Sioux City			1527 KUSD-2 SD			2100 KQTV-2 MO	
	1936 WOI-5 IA			1529 KQTV-2 MO		September		
	1940-2130 "Midwest			1538 WDAF-4 MO		1 Tr	0745 WVIR-29 VA	230
	Es remained in--			1602 WMT-2 IA			WYAH-27 VA	230
	sometimes intense"			1623 KTIV-4 IA			WWBT-12 VA	210
	2128 KCMO-5 MO	T		1657 KXON-5 SD		0800	WRDU-28 NC	
	KSNB-4 NE	T		Mitchell			Durham	330
27	1643 WPBT-2 FL			1740 WOI-5 IA			WVEC-13 VA	230
	WTVJ-4 FL			1800 KSNB-4 NE		0831	WOLO-25 SC	
	1822 WDIQ-2 AL			Superior			Columbia	520
	WCBI-4 MS			1830 KNOP-2 NE			WRLK-35 SC	
	1840 KALB-5 LA			North Platte			Columbia	520
	1844 WSB-2 GA		August				WNOK-19 SC	
	1845 WBRZ-2 LA		2 Es	1055 WPBT-2 FL			Columbia	520
	1850 WMAB-2 MS	T		WTVJ-4 FL			WCVE-23 VA	210
	1900 WSJK-2 TN			1312 WBRZ-2 LA		0902	WCVW-57 VA	
	Sneedville			1342 WNGE-2 TN	T		Richmond	210
	1952 WWL-4 LA			1610 unIDs 2 & 4		0905	WHRO-15 VA	230
	2230 WESH-2 FL			"Canada			"Patchy fog through-	
28	1637 WPBT-2 FL			2200 KTCA-2 MN			out morning--Wash-	
	WTVJ-4 FL			WCCO-4 MN			ington U's (20 & 26)	
			3	1054 WBRZ-2 LA			in snow-free"	

"June wasn't half bad for E-skip though work five days a week cut into DX a lot more than last year at this time. Quite a number of new stations on Es received...July was a good month for E-skip although nothing truly amazing was noted with the exception of some very short skip on the 7th. There was quite an Es drought during the middle of the month, though the end of the month exhibited the best skip for me, at least. August was a pretty mediocre month as far as Es reception was concerned--at least when I was able to view it. After looking all month for some decent tropo activity it finally came this morning, 9/1. Considering the antenna I have--one of those all channel jobs with no rotor pointing roughly SSW--I was pretty amazed at what tropo can really do. There was patchy dense fog most of the morning with stations from as far as SC in on UHF. I assume this is what's termed 'coastal' tropo. Unfortunately--it's back to college on 9/3 and probably the end of TV DX until Thanksgiving break. 73"

Dean R. Markosha 10636 Avenue "B" Chicago, Illinois 60617 (CDT)

Equipment: 19" Sony Trinitron Plus color set, RCA 4BG69 antenna, Winegard U-995 antenna, Blonder-Tongue Able U-2 UHF amplifier, CDE AR-44 rotor at 40'

September

5 Tr	2100 WBAU-13 WI		6 Tr	1817 WOI-5 IA		8 Tr	1545 WGTU-29 MI	
	2200 WGHM-10 IL			1830 KDIN-11 IA			1930 WPBN-7 MI	
	2215 KTTC-10 MN			1842 KCCY-8 IA			2000 WKON-20 MI	
6	0530 KCRG-9 IA		7	1800 KDUB-40 IA			2004 WIPB-49 IN	
	1700 WHO-13 IA			2200 KTIN-21 IA			2006 WBGU-57 OH	
	1800 KIIN-12 IA			2230 KWWL-7 IA			2018 WCET-48 OH	
				2246 WMT-2 IA			Present log total: 155	

Paul Gaines 15920 Puritan Street Detroit, Michigan 48227 (EDT)

June		July		August	
4 Es	1226 unIDs 5, 6	15 Tr	0245	WNBY-7 NY	
6 Es	2310 KOAA-5 CO 1145	6	1305	ICR6-5 CUBA T	Watertown 375
	2323 KYCU-5 WY 1090			"palm tree TP"	WABC-7 NY 490
7 MS	0250 unID-4 west	7	1720	CJCH-5 NS	0310 WTVH-5 NY
14 Es	1315 WLBT-3 MS 790			Halifax 970	Syracuse 350
	KATC-3 LA 970			CJCH6-6 NS	1157 WICD-15 IL 305
	1535 KRIS-6 TX 1280			Caledonia 890	"got up late"
	1600 KTAL-6 LA		1730	CBHT-3 NS 970	16 1202 W39AA-39 IN 130
	Shreveport 905		1955	unIDs on 5; CBC	20 MS 0324 WCBS-2 NY 490
	KALB-5 LA 915			French & ATV	Tr 0824 WMBD-31 IL 345
	1700 KYCU-5 WY 1090	12	2258	KOAA-5 CO 1145	0831 WTV-17 IL 300
	1718 KHAS-5 NE 790		2316	KARD-3 KS 810	0847 WRAU-19 IL 345
	1723 KLNB-3 NE 860	14 Tr	2300	WBRE-28 PA 380	0901 WICS-20 IL 375
	1732 WKRG-5 AL 855		2335	WNEP-16 PA 385	0921 WCAB-50 IN
	1740 KFSM-5 AR 765		2342	WVIA-44 PA 385	St John 225
	1828 KDSJ-5 SD 1025		2348	WBJA-34 NY 365	21 0607 WOWK-13 WV 280
17 Tr	0154 WOWK-13 WV 280		2350	WSKG-46 NY 365	22 0823 WOWK-13 WV 280
21 Es	1115 KOCO-5 OK		2351	WNBY-36 NY 320	0832 WPBO-42 OH 255
	Oklahoma City 995	15	0003	WICZ-40 NY 365	23 0929 WKOW-27 WI 315
22	1035 KYCU-5 WY 1090		0008	WUTR-20 NY 400	0931 WHTV-15 WI 315
	1100 KRMA-6 CO		0012	WLYH-15 PA	24 MS 0315 WCBS-2 NY 490
	Denver 1125			Lancaster 385	Tr 0954 WKON-52 KY 275
25	1125 WPTV-5 FL T		0023	WDAU-22 PA 385	28 0906 WICS-20 IL 375
	1135 WCIX-6 FL T			thru CGKN1	Es 1315 unID-5 S.S.W.
			0028	WHP-21 PA	August
3 Es	1256 WPTV-5 FL 1110			Harrisburg 355	3 Es 1218 KENS-5 TX 1220
	1258 WRDU-3 FL 1000		0043	WTPA-27 PA	1300 KATC-3 LA 970
	2010 WDSU-6 LA 940			Harrisburg 355	KIII-3 TX 1280
	2043 ICR6-5 CUBA T		0048	WSYE-18 NY 320	1303 KFDX-3 TX 1000
	2100 KXAS-5 TX 1000		0058	WJBL-19 PA	4 Tr 0755 WICS-20 IL 375
	2303 KATC-3 LA 970			Johnstown 260	0756 WAND-17 IL 340
	2305 KALB-5 LA 915		0145	WOKR-13 NY 280	0810 WICD-15 IL 305
	2340 KENS-5 TX 1220		0154	WHBC-10 NY 280	0820 KDNL-30 MO 450
	2341 KRIS-6 TX 1280		0232	WHNG-12 NY	0827 WBAK-38 IN 290
				Binghamton 365	

Bob Zent 1835 Fruit Street Huntington, Indiana 46750 (EST)

July		August	
18 Tr	2250 London U's	7 Tr	2255 WHTV-15 WI T
8 Tr	2030 WPGH-53 PA 290		"strong GCI
	WOUC-44 OH 215		over local 15"
	2035 WOUB-20 OH T	12 Es	1850 KTWO-2 WY 1110
	WVU-24 WV 300		1945 KOTA-3 SD 970
13	0605 WPGH-53 PA 290	16 Tr	2225 KINL-30 MO 305
	WYTV-33 OH 250	21	0655 WBBF-4 IL
	WKBN-27 OH 250		Rock Island 270
	WFMJ-21 OH 250	August	0659 WQAD-8 IL 270
	WTAP-15 WV 245	4 Tr	0610 Kitchener U's
	WGTU-29 MI 265		Chatham U's
16	0950 CHLFT1-76 ON 300	28 Es	1528 unID-2 PBS S.
	CIC059-59 ON 200	29 Tr	2140 WHTV-36 WI 200
	CHLFT3-48 ON 200		"rarely seen"
	CKCQ3-42 ON 200		2145 WKOW-27 WI 255
	CKGN29-29 ON 200		0650 CHLFT7-55 ON
	CIC018-18 ON 260		Barrie 375
	CHLFT2-40 ON 260		0700 KINL-30 MO 305
18	2250 Kitchener U's	7	2255 Rockford U's
	Chatham U's		WKOW-27 WI 255
	Oil Springs U's		WHA-21 WI T
			"strong GCI
			over local 21"
			2225 Rockford U's
			2358 WREX-13 IL
			Rockford 205
			2200 WGTU-29 MI 265
			2215 WPHN-7 MI 265
			2220 WFTV-9 MI 240
			2330 London 10 & 18

"Earlier this month I installed a Winegard GH-4054 VHF-FM antenna below my parabolic. Performance on the television bands is quite good but it lacks directionality over much of the FM radio band. Anyhow I'm glad to be using an outdoor VHF antenna once again. New loggings are underlined. Total now 268."

Steven Shaffer 10956 Indianapolis Blvd. Hammond, Indiana 46326 (219)659-4752

June		July		August	
7 Es	1700 CBHT-3 NS 1100	31 Es	1730	KNOL-4 TX	950
29 Es	1030 KPRY-4 SD 650	12	2000	KATC-3 LA	750
	1100 KOTA-3 SD 800	26	1030	KYUS-3 MT	875
	1140 KPLO-6 SD 700		1100	KID-3 ID	1100
July			1130	KOA-4 CO	875
7 Es	1630 CHSJ-4 NE 1000	29	1730	WBAR-3 FL	800
					Tr 1800 WCCO-4 MN 320

QSL CORNER

Thomas J. Vinding, Jr.
224 Pinewood Road
Baltimore, MD 21202
Phone 410-41-282-5649
Deadline: 19th

- AR KASU 91.9 Jonesboro, Drawer B898, State University, 72467. Letter from Richard Carvell, Mgr. Zank
- FL WQJH 105.1 Orlando, 222 Hazard St, 32804. Friendly letter in 8 days, Don Anolin, CE, Swartz.
- GA WJIZ 96.3 Albany. Letter from Fred (Doc) Suttles, Station Mgr verifies after sending a fresh report this year, & mentions also being heard in Wisconsin. Elving
- KS KCKN 94.1 Kansas City, P.O.Box 1165. Letter from Jim Jett, CE. Zank & also Simon
- KLDD 106.1 Luons, Box 768, 67554. Letter from Jim Gloss, Mgr. Zank
- KMGR 99.7 Shawnee Mission, 4935 Belinder Rd, 66205. "Reception confirmed" note on my report. Signed by Ellis --- (unreadable), eng supt. in 5 days. Simon
- MA WBUR 90.9 Boston, Boston University, 630 Commonwealth Ave, 02215. Returned my report with "above report verified" written at bottom signed by James H. Bonny, CE in 10 days. Simon
- MO KUMR 88.5 Univ. of MO-Rolla, G-6 Library, Rolla, 65401. Letter from Jeffrey R. Stoll, Chief Engineer. Zank
- KSMU 91.1 Springfield, Southwest MO State Univ. 65802. Friendly letter explaining that station heard was not them. Reply in 2 weeks from Gloria Palmer, Eng. Simon
- MN WCCO 102.9 Minneapolis, 215 S. 11th St, 55403. Note & business card from Tim Prouty, Engr. Sup. Zank
- NE KTCH 104.9 Wayne, box 484. Letter from Theodore S. Storck, Mgr. Zank
- NY WJMO 92.5 Rochester, 829 Midtown Tower. Letter from Robert G. Mallery, CE. Zank
- NJ WPAT 93.1 Paterson, 1396 Broad St. Clifton, 07013. Form am/fm letter with out dates, etc. signed Kenneth W. Strout, CE. Simon
- OH WMHE 92.5 Toledo, 4665 W. Bancroft St, 43615. Friendly letter stating they were on a 250 AAT tower after regular antenna was hit by lightning 6-30. Charles A. Myers, operations manager & reply in 10 days, Simon
- WMRN 106.9 Marion, Box 518, 44302. Station info & note of 'most distant reception' but no dates. Signed by F. J. Peters, VP for Eng & reply in 5 days. Simon
- WBEA 107.3 Elyria, EST Building, 44035. Long personal letter chiding me for not reporting more details. Signer Glenn P. Smith, CE in 5 days. Simon
- WMVO 93.7 Mt Vernon, 43050. Unsigned memo from Don Talbot in 2 weeks. Simon
- OK KEBC 94.7 Oklahoma City, 826 SW 31st St. 73109. Letter & map, bumper-sticker from Randall C. Mullinax, CE in 10 days. Lowery.
- SD KESD 88.3 Brookings, South Dakota State Univ, 57006. Letter from Brian Prows, Program Coordinator (the names they dig up for PD, HI!) Mentioned also received a report from Louisiana. Also send 2 program guides, one contained an article on FM antennas. Aden
- KELO 92.5 Sioux Falls. Send card signed by Craig ? L. Gundersen ? Basic details. Received 7-12-77 for 6-28 report. Aden
- TN WETS 89.5 Johnson City, Box 21400-A. Letter from Richard F. Ellis, Mgr. Zank
- TX KWTX 97.5 Waco, Box 7528, 76710. Xerox of my report with confirmation note from Jensen Dove, CE in 5 days. Simon
- KFPT 90.1 Houston, 419 Lovett Blvd, 77006. Letter & KFPT's news paper from Frank Martin CE in 1 month with return postage. Nice letter & said we've only had one other reception report from Quebec? Traska
- KNTU 88.5 Denton, 76203. Nonspecific friendly letter from Guy M. Johnson, Program Dir with reply in 2 weeks. Simon
- UT KSUB 92.5 Cedar City. Short, inspecific letter from Donald E. Cartwright, Mgr along with some brochures on the area. Elving
- KALL 94.1 Salt Lake City. Rex L. Vance, CE sends qsl card with am crossed out & a listing of their translators; mentions their SCA for subaudible telemetry 20-30hz modulation has been heard in Louisiana. Elving.
- VA WTKV 101.7 Kilmarnock. Dean Loudy, mgr sends friendly letter & map. Elving.
- WY KFBC 97.9 Cheyenne. My first qsl from Wyoming, letter from Ron Kercher, PD. Elving.

Reporters this time are: Neil G. Zank of Lincoln, NE, Shel Swartz of West Palm Beach, FL along with Ken Simon, Bruce Elving, of Duluth, MN, Greg Lowery of Cadwell, GA, Frank Aden of Bend, OR, & Paul Traska of Buffalo, NY. This was all FM QSL Month & I got lots more just waiting to get typed up. If you don't see your report here, either it will be in next month or you didn't send a report yet. Newest reporters are Zank, Lowery & Traska. It looks like the skip maybe gone for a while & qsl's are not back to their reporters yet. Just send in the good news when you get it. 73's for now, and thanks for the support with my column. *Tom*

Memorabilia

October 1977



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

"THIS IS YOUR DX"

Featured: Paul Traska

My start as a DXer came to be quite by accident, the year 1967, the month November, the exact date not known, but somewhere in mid-November. I was watching Johnny Carson that night. I don't want to put in a plug for the show, but, back in those days, that show was OK; now---ahh. Well, the show ended at approximately 1:00am. It was a few minutes after, by the time I went to shut off the set. This is not a plug, either: my local channel 2 WGR had already signed off (I wish it would do so now). There was a weak signal coming through. I attentatively kept on looking at it. Then, a great idea just struck me: why don't I change the antenna? I did, and it worked; but I couldn't believe that this was Channel 2 Pittsburgh.

I was very much amused by this discovery. I said to myself: Why not wait until Channel 4 (WBEN) signs off? The same thing might occur. I was amazed once more: Channel 4 Pittsburgh came in. I said to myself again that there is something else; but it turned out to be a bummer when I couldn't see Channel 7 Pittsburgh. I sat up until about a little past 2:00am; all I saw was Channel 7 Detroit. (And odd call letters; at first I thought that someone was reciting the alphabet---WXYZ). I was also glad seeing Detroit, but still a little displeased from not receiving Pittsburgh. "Well, I'll call it quits tonight---it's past 2:15am. I'd better hit the hay before somebody asks what I am doing, looking at all the snowy dots and what picture".

In the meantime, I continued operating, and looking at those fuzzy and snowy pictures; all the time I had no knowledge as to where to position my antenna and where any station could be, but I did manage to receive more than a few great signals without the knowhow. It was after I had joined WTFDA that there came a book of North American TV stations. With that book in my hand, I really went to town. So this amazement or astonishment kept me looking, night after night. I received Channel 4, KARK Little Rock (not by skip). It was after 2:20am, it was meteor scatter; I didn't know that at the time. I just kept on watching, until my total stations were somewhere in the 90s. Time went on; I was fascinated with these signal receptions. Then my brother told me that he too did some tuning of the dials in the early 50s. Some of those stations got me more excited; ones that he had seen back then.

One day, I picked up my TV Guide (AUGUST 1969 issue), and inside there was an article ("Tune Your Set Carefully, and You May Even Get Holland") by (guess who, you're absolutely correct) Glenn Hauser; so I read the article twice, then, I wrote a letter to the address shown: WTFDA-Milwaukee then. I received the literature about the WTFDA, joined, and became a member that year.

Before I go on, let me explain: I later found out that there was no Channel 7 in Pittsburgh. Maybe some day in the future they will have; then I'll get it. After looking and reading over this story, I only wish that I would have known about the WTFDA back in '67; there were better opportunities for acquiring more distant signals than now. Considering total TV-FM and CB stations, all this interference is not "healthy" for DXers, especially the latter one. But, at the present, I'm happy with my total stations and my DXing equipment or gear; they could be a little better, but everybody says that. I have one last word: If you're not in the WTFDA, you're not a DXer.

Thank you very much, Paul. I, for one, have thoroughly enjoyed your account of how you became a DXer.---rjw.

73s, gud DX, Bob



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TO BEAT!**

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The VHF-UHF DIGEST is the official publication of the Worldwide TV-FM DX Association. WTFDA is a non-profit organization and a member club in the Association of North American Radio Clubs (ANARC).

Persons contributing their efforts for the Worldwide TV-FM DX Association do so without any monetary compensation. Dues and all other revenue cover printing, postage, and other expenses.

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