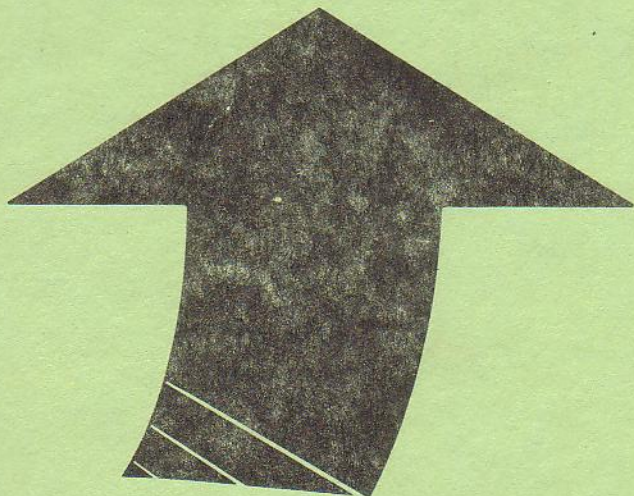


**YLF-DLF  
DIGEST**  
the official publication of the Worldwide TV-FM DX Association

**JUNE 1978**

**THIS MONTH**

***PRECONVENTION ISSUE***



# From The Staff :

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

CONVENTION 1978...Don't miss the 1978 WTFDA Convention! Full details appear on page 18. Use the convention registration form in the center of this issue and fill it out NOW!

1978 ANARC CONVENTION...This year will be a return to Montreal where it is hosted by Radio Canada International. Dates are July 14, 15, and 16. Some activities to be seen in Montreal will be a tour of RCI facilities, workshops, HAP auction and a possible tour of the Maison de Radio Canada Radio and TV facilities in which a working demonstration of the world's first direct satellite to home receiver television broadcasting system. For registration form and more details write ANARC 557 North Madison Ave., Pasadena CA 91101.

TV SCOREBOARD/STATISTICS...New editor for this column is Chuck Michaelis. Lets all give Chuck a hand and send in your totals and possible record loggings to him at Route #2, Hebron OH 43025.

APRIL VUD CUT OFF INFORMATION...Page 30, line from top of tower to  $\frac{1}{2}$  tangent at earth has length "s." Page 31 top should read: " $S (2ka)^{\frac{1}{2}}$  ( $h_1^{\frac{1}{2}} + h_2^{\frac{1}{2}}$ ) (#5). Page 32: First line ends with "instead" then

" $N=10^6 (n-1)$  (#10). Also the parenthetical note should read " $(=1,000, 000 \text{ dn/dh, remember})$ ". (this without a capital N.) Page 33: "Then for  $h$  between  $h_s$  (the surface altitude) and  $h_s + 1\text{km}$ , the refractivity,  $N^*$ , given by this model is".

FEEDBACK...Your editor has been thinking about revising this column as a question and answer and technical comment column. This would be a forum where members could discuss recent technical columns in the VUD and also a place for members to ask any question concerning the hobby. If anyone is interested in editing such a column write Frank Aden, Jr. Editors would not have to have an extensive technical background as other members would be able to answer questions posed.

Continued on page 23.

## TABLE OF CONTENTS

MAILBOX: Nine new members this month!.....	3
FCC FM NEWS: FM DXing in Austria.....	5
FCC TV NEWS: The column returns! New editor needed.....	8
CAN YOU HANG A PRIZE ON QSLs?: A look at the problems with QSLs.....	10
WHY DXERS SHOULD USE DIGITAL READOUT FM TUNING SYSTEM.....	11
IN SEARCH OF PSB: A look at the best bets.....	13
QSL CORNER: More reports needed!.....	15
PHOTO NEWS: WOI's animated ID.....	16
CONVENTION 1978: One of the best and its still to come!.....	18
VHF UTILITY DX: 52mhz Australians reported in CA.....	19
MEMORIBILLIA: A look at some old time QSLs.....	22
FM STATISTICS: Column returns!.....	23
CCI: Only one UnID.....	23
EASTERN TV DX: Auroral hash noted up north.....	24
SOUTHERN FM DX: Tropo and Es reported.....	25
STATION BREAK: .....	29
NORTHERN FM DX: AU heard in Northwest.....	30
NV9300 THE DREAM MACHINE: A look at the new Panasonic recorder.....	31
WRTH EUROPEAN TV: A list of the "E" channels.....	33
WESTERN TV DX: Only a few E openings noted in the west.....	34



# MAILBOX

John Zondlo  
6617 Maryland  
Hammond, IN 46323  
(219) 844-8694  
Deadline: 10th

### New Members:

Douglass Allen  
Dave Hascall  
Instant Replay  
David Westerson  
Thomas Payne  
Tom Tomlins  
Matthew Wall

15 Lafayette St., Apt. 64  
211 N. Merrill  
4149 Bonita Ave.  
1126 Old Alturas  
8340 W. 35th St.  
47 Bay Lane  
14150 S. Prairie, Apt.

Schenectady, NY 12305  
Fortville, IN 46040  
Coconut Grove, FL 33133  
Redding, CA 96001  
St. Louis Park, MN 55426  
Dade City, FL 33525  
Hawthorne, CA 90250

Mark Westling  
Roosevelt Williams

2710 Pinewood Terrace  
955 Evergreen Ave., Apt.  
219  
207

Austin, TX 78757  
Bronx, NY 10473

### Renewals:

Edward Cotton, Mike Dorner, Jim Gill, Robert Goodman, Robert Heckenlively, William Higgs, Hank Holbrook, Roger Horie, Alan Mayer, Robert McGowan, Rod O'Connor, William Ronecker, Mahlon Stilwell, Bill Thompson, Roger Winsor, Jeff Wolf, Mike Worst, Robert Zent.

### Rejoins:

Grant Manning-3417 Purer Road-Escondido, CA 92025  
Bill Migley-210 S. Maple St.-Lancaster, OH 43130

### Address Changes:

Mike Dorner, Jr.-1304 Airline Park Blvd.-Metairie, LA 70003  
Richard C. Evans-P.O. Box 1121-Havertown, PA 19083  
Larry Weil-15 Davis Road, Apt. A12-Acton, MA 01720  
Mike Worst-425 Archie, #18-Vidor, TX 77662

### Renewals Due in July:

Dr. Michel Breger, R.S. Broadhead, John Clemmer, Bob Curole, Mike Dalton, John Ebeling, Ron Ginardi, Joe Gragg, Dave Harms, Kenneth Kiihr, Chris Landon, David Legler, Nick Lombardi, Mark Lucas, David Martin, David McLaren, Vic Melis, K. Noffsinger, Denis Orlando, A. Robert Pantazes, Walter Patton, Ted Pinski, Robert Ross, Steven Shaffer, Gary Siegel, Brad Stanton, John Timm, William Tudor, Robert Walker, Robert Williams, Ron Wing, Tracy Wood.

Reckon I'll let DOUGLASS ALLEN introduce himself: "I'm not exactly new to VHF-UHF DXing, as I've sporadically DXed FM and TV for many years, mostly to determine conditions on the VHF-UHF ham bands, where I've worked 48 states on 6 meters and 36 states on 2 meters from eastern NY. I've never logged my TV or FM DX, but recall several 500-600 mile tropos on TV UHF and single hop Es on FM. This was all done at my summer camp 10 miles from downtown Schenectady, at an elevation of 1,400 feet, about 1,100 feet above my downtown apartment location." Douglass learned about the club in Communications World magazine.

Also learning of the club in Communications World is DAVE HASCALL. He's also a member of MVDXC and NASWA. Dave DXes with an RCA XL100 TV and a 9 band portable receiver.

THOMAS PAYNE is into SW, ECB, and TV DX. He uses a 9 band portable radio and a 19" color TV. He heard about us in Elementary Electronics.

New member MARK WESTLING is also a member of NASWA, WDXC, and Medium Wave Circle. He's a 21 year old computer programmer who DXes with an RCA color TV and a Yaesu FRG-7.

### Tidbits.....

This in from Greg Monti (5 Hickory Road, Bayville, NY 11709): "As a brief intro, I'm 22 and employed as a part-time announcer at WGBB Freeport NY. As the summer approaches, my DX interests are changing from MW to FM and TV. Probably my first priority will be the installation of a "real" FM antenna system so I can turn those "occasional" or "fringe" FM's into "regulars". I live 25 miles east of NYC, which means that there are a lot of strong FM signals from city and suburbs, perhaps 60 regular stations on the 100 FM channels, not leaving too many open for DX. In addition to DXing, I am a general radio buff, and trade aircheck tapes of local stations with same, most of whom are DXers. I am also a member of JRCA. My only complaint after receiving the first issue (April) of the VUD is that the Mailbox column ran off the top of page 4 and the technical article on pages 29-33 ran off both the top and bottom of every page it was printed on!!" Sorry 'bout that, folks.

# FCC FM NEWS

## New Stations G. ante'

CT Berlin '89.9 10 watts; Schools  
 KY Bardston 96.7 3000 h.v.; 160'; an  
 initial decision, subject to reversal  
 MA Acton '89.1 10; Schools  
 MT Havre '90.1 10 N. Mt College  
 SC Cherokee 103.1 3000 h.v.; 300' init.dec.  
 TX Merkel 102.3 3000 h.v.; 300' " " "  
 UT Salt Lake City '90.9 19000; 3600';  
 Listeners' Community Radio. Init. dec.:  
 VA Berryville 105.5 3000 h.v.; 300'; kg  
 BC Aiyansh 102.3 278 w; CFRP-AM relay  
 BC Chase CFPM-8 93.1 140 w; k [relay]  
 BC Kamloops 96.5 4750, cm; French, CBUF /  
 BC Pritchard CFPM-9 106.3 19 watts; k  
 BC Terrace 95.3 54 w; CBC-CFRP-AM relay  
 96.9 54 w; CBUF relay; cm  
 MB Limestone (94-07; 56-31) 96.1 15 watts  
 rock; relay of CJOG-AM Winnipeg  
 PQ Rouyn-Noranda 88.7 4800; 395', a non-  
 profit station, but will have some ads  
 SA Saskatoon 104.7 98000; \$, CBC-FM  
 PANAMA HOHM-FM 90.9 Chitre, 1000 watts;  
 said to have "several" 50-watt repeaters;  
 Spanish; varied program-music,  
 stories, discussions, and ON AIR!

## Facilities Changes

AL Bay Minette WWSM 106.5 adds v  
 IN Hammond WYCA 92.3 400' (30000 h.v.)  
 MI Presque Isle WUPI from '91.1 to '90.3  
 NJ Hastings W5CH-FM 100.1 1800 h.v.; 275'  
 NY Lake Ronkonkoma WSHR '91.0 has v  
 PA Philadelphia WSN1 101.5 12500 h.v.  
 (1010'); 33 miles primary; 72 secondary  
 PA York W5BA-FM, now rp, 103.3 12000h.v.;  
 650'; directional  
 TX Beaumont KTEL 95.1 60000 h.v. (220')  
 WA Seattle KYYX 96.5 81000 h.v.; 1220'  
 AI Edmonton CKO-FM 105.4 100000 h.v.  
 BC Kamloops CFPM 98.3 4300 (468')  
 CN London C1XX to be on 106.9 with 3000  
 h.v.; 125' and to be noncommercial (\*).  
 Station grant was previously announced,  
 but no frequency had been decided for it.  
 CO Colorado Springs K1NX 101.9 has v  
 CT Hartford W6TO from 88.3 to '89.9 63  
 watts h.v.; 86'  
 IN South Bend WRBR 101.9 700' (3000 h.v.)  
 NC Concord WPEQ 97.9 660' (20000 h.v.)

## Deletions

IA Hampton K0HJ 104.9 (never constructed)  
 MN Cottage Grove W5WC '86.1  
 PG Ch. Nord CPUT-1 106.7; never was on  
 PQ Saguenay (Chicoutimi) CHUT 96.7

## Call Letters Assigned

CA Arcadia 107.1 KMAX (apparently never  
 changing to KPFC-FM); 'FM-107"  
 MI Traverse City '90.9 WMMC  
 NE Scottsbluff 92.9 KMLP  
 TX Alice 92.1 KXMS (KOPV-FM); still r  
 TX Andrews 105.5 KACTI-FM  
 TX Conroe 106.9 KMCV (KXNO); now g; U

TX El Paso 92.3 KFIM (KSDL); to use "92-K."  
 TX Orange 104.5 KZMR (K0BS); rp; nonID is  
 "ZOM 104.5."  
 UT Logan 94.5 KJKJ (K0WJ); rp; no network/  
 WA Yakima '91.9 KDNA

## Non-IDs

AZ Tucson KRQD 93.7 KRQ, except on hour  
 MC La Plata WATR 104.1 X-104, now 50000  
 h.v.; 500', with improved signal into DC  
 MN Moorhead KQWB-FM 96.7 Q-98-FM  
 KV0X-FM 99.9 X-100  
 MN Wadena KXMS 105.4 FM-106  
 ND Jamestown K5JM 93.3 FM-93  
 PA Carlisle WHLY-FM 102.3 Country-102  
 PA York-Hanover WYCR 98.5 "MS-YCR"  
 TX Houston KRLY 93.7 Y-94 [IA Mason City  
 KODA-FM 99.1 99-FM] KLSX 106.1  
 TX Nacogdoches KSFA-FM 92.1 92-K; KS-105  
 TX San Antonio W0AI-FM 97.3 FM-97  
 TX Brownsville KR1X 95.5 is not a nonIDer;  
 uses calls more often than it uses "99-X."

## Formats/Networks

CA Vacaville KVIC 95.3 r (from mk); "Quick."  
 DC Washington WDCO-FM 101.1 rp [WY-106"  
 FL Leesburg WHLY 106.7 pm (m evenings); /  
 FL Marianna WJAO 100.9 r, "Q101"; \$  
 FL Melbourne WTAI-FM 107.1 m (not r) [102"  
 FL Milton WGBM 102.7 k (not km); "Country /  
 FL Quincy W0NH-FM 101.7 rs  
 FL Starke WFXE-FM 106.3 Mutual  
 FL Titusville WPIO '85; 3 g  
 GA Americus WFOR 97.7 r (from m)  
 GA Augusta WFEQ-FM 104.2 Y (from W); music  
 [not Musik] on SCA.  
 GA Valdosta WJGA 85.9 n (not nr)  
 IL Aurora WKKD 95.9 apparently r (having  
 dropped kalamitic beautiful n?)  
 IA Clinton KSAY 96.1 m on r (from m)  
 MO Catonsville WTKT 105.7 rp  
 ND Halfway W0CM 96.7 r (from rp)  
 NJ Dearborn WVIC 100.3 U (from Mutual)  
 MI Detroit W6OW 95.3 still has cm, but  
 may be just a when calls change soon  
 WZKX 97.9 = (not ne); talk all night  
 MN Humble City K7KX 94.1 r (from r); "K-  
 94 FM" nonID  
 NY New York WR1U 92.3 rp (Burkhardt-Abraham)  
 NY Plattsburgh W6FB 99.9 rp  
 NC Southport WLCF 107.1 r  
 OH Akron WKDD 96.5 r (not rp); no network  
 OH Cella W0CM-FM 96.7 rs; music on SCA  
 CH Cleveland W0NT 107.9 m  
 OH Columbus W0MS 95.7 m; music on SCA  
 PA Braddock WFFM 96.9 is nr; not just r  
 PA Harrisburg W5FM 99.3 r, "Rock 99."  
 PA Millersburg WJUR 58.3 gk (from mk)  
 PA Pittsburgh WPEZ 94.5 rp  
 PA Starview WRHY 92.7 rp (from r)  
 PA Sunbury WK0K-FM 94.1 k (from r); "K0-  
 County."  
 PA Warren WRRN 92.3 m (not mp)  
 PA Washington WJPA-FM 95.3 m (afternoon m)  
 SC Greenville WFBG-FM 92.7 r (not nr)  
 TX Houston KILT-FM 100.3 rp ("FM-100")  
 TX Killen "KNCI-FM 91.3 adds A to P; AP  
 TX San Antonio K1TY 92.9 r (not nr)  
 TX Victoria KTXN 96.7 k (from nr)  
 VA Warrenton WEEH-FM 107.7 p (from nr)  
 WV Morgantown WCLG-FM 100.1 is rp  
 CN Cornwall C6LE 104.5 nr

Bruce E. Elving, Editor.  
 18 1/2 East Fifth St. ext  
 Duluth, MN 55801  
 ON Charter CBEE 95.1 classical  
 ON Sarnia CBEG 106.3 "  
 PG Longueuil C1ELP-FM 96.5 pm (some c)  
**Stereo, to be \$, or \$ Resumed**

MI Alpena WHSB 107.7  
 MI Corp WIDL 104.9  
 MN Princeton WQPM-FM 106.3 k (from m)



NE Gracksford KINI '96.1 a, obtruded non-  
 commercially on a commercial channel  
 OH Marietta WMR 88.3  
 TX Lufkin KLUF-FM 105.1  
**Dropping Stereo**  
 IN Columbia City WFBT 106.3  
 MN Colvilleville K5JU '89.1, 10 w, but with  
 a high tower, horizontal only (heard  
 clearly in a car at 37 miles).

## SCA (67 kHz) News

GA Savannah WQXI-FM 94.1 no SCA, "94-Q."  
 IA Sioux Center K0CR '91.3 MN talking book  
 MA Boston WROH 56.5 no SCA  
 WZ-FM 106.7 no SCA  
 MA Worcester WAAF 107.3 no SCA  
 OR Bend KXIQ 94.1 no SCA  
 OR Eugene KPWW-FM 99.1 no SCA  
 SD Watertown K1XX 95.1 farm news

## Dolby Station Information

The following comes from the latest Dolby  
 station list, supplied by Paul E. Kinnaly,  
 Jr., Dedham MA. All of the below are  
 dropping Dolby, unless marked (+), in which  
 case the station is adding Dolby. Many  
 stations may be dropping Dolby because of  
 the nuisance of having to broadcast a cal-  
 ibration tone. I have myself heard no im-  
 provement in Dolby fringe-area reception,  
 and wonder if any DXers have noticed an  
 improved ability to pick up a Dolby station  
 under DX conditions with Dolby receiving  
 equipment.  
 WLRH '89.3 Huntsville, WDLX 92.9 Mobile,  
 WEIZ 100.1 Phenix City, WJ0A 95.7 Tuscaloosa  
 AL, KYNO-FM 95.5 Fresno CA (+), KFAC-FM 92.3  
 Los Angeles (+), KJ0I 96.7 Los Angeles, KBIG  
 104.3 Los Angeles, KWH 96.7 Paradise (+),  
 KLRO 94.9, K1FM 90.1, KFMB-FM 100.7 and KGB-  
 FM 101.5 San Diego CA; K5JS '90.7 San Jose  
 CA, KBEI 135.9 and KZY106.7 Denver CO, WPKM  
 '89.5 Bridgeport CT, W1IC-FM 96.7, WDRG-FM  
 102.9 and W0CN 105.9 Hartford CT; WAMU '86.5,  
 W0HR 96.3 and WROX 107.3 Washington DC; WTMJ  
 93.1 Miami FL (-), WATA 97.3 Miami, W0SR  
 102.5 Sarasota FL; K1MU-FM 94.7 Honolulu HI  
 (+), K1D-FM 96.1 Idaho Falls ID (-), WFMJ-FM  
 94.7 Chicago IL; WYEZ 100.7 Elkhart, WBCL  
 '90.3 Fort Wayne (+), WMEF 97.3 Ft. Wayne,  
 WMAP 93.1 Indianapolis, WLRG-FM 104.1 Muncie  
 IN (Continues next page).

Dolby droppings, continued KTPK 106.9 Topeka KS, WGSN 99.7 Louisville KY, KSNS 96.1 Lake Charles LA, WEZB 97.1 and WNOC-FM 101.1 New Orleans LA, WDCS 97.9 Portland ME, WPOC 93.1 and WMAR-FM 106.5 Baltimore MD, WROR 98.5 and WHCN 134.1 Boston, WVBF 105.7 Framingham, WWEL-FM 107.9 Medford, WAQY 102.1 Springfield, WCRB 102.5 Waltham MA; WWCJ 94.7 Birmingham, WJLR-FM 95.3, WABX 99.5 and WWWW 106.7 Detroit, WZZR 95.7 Grand Rapids MI, WQID 93.7 Biloxi MS, KRFG 93.5 Greenfield MO, KYYS 102.1 Kansas City, KCFM 93.7 St. Louis MO; WGIR-FM 101.1 Manchester NH (+), iPAT-FM 93.1 Paterson NJ, WDOM 100.9 and WWSH Albany, WBEH-FM 102.5 Buffalo, WKFM 104.7 Fulton, WEDS \*89.7 Geneva, WNCM-FM 102.7 and WRFM 105.1 New York; WEZO 101.3 Rochester, WHTQ 93.1 Syracuse NY; WRQD 95.1 and WEZC 104.7 Charlotte NC; WZYV 100.9 Fairmont NC, WAEZ 97.5 Akron, WHLQ 106.9 Canton, WEGN 102.7 Cincinnati, WDMT 107.9 Cleveland, WCOL-FM 92.3 Columbus, WTUE 104.7 Dayton, WVUD 99.9 Kettering, WXEZ 105.5 Sylvania OH; WKHP 97.7 Edmond OK, KOSU \*91.7 Stillwater OK, KSDR \*90.1 Ashland OR, WCCK 103.7 Erie, WDAK 94.5 Lancaster, WMMR 93.3 and W10Q 102.1 Philadelphia PA; KWCJ 94.9 Arlington, KZEW 97.5, KMEZ 100.3 and KVIL-FM 103.7 Dallas, KFJZ-FM 97.1 Fort Worth, KRLY 93.7, KFMK 97.9 and KILT-FM 100.3 Houston, KITE-FM 104.5 San Antonio TX; KSFI 100.3 Salt Lake City UT, WHRA \*90.7 Harrisonburg VA (+), WEZR 106.7 Manassas, KEZA 103.7 Richmond VA; KZUN-FM 96.1 Opportunity, KIXI-FM 95.7 and WSEA 100.7 Seattle WA; WPNE-FM \*89.3 Green Bay (+), WSPY 97.9 Stevens Point WI.

Abbreviations used in this column: \* educational; † stereo; h horizontal polarization; v vertical polarization; ' height above the average terrain in feet; w is watts, the method used to express effective radiated powers of frequency modulation (FM) stations. Program formats: c classical, e ethnic, g gospel, k country, n is middle of the road or easy listening, p progressive rock, r rock oldies, t forty and easy rock, ro or pr is so-called "album-oriented rock", s soul. Network symbols: A ABC-FM, E ABC Entertainment, I ABC Information, M Mutual, N NBC, P National Public Radio, U United Press Audio, Y ABC Contemporary. SCA stands for "Subsidiary Communications Authorization," referring to an FCC-authorized subcarrier specifically not intended for the public and DXers to listen to. This subcarrier latches onto a regular FM broadcast station's signal and is usually 67 kHz removed from the station's main carrier frequency. I am uncertain if this 67 kHz is only above, or both above and below the center frequency. Perhaps somebody can enlighten me on this point.

### FM DXing in Austria

Anton Wressnig, Wien, Austria, writes: "I could not yet find out whether SCA is also used here in Austria. Beyond that your publications bring some surprising information for the European FM listener. FM DXing, for example, seems to me much less common in Europe than in the U. S. Additionally, ORF - the Austrian Radio and TV company - does not show any interest in getting reception reports of its FM broadcasts even if they come from abroad.

"On the other hand, Yugoslav Radio shows an immense interest in getting reception reports of its FM broadcasts, obviously for military communications use in case of a war. I only sent them a reception report of one of their FM broadcasts once not knowing that background at that time. Having the iron curtain only 40 miles away from Vienna it is surprising to know that countries like Hungary, Czechoslovakia and Poland offer their listeners mono and stereo radio sets capable of both their FM audio band of 65 to 73 MHz and the West-European 87.5 to 104 MHz band. On the other hand, sets like these are forbidden in Austria since private radio telephone services are working in the 65 to 73 MHz band here. By this, people here are cut off from 4 Czechoslovakian and 3 Hungarian FM radio programmes partly transmitted in stereo. Of course, some people have solved this problem with their private converters.

"By the way, I can recommend any visitor from overseas who is interested in FM to come to Berlin. It is the only place in Europe where 15 FM radio programmes are jammed together in the 87.5 - 100 MHz spectrum. Among them: 1 U. S. military, 1 British military and 1 French military program together with BBC's German language foreign service. The rest of the programmes are made up of East Berlin and West Berlin stations. Overloading of radios is notorious at this place."

### Members' Reports and other happenings

Jose Bahr says FM is burgeoning in the Caribbean, with 95.5 and 100.1 in Trinidad's city of Port of Spain; a 92.9 in St. Lucia, with power unknown; and FM in Aruba and Curacao.

KKEZ 94.5 Fort Dodge IA, in going to 100,000 h, b at 600' claims to be one of only 6 such stations in Iowa, but Robert Baker counted 8 stations with over 600' towers. WGTB \*90.1 the Georgetown U. station in Washington DC may be taken off the air, with its facility transferred to another school or group. The U. of Dist. of Columbia is interested in it and would run an sj format; school is 75% black, says Andy Smith. The Archdiocese of Washington proposes Spanish for it, while the U. of Maryland, College Park, would run the station with a p format.

Mike Dalton, 1840 Drew St., Clearwater FL 33515, would like information from anybody who knows about a propagation mode known as transequatorial scatter. He frequently gets DX by skip from the south, including 88.1 Radio Fabulosa and 88.8 Fabuestereo (TGRT) Guatemala—stations which he regrets are no longer listed in the FM Atlas. Pat Dyer would like to see news of illegal FM stations not covered; "The only VUD coverage I'd like to see of such things is their demise notice."

John Ebeling sent a clipping describing how the hogs at John McNutt's farm near Iowa City IA seem to enjoy classical music (but not opera) over rock. In a more serious vein John says: "I hope your excellent letter to lawyer of Sino Radio ends their silly attempt at harrassment of you. . . The idea of a line for interstate hys. of Hauser's is not bad, but with all the info presently on the maps, it would clutter them even more. . . KFAI 90.3 Minneapolis has been on the air testing; no \$. . . I note that the last portion of your column [in the May VUD] had been edited somewhat. All I can say is, please do not quit the column. . ."

Al Ellis says CFMU 93.3 Hamilton ON is on the air with 50 watts, h, -147' and not stereo, and easy for Al to pick up in Brantford with his deluxe equipment. And CHAY 93.1 Barrie ON is back on the air with 100,000 h, v; 1000', after a previous tower went down after an airplane crashed into it.

The manager of the new KINI \*96.1 said his station is a public service station serving primarily the Sioux people of the Rosebud Reservation in south-central South Dakota. Its city of license is

## KINI

F.M. Stereo Radio 96.1

St. Francis, S.D. 57572

Ph. 605/747-2291

Crookston NE, but its studio and transmitter are located a little south of St. Francis SD. It is on the air seven days a week from 7 a. m. to 11 p. m., and came on the air Jan. 25. I am sure DX reports would be welcome at KINI. WBEZ, an old educational FM station, \*91.5 in Chicago, just began 24 hour programming, with classical music in the wee hours. Robert Goodman, Cicero IL says: "I'm glad you're sticking up for your rights in the SCA adapter issue. If not stopped here, what further rights will special-interest-controlled govt. agencies like the FCC strip us of? If SCA adapters are outlawed, only outlaws will have SCA adapters!"

Clarke Ingram lists three extra-legal FMs still operating in or near Pittsburgh; "WGRC, C-98," Carrick 97.6, r, 15 w and on 5 nites a week; "WXLE 90.1 and WFMQ 89.7" both in Canonsburg PA with about 15 watts. He, too, noted the editing of my column, and said the publishing staff had never edited his column. In fairness, I should say that they are probably a little jittery after having let some stuff go through that, had it been edited, there might have been fewer hard feelings today for all concerned.

After a trial period, Karl R. Krohn, St. Paul MN, removed his external Dolby equipment, concluding that "its marginal value for improving the sound source did not merit the additional electronics. I would be inclined to argue that the only successful application of the B system Dolby is in the attempted salvation of the cassette tape medium; my ears take offense at Dolby calibration tones.

Sharp-eyed Nick Lombardi noted on the 92.9 section of the Atlas WZGC Atlanta is "KZGC."

Taking the broadcasters' point of view on nonIDers is Greg Monti: "It's just like DXers complaining. . . The printing of slogans in the VUD is of course an important service to DXers. . . Regarding your SCA problems: I hope you win this, but I also hope the result isn't widely publicized. We could be in for a massive case of 'SCA ripoff' by greedy commercial establishments. . . WPLJ 95.5 New York is probably the 'King of Overprocessing.'" Interestingly, WPLJ is heard over the ABC radio networks between newscasts; I can hear WPLJ, sans stereo and sans fidelity, over SCA whenever I care to listen. Greg goes on: "Any station worth its salt would never buy studio tape and disc equipment that isn't within decent specs, if not better than FCC specs. . . Stations around here that are all-cart maintain their machines carefully. As far as speeding up the records goes, this is an outmoded technique thought up by some confused top-40 PD's in the late sixties, but which persists in the minds of some. Such PD's usually change jobs every 6 to 12 months. . . Some AM stations do have good audio, but WNBC sounds bad. As an announcer at WGBB Freeport NY, I can say that I'm routinely impressed with the station's air sound." Dave Hascall says WGTC Bloomington IN 92.3 uses "Big Country," as a slogan, but does not say whether this is a nonID used in lieu of call letters or not.

About three members sent clippings about an illegal TV station that appeared in Syracuse NY, and was widely reported by the news services. WKBC-FM 97.3 N. Wilkesboro NC plans to change to 100,000 h,v, and with a directional pattern north to south to avoid interference to Greensboro NC 97.1.

KSCF 97.1 Florissant MO is now on the air, reports Dave Nordmann. KSCF has 50000 h,v; 500'; stereo. WDBR 103.7 Springfield IL is to make a major format change, it has been announcing. And Dave wishes me "good luck in your SCA suit!" Music Associated, in New Jersey, tells me they will quit selling SCA units—the response to their ads has not paid off. I have offered to buy them out, but no response to that offer yet. Other SCA firms I contacted after getting word of the suit have not replied to my offer to unite with them, either out of fear, or because the latest developments have scared them. However, with or without company, I will continue the challenge! Quebec's Walter Patton says he's sorry to hear about my SCA problems: "It is too bad to see what limited broadcast frequencies that are available being used for services that should be supplied via common carriers. Atlas errors he discovered: 90.7 WACG should be Augusta, not Atlanta GA. 93.5 Stroudsburg PA should be WVPC, not WVPC. 94.1 Watertown WI WITN, not WITN. 96.9 Zion IL WKZN, not WKSX. 102.3 Viroqua WI WGBM not WGRM. Sandusky OH WLEC, not WLFC. 103.1 Cobourg ON CFMX not CGMX. 106.3 delete Greenville KY WKYF-FM. Channel taken over by WKDZ-FM 106.3 Cadiz KY and WLLS Hartford KY. "I appreciate your giving the geographic coordinates for translators. Often they appear to be named after a local geographic or geological feature. Canadian stations, the CBC especially, seem prone to this action. Where or what is Waasagomach MB? You might note on your maps that most places in Canada also have daylight savings time, starting and ending on the same days as in the U.S.A. Some places this is a local option and they do not change. Most places do, however.

On 92.7 Prince Frederick is not in ME, but in MD, reports R. H. Perrin of Wells ME.

Off the air temporarily while new equipment is installed: WNOZ 99.9 Cortland NY. Allen Rockford says on the maps I forgot to put the WMJQ 92.5 calls on the maps for Rochester NY. The 10-watt WITC Cazenovia NY \*90.9 puts a good signal into Syracuse; "it's all-girl radio, as the college is a girls' college."

So Dave Walcutt wants to know of a NON-nonIDer in the Memphis area, says Rick Samford: "At 570 miles I'm probably out of the 1 mv/m curve but I can safely say that WEZI 105.9 isn't one. Managed to tape three calls between 0828 and 0830 (before, during, and after the weather). Most beautiful

music stations in Texas and the South give call letters. With the skip season upon us I thought a list of stations that carry major league baseball from this area might be helpful. I don't want anyone to use this list as a way of counting new stations but this information might be helpful in pinning down an opening. Here are stations I can get on the Houston Astros network; WTAW-FM 92.1 College Station, KULP-FM 96.9 El Campo and KOOI 106.5 Jacksonville TX. Texas Rangers network; KNBT 92.1 New Braunfels and KBOP-FM 98.3 Pleasanton."

From Indiana, Tom Cornell reports the local "FM musical chairs" won't occur for quite some time. "It will ~~axx~~ wait for action on the Muncie channel. I'm sure that I saw data on at least two applicants for 104.9." Tom wonders if anyone knows if WEFM 99.5 Chicago's request for the call letters WICV still stands. If so, he thinks, WNIB 97.1 Chicago's request for WEFM's call letters may go through. Tom got a Karkota SCA adapter going from a kit, says it's not bad at all. "For someone not knowing how to build one from scratch, I'd consider it fully satisfactory. Neither it nor mine will come close to the reception quality of the receiver used by WWKI to rebroadcast WNAP/WBC sports SCA."

John Timm was nice enough to send a copy of an article in High Fidelity Trade News concerning the FM Atlas; already several responses have come from that source—people who are also potential WTFDA joiners.

Dave Walcutt says of SCA: "Many of the stations that would be parties to complaints that their SCA was being tapped by so-called unauthorized users are themselves guilty of violation of the Communications Act inasmuch as they relay information picked up from the public service bands on their scanners—private police reports and the like—which they use in giving traffic reports on highway conditions, and late-breaking news. . . and this is being done for the stations' own profit! The idea of backing down on nonIDers is okay if you drop the term nonIDer period but do use all slogans. . . and you will have to abandon the pejorative label all together and just list slogans, without mentioning whether they also ID or not. I would like to see all slogans listed, without getting trite or redundant, eg little difference between 99 FM versus Stereo 99. But key phrases when they are distinctive, like "love rock" or "magic 102 FM" oughta be. Holy cow, a PPS—I just noted that your Atlas has no printing on the back of the book, the spine, the part that faces outward on a bookcase. I think I know why, though—tricky printing alignment?" Not really, just that I have never thought of it when sending the printing job to the printer. Hopefully, next edition I will remember at the right time. Dave feels I am on strong legal ground in advocating SCA to the masses, even if SCA is not intended for public consumption. "Mere technical processing of the signal, including addition of SCA information, does not in any way lessen the publicity of the signal."

The CBC-FM English stereo network across Canada does not have their stations give individual identifications either on the hour or on the half-hour. They just say CBC-FM 94.1 Toronto, etc. Says K. W. Walter: "The CRTC has recently turned out a booklet on the prospective growth for FM stations by 2001 in the Windsor-Quebec City corridor, which contains about 2/3 of the Canadian population. The complications in effect of the four national CBC network combinations in one (on FM) keeps life interesting, if somewhat confused."

Dr. Richard Wood, after he returns in mid-August, plans to move into a new house near Plymouth NH and install two 64-element, Winegard-made, FM antennae. Then "I promise you'll have a regular contributor for changes, formats, SCAs, etc., in northern New England." Richard sent two articles from the *Boston Globe*, both written by Jeff McLaughlin, who seems to be quite an eclectic radio dialer, recommending programs on such stations as WHRB 95.3, WERS 88.9, WBRB 91.7 and WTBS 88.1.

Neil Zank says that, in the FM Atlas, "I would prefer that the low power (10 watts) be listed in the columns as more important than the translators. This especially if there can be only one or the other included in the Atlas."

The CRTC report on sound broadcasting requirements for Canada by 2001, alluded to above, looks to the bulk of future growth from the FM band. The report points to a need for 328 AM and FM radio stations in the Windsor-Quebec area, out of an estimated currently-available supply of 233. "It is evident that action must be taken to increase the supply of channels if the projected demand is to be met. . . Accordingly, it [the CRTC] has asked the Department of Communications to take steps to ensure that sufficient spectrum space be made available for this purpose."

Contributors: Frank Aden, Jr., Bond OH; Jose Barr, WVIS Frederiksted, VI; Robert Baker, Hummelst IA; Andy Blatt, Marietta OH; Thomas V. Cornell, Greenport IN; Mike Dalton, Clearwater FL; Harley Drew, WBBQ-FM Augusta GA; Pat Dyer, San Antonio TX; John Ebeling, Bloomington MN; Albert H. Ellis, Brantford, Ont.; Joseph C. Gill, S. J., manager KINI St. Francis SD; Robert Goodman, Cicero IL; Clarke Ingram, Pittsburgh PA; Paul E. Kinnaly, Jr., DeSmet NA; Karl R. Krohn, St. Paul MN; Nick Lombardi, Atlanta GA; Greg Monti, Bayville NY; James H. Montgomery, Evansville IN; Dave Kascall, Fortville IN; Bill Mitchell, N. Wilkesboro NC; Randy Morrison, KUKJ Logan UT; Dave Nordmann, St. Louis MO; Walter Patton, Montreal PQ; R. H. Perrin, Wells ME; Los Price, Wilmington NC; J. Robertson, Crosswell MI; Allen Rockford, Syracuse NY; Rick Sanford, Burnet TX; Andy Smith, Hyattsville MD; Dr. John Timm, WEZM Milwaukee WI; David L. Walcutt, Houston TX; K. W. Walter, Toronto ON; Anton Wresnig, Wien, Austria; Dr. R. E. Wood, Plymouth NH; Neil G. Zank, Lincoln NE.

# FCCTV NEWS

Temporarily edited by  
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Deadline: 10th

JUNE 1978 DO YOU WANT TO EDIT THIS COLUMN? WRITE FRANK ADEN, JR. FOR DETAILS!

Information collected by Bill Block and Frank Aden, Jr. This month's column contains most of the TV changes since last column.

## CALL CHANGES

KTEN Fontana CA ex KIXA  
KBDI-12 Broomfield CO, new  
KYEO McAllen TX, new  
WKPD Paducah KY ex WDXR  
WTEN-17 Atlanta GA ex WTOG, application  
WIXT Syracuse NY ex WNY5-9  
KTVW-TV Phoenix, new  
WGSE Myrtle Beach SC, new  
WLFL-TV Raleigh NC, new  
KNBN Dallas TX, new  
WFFT-TV Fort Wayne IN, new  
MNVW Hanover NH, new  
KYEL Yuma AZ ex KBLU-13  
WTKK Manassas VA, new  
WLRE-26 Green Bay WI, new

## FACILITIES CHANGE

KVCR-7 Redding CA, ERP to 1067, CP  
WERB-21 Louisville KY, from 41, CP  
WATU-26 Augusta GA, ERP to 263  
WUNF-33 Asheville NC, ERP to 91, AAT to 2620ft.  
KYEL-13 Yuma AZ, ERP to 316  
WLTW-23 Miami FL, ERP to 2000  
WLRN-17 Miami FL, ERP to 2880  
WPTT-2 Miami FL, ERP to 100  
WTHS-2 " " " " " "  
WFFO-40 Greensburg PA, ERP to 488, AAT to 977ft.  
WPCB Pittsburgh PA, ERP to 5000, AAT 921ft.  
WCET-48 Cincinnati OH, ERP to 562, ANT. 1070ft.  
WZTV Nashville TN, ERP to 2690, ANT. 1000ft.  
KCOS El Paso TX, ERP to 195, ANT. 820ft.  
KSGW Sheridan WY, ERP to 316, ANT. 1220ft.  
WHNB-30 New Britain CT, ERP to 3020.  
WCRF Rockford IL, ERP to 302, ANT. 570ft.  
WXXI-21 Rochester NY, ERP to 1580, ANT. 450ft.  
WPTV-4 Bloomington IN, ERP to 55, ANT. 1200ft.  
WVIA-44 Scranton PA, ERP to 1510, ANT. 1670ft.  
KZSD Martin SD, ERP to 263, ANT. 880ft.  
WTNH-8 New Haven CT, ERP to 166, AAT to 1210ft.  
WSEK-38 Boston MA, ERP to 1170, AAT to 1160ft.  
WLIW-21 Garden City NY, ERP to 562, AAT to 380ft.  
WCNY-24 Syracuse NY, ERP to 2750, AAT to 1380ft.  
WNEP-16 Scranton PA, ERP to 661, AAT to 1670ft.  
WCSC-5 Charleston SC, ERP to 100, AAT to 1000ft.  
WEZF-22 Burlington VT, ERP to 309, AAT to 2740ft.  
KYVE-47 Yakima WA, ERP to 550, ANT. 920ft.  
WITI-6 Milwaukee WI, ERP to 100, AAT to 1000ft.  
WVII-7 Bangor ME, ERP to 100.  
WTKK Manassas VA, ERP to 1380, ANT. 590ft.  
WRAL-5 Raleigh VA, ERP to 100, AAT to 1990.

## NETWORK CHANGES

KTVZ-21 Bend OR, now NBC primary, CBS secondary

NOTE: Channels numbers are indicated when known.  
Unfortunately not all information contained  
complete information.

## NEW APPLICATIONS

Tulsa OK, ch. 26, ERP 2838, AAT  
1480ft.  
Abilene TX, ch. 32 ERP 55, AAT 909ft.  
Waco TX, ch. 25, ERP 1466, AAT 1825ft.  
Waco TX, ch. 25, ERP 3000, AAT 1843ft.  
Richmond VA. ch. 35 ERP 1589, AAT  
741.45ft.  
San Francisco CA, ch. 26, ERP 2499,  
AAT 1381ft.  
Santa Rosa CA, ch. 50, ERP 69.5, AAT  
3079ft.  
Richmond TX, ch. 45, ERP 1683, AAT  
578ft.  
Hanover NH, ch. 7, ERP 1230, AAT  
480ft.  
Los Angeles CA, ch. 68, ERP 1925,  
AAT 2870ft.  
Cleveland OH, ch. 19, ERP 1090,  
AAT 1008ft.  
Spartanburg SC, ch. 49, ERP 839,  
AAT 957ft.  
West Palm Beach FL, ch. 42, ERP  
1069, AAT 1941ft.  
Honolulu HI, ch. 26, ERP 12.11,  
AAT 2171ft.  
Edwardsville IL, ch. 18, ERP 5000,  
AAT 1225ft.  
Kansas City MO, ch. 62, ERP 1868,  
AAT 1120ft.  
Bemidji MN, ch. 9, ERP 316, AAT  
109ft.  
Las Vegas NV, ch. 21, ERP 280, AAT  
1414ft.  
Atlantic City NJ, ch. 53, ERP 3034,  
AAT 461ft.  
Tulsa OK, ch. 41, ERP 2100, AAT  
291ft.  
Winston-Salem NC, ch. 45, ERP 1607,  
AAT 526ft.  
Cocoa FL, ch. 52, no other informa-  
tion supplied.  
Denton TX, ch. 2, ERP 100, AAT?  
Owenboro KY, ch 19, ERP 648, AAT  
974.5

NOTE: All ERP in kilowatts.

## TRANSLATOR INFORMATION

K02IW Klawock AK KENI-2, KAKM-7,  
KTVA-11 & KIMO-13  
K07PA Manitou Springs CO KTSC-8  
K0GCE Hayden CO 10w  
K09KC Sterling CO 10w  
K10JN Kongiganah & Cape Newenham AK  
5w  
K09AG Basalt CO 10w  
K06JF Cortez CO KREZ-6  
K04JC Bouse AZ KOOL-10



TRANSLATOR INFORMATION Continued

K10KE Flain & Lake Wenatchee KAPP-29  
 K12KY Mescalero NM KGGM-13  
 K13NS Kwigillingok & Mecoryuk AK  
 K110F Big Elk Meadows CO KMGH-7  
 K130U " " " " KBTV-9  
 K08HR Placerville CO increase to 10w  
 K60AN Henderson NV decrease to 10w  
 K61AW Panaca NV KVVU-5  
 W64AK Conneaut OH WVIZ-25  
 K45AB Kasilof AK KAKM-7  
 K61AX Wellton and Mohawk Valley AZ  
 KAET-8  
 K63AV same as above, KTAR-12  
 K65BB same as above, KOOL-10  
 K67BI same as above, KTVK-3  
 K69BQ same as above, KPFO-5  
 K05GI Buford CO, from ch. 12, increase to 10w, change to KBTV-9.  
 K06JJ Meeker, Wilson Oil Camp CO, change from ch. 7 to 6, change to KBTV-9, change to 10w  
 K05FU Sutton AK  
 K04JC Bouse AZ  
 K110B Bouse AZ  
 K130N Glen Haven CO  
 K0210 Redstone and Crystal River CO (this appears to be an FM xsltr but indicated for TV?)  
 K06JA Cedar Canyon UT  
 K07OR " " "  
 K070Y Orderville and Glendale UT  
 K08DX Prescott WA  
 K09NY White Bear AK KYUK-4  
 K04JF Nulato AK change from ch. 9  
 K76BH Bishop and Big Piney CA  
 K70AA " " " " "  
 K73AA " " " " "  
 K79AT " " " " "  
 K12Jf Bishop Creek and Aspendell CA  
 K05AH Lee Vining and Bridgeport CA  
 K12IQ Mammoth School and Conway Summit CA  
 K62AO Morongo Valley CA KTLA-5  
 K67EH " " " KHJ-9  
 K64AU " " " KABC-7  
 K60AY " " " KNBC-4  
 K12IG Pondersosa Basin CA KXTV-10  
 K08II Elanco Basin area CO KREZ-5  
 K0212 Gunnison CO (another FM xsltr call?)  
 KWGN-2  
 K1305 Aromas CA (?) KQED-9  
 K64AT Victorville, Apple Valley, Adelanto Silver Lakes and Phelan CA KLXA-Fontana  
 K12EY Hayden CO change to K03EW, increase to 10w  
 K08DC Hayden CO change to K09NX, increase to 10w  
 K04JD Salida and Buena Vista CO KWGN-2  
 K10KQ Heart Butte MT CJOC-7  
 K67EG Arrey and Derry NM KGGM-13  
 K57AW Deming NM KGGM-13  
 K03EV Gallup NM KGGM-13  
 K72AX Tucumcari NM KGGM-13  
 K15AA Hugo CK KETA-3  
 W69AP Brattleboro VT WCAX-3  
 W62AT Bellow Falls VT WCAX-3

K48AC North Kenai AK  
 K55BB " " "  
 K58AK " " "  
 K64AN Sterling, Soldotna and Kasilof AK  
 K60AX Kingman AZ  
 K58AP Topock, Gas City, Mohave Valley AZ & Needles CA  
 K53AD Bethune and Burlington CO  
 K55AX " " " "  
 K57AM " " " "  
 K59AP " " " "  
 K60AM Cheyenne Wells and rural area CO  
 K62AH " " " " " "  
 K64AJ " " " " " "  
 K66AQ " " " " " "  
 K70FL Hartsel CO  
 K64AQ " " "  
 K80AZ Big Fork MT  
 K82AO " " "  
 K74BL Lewistown MT  
 K60AF Carlin NV  
 K60AQ Eureka NV  
 K67AL Ely NV  
 K55AQ Panaca NV  
 K69BB Horse Springs store and ranch NM  
 W60AF Malone NY  
 W65AH Loudonville OH  
 W69AO Millersburg OH  
 K66AQ Erick, Sayre, Carter OK  
 K68AU " " " "  
 K81AD Wasco OR  
 K63AT Wallowa Valley OR  
 K65AY " " "  
 K67BF " " "  
 K76AU Wheeler county TX  
 K68AX Price and Rural Carbon county UT  
 W57AG Parkersburg WV

LATE NEWS

application, Grand Junction CO, ch. 8 ERP 162, AAT 2973ft. By KRDO radio.

STATE OF THE INDUSTRY March 31st 1978

Commercial TV Licensed	724
VHF	513
UHF	211
Educational	243
VHF	93
UHF	150
<b>TOTAL TV</b>	<b>967</b>
Translators	3500
UHF	1082
VHF	2418

See any new changes in your local TV?  
 If the answer is yes, send them into  
 FCC-TV NEWS TODAY!

# Can YOU Hang A Price On QSLs?

Yes, it's possible, and no, it's a possibility? Let me lead you deeper into this question before I put down the answer, as maybe in reading the first line you noticed I used both yes and no in the same sentence. Everyone knows that these words are opposites, but in this case they could be alike. I'd like to ask you QSL collectors a few questions:

- When was the last time you sent for a verification?
- When was the last time you received a verification?
- When you sent for a verification, what did you enclose?
- How much did you spend for your last verification?
- How many times do you go after one verification?

I would imagine all QSLers could answer the above questions, but let me ask you this- has anyone a good answer to the last question? I think not, and why is anybody's guess. Opinions on the question vary, as some cite lack of cooperation, or that many stations couldn't care less about where they were received. Others yet are that some stations aren't knowledgeable about DXing, or are victimized by the increased postal rates. Some small stations find it rough trying to answer the correspondence from DXers, though that's still no excuse.

I was prompted to write this by an experience in trying to get a QSL (I won't name the station). The QSL from this station is special to me because of the time and work, not to mention money, that I spent trying to get it. For example, I sent them a letter with return postage, but received no reply. Then I sent a second letter with RP, but again received no reply. Finally, the third time I tried I sent a letter with a SASE and received a reply. In the process I used up 6 postage stamps, 4 envelopes, and 3 letters.

My intentions are not to discourage fellow DXers or to discredit stations, since some stations verify in a short time and some in a lengthy time. The intent is to encourage DXers to go after verifications from stations known as non-verifiers. If you don't succeed at first, try again (we've all heard that one before, hi). Here's a few tips on getting good QSLs:

- (1) It's always good to have the correct station address. Many books carry addresses, such as World Radio-TV Handbook and the Broadcasting Yearbook. In addition, you'll find addresses in VUD columns such as QSL Corner and FCC-FM. If you can't find an address, just put the call letters, city and state, and in most cases, it should get there, though it may take a bit longer.
- (2) Give complete details of everything heard or seen. Be sure to include correct times of everything received, and send information that can be checked with the station's log. Especially good are commercials, public service announcements, and program titles. If a program has a unique logo or picture, you might try sketching it in the report.
- (3) Enclose return postage. I personally think you should meet the station half-way, and in some cases, you might enclose a self-addressed, stamped envelope.

In conclusion, I hope that DXers will receive greater cooperation from stations in the future. We must do our part, though, in sending good, accurate reports. What if someone doesn't believe you were watching K??? or W??? TV in that city and state? Just pull out that hard to get QSL and show them the proof!

by Paul D. Traska and John Zondlo

# WHY DXERS

## Should Use DIGITAL Readout FM Tuning System

We will assume for the purpose of this discussion that the conventional tuner and the digital tuner described have identical design except for the readout mechanism. Although in practice this assumption is generally not true, it will help to focus our attention upon what I consider to be distinct advantages of the digital type tuner with electronic readout of frequency.

Let us direct our attention to why it is desirable to know the incoming FM frequency with accuracy. Almost all members have had the frustrating experience of not being able to identify a particular station that was received. There is little information you can obtain about a station during regular programming other than format. If you are lucky, you may hear an ID or mention of some town during news or commercial periods; what do you do if you hear only music or part of a voice program? There is a piece of information that every station broadcasts that is of use to the dxer—the carrier or center channel frequency (all stations are required by law to maintain their frequency within narrow limits in the U.S.)

The broadcast frequency is of great value to the FM dxer since it may be the only factual piece of data he can obtain regarding a station. Once the broadcast frequency is known, there are only a limited number of stations assigned to that particular channel. The dxer cannot be ambiguous concerning whether he is tuned to 91.9, 92.1, 92.3, or some other spot; he must know that he is tuned to precisely 92.1, and he should be able to do this quickly and accurately. In trying to help other local dxers, we have found that the greatest impediment to locating a station is adequate information regarding where they were tuned—you can't find the college station at the low end of the dial very well in any log! The station on 89.3 is a different matter....

With a known frequency of reception and an FM directory, one can generally deduce what station he was receiving. If you have a directional antenna (who doesn't?), you have another fine piece of information to help define the region from which reception was made; this allows you to usually narrow the choice to a most likely station. You can quickly make note of a repeater for logging and then tune to another station. If you are in doubt concerning the station, one can always write to the station for additional information.

The FM dxer does not have some of the advantages that the T/ dxer may have. To my knowledge, no one builds a mechanical click stop FM tuner with discretely marked channels. On FM the small amount of spectrum between stations means that one has to have a mechanism to determine where he is tuned; most commercially available equipment perform only passably in this respect.

You can now guess why we consider the digital frequency display to be necessary for efficient dxing. This becomes evident during openings when you would like to log as many stations as possible. The main reason for selecting the digital tuner is to increase the dial reading precision and accuracy while increasing the speed at which meaningful measurements can be made.

Let us look briefly at the conventional tuner dial scale. This class of tuner are frequently poorly calibrated and may have scale nonlinearity. Coupled to dial backlash problems, the difficulty of interpolating frequency, and the likelihood of making an error when rushed or tired, the conventional tuner is an unwieldy vehicle for assessing FM broadcast frequencies. You may have noted how tired your eyes get after reading the scale for an extended period; the dials are not meant to be read very far away which strains one's eyes.

The frequency display on digital tuners is usually large enough to be seen across the room. This is a useful characteristic as it is possible to keep track of the set frequency while you move about to look at maps, logs, a clock, or do something else—yet you can refresh your memory at a glance with no ambiguity and no eye strain. Since the digital format presents only a single group of numbers, there is less chance of error when exhausted from a long session or just due to carelessness.

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This last error we laughingly call "pilot error." When things get hectic during an opening and time is of the essence, it is easy to make errors recording data. Part of the benefit of the digital system is that it makes dxing easier; since one is not as pressed for time with a digital tuner, he can quickly and accurately record data and then concentrate on the reception if it is not being recorded. I am in favor of anything that relieves the tedium of dxing and makes the system simpler to operate. The digital system makes tuning and readout less of a chore; it makes the operation faster, more accurate, and less prone to errors.

There are several types of digital display tuning units manufactured for FM; some of these units are more desirable than others. One convenient feature is to be able to tune even channels such as 97.8. There are some tuners that will tune and indicate both odd and even stations-this is very useful. If you are interested in any stations from Central America, South America, or the Caribbean area, it is best to be able to tune their even frequencies. As an example, the most heard even channel station we have is KQRT (88.8) in Guatemala. Some time you may be surprised to find out that a station you may have logged at 90.7 is really one 90.6. I understand that the FCC is considering allocation of FM stations at even intervals in some regions of the spectrum and in specific areas of our country.

Of the digital display tuners, we consider the conventionally tuned devices with a digital dial display to be the most practical for dxing. Some of the sophisticated digitally synthesized and programmable units are less desirable for dxing due to the limited versatility of the actual tuning system. While some of these units are impressive to see and offer good displays, most suffer from the inability to offset the local oscillator (tune off center channel) for utilizing the receiving system I.F. skirt selectivity. There is only one true digital unit of the synthesizer variety that meets the needs of the dxer; this is the new unit manufactured by REVOX-I have used this unit at my store, and have one on order. Use care if you select a digitally tuned unit since you could find the unit to have some serious shortcomings!

When two stations are received on the same frequency, it is often possible to receive one of the stations by a slight detuning of the set. Many times there will be a strong station adjacent to a weak signal; to be able to tune in the weak station it may be necessary to tune considerably to one side of center channel. This procedure takes advantage of additional selectivity gained by placing the interfering station on the low response side of the I.F. amplifier characteristic response and some additional front end rejection. Most synthetically tuned units have no provisions for offset tuning and are helpless in many dx situations; for this reason we find most of the digitally synthesized tuners to be inadequate for the serious FM dxer. It is possible that some stations off normally tuned channels would be unreceivable and it is possible that even frequency stations would not be receivable with certain digital units.

The system we feel is highly advantageous is the continually tunable system using conventional front-end tuning capacitors with the addition of a digital dial readout system. This system offers great precision of tuning with high accuracy in the identification of the incoming FM signal frequency. All the advantages of selectivity and the dxer's tricks are retained. During an opening the digital display will increase the dxer's efficiency by cutting errors and increasing the speed with which stations are identified.

We have found that using a digital display tuner has been of considerable aid during the last couple of years. After using the digital tuner system, it is most difficult to go back to the best of the regular dial systems, and we haven't. As an analogy it would be like trying to walk around your house with your eyes closed.

I'm sure that a digital system will increase your logging efficiency and accuracy. Once you change to the digital system, you will rather fight than switch!

In the future we plan to provide readers with review of the following tuners: the SAE digital tuner, the REVOX digitally synthesized tuner, and the Nakamichi 630 tuner/preamp-the Nakamichi tuner is an excellent dial type tuner. I have just decided to purchase the REVOX tuner as my second tuner, so I will be able to tell you how it compares with the Dalton Audio modified SAE tuner which will be reviewed shortly.

Good dxing with the season coming up. Hope the digitals are working out there. If anyone needs literature on any of the tuners mentioned above, drop me a line. Mike Dalton, DALTON AUDIO, 1840 Drew St., Clearwater FL 33515

YOUR BEST BET: You will encounter several good frequencies when attempting the reception of police frequencies. This month I will direct my attention towards municipal police agencies, which dot the 30 - 50 megahertz range. Municipal agencies make up the bulk of traffic heard on these frequencies. The intent of this article is to bring out the result of my research to the benefit of other DX'ers. My research reflects those agencies licensed to the frequencies listed and in no way guarantees that the agencies use of an allocation. You will note that there exists in several states what might come close to a regional net. This is especially prevalent in Tennessee, Texas, Louisiana, Virginia and Illinois. I will underline my successful proven finds to illustrate the areas I am aware that such nets exist.

Frequency	State
37.02	AR TN TX IA NJ
37.04	PA IA AR TN TX IN FL VA
37.06	GA IL KY AR TN TX NJ PA
37.08	NJ PA AR TN TX FL SC WV
37.10	DC FL GA NC SC VA IL IN KY WI AL AR MS OK
	<u>TN TX IA MN SD NJ PA</u>
37.12	<u>FL GA IL IN KY WI AR TN TX IA NJ</u>
37.14	NJ PA IA AR TX KY SC
37.16	IS SD NJ AR TN
37.18	FL GA NC VA WV IL IN WI AR <u>TN TX</u> IA MN SD
	MD NJ PA
37.20	MD IA AR TN FL
37.22	FL AR OK TN TX LA NJ PA
37.24	AR OK TN
37.26	FL NC SC VA AR TN TX IA MN MD NJ PA
37.28	SC WV AR OK TN IA NJ
37.30	<u>MD</u> NJ PA IA AR TN TX SC IL
37.32	AR NJ TX IA GA
37.34	NJ OK TN
37.36	AR TN NJ
37.38	TN TX NJ
37.40	NJ PA AR KY FL
37.42	FL NJ PA
39.02	SD LA MI OH DC <u>MD</u>
39.04	NC
39.06	KS MN MO NB MI OH IL FL GA VA
39.08	DC
39.10	TX FL SC KS MN MO NB SD AR LA MS MI OH IN
	KY WI MD NJ PA
39.14	LA MI OH NC SC MD NJ PA
39.16	SD NJ
39.18	IA KS MN SD LA MS OK TN TX MI OH IL KY WI
	FL GA NC SC MD NJ PA
39.20	SD VA MD PA
39.22	MN SD <u>LA</u> OH WI NC MD PA
39.24	IA SD LA OH NC MD NJ
39.26	LA MI OH IL MD NJ
39.28	MI OH VA WV NJ PA
39.30	LA OH IL WI MD NJ PA
39.32	OH MI KY NC VA NJ PA MD
39.34	LA IL WI MD NJ PA
39.36	SD OH IL KY NC VA PA
39.38	LA MI OH IL WI NC MD
39.40	LA OH KY NC VA

39.42	LA TX MI OH KY WI NC VA MD NJ PA
39.44	KS LA OH SC VA MD
39.46	KS MN TN OH IL WI NC MD NJ
39.48	OH IL WI KY VA MD NJ
39.50	KS MN NB SD LA TX MI OH IL VA NC GA SC KY
	WI DE NJ PA
39.52	OH KY WI GA MD
39.54	LA TN OH IL NC VA WV NJ PA
39.56	LA MI OH IL KY WI NC MD PA
39.58	KS NE SD LA TN MI OH IL KY WI FL NC SC
	MD NJ PA
39.60	LA OH KY WI VA NJ PA
39.62	KS LA MI OH KY SC VA MD NJ
39.64	LA MI OH NC VA WV NJ PA
39.66	KS LA TN MI OH IL WI VA MD
39.68	NE TN MI OH KY GA VA NJ PA
39.70	KS LA MI OH IL WI NC DE NJ PA
39.72	LA MI OH WI VA WV MD NJ
39.74	NE LA MI OH IL NJ
39.76	NE LA MI OH VA WV NJ MD
39.78	NE LA MI OH IL WV MD
39.80	KS NB LA MI OH VA WV NJ
39.82	IL IA KS MN NE AR LA MS OK MI OH WI FL GA
	NC VA WV MD NJ PA
39.84	NB LA MI VA WV MD NJ
39.86	LA MI OH FL VA WV DE NJ PA
39.88	NB MI VA WV MD
39.90	MN NE ND LA TN TX MI OH IL WI FL GA NC SC
	VA WV
39.92	NE LA FL WV NJ
39.94	MN NB LA OH WV MD PA
39.96	NB LA OH SC WV MD NJ
39.98	KS MN MO NE NB AL LA MS OK TN TX MI OH IL
	KY WI GA NC SC WV MD NJ PA

Reporting from their monitor posts, we get news of other DX'ers tidbits:

Ron Wing  
705 N. Emporia  
Wichita, KS 67214 reports: Sedgwick County Medical Society changes  
155.235 to 152.0075 MHz  
Wichita Pager KAD 927 lost it's fiberglass  
antenna now operating on a cut down CBI  
(35.58 MHz)

Gary Caslen  
RR#1  
Chatfield, MN 55923 reports: NOAA weather station WXJ 86 goes on the air  
WXJ 86 is located in La Crosse, WI  
(162.55 MHz)

Pat Dyer  
5315 Silvertip Drive reports: NOAA weather station WXX 67 goes on the air  
San Antonio, TX 78228 WXX 67 is located in San Antonio, Texas  
(162.55 MHz)

Bexar County Sheriff 155.79 KKJ 999  
155.295 KGL 482

Bexar County Fire 154.25 KK2 416

Donald L. Bleivins  
407 Langley Road  
Baltimore, MD 21221 Baltimore Gas & Electric Howard Service  
KGA 255 153.605..153.575 Facility  
153.44...47.86.. Ellicott City, MD

# QSL CORNER

Thomas J. Wingling, Jr.  
221 Pinewood Road  
Baltimore, MD 21222  
Phone # 1-301-282-5449  
Deadline: 10th

- FL WDCU 89.7 Miami, 2300th 135th St., 33167. Send short note. Report & note signed by Mike E. Ziebel within 13 days. Sowinski.
- COXN 97.9 Clearwater, P. O. Box 4809, 33510. Nice letter from William D. Elliot, CE in 2 weeks. Lindlade.
- WGRN 94.3 Riviera Beach, 100 W. Blue Heron Blvd., 33404. Letter from Robert J. Ward, Executive VP & GM. Sawatzku.
- IL WFMT 98.7 Chicago, 500 N. Michigan Ave, 60611. Letter from Gordon S. Carter, Eng in 10 days. Samford.
- WMBI 90.1 Chicago, 820 N. LaSalle St, 60610. Send a program guide with report, from Henry J. Voss in 11 days. Sowinski.
- WVJC 89.1 Mount Carmel, 2800 Collens Dr, 42863. Report & letter signed by Stephen J. Whitt in 10 days. Sowinski.
- ID KUNZ 96.9 Nampa, 1115 N. Curtis, Boise, ID 83704. Send letter signed by Don Bower, CE in 5 months. Aden.
- IN WIAN 90.1 Indianapolis, 931 Fletcher Ave., 46203. Report & a letter signed by John L. Kron, CE in 7 days. Sowinski.
- WNAF 93.1 Indianapolis, North Illinois St, 56206. Send long letter on extravagant stationery. Report & letter signed by Bob Brockway, CE in 6 days. Sowinski.
- WINDU 92.9 South Bend, Inwood & Keen Rds., 46637. Send verification card with report in 16 days. Sowinski.
- KS KTTL 93.0 Dodge City, S. Highway 283, 67801. Send letter in 10 days from Nellie L. Robbs, GM send coverage-map. Rogers.
- KV WDOC 95.5 Prestonsburg, 41653. Send AM & FM coverage-maps, no signer in 40 days, Sowinski.
- OK KOD 98.1 Lexington, P. O. Box 100, 40501 Letter in 8 days, no signer. Sowinski.
- LA KSHS 96.1 Lake Charles, Paul L. Hoffner sends 5 bumper-stickers for being most distant listener, plus a long folksy letter. Elving.
- WNOE 101.1 New Orleans, 529 Bienville St, 70130. Friendly letter with QSL Card in 5 days from Scott Seagraves, "The Swamp Angel DXer" Says he used to be a member of the MRC. Rogers.
- DE WDEA 95.7 Ellsworth, 68 State St, 04605. Send letter with report signed by Harvey E. DeVane, GM in 9 days. Sowinski.
- MD WOPV 92.7 Walata, 281 Pain St, 04610. Report signed by Roger Holbert in 4 days. Sowinski.
- MI KSLW 94.1 St. Paul, 400 Schley St, 55104. Letter & coverage-map for Minn. Public Radio System from Richard E. Nelson in 11 days. who describes his dxing interest & mentions a report from Ben, DR. Sawatzku
- KNUJ 93.1 New Ulm, 56073. Send verification card signed by Gerald Whitson, CE. in 12 days. Sowinski.
- NY WBUF 92.9 Buffalo, 1233 Main St, 14209. Send a copy of WBUF...The Story Report signed by Michael Baxter in 9 days. Sowinski.
- WGRN 94.9 Buffalo, 464 Franklin St., 14202. Send verification card signed by Harold A. Higgins in 4 days. Sowinski.
- OK KPAU 96.5 Tulsa, P. O. Box 746, 74401. Letter from Cliff Allen, Operations Man. in 5 weeks. "This is the furthest (his spelling) report we have received." Sawatzku.
- KRHO 102.3 Duncan, 1701 Pine, 73533. Letter & a 20 year old KRHO brochure from Lester A. Agee, CE in 3 days. Sawatzky.
- SC WDUU 94.5 Greenville, Bob Jones Univ. 29614. Letter & literature from Jim Ryerson, Station Manager says "...it is the farthest distance from which we have been received." Sawatzky.

Reporters this time are: Robert R. Rowinski from St. Clairsville, OH, Roland Lindlade from Omaha, NE, Frank Aden of Bend, OR, Bruce Elving of Sulphur, OK, David Rogers of Buffalo, OK, Peter Sawatzku, of Waterloo, ON. This was an all FM QSL month as you can see. I'm running a little low on reporters, but do have a good number of items still a waiting to be typed up. This month I got mixed up in typing Sawinski & Sawatzku for they are alike if you take a fast look at the name as I type this. Nothing bad intended by this comment. 73's for non...

Tom

# PHOTO NEWS

Jim Alexander  
4 Brook Court  
Parsippany, NJ 07054

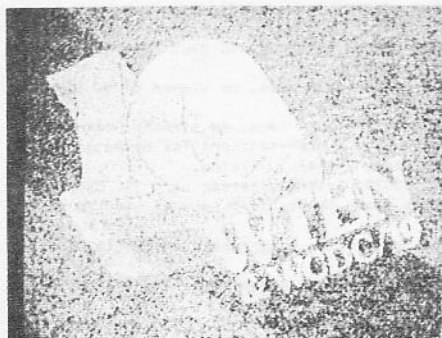
June, 1978



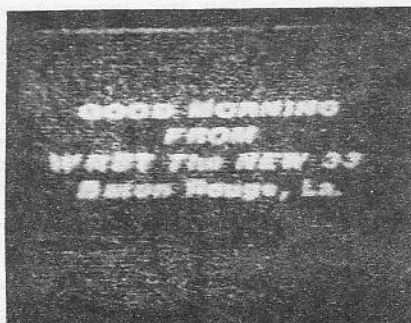
KTEW- 2 Tulsa OK  
E-skip (Simon)



WMAR- 2 Baltimore, MD  
950 mile E-skip (Battin)



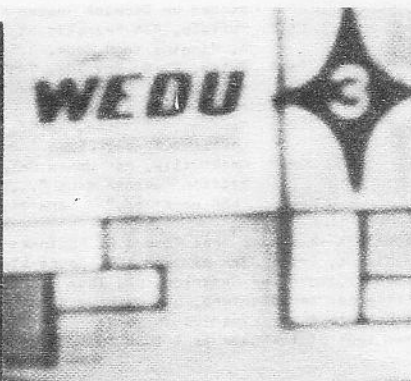
WCDC-19 Adams, MA  
300 mile tropo (Yingling)



WRBT-33 Baton Rouge, LA  
605 mile tropo  
12/4/77 (Combs)

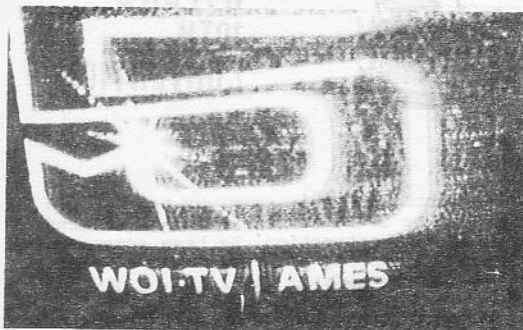


KTCA- 2 Minneapolis, MN  
E-skip  
6/15/76 (Aden)

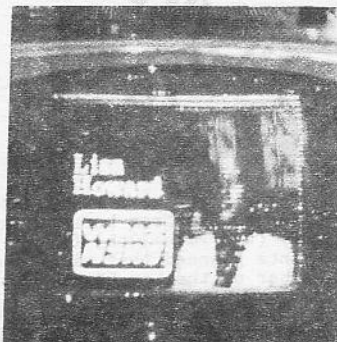


WEDU- 3 Tampa, FL  
E-skip (Traska)

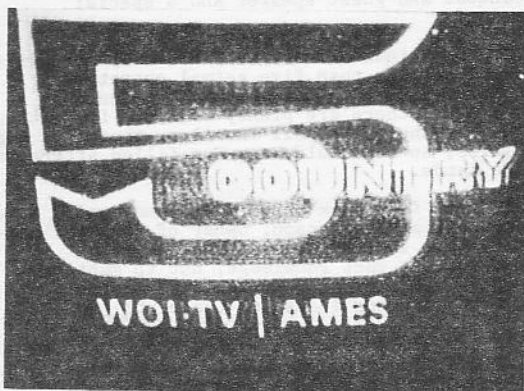




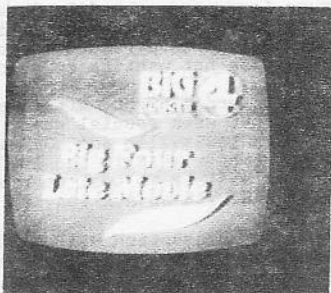
WOI-TV | AMES



WSAZ- 3 Huntington, WV  
E-skip (Simon)



WOI-TV | AMES



KDBC- 4 El Paso, TX  
830 mile E-skip (Pizzi)

WOI- 5 Ames, IA  
1,015 mile E-skip  
6/8/77, 2000 EDT (Egan)

(The above photos of WOI- 5's animated ID were taken five seconds apart. 'COUNTRY' begins as a star inside the five, and the word zips across to the right - jja)

My thanks to our contributors:

- Ken Simon, West Palm Beach FL
- Buck Battin, Duluth MN
- Tom Yingling, Baltimore MD
- John F. Combs, Orlando FL
- Frank Aden, Bend OR
- Paul D. Traska, Buffalo NY
- Dave Egan, Valleyfield PQ
- Jim Pizzi, Orcutt CA
- Paul Gaines, Detroit MI

73 and good DX,

WDAU-22 Scranton, PA  
390 mile tropo (Gaines)

**LOUISVILLE  
'78**



**WTFDA'S  
10TH  
CONVENTION**

July is never a very exciting month, but this year why not declare your independence from boredom and plan to be in Louisville the last weekend of July (the 28th-30th) for the WTFDA annual convention. We have some special events planned that will be anything but boring and you'll get to meet a number of the top DXers from around the country.

Activities planned include a number of tours for those who want to take them to TV and FM stations, a banquet and guest speaker and a special DXpedition--at NO ADDITIONAL CHARGE!

The DXpedition this year will be unique because WTFDAers will set sail-- aboard the Belle of Louisville, one of less than five actual operating steamboats on America's rivers, for a cruise up the Ohio River. The boat is huge (ever seen the film Showboat?) and there are plenty of spots for sitting with portable radios just waiting for the DX to roll in. Also, there's a snack bar and complete restroom facilities, so it should be a fun-filled afternoon for those not wanting to scan the bands.

Saturday night, after we get both feet back on solid ground, we'll have a banquet with special guest speaker Clarence Henson, owner of two stations-- WLPS in Louisville and WORX in Madison, Indiana. He was the builder of the first FM for WHAS in the 1940's and has a vast knowledge, not to mention a unique ability to tell stories of, "What it was like when...." The evening will end with an auction, so be sure to bring items for the club!

The convention will also feature seminars about topics from TV DX to SCA and back, as well as equipment displays, door prizes and a lot of other fun. The Louisville delegation will provide a hospitality room with colas, beer and snacks, and there will be time for meeting and greeting your fellow DXers over a fallon or two of brew.

The convention site is centrally located, as Louisville is within easy driving distance from the South, Midwest or East. For the rest of you folks, we have service by a number of airlines, including Eastern, Delta, TWA, American, Piedmont, Allegheny, Ozark and a few others, as well as rail service on Amtrak. The city is also served by Greyhound and Trailways buses and you can always sail in on the Delta Queen, if you feel like a great grand entrance! The motel is providing FREE airport limo service and we'll pick you up if you end up elsewhere, so don't let not having a car stop you!

The rates for the motel are reasonable, at \$18 for a single, \$24 for a double and \$32 for a triple with rollaway (triples with no rollaway for families are \$28). We'll be staying at Holiday Inn Southeast at Interstate 264 and the Bardstown Road exit. The location is near fast food and fancier restaurants and just a half mile from a major mall, so bring the wife and let her shop! We are also just a block from a complex of eight theatres, so if you get bored by propagation.....

Registrations should be sent in immediately, as the cost will be higher if you fail to pre-register! Registration is \$17.50 per person (which includes the boatride and banquet), or \$20 at the door for late registrations. Make your check out to the Louisville Convention Committee and send it to the address on the registration blank.

QUESTIONS??? Write Ted Fleischaker, 3023 Tremont Drive, Louisville, KY, 40205, or call (502) 451-5558 except Tuesday, Wednesday or Thursday nights, then call (502) 588-6467 after 8:30 p.m. and before midnight.

**SEE YOU IN LOUISVILLE!**



# VHF UTILITY DX

Pat Dyer  
5315 Silvertip Drive  
San Antonio, TX 78228  
Deadline: 5th of month

JUNE 1978

Glenn Hauser, c/o WUOT, Univ. of TN, 232 C&E Bldg., Knoxville, TN 37916  
PRG-7, HQ-160; random short in-/exterior wire antennas; GMT used

3-20:	2222	30.275	Antigua or Ascension Island (5th harmonic BBC)
23:	2100	30.840	Antigua (2nd of BBC)
25:	1415	30.360	Ukogbani ? (2nd of BBC)
26:	1436	30.690	(2nd of ?) 1720, 30.210 Ascension (2nd of BBC)
	1719	30.720	Morocco ? (2nd)
28:	2243	30.275	(as prior)
30:	2225	30.975	Antigua (5th of BBC)

Neil Dickerson, 426 State St., Sharptown, MD 21861 Realistic PRO-1  
with 30-50 MHz antenna at 40'; EST used

3-4:				1410	-	35.38?	Oakland, CA-mp
1140	KPC36	33.98	Belmont, CA-sf	1413	-	35.38?	LA, CA-mp
1147	KPC48	33.98	Fairfield, CA-sf	3-15:			
1148	KPC98	33.98	Modesto, CA-sf	1306	KSV810	33.08	Portland, OR-ho
1202	KZE69	33.98	Groville, CA-sf	1321	KMP619	33.78	Beverly Hills, CA-f
1204	KPC97	33.98	Clear Lake, CA-sf	3-21:			
1206	KPB96	33.98	Weaverville, " "	1206	KPB77	33.98	Perris, CA-sf
1207	KMJ876	33.98	Sacramento, CA-sf	3-24:			
1212	KSU412	33.44	Strawby Pk, CA-cf	1502	KCW413	39.24	PtReyesStn, CA-p
1215	KKT47	33.98	Chico, CA-sf	1510	KMA224	39.24	San Rafael, CA-p
1220	KGJ704	33.70	Scotia, CA-f	4-2:			
1223	KDG872	33.70	LA, CA-f	1721	KKA569	39.50	Winnfield, LA-p
3-8:				1736	KKC223	39.50	Crowley, LA-p
1306	KLP527	35.22	Honolulu, HI-tp	1737	KRX511	39.82	Krotz Spgs, LA-p

Albert H. Ellis, 19 McClure Avenue, Brantford, ONT, Canada N3R 4L7 GMT

4-5: 2210-2230 L.A., San Diego, and Modesto, CA-mp's

Donald L. Blevins, 407 Langley Road, Baltimore, MD 21221 in the May YUD  
was scheduled to start a new column "IN SEARCH OF PSB". It will deal  
with how to secure QSL's, communications systems, etc. He would like  
members to send information on their own local/area police/fire systems.

Linda Brodsky, 245-16 149 Avenue, Rosedale, NY 11422 GMT Bearcat 210

3-8:	2250	33.83	Seattle, WA-mp	3-13:	1720	35.03
14:	1715	33.89	Augusta-mp			
		33.93 & 35.46	LA, CA-mp			
		35.38	LA, CA-mp			

Regarding the 33-mp's "...I often hear 33.83, 33.93, and 33.89 when  
frequencies in the 35 MHz band are not coming in. Occasionally...same  
transmission on 35.46 and 33.93 but at times ...different... Also hear  
technicians working on ... 33 MHz ... while the 35 MHz...mobile traf-  
fic." Has anyone else noted these ?

LU3EX, Buenos Aires, during the month of March had some form of 50-MHz  
DX (F2 or E2) every day except - 1, 2, 16, 17, 18, 25, 31.

ZE2JV, Rhodesia, 4-8: 1726-1810Z, 144-MHz TE contacts into Cyprus

12: 1800-1805Z, " " " contact into Greece  
11: 1659 " " " beacon from Cyprus

ZS6LN, S. Africa, 9: 1220 50.029 (F2) beacon from S. Africa

G4BPY, England, 2: 1200 50.1 (F2) beacon into SW Africa

FX3VHP, France, 1200-1500 1450-1620 " " " " S. Africa  
(England-S. Africa path apx 9185 km)

Many large solar flares (with radio noise bursts) causing h. f. blackouts and magnetic storms (with aurorae) during April. VHF F2 activity wont be much affected during the summer months by these though

Martin J. Theil, 12 Princeton Drive E., Holiday, FL 33589 Bearcat 101/210; GMT

<u>4-1:</u> 2140 33.94 LA, CA-f	<u>20:</u> 2030 39.82 Temple Cy, CA-cp
2240 39.46 " "	<u>22:</u> 2030 35.46 LA, CA-mp
(2110 32.96 Sp pager)	<u>24:</u> 1800 " " "
<u>12:</u> 1715 35.38 S Diego, CA-mp	1810 35.26 " " "
2120 35.76 Los Indios, TX	<u>30:</u> 1815 35.46 " " "
2140 33.89 LA, CA-mp	

Hauser addenda, harmonics

<u>4-4:</u> 2340 30.275 Antigua (5th BBC)	9: 1552 30.710 Portugal (2nd RFE)
30.875 " " "	1600 30.870 France
<u>8:</u> 1615 30.870 France (2nd RFI)	1605 30.800 Ascension(2nd BBC)
1730 30.140 Ukogbani (2nd BBC)	<u>29:</u> 2255 30.875 Antigua (5th BBC)
<u>9:</u> 1415 30.720 Morocco (2nd VOA)	2259 30.275 " " "

Bill Grant 67 Brattle St., Worcester, MA 01606 GMT

2nd harmonics, R-390A & longwire

<u>3-24:</u> 2200 30.278 Ascension (BBC)	<u>31:</u> 2155 30.980 Ascension (BBC)
30.980 " " "	2200 30.278 " " "
<u>25:</u> 1155 30.370 Antigua (DW)	<u>4-1:</u> 1600 30.230 Ecuador (HCJB)

Cobra PF-VHF monitor, Tennelec MCP-1 scanner, Channel Master VHF TV,

Starduster CB antennas

<u>3-4:</u> 1545 35.28 Sp pager	14: 2120 35.46 LA, CA-mp
2115 35.38 LA, CA-mp	2125 35.28 Sp pager
2205 35.46 " " "	2130 35.38 Modesto, CA-mp
<u>5:</u> 1910 35.38/.46 " "	2135 35.46 Oakland, CA-mp
1945 35.28 Sp pager	<u>15:</u> 2155 33.0 w
2100 35.38 S Diego, CA-mp	<u>16:</u> 1935 35.28 Sp pager
2115 35.46 " " "	<u>17:</u> 2130 35.38/.46 LA, CA-mp
<u>6:</u> 2215 " /.38 " & LA, CA-mp	2140 36.5 Sp
<u>7:</u> 2115 35.38 LA, CA-mp	<u>18:</u> 1635 36.45 Sp
35.46 S Diego, CA-mp	<u>19:</u> 1605 36.45 Sp
2130 35.28 Sp pager	<u>22:</u> 2125 35.38/.46 LA & SD, CA-mp
<u>8:</u> 2145 35.38/.46 LA & SD-mp	2135 36.5 Sp
2214 42.56 LA area	2150 35.96 SF Bay area
2215 44 w & sw	2155 36.33 w
<u>9:</u> 1630 41 Spanish	<u>23:</u> 1230 32.96 Sp pager
1730 35.38/.46 LA, CA-mp	<u>24:</u> 2145 36.45 Sp
<u>10:</u> 2045 36.0 Spanish	2150 35.38/.46 LA, CA-mp
<u>11:</u> 1513 41.62 Sp	2230 35.38 S Diego, CA-mp
2030 35.46 LA, CA-mp	<u>25:</u> 1230 35.28 Sp pager
<u>12:</u> 1945 35.38 " " "	<u>26:</u> 1600 36.355 Sp
1950 35.28 Sp pager	<u>27:</u> 2230 35.28 Sp pager
<u>13:</u> 2130 35.38 LA & SD, CA-mp	<u>28:</u> 2140 " " "
2145 35.38 Imperial, CA-mp	<u>29:</u> 2140 " " "
2150 35.28 Sp pager	<u>30:</u> 2145 32.96 " " "
2155 35.46 LA, CA-mp	<u>4-1:</u> 1455 41.62 Sp
<u>14:</u> 2115 35.38 " " "	<u>2:</u> 1430 35.28 Sp pager

Rick Stein, 456 Barrymore Place, N. Brunswick, NJ 08902 Regency Touch, EST

<u>3-11:</u> 0920 40.46 Sp & Eng	1002 31.84 sw US
<u>12:</u> 1052 30.70 sw US	
<u>13:</u> 1115 30.70 sw US	1217 40.46 Sp
<u>14:</u> 1315 40.46 Sp	1434 KJA348 31.84 Chesterville, TX
<u>15:</u> 1424 31.84 sw US	
<u>16:</u> 1500 31.16 " " "	

-cont-

(Stein, contd)

17:	1127 31.84 US sw	22:	0925 31.84 US sw	28:	1308 45.385 Sp/Eng
	1154 43.025	23:	1015 31.16 Sp	29:	1158 40.46 Sp
18:	1223 31.84 US sw	24:	1318 31.84 US sw		1209 30.70 US sw
	1318 40.46	26:	1154 40.46	31:	1139 40.46 Sp
20:	1220 40.46	27:	1226 40.46	4-1:	0940 40.46 Sp
	1400 31.84 US sw	28:	1238 30.82 US sw		

Lots of US feed into the Latin American 40.46 repeater.

Now my loggings. Hallicrafters SX-62, Hammarlund SP-600-JX-10; 2 30' wires at 12', ne-sw/nw-se runs; 49.5-50 MHz on Swan 250 with Ameco nuvistor pre-amp, 5-el Cushcraft horiz Yagi at 23'. All F2 (bs-backscatter) with peak daily MUF noted. GMT used, new underlined

4-6:	1832 42.12	13:	1745 30.42 Can	21:	1855 32-US west
	1850 30.42 Can		1930 45.27		1940 45.08
	2336 OK City-bs	14:	1535 45.10	22:	1730 36's
7:	1930 low-30 Can		2242 KLF 527	23:	0012 KLF 527
	1932 KLF 527		2349 KME 438-bs?		1943 49.58
	2000 50.120	15:	2100 LU3EX	25:	2015 35.78
8:	1650 30.42 Can		2106 LU8AHW	26:	1900 35.78
	1945 37.11		2117 LULDAU	27:	2105 37.34
9:	1715 41.50		2140 XE1GE-bs	28:	2215 36's
	1935 low-30 Can	16:	1940 49.58	29:	1445 35.78
10:	1915 32 US	17:	1735 38.50	30:	1805 30.30
	1946 LU8DIN	18:	1945 38.50	5-1:	1705 35.78
11:	0308 <u>KZ5NW</u>	19:	2005 38.55	2:	1905 45.30
	0320 <u>YV6ASU</u>	20:	1740 30.42 Can	5:	0012 35.22
	1710 37.000		1905 49.58		1915 35.78
12:	1835 38.58		2100 KLF 527		2002 BBC

BBC	30.85	Ascension?-ha	LU8AHW	50.1-	B.A., Argentina-a
KLF 527	35.22	Honolulu, HI-tp	LU8DIN	50.1-	Mar del Plata, ""
KME 438	35.22	Orange, CA-tp	XE1GE	50.1-	Cuernavaca, Mex.-a
LULDAU	50.1-	B.A., Argentina-a	-	35.58	OK City, OK-vp
LU3EX	50.1-	" "	YV6ASU	50.1-	Barcelona, Venez.-a
			KZ5NW	50.1-	Coco Solo, C. Zone-a

(a-amateur, ha-harmonic, tp-tone pager, vp-voice pager)

correction to my last loggings (May issue) 3-10: 1702, KQY 588

April 10.7-cm (2800 MHz) solar flux avg 152; the highest since early 1971 and the highest April since 1970.

May issue of Sky & Telescope begins a series on homemade radio telescope systems. Solar effects (e.g., noise bursts) are covered.

Frank Aden, Jr., 1535 NW Ithaca Ave., Bend, OR 97701

3-2: -- 35.-- GA (Forestry)

soon will have the Radio Shack programmable scanner in use for Es season

Again, to those who have sent in reports that are not as yet in the column - they have been held back since they were essentially non-DX in nature (i.e., local/semi-local, line-of-sight, etc.). As the load of DX reports permits, these will be tried to fit in. Don Blevins' new column (see earlier) may be a better place for a lot of that variety.

KH6HI (Ewa, HI) figures that MUF's to 50-MHz on F2 ought to be possible to the mainland by November. The KH6EQI beacon is on 50.104 MHz. Its power/antenna system is much improved over a few years ago. It's also a target for multi-hop Es in the summer season.

Late word has that some VK2's (Australia) were heard in Apr in CA above 52 MHz at 0200 PST. More details when possible.

# MEMORABILIA

Robert J. Williams  
251 6th Avenue East  
Twin Falls, Idaho 83301  
Phone: (208) 733-3621  
Deadline: 5th of month

June 1978

This month, MEMORABILIA features two great QSL cards, sent in by Paul D. Traska of Buffalo NY. Thank you very much, Paul! (I'm glad you enjoy the column, Paul; I'm happy to hear it, as I'm always glad to hear from fellow DXers.---rjw).

WFBM-6 (now WRTV 6)  
Indianapolis IN

**WFBM**

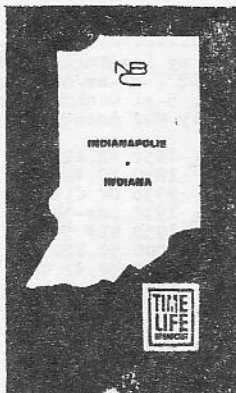
AM     FM     TV

TIME 12/42 DATE 7/29/70

This is to verify your reception of WFBM. Thank you for your report.

*TV Antenna hgt = 1014'*  
*990' above average terrain*

AM 1250 KC    •    FM 94.7    •    TV Channel 6  
5 KW                      50 KW                      100 KW



# WKBF TV



WKBF-61 (now off)  
Cleveland OH

Verified Reception of Cleveland's SuperPower Station, on 8/25/72 in Buffalo, N.Y.  
Antenna Height 1971 Ft. Above Sea Level Visual ERP 3020KW

Keep 'em coming, guys! This reminiscin' is a ball. See y'all in 30.

73s, gud DX,

Bob

# CONVENTION 1978

DON'T MISS IT! SEE PAGE 18 FOR DETAILS.

**FM****STATISTICS**Fred Norquist  
7945 Boxford Road  
Clay, NY 13041  
Deadline: July 5th

DXer Location	Rank	TOTAL	88-92	Es	MS	AU	USA	CN	MX	FO	TPU	YB	Date
Pat Dyer, San Antonio TX	1	1154	131	930	15	0	41+	2	6	3	53	70	7/20/77
John Ebeling, Bloomington MN	2	1095	159	579	23	72	46+	4	3	0	54	52	11/1/77
Fred Norquist, Clay NY	3	950	124	412	20	37	39+	3	0	2	45	69	5/1/78
Fred McCormack, Des Lacs ND	4	906	115	681	21	69	43+	6	3	0	53	65	8/8/77
Ron LeBlanc, Marrero LA	5	843	129	452	2	0	39+	3	5	6	54	71	11/19/77
Mike Buzaj, Enfield CT	6	813	104	386	2	10	37+	3	0	1	42	74	9/15/77
Bob Seybold, Dunkirk NY	7	812	97	320	0	0	42	5	6	0	53	60	7/31/77
Peter Sawatzky, Waterloo ON	8	777	90	308	105	5	38+	4	0	1	44	71	4/8/77
Joe Fela, South Plainfield NJ	9	736	144	314	2	9	37+	2	0	2	42	68	7/7/77
Hank Holbrook, Chevy Chase MD	10	704*	-	-	-	-	35+	4	0	3	43	-	7/20/77
Danny Buntin, Stillwater OK	11	670	74	382	0	0	40+	4	3	0	48	74	6/7/77
Roger Winsor, Hobart IN	12	653	-	-	-	-	-	-	-	-	-	-	6/14/77
Ralph Strobel, Muncie IN	13	650	-	-	-	-	23	3	-	-	26	71	7/15/77
Larry Vogt, Springfield VA	14	591	135	216	19	6	37+	5	1	3	47	68	6/1/77
R.E. Lyons, Belleair Eluffs FL	15	578	174	165	1	0	38+	2	8	11	60	74	4/22/77
Doug Everitt, Enid OK	16	511	80	299	15	0	32+	4	6	0	43	74	8/7/77
Joseph Smith, Johnson City NY	17	447	59	71	0	0	24+	1	1	0	27	71	7/20/77
Ted Fleischaker, Louisville KY	18	349	46	57	0	0	29	4	1	0	34	74	8/6/77
John Jefferson, Concord CA	19	266	52	51	46	0	18	2	2	0	22	57	6/2/77
Ken Simon, West Palm Beach FL	20	191	71	126	0	0	20+	1	1	4	27	-	7/17/77
Michael Scheel, Davenport IA	21	180	19	7	0	0	13	1	0	0	14	71	7/19/77
David Nelson, Chapel Hill NC	22	164	24	42	0	0	18	1	0	0	19	76	8/3/77
Eric Fader, Bayside NY	23	152	36	0	0	0	10+	0	0	0	11	74	7/28/77
Michael Hogan, Highland IN	24	104	29	0	0	0	6	1	0	0	7	-	5/9/77

\* Verified.

Many of you need to update your totals. There are several of you in the "1000 club" that are conspicuously missing in the above FM Statistics, so "get with it" and send in your new stats.

A QUICK RUNDOWN OF COLUMN DEFINITIONS: TOTAL, means the total number of FM stations logged. (Frequency changes count as a new station, call letter changes DO NOT count.) 88-92 is all stations logged from 88.0 to 91.99. Es means the total number of stations logged via E-skip. MS, is the total by meteor scatter. Au is the total via aurora. USA, means the total number of states and the + means Washington DC. CN is the number of Canadian provinces logged; MX is the number of Mexican estados logged; FO, means the number of foreign countries logged, but NOT Canada or Mexico. TPU or "total political units", is the sum of USA CN MX & FO. YB, is the year you began FM DXing.


**[UNIDENTIFIED DX]**

 William J. Draeb  
 Ellis St. R.R.#2  
 Kewaunee, WI.  
 54216  
 (414)-388-2350

 Deadline: 1st of  
 each month.

Support WFPDA; your report is important!!!!!!

Not much activity as far as unids goes yet. The Es season should be getting underway shortly (I saw a little on 4-23, 4-29 and 5-2). Not of it mounted to much though.

Here's the only report I have this month:

Steve West; 432 Kenmore Rd., Havertown, Pa. 12083 EST

2-28 Ms 0100 101.5 "...we're here all night just for you...". Antenna was pointed SW. P.A: CA, LA, AL, FL, TX. It sounded like a "m" station. (Perhaps some of active FM DXers might have some idea what you heard; I have no idea on this end.--w)

FROM THE STAFF Continued from page 3.

PSB TECHNICAL COLUMN EDITOR...The WD is now looking for a person to edit a technical column for PSB and or editors to write technical reviews for PSB and other DX equipment. If you are interested write Frank Aden, Jr.

# EASTERN TV-DX

Bill Thompson  
1907 Seneca Street  
Buffalo, NY 14210

June 1978

Deadline: 5th

Massive solar flares in April and early May have caused large amounts of VHF auroral activity. No resulting TV DX reports have shown up here yet, but there were plenty of opportunities for auroral DX for DXers in the Northeast and the northern Midwest U.S., and eastern Canada. The giant solar flare of April 10th and 11th was followed by one of the strongest and most extensive periods of auroral "hash" in recent years on VHF TV in northern latitudes. More auroral disturbances followed in late April, with three more major solar flares from the last week of April through the first week of May.

Steven Shaffer 10956 Indianapolis Blvd Box 4 Hammond, Indiana 46326 (CDT/CST)  
**October** 28 Es 1015 WEDU-3 FL 900 30 Tr 1100 WRTV-6 IN 130  
 27 Tr 1000 WKOW-27 WI 100 1100 KIII-3 TX 1000 1130 WBAU-13 WI 280  
 1030 WCPR-62 MI 210 1200 KRIS-6 TX 1000 Present log total: 46  
 Equipment includes RCA XL-100 25" color set, 20 element non-rotatable antenna.

Bob Zent 1835 Fruit Street Huntington, Indiana 46750 (BST)  
**March** 9 Tr 1515 WFPL-10 ON 260 WMBD-31 IL 215 9 Tr 2018 WUTV-29 NY 370  
 GIC059-59 ON 200 WICS-20 IL 230 2030 WNED-17 NY? T  
 CHLFT3-48 ON 200 1808 CICA-19 ON 360 **April**  
 CKCO3-42 ON 200 CBLFT-25 ON? T 7 Tr 0615 GIC03-42 ON 200  
 CBLFT2-40 ON 260 1832 WJET-24 PA 290 29 0800 CICO18-18 ON 260  
 GIC018-18 ON 260 WSEE-35 PA 290 GIC059-59 ON 200  
 GIC028-28 ON 300 2000 KDNL-30 MO 300 CKCO3-42 ON 200  
 CKGN29-29 ON 200 2004 KETC-9 MO 300 CKGN29-29 ON 200  
 1520 WRAU-19 IL 215 KPLR-11 MO 300

"Got an RCA video cassette recorder last Christmas. The built in tuners seem to be quite sensitive and have above average selectivity. However, the unit doesn't do well recording very weak signals or if there is much CCI on the channel. I'm waiting to see how it handles Es."

Robert Goodman 5129 W. Roosevelt Road Apt. B7 Cicero, Illinois 60650  
 "Lots of tropo over Lake Michigan last month, but no new stations. Instead of listing numerous relogs of South Bend, Elkhart, Kalamazoo, Grand Rapids and Battle Creek, I'll give the minimum k (coefficient of effective Earth's radius) figure necessary to produce those conditions. I'm taking zero as the HAAf (height above average terrain) of my antenna:

date	time	propagation	call/channel	k	min	location	remarks
		(CST)					
3/9-10	----	Tr			12.0		thaw/fog
4/14	midday	Tr			3.7		
4/15	evening	Tr			3.7		
4/16-17	----	Tr			12.0		
'18	1645	Tr			10.3		
	1655		unID-57	--			mystery
	1725	LS	WHME-46	--		South Bend IN	
./23	1815	Tr			6.6		
	1831	LS	WNIT-34	--			several clear bursts
4/25-27	----	Tr			12.0		
4/27	2000	Tr	WTV-18	--		Milwaukee WI	rare here
			(others)	--	10.6		

4/18 ch 57 was another mystery log, this time duplicating local channel 2 news; antenna directed north as for 9/20/77 mystery on ch 31. I can't figure it. I rarely get Milwaukee in this apartment (crowded enough anyway without another city in my kitchen, I guess). 4/27 log was with antenna pointing south, catching a reflection; weaker signal with antenna north. It must be this building's lie; Milwaukee frequently in at former Cicero bldg. Makes me curious about the mystery logs north, seemingly an attenuated direction otherwise. IDs are getting rough. Call letters are tiny; networks break for regional ads (Schaefer beer in Indiana!); seems all non-commercial stns hold fund-raising auctions at the same time. Was anyone lucky enough to catch "Lucky-7" Syracuse pirate?"

It's that time again: Time to make your summer vacation plans. Don't miss WITFA's convention this year! Come to Louisville July 28-30 for FM and TV DX-ing's annual big event--you'll have a great time, no matter what your interest in DXing may be. Hope to see you there this year!



# southern fm-dx

Danny Buntin  
1020 S. Duncan  
Stillwater, OK 74074  
DEADLINE: July 8th

JUNE 1978

\*\*\*APRIL 30 MARKS FIRST MAJOR E SKIP OUTBREAK OF THE YEAR\*\*\*

Highlights this month concern tropo from TX to FL along with one lone date showing some E skip. More reports on the April 30 opening would have been appreciated.

Rick Sanford, 404 S. McNeill, Burnet, TX 78611		3-19 to 4-30-78 CST	
Equipment: Kenwood KF-5400 rx, 10-element Archer FM at 24 ft. with Felden #8230 T-line, and Alliance U-100 rotor.			
3-19		2159	KTDY 99.9 LA Lafayette 385
tr 0821	WJMI 99.7 MS Jackson 500	2200	KGRA 103.7 LA Lake Charles 310
3-21		2345	WJLN 95.5 MS Jackson 500
tr 2302	KOPY 92.1 TX Alice, same heading as KMPT 205	2351	WFMP 102.5 LA Baton Rouge 435
		2356	KREL 95.1 TX Beaumont 250
3-22		4-2	
tr 0850	XHJD 98.9 NL Monterrey 365	tr 0001	WSEB 97.1 LA New Orleans 500
2330	WEZB 97.1 LA New Orleans 500	0006	WQXV 92.3 LA Laplace 480
2352	WFMP 102.5 LA Baton Rouge 435	0034	WQTX 107.7 AL Enterprise 745
2358	WVEL 105.3 LA Slidell 520	0100	WIRB 96.9 AL Enterprise 435
3-23		0104	WQXY 100.7 LA Baton Rouge 500
tr 0022	KTAL 98.1 TX Texarkana 305	0115	WBYU 95.7 LA New Orleans 290
0042	KREL 95.1 TX Beaumont 250	0124	KRMD 101.1 LA Shreveport 340
0845	XHJ7 93.3 NL Monterrey 365	0132	KDUV 100.3 TX Brownsville 305
3-28		0147	KTAL 98.1 TX Texarkana 50
tr 2322	KGRA 103.7 LA Lake Charles, DJ ment. listeners at TX A&M at College Station, about a 200 mile haul; more closet DXers? 310	0158	WKYI 94.7 MS Jackson 520
2348	KTDY 99.9 LA Lafayette 385	0159	WVEL 105.3 LA Slidel 365
3-29		0202	KAJN 102.9 LA Crowley 310
tr 0000	KTRU 91.7 TX Houston, 340 wts. heard previously but never at right time 340	0205	KLCL 99.5 LA Lake Charles 435
0012	WFMP 102.5 LA Baton Rouge 435	0744	WQXY 100.7 LA Baton Rouge 500
0020	KREL 95.1 TX Beaumont 250	0747	WEZB 97.1 LA New Orleans 705
0045	KRIX 99.5 TX Brownsville 340	0753	WRHM 90.3 AL Birmingham 435
0050	KOPF 104.9 LA Abbeville 300	0830	WAFB 98.1 LA Baton Rouge 360
0100	KVVF 105.5 LA Leesville 365	0845	KINB 107.3 OK Poteau 435
0154	XHJD 98.9 NL Monterrey 310	2227	WAFB 98.1 LA Baton Rouge 500
0206	KLCL 99.5 LA Lake Charles 385	2257	WJMI 99.7 MS Jackson 385
0803	KGRA 103.7 LA " " 260	2259	KNOE 101.9 LA Monroe 435
0810	KTDY 99.9 LA Lafayette 365	2349	WFMP 102.5 LA Baton Rouge 435
0902	KHYS 98.5 TX Port Arthur ex KFAC-FM 365	4-3	
3-30		tr 0002	WQXY 100.7 LA Baton Rouge 500
tr 0758	XHQO 93.3 NL Monterrey 260	0030	WEZB 97.1 LA New Orleans 520
0759	KREL 95.1 TX Beaumont 260	0100	WREL 105.3 LA Slidell 340
0802	KHYS 98.5 TX Port Arthur 270	4-4	
3-31		tr 0023	KRIX 99.5 TX Brownsville 325
tr 0758	KOBS 104.5 TX Orange 310	0101	WEZB 97.1 LA New Orleans 325
0803	KGRA 103.7 LA Lake Charles " " 250	0810	KFJL 98.9 OK Oklahoma City 250
0805	KLCL 99.5 LA " " 195	0811	KOPM 104.1 OK Oklahoma City 285
0815	KVLU 91.3 TX Beaumont 290	0821	KPLG 98.1 OK Lawton 325
0841	KETX 92.1 TX Livingston, same heading as WFMP 365	0830	KBRC 94.700K Oklahoma City 325
2217	KTDY 99.9 LA Lafayette 310	0845	KTEN 93.3 OK Ada 290
222r	KGRA 103.7 LA Lake Charles 435	0905	KNOE 106.9 OK Clinton 435
2239	WYNN 101.5 LA Baton Rouge 310	0908	KLLL 96.3 TX Lubbock 385
2305	KLCL 99.5 LA Lake Charles 340	0913	KLEL 94.5 TX Lubbock 310
2314	KPCF 104.9 LA Abbeville 400	2229	WAFB 98.1 LA Baton Rouge 385
2330	KDEA 99.1 LA New Iberia 365	2235	KTDY 99.9 LA Lafayette 310
2358	KQBE 94.5 LA Lafayette 365	2302	KGRA 103.7 LA Lake Charles 365
4-1		2356	XHJD 98.9 NL Monterrey 500
tr 0000	KSLI 96.4 LA Alexandria 290	4-5	
0017	KRMD 101.1 LA Shreveport 305	tr 0003	WZBZ 97.1 LA New Orleans 290
0024	KTAL 98.1 TX Texarkana 435	0008	KRMD 101.1 LA Shreveport 385
0028	WQXY 100.7 LA Baton Rouge 500	0053	KNOE 101.9 LA Monroe 745
0032	WZBZ 97.1 LA New Orleans 470	0821	WQXV 106.7 AL Enterprise 765
0034	WQXV 107.7 AL Enterprise 340	0830	WFPM 107.9 FL Panama City 500
0050	WYNN 101.5 LA Baton Rouge 220	0850	WJMI 99.7 MS Jackson 340
0124	WYNN 101.5 LA Baton Rouge 340	2210	KRIN 99.5 TX Brownsville 220
0154	WYNN 101.5 LA Baton Rouge 340	2300	KGHI 100.1 TX Henderson 340
0159	WYNN 101.5 LA Baton Rouge 305	2316	KDUV 100.3 TX Brownsville 305
0202	WYNN 101.5 LA Baton Rouge 500	2329	KTAL 98.1 TX Texarkana 500
0205	WYNN 101.5 LA Baton Rouge 385	2339	WYNN 101.5 LA Baton Rouge 385
0206	WYNN 101.5 LA Baton Rouge 385	2359	KTDY 99.9 LA Lafayette 435
0208	WYNN 101.5 LA Baton Rouge 500	4-6	
0214	WYNN 101.5 LA Baton Rouge 500	tr 0050	WFMP 102.5 LA Baton Rouge 500
0217	WYNN 101.5 LA Baton Rouge 500	0101	WZBZ 102.9 MS Jackson 500
0218	WYNN 101.5 LA Baton Rouge 500	0114	WJLN 95.5 MS Jackson 705
0219	WYNN 101.5 LA Baton Rouge 500	0120	WQXV 107.9 AL Birmingham 385

4-6	tr 0129	<del>WZTK</del>	104.7	AL	Birmingham	705	tr 0009	KRIV	99.5	TX	Brownsville	340
	0159	<del>WENN</del>	107.7	AL	Birmingham	705	0821	<del>WMC</del>	99.7	TN	Memphis	570
	0200	<del>WJCG</del>	104.1	GA	La Grange	800	0828	<del>WZZI</del>	105.0	TX	Memphis	570
	0207	<del>WOLY</del>	107.3	AL	Florence	685	no sign of Little Rock at 44.5 mi.; looks as tho I missed some nice traps earlier this m. o.					
	0214	<del>WHPK</del>	98.1	AL	Payette	685	0850	<del>WJVI</del>	99.7	MS	Jackson	500
	02311	<del>WAPI</del>	94.5	AL	Birmingham	705	4-21					
	0243	<del>WQEZ</del>	96.5	AL	Birmingham		tr 2234	KIEL	95.1	TX	Beaumont	250
	0710	<del>WJMI</del>	99.7	MS	Jackson	500	2301	KHYS	98.5	TX	Fort Arthur	260
	0721	<del>WAFB</del>	98.1	LA	Baton Rouge	435	4-23					
4-7	tr 0032	KRIV	99.5	TX	Brownsville	340	tr 0813	KLLL	96.3	TX	Lubbock	290
	0855	KLLL	96.3	TX	Lubbock	290	0815	KLEK	94.5	TX	Lubbock	
	0859	KLEK	94.5	TX	Lubbock		0825	<del>KRCT</del>	94.3	TX	Ozona	175
	2259	KOBS	104.5	TX	Orange	270	0831	KOMS	92.1	TX	Alice	205
	2300	KHYS	98.5	TX	Fort Arthur	260	new calls, ex-KOPY					
	2306	KLOL	98.5	TX	Lake Charles	310	0903	XHJE	98.9	NL	Monterrey	365
	2332	WEZB	97.1	LA	New Orleans	500	2103	KRIV	99.5	TX	Brownsville	340
	2357	XHJD	98.9	NL	Monterrey	365	2116	KDUV	100.3	TX	Brownsville	
	2359	WVEL	105.3	LA	Slidell 520		2134	KHYS	92.1	TX	Alice	205
4-8	tr 0026	KGRA	103.7	LA	Lake Charles	310	4-24					
	0036	WFMP	102.5	LA	Baton Rouge	435	tr 0746	XHQQ	93.3	NL	Monterrey	365
	0045	WQXY	100.7	LA	Baton Rouge		0749	KOYL	97.9	TX	Odessa	255
	0048	WYXK	101.5	LA	Baton Rouge		0828	XHJD	98.9	Monterrey, NL		365
	0751	KNOE	101.9	LA	Monroe	385	0832	KQIP	96.9	TX	Odessa	255
	0750	KINB	107.3	OK	Poteau	360	0839	KOCV	91.3	TX	Odessa	
4-13							2358	KDUV	100.3	TX	Brownsville	340
tr 2124	XHRL	98.1	NL	Monterrey	365	4-25						
2127	WAFB	98.1	LA	Baton Rouge	435	tr 0003	KRIV	99.5	TX	Brownsville		
2259	XHJD	98.9	NL	Monterrey	365	0019	KIEL	95.1	TX	Beaumont	250	
4-14							0059	KHYS	98.5	TX	Fort Arthur	260
tr 0759	KFNE	95.3	TX	Big Spring	215	4-27						
0800	KOYI	97.9	TX	Odessa	255	tr 2300	KGRA	103.7	LA	Lake Charles	310	
0848	KQIP	96.9	TX	Odessa		4-28						
0900	KYKK	94.1	NM	Humble City	325	0000	KHYS	98.5	TX	Fort Arthur	260	
2304	WEZB	97.1	LA	New Orleans	500	0748	KTAL	98.1	TX	Texarkana	305	
2330	XHJD	98.9	NL	Monterrey	365	0759	KOSY	102.5	AR	Texarkana	305	
2334	KTDY	99.9	LA	Lafayette	385	0801	KZMR	104.5	TX	Orange	270	
4-15							new calls; ex-KOBS					
tr 0100	WVEL	105.3	LA	Slidell	520	0814	KYKJ	102.3	TX	Jasper	250	
0101	KGRA	103.7	LA	Lake Charles	310	0824	KGRA	103.7	LA	Lake Charles	310	
0751	KLLL	96.3	TX	Lubbock	290	2115	WAFB	98.1	LA	Baton Rouge	435	
0753	KYKK	94.1	NM	Roswell	410	2300	WVEL	105.3	LA	Slidell	520	
0800	KBIM	94.9	NM	Roswell	410	2302	WEZB	97.1	LA	New Orleans	500	
0816	KLEK	94.5	TX	Lubbock	290	2323	WYXK	101.5	LA	Baton Rouge	435	
0828	XHJD	98.9	NL	Monterrey	365	2334	KIEL	95.1	TX	Beaumont	250	
2137	WFGI	103.3	LA	Hammond	475	4-29						
2149	WAFB	107.3	FL	Pensacola	665	tr 0817	WJMI	99.7	MS	Jackson	500	
2300	WFCS	89.3	FL	Pensacola		0821	WAFB	96.1	LA	Baton Rouge	435	
212	KNOE	101.9	LA	Monroe	385	0832	KLLL	96.3	TX	Lubbock	290	
223	WAFB	98.1	LA	Baton Rouge	435	0838	KWOE	106.9	OK	Clinton	325	
4-16							0839	KOFM	104.1	OK	Oklahoma City	325
tr 0001	WEZB	97.1	LA	New Orleans	500	0846	KRLG	98.1	OK	Lawton	260	
0005	WVEL	105.3	LA	Slidell	520	0849	KLEK	94.5	TX	Lubbock	290	
0028	WJMI	99.7	MS	Jackson	500	0923	WZZQ	102.9	MS	Jackson	500	
0030	WBYU	95.7	LA	New Orleans	500	1800	WAFB	98.1	LA	Baton Rouge	435	
0031	WLTN	95.5	MS	Jackson	500	2310	WPEQ	104.7	FL	Tampa	985	
0039	WPNO	99.5	LA	New Orleans	500	2354	WPMF	10.5	LA	Baton Rouge	435	
0043	WQUE	93.3	LA	New Orleans		4-30						
0057	WML	101.9	LA	New Orleans		tr 0042	WFSU	91.5	FL	Tallahassee	840	
0100	KLOL	98.5	LA	Lake Charles	310	0109	WJMI	99.7	MS	Jackson	500	
0105	WRMY	106.7	AL	Enterprise	745							
0107	WPFM	107.9	FL	Panama City	765							
0112	WKXI	94.7	MS	Jackson	500							
0754	WALT	97.1	MS	Meridian	585							
0800	WFCS	89.3	FL	Pensacola	665							
0814	WZZQ	102.9	MS	Jackson	500							
0845	<del>KXKZ</del>	107.5	LA	Ruston	360							
0930	WQMV	98.7	MS	Vicksburg	460							
0931	WKYV	106.7	MS	Vicksburg	460							
0820	KWLV	107.1	LA	Many	290							
0816	WLTN	95.5	Jackson		500							
4-17												
tr 0000	KSLI	96.9	LA	Alexandria	355							
0846	KWOE	106.9	OK	Clinton	325							
2315	KTAL	98.1	TX	Texarkana	305							

In spite of a few good spells of tr, April turned out to be somewhat of a disappointment. During the latter half of the month there was a 10 day period when no 500+ mile tr was heard. One doesn't expect this during the peak month of the Gulf tr season. As you can see, however, it was far better than the lousy conditions of just two months ago. The weekend of 3/31-4/2 was fairly productive with a few south LA stations (all new) booming in over some Houston stations, not to mention a little 700+ mi. tr. The tr duct during the morning of 4/5 was strange as there was no sign of Baton Rouge and New Orleans in the 400-500 mi. range cont.....

which lie along the path to Panama City; however, Monroe and Jackson to the ENE were in. Although it probably couldn't be categorized as the best all around opening during April, the duct to AL during the wee hours of 4/6 was probably the most exciting. Most Birmingham stations eventually just about pegged the meter. Indicative of the nature of this opening is the fact that I probably heard the gospel programming of WJNC 93.7, Birmingham, but KLBW at 40 mi. was a bit much for me to decipher this one. There was another good opening to the New Orleans area on 4/15-16 with WFOJ 89.3 fairly strong at 0800 on 4/16. There were numerous super-intense "nuisance" openings covering all of south Texas during late April but most of the openings to Monterrey have been rather poor; tropo to Monterrey was better last Nov. When Tampa and Tallahassee finally made it in again at the end of the month, they weren't received via the type of opening that I had expected. Rather weak and erratic signals were observed for the Elidell, Baton Rouge, and Jackson stations that I managed to hear. Reception of WRPQ was extremely weak and short lived as it was soon swamped by KZME and KPLR. Although reception of WFSU was noted for a longer period of time, it was also extremely weak. Last but not least, I finally managed to pull in New Mexico via tr in mid-April.

The large number of new loggings is attributable to the fact that this is the first spring that I've been able to go after the tr with a rotor. My FM DX bears no resemblance whatsoever to that seen on the TV using its lousy antennas. Of the 40 new stations listed here I've managed to tape the legal CE (though some of these are of poor quality) for all except KAJM, WQUR, KMLV, WQMV and WMC. My mileage estimates probably aren't the most accurate but they should serve the more important function of indicating the extent of these openings. Please include some sort of mileage estimate with your noteworthy tr catches whether noteworthy for you is 200 or 700 mi.

There haven't been any signs of any late April skip openings. It looks as though the '78 skip season is going to be like the rest of the 78 DX: late and below par. P.S.: It looks like I spoke too soon about the skip season. A few hours after I typed this up (I tuned in at 2000 CDT) we had a skip opening to the VA area. I only logged four static but MUF hit at least 106.5. At least it's a start.

Glenn Hauser, University Radio WUOT, Knoxville, TN 4/30 (CST)

Equipment; Pioneer TX 9100 tuner, Channel Master 3617 ant. just above one storey roof level with Radio Shack rotor.

A nice example of Es correlation with solar activity occurred on Sunday, April 30. I was listening to CBC Northern Service on shortwave 11.72 MHz, when within a few seconds at approximately 0850 CST, the signal completely disappeared, the noise level rose, and a check of other shortwave bands showed few, if any, signals to be heard. This was an SID (sudden ionospheric disturbance) caused by a solar flare a few minutes earlier. As soon as this happened, I turned on the TV, and by 0930 was getting first Es of the season, from KGFT-4, KIII-3, KRGV-5, etc., and when FM was checked at 0935, there on 96.1 was "LA W del Valle" (KJWW Harlingen) with a political spot for Joe G. Villareal in stereo. Then at 0944 I logged KMW 96.9 (SS), McAllen, TX, a station which has recently affiliated itself with the well-known shortwave station HCJB, Ecuador. At 0945 tuned up to 98.5 and found in Spanish, weather for the Texas valley, then into Spanish "love talk" so that was KQXX, McAllen. At 0948 there was even CGI to local WOKI 107.7, from KESI Edinburg, with EZ music, finally something in English! which had an ID at 0958 by a woman as "Beautiful FM 108, KESI, Edinburg, All Music All The Time", which I taped. (This "AMATT" garbage, which is an insult to anyone's intelligence, has led me to tape an ID for WUOT which goes "All Music, Part of the Time!") At 1008 and for half an hour afterwards, there was Tex-Mex music on 91.3, in and out, probably one of the Texans, tho I was hoping for Mexico. Also on 88.7 some rock at 1010, likely KUHF, Houston, as by then the TV skip had moved to KJAC-4 et al. I checked all the Matamoros and Monterrey frequencies listed in the latest FM Atlas, but not a peep. The skip may not have reached Monterrey, but Matamoros surely would have come thru if the stations were actually on the air. I'm now living in the eastern part of Knoxville, much too close to local xmters on Sharp's Ridge for DX comfort. I hope to be getting some DX reports at WUOT, 91.9 this summer from WIFDA members, sufficiently detailed so I don't have to "unverify" them as has been the case with a few recent ones. Until the next, 73. (report again soon, db)

ES FROM LAST SUMMER:

Mr. Pat Dyer WA5ITX, 5315 Silvertip Br., San Antonio, TX June, 1977 (CST) = tentative

6 1602-25 unIDs 88-95			
1628 WFRJ 96.7 WV 1170	2135 KALL t94.1 UT 1080	1837 KLYD t94.1 CA 1250	
1629 WJGS 98.5 MI 1270	2150 KBAR t98.3 ID 1230	1838 KMJ t97.9 CA 1315	
1632 WFMT 98.7 IL 1045	2158 KXZJ 95.7 ID 1265	9 0929 KGAF 94.5 TX 300 (tr)	
WLAK 93.9 IL 1045	2203 f/out	0945 KEYA t88.5 ND 1335	
WFZ 94.5 PA 1280	8 1810 KLCN t88.1 CA 1180	CBW t 98.3 Man 1410	
1633 WDOC 95.5 KY 1065	KCSN t88.5 CA 1210	0957 CKY t92.1 Man 1410	
(MUF 105.7)	KLLU t89.7 CA 1140	0958 KQDY 94.5 MD 1200	
1643 WJOI 93.7 PA 1280	KFGS t 89.3 CA 1185	1055 KASD 88.3 SB 1020	
1645 WXIL 95.1 WV 1180	1815 KJOI t98.7 ca 1190	1058 KPJM 89.3 SD 1020	
1706 WUUU 94.5 SC 1010	1817 KFOL t93.9 CA 1190	1500 KEYA 88.5 ND 1335	
1755 WYSU t 88.5 OH 1275	1820 KXTZ t94.1 NV 1040	1507 KQWB t98.7 MN 1205	
1800 WHBC 94.1 OH 1235	1821 EKOF 93.5 CA 1195	1507 CBW 98.3 Man 1410	
1827 f/out	KILA t95.5 NV 1040	1520 KQDY 94.5 ND 1200	
7 1748 WVCU t89.7 FL 1150	1836 KWXY t98.5 CA 1080	1520 KPJM t89.3 ND 1240	

9 1525 KQJB t97.1 ND 1305  
 1528 KWYR 93.7 SD 960  
 1545 KMTN 96.9 WY 1175  
 1550 KSIH t94.9 ID 1195  
 KMTW 96.5 ID 1265  
 1559 KBPK 92.3 ID 1370  
 1601 KBOI 97.9 ID 1370  
 KBXL 94.1 ID 1390  
 1602 KBAR t98.3 ID 1230  
 1604 KEZJ t95.7 ID 1265  
 KCGM 95.7 MT 1380  
 1607 KUPI 99.1 ID 1215  
 1613 KDXU t93.5 UT 1005  
 1618 KBYU t88.9 UT 1045  
 KUDR t90.1 UT 1080  
 1622 KUWZ 96.9 ID 1380  
 KFXD t94.9 ID 1380  
 1627 KHLI 97.7 ID 1215  
 1635 KTAJ 93.5 WY 1080  
 1702 KCFX 98.7 UT 1080  
 1707 KEZJ 95.7 ID 1265  
 1734 KSNM t93.7 ID 1265  
 1754 KSUB 92.5 UT 1005  
 1800 KXTZ t94.1 NV 1040  
 1808 KDXU 93.5 UT 1005  
 1858 KROE 94.9 WY 1150  
 1932 KQDY 94.5 NK 1200  
 1935 KRFM t89.3 ND 1240  
 KEJA t83.5 ND 1335  
 1940 f/out (lull) 1906-1932  
 10 1500-1404 unIDs 88-89  
 1535-1600 unIDs to 98.5  
 1603 KLUC t98.5 NV 1040  
 KTRI t92.3 NV 1040  
 1603 KDXU t93.5 UT 1005  
 1614 KNIS t94.7 NV 1370  
 1617 KNEV 95.5 NV 1380  
 1618 KILA 95.5 NV 1380  
 1627 DVLV 99.3 NV 1330  
 1628 KRNO 106.9 NV 1380  
 (1630-55, with VOR's)  
 1659 KLUB 97.1 UT 1080  
 1701 KCFX 98.7 UT 1080  
 1704 KALL 94.1 UT 1080  
 1715 KSIH 94.9 ID 1194  
 1720 KEZJ 95.7 UT ID 1265  
 1723 KMTW 96.5 ID 1265  
 1728 KUDR 90.1 UT 1080  
 1750 f/outs  
 1850 KANW 89.1 NM 620  
 KLTJ t88.3 NM 620  
 1854 KPMC t96.1 UT 1045  
 1931 KDXU 93.5 UT 1005  
 KBRE t94.9 UT 1004  
 2002 KMTT 93.7 OR 1605  
 state #40, double skip  
 2008 KLUC 98.5 NV 1050  
 2015 KXTZ 94.1 NV 1040  
 2018 KOPK 97.1 NV 1040  
 2102 KPSC t89.3 CA 1185  
 KKLK 88.9 CA 1190  
 KCSN t88.5 CA 1210  
 KLLU 89.7 CA 1140  
 KCRW t 89.9 CA 1200  
 KPFK 90.7 CA 1190  
 KUSC t91.5 CA 1190  
 2105 KVIM 93.7 CA 1070  
 KBBL t 99.1 CA 1140  
 KJOI 98.7 CA 1190  
 KNOB t97.9 CA 1180  
 2120 KFSD t94.1 CA 1120  
 KLRD t94.9 CA 1120  
 2125 KYXY t96.5 CA 1120  
 2130 f/out  
 11 1015 KFSD t94.1, KLRG,  
 KYXY KIFM KPFI, CA

11 (1025-1105, spotty VOR's)  
 1032 KFMB t100.7 CA 1120  
 KGR t 100.5 CA 1150  
 1046 KAFX t107.9 CA 1150  
 1110 f/out  
 1142 KVIM t93.7 CA 1070  
 1150 TG-- 88.8 Gu 1120  
 1154 " 96.1 "  
 1158 98.6  
 t 88.1  
 1202 t 94.9  
 1215-1230, lull  
 1232 KNOB t 97.9 CA 1180  
 1245 f/out  
 1330 KPFK t90.7 CA 1190  
 KPSC t89.3 CA 1185  
 KCSN t88.5 CA 1210  
 1348 KPLO t93.9 CA 1190  
 1352 KSOM t93.5 CA 1155  
 1618 KQYN t95.7 CA 1065  
 KBBL t99.1 CA 1140  
 1620 KOLA t99.9 CA 1135  
 1622 KWST 105.9 CA 1190  
 1625 KAFX t107.9 CA 1150  
 1642 KWAO 106.3 AZ 850  
 1643 KROQ 106.7 CA 1185  
 1645 KITT t105.3 CA 1120  
 KNACT t105.5 CA 1180  
 KBIG t104.3 CA 1190  
 KRUT t103.3 CA 1270  
 KOST t103.5 CA 1190  
 KAGBT t103.9 CA 1195  
 1647 KOTE 106.3 CA 1190  
 (1650-1705, with VOR's)  
 1709 KGRD 103.9 NM 520  
 (implies MUF well over 150)  
 1720 KLUB t97.1 UT 1080  
 1723 KPMC 96.1 UT 1045  
 (over local)  
 KSOPT t104.3 UT 1080  
 KILA t95.5 NV 1040  
 1727 KBAS 95.9 AZ 980  
 1728 KYXY 96.5 CA 1120  
 1729 KGBS 97.1 CA 1190  
 1730 KALJ 95.1 AZ 970  
 KPSG t96.3 CA 1190  
 1741 KWXY 98.5 CA 1080  
 KJOI 98.7 CA 1190  
 1742 KUPD 97.9 AZ 825  
 KBBC t98.7 AZ 835  
 (1740-1845, with VOR's)  
 1858 KFRIT t106.5 CA 1120  
 1903 KWST 105.9 CA 1190  
 1906 KHSJ 105.5 CA 1115  
 1907 KIFM 98.1 CA 1120  
 1914 KHAY 100.7 CA 1250  
 1915 KXTZ 99.9 CA 1270  
 1916 KMAI t107.1 CA 1180  
 1918 KRTH t101.1 CA 1190  
 1959 KDB 93.7 CA 1270  
 2000 KBBY t 95.1 CA 1250  
 2010 f/out  
 12 1037-1041 KFJM t89.3 ND  
 14 1120 unID to 89.5  
 1128 WIAA 88.3 MI 1255  
 1132 WJUR 89.3 IL 1060  
 1143 WFNE 89.3 WI 1190  
 1811 WMPR t88.1 SC 1110  
 WMHK 89.7 SC 1075  
 15 0818-30 unIDs 88-90  
 OS30KSIH 94.9 ID 1195  
 0831 KID 96.1 ID 1215  
 tr 0836 KKKK 99.1 TX 340  
 Es 0851 KMTW t96.5 ID 1265  
 0900 KEZJ t95.7 ID 1265  
 0908 KXTZ 94.1 NV 1050

15 0928 KTRI t92.3 NV 1050  
 16 0950-57 WSWN 89.7 FL 1110  
 1053-111- WMOU 89.7, FL  
 2215 KADt 88.3 SD 1020  
 2218 KUSD t89.7 SD 920  
 2218 KQWB 98.7 SD 920  
 2219 KPNN t97.9 ND 1205  
 KDLC t96.9 SD 1050  
 20 1052 WNCI t97.9 OH 1135  
 1055 WMBD 93.3 IL 925  
 WAKW 93.3 OH 1035  
 1058 WFCJ t93.7 OH 1070  
 1101 WBTJ 95.3 OH 1085  
 1103 WQMS 96.5 OH 1045  
 1105 WPTH 95.1 IN 1095  
 1112 WSLM 98.9 IN 945  
 1114 WLWV 94.9 OH 1045  
 tr 1114 KNCB 94.3 TX 35  
 Es 1123 WSAI 94.1 OH 1035  
 vy spotty after 1130,  
 last gasp apr 1215  
 21 1127 unID 89.7  
 1129 WERN t88.7 WI 1065  
 1130 WFME 89.3 WI 1110  
 1545-50 unIDs 89.3, 88.9  
 2015 KPAK 93.5 WY 1080  
 KSIH t94.9 ID 1195  
 2018 KMTN 96.9 WY 1175  
 2024 KUPI 99.1 ID 1215  
 2029 KOTN t93.3 MT 1245  
 2031 KAWY 94.5 WY 1015  
 2055 f/outs  
 23 1646 WSCI t89.3 SC 1120  
 1649 WZTC t96.9 SC 1120  
 WBBU t98.7 SC 1075  
 1650 WANE t93.5 SC 1110  
 1655-1720 lull  
 1729 WHRT 88.3 OH 1180  
 1732 WTOP t98.1 OH 1235  
 WNBC t94.1 OH 1235  
 1736 WBBY t 93.3 OH 1110  
 1744 WAMO 105.9 PA 1280  
 1747 WYIQ 99.1 PA 1345  
 1806 WNGI 97.9 OH 1135  
 1808 WOKU 107.1 PA 1300  
 1810 WRLE 105.1 WV 1135  
 1812 WEM t107.9 WV 1100  
 1826 WLOA t96.9 PA 1290  
 1827 WPEZ 94.5 PA 1280  
 WJOI t93.7 PA 1280  
 1850 f/outs  
 24 1256 KIMM t98.5 CO 810  
 KKKY 95.7 CO 810  
 1301 KBVL 94.7 CO 820  
 1310 f/outs  
 2150-2205 unIDs 88-89  
 (MUF 89.3)  
 25 0935-1010 unIDs 88-95  
 1013 WEDR t99.1 FL 1150  
 1014 WJNC 97.9 FL 1150  
 WSWN 93.5 FL 1110  
 1015 WNGI 93.5 FL 1050  
 1016 WINK t96.9 FL 1040  
 WJXT t 96.3 FL 1150  
 1020 WMTL 93.9 FL 1150  
 1032 WGOR t93.5 FL 1040  
 1033 WJNZ 94.9 FL 1150  
 1036 WCVU t94.5 FL 1050  
 1039 WYXI 100.7 FL 1150  
 1040 WMOG t99.9 FL 1150  
 WYOR 105.1 FL 1150  
 1105 XEBS t89.7 DF 690  
 1107 XHM t88.9 DF 690  
 XHJL t91.3 DF 690  
 1110 XETI t97.9 JAL 690

25 1115 XHRO t95.5 Jal 690	25 1407 WFOY 97.7 FL 1035	25 1652 WRRH t88.7 WI 1065
1120 XHLC 98.7 Jal	1429 WOHL 98.1 FL 930	1659 WFNE 89.3 WI 1190
1125 f/out	1230 WEGM t98.0 FL 855	soon f/out
1158 WQGU 89.7 FL 1115	1432 WQNE 98.5 FL 780	1800-ten unIDs to 95
1225 WRYO t98.5 FL 965	1433 WBJD t97.7 VA 1085	1814 WVFM 94.1 FL 1010
1227 WCVU 94.5 FL 1040	1441 WQKA 106.7 GA 940	1818 WRGI 93.5 FL 1050
1230 WFFM 94.1 FL 1010	1442 WATL 104.1 AL 670	1820 WCVU t94.5 FL 1050
1230 WMOG 99.9 FL 1150	1455-1510 with VOR'S	WWWL t93.9 FL 1150
1232 WFLA t93.3 FL 985	1514 WSFL 106.5 NC 1305	WYOR t105.1FL 1150
1236 WINK 96.8 FL 1040	WFJS 106.7 SC 1075	WGLO t106.7 FL1150
1240 KOGI 106.5 TX 260	1518 WAUG 105.7 GA 1010	1824 WAXY 105.9 FL 1150
1300 WGLC 106.7 FL 1150	1521 WRNS 95.1 NC 1275	1840 WFLA t93.3 FL 985
1301 WIRK 107.9 FL 1145	1527 WQSM 98.1 NC 1275	1859 WUSF 89.7 FL 985
1305-1320 with VOR'S	1529 WENC 99.1 NC 1200	1900 WMYR t88.1 SC 1110
1322 WZZM t105.5 FL 990	1536 WVCT 106.1 NC 1265	1917 WAAG 94.9 IL 915
1325 WOVV t95.5 FL 1115	WKTC 104.3 NC 1290	1939 WCVU t94.3 GA 1010
1328 WROG 103.9 FL 1035	1542 WNET 107.7 NC 1295	1943 WTVL 99.9 FL 1055
1328 WDUV 103.3 FL 980	1551 WRQR 98.7 NC 1175	1947 WHBF 98.9 IL 945
1337 WYRL 102.3 FL 1090	1554 WRVQ t94.5 VA 1325	1950-2025 with VOR'S
1342 WLOY 98.7 FL 1115	1558 WHPE 95.5 NC 1160	1993 WBBM t107.9 WV 1100
1348 WTAI 107.1 FL 1090	1559 WRBZ 95.7 VA 1375	2047 KSHE 94.7 MO 780
1353 WBLE 105.9 FL 1040	1602 WOFM t94.9 TN 1020	2105 f/out
1358 WRJW 105.1 FL 1035	1613 WFLA 95.3 VA 1325	2230 WIAA 88.3 MI 1255
WYOR 105.1 FL 1150	1614 WYVA t94.1 VA 1370	2300 f/out
1406 WRKT 104.1 FL 1075	lull to 1633	2300 unID 88.7

**EDITOR'S NOTE:**

Regretably, Pat's report represents only three of some 25 aqs. that the previous editor lost or whatever. Pat was just one of several others given similar treatment. So far, Pat has chosen to resubmit three pgs. I think putting together the remaining 22 pgs. for this column would be an overburdensome task for me and Pat both, not to

mention the boredom that very long listings of loggings usually have on the reader. I hope Pat will figure out a way to give us the other results of his prodigious '77 skip season in a summarized version.

Danny Buntin, 1020 S. Duncan, Stillwater, OK 74074, 4-14 to 5-6, '78 (CST, CDT)  
Equipment: Pioneer TX-9100, Antennacraft 10 el. ant., 34 ft. above ground

4-14 Tr 1833 WMC 99.7 TN Memphis, "FM 100", 405 30 Es 2105 95.3 WSCR FL F. "Mfers, as the  
16 1800 KDRB 95.9 KS Derby, new on air 95 mx cent. on a Sun. night in SW FL"

6 Tr 1025 all 3 Abilene, TX stations  
I evidently missed quite a bit of the year's first skip, discovering only its tail end. To add to the excitement there was a tornado warning out at the time and I expected to be perturbed by the piercing scream of the sirens at any minute while dxing but nothing of any consequence happened. Shortly after 2100 Es died. The past winter made tropo go into hibernation. A dozen snowstorms during Jan and Feb caused snow to persist on the ground for most of the period, breaking all sorts of winter weather records. In spite of warm spring weather now no sign of improvement in tropo has been noticed. That's all, 73

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## STATION BREAK

WANTED: Newly reactivated FM/TV DXer wishes to buy Broadcasting Yearbook 1978, 77 or 76. State asking price, condition. Also seeks preamp in good working order. Richard E. Wood, Boyd Hall, Plymouth State College, Plymouth NH 03264. Phone prepaid (603) 536-3437; work (603) 536-1550, ext. 303.

Ken Simon reports DXer Keith Hamer has a car security device activated by courtesy light door switches. Also operates car horn after short delay, suitable for negative or positive 12 volt grounds, is solid state and is supplied with installation instructions and switch with mounting bracket.

USA Price (for WFFDA members) \$34. Send orders in Pounds Sterling to 7 Epping Close, Mackworth Et., Derby, United Kingdom.

LUCKY SEVEN TV: Your editor would like to thank the many members who sent in articles on the recent Syracuse NY pirate TV station. With such widespread coverage of the station in the national media it will not be repeated in detail here.

# NORTHERN FM-DX

Bruce Goldsen  
27 Spruce Hill Road  
Georgetown, CT 06829  
(203) 544-8129

June 1978

Deadline: the 10th

Send in your DX now, if you live in WA,OR,ID,WY,ND,SD,NE,MN,IA or east of the Mississippi River and north of the Mason-Dixon line.....

Only two reports this month; hope to see many more next month as "the season" draws near.

Frank Aden, Jr.-1535 NW Ithaca Ave.-Bend, OR 97701 (PST)

4/10, All loggings AU

1800 KAOS 89.3 WA Olympia, very weak and distorted, new  
1805 KPEC 90.9 WA Tacoma, talk noted, new  
1807 KIXI 95.7 WA Seattle, MOR, new  
1815 KNEQ 97.3 WA Tacoma, rock, one of the strongest in, new  
1818 KING 98.1 WA Seattle, talk, relog  
1820 CBUP 97.7 BC Vancouver, French CBC, new  
1825 KONA 105.3 WA Kennewick, MOR, regular Tr station here, but in AU  
1830 KBLE 93.3 WA Seattle, MOR, very weak, new  
1835 KUOW 94.9 WA Seattle, music possibly, very weak, relog  
1840 KYAC 96.5 WA Seattle, rock, very strong but distorted, new  
1845 KELA 102.9 WA Centralia, very weak, relog.

Got a good AU opening the 10th. Good to see this happen. Since moving to this location in 1975 I have not been able to hear any Seattle-Tacoma-Vancouver DX since a 6000 ft butte is  $\frac{1}{2}$  mile to north. At old location, used to have that area a regular on Tr. This allows me to fill in a few holes... Receiver: TX7500 Pioneer; Antenna: Winegard SC650 with preamp, rotor at 25 ft. Antenna pointed 90° from Seattle (towards NE). 73, Frank.

Mike Bugaj-69 Sherman Road-Enfield, CT 06082

10/18 AU 1820-1920 WMUZ 103.5 MI Detroit  
WBFG 98.7 MI Detroit  
10/31 Tr 2103 WBEN 102.5 NY Buffalo, super strong, almost pegging  
2110 CHSC 105.7 ON St. Catharines  
WHLD 98.5 NY Niagara Falls, c  
CKDS 95.3 ON Hamilton, EL  
2210 CHUM 104.5 ON Toronto, r  
12/2 Es 1901 KEZQ 94.1 AR Little Rock  
KLAZ 98.5 AR Little Rock, Z-98  
1/4 AU 1730-2000 WMUZ 103.5 MI Detroit  
WBFG 98.7 MI Detroit  
4/4 AU 1800-1950 WMUZ 103.5 MI Detroit  
WPHD 103.3 NY Buffalo  
WTOF 98.1 OH Canton  
1900 WNCI 97.9 OH Columbus, rock, ID

WNCI is new logging, first new station since 9/10/77. This sure was a long, hard winter, and so far this spring hasn't been too great for DX, but at least the snow is gone and the grass is getting green. 73.

I noticed that last column, I listed the deadline on the masthead as the tenth, and gave it as the 15th at the end of the column. From now on, it will be the tenth. Good DX to all in the coming season, 73, Bruce.

NEWS NOTES: Walter Patton reports WTFDA member and CRTC lawyer is overseeing the prosecution of 5 Canadian TV stations charged with falling short of the mandatory minimum level of Canadian program hours.

Station involved are CITY-TV, CJON-TV, CFOM-TV, CHEX-TV and CKPR-TV. These are the first stations to be charged with violating the program rules.

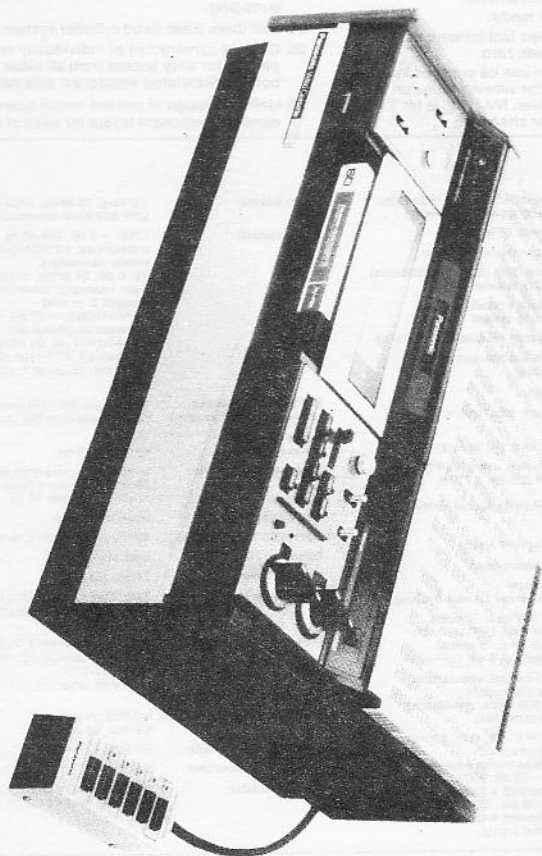
Regulations require Canadian stations to program 50% Canadian programs between 6 p.m. to 12 midnight.

# NV9300 The Dream Machine

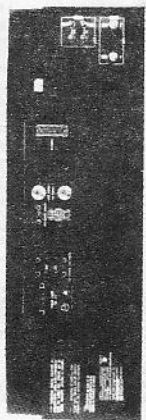
The PANASONIC NV-9300 Videotaperecorder is a DXer's dream machine. It has built in tuners for recording both VHF and UHF channel off-air programs. A pause feature allows a DXer to cut and edit unwanted material. The NV-9300 has extra features such as still frame capability with still frame adjustment, crash edit for joining video and audio segments and remote controllability. List price is \$1900 less RF adapter (ch. 5 or 6 optional at \$75.)

## Panasonic

Model NV-9300  
3/4" Video Cassette Recorder with VHF/UHF Tuners  
with optional remote control unit NV-A152



rear view



## FEATURES

1. Color or black-and-white recording and playback of 3/4" video cassettes.
2. VHF and UHF tuners for recording TV broadcasts.
3. High quality pictures, with 45 dB signal-to-noise ratio.
4. High resolution: 330 lines monochrome. 240 lines color.
5. Controls are non-locking pushbuttons with logic memory; just a light touch is all that is needed to change functions.
6. Still framing, with still frame adjustment.
7. Optional remote control unit, NV-A152, controls record, play, fast forward, rewind, stop, and pause (still frame).
8. Automatic gain control of video and audio levels.
9. Automatic rewind at end of tape.
10. Auto Repeat playback mode.
11. Auto Search mode stops fast forward or rewind when tape counter reads zero.
12. Optional RF modulator can be plugged into the back of the recorder, for viewing tapes on a conventional TV receiver. NV-U105 is for TV channel 5, NV-U106 for channel 6.
13. VTR/TV antenna switch selects source for TV receiver: optional RF modulator or external TV antenna.
14. Two audio channels.
15. Front panel microphone input jacks.
16. Audio monitor output.
17. Standard output connectors: 8-pin video/audio, UHF-type video, and RCA-type audio.
18. Dropout/noise compensator.
19. Automatic phase control (APC) for stability of the color signal.
20. HPF™ video heads.
21. Skew and tracking controls.
22. Die-cast chassis for strength and durability.
23. New gear tape loading system for reliable tape threading.
24. Belt drive video head cylinder system.
25. Cabinet constructed of individually removable panels, for easy access from all sides, top, and bottom. Simulated woodgrain side panels.
26. Uniform design of printed circuit boards, with low density component layout for ease of servicing.

## SPECIFICATIONS

<b>Tape Format:</b>	U-Vision 3/4" (19mm) wide video cassette tape (high density)	<b>Video Output:</b>	1.0 Vp-p, 75 ohms, unbalanced, UHF and 8-pin connectors
<b>Power Source:</b>	120V AC, 60 Hz	<b>Audio Output:</b>	LINE: -6 dB, 600 ohms, unbalanced, x 2 RCA-type phono connectors TV: 0 dB, 5K ohms, unbalanced, 8-pin connector (channel 1, channel 2, or mix) HEADPHONE: -32 dB, 8 ohms, unbalanced, phone jack MONITOR: 0 dB, 5K ohms, unbalanced, RCA-type phono connector (channel 1, channel 2, or mix)
<b>Power Consumption:</b>	Approximately 130 Watts	<b>Horizontal Resolution:</b>	B/W: more than 330 lines Color: more than 240 lines
<b>Television System:</b>	EIA standard (525 lines, 60 fields) NTSC type color signal	<b>Audio Frequency Response:</b>	50 to 15,000 Hz
<b>Video Recording System:</b>	Two rotary heads, helical scanning system	<b>Signal-to-Noise Ratio:</b>	Luminance: more than 45 dB (Rohde & Schwarz noise meter) Audio: more than 45 dB
<b>Luminance Signal:</b>	Frequency modulation recording	<b>Audio Crosstalk:</b>	More than 40 dB
<b>Color Signal:</b>	Converted sub-carrier direct recording	<b>Operating Temperature:</b>	41° F to 104° F (5° C to 40° C)
<b>Audio Track:</b>	2 Tracks	<b>Operating Humidity:</b>	Less than 80%
<b>Tape Speed:</b>	3 3/4 i.p.s. (95.3 mm/s)	<b>Weight (approx.):</b>	74 lbs. (33 Kg.)
<b>Relative Head to Tape Speed:</b>	404.3 i.p.s. (10.26 m/s)	<b>Dimensions (approx.):</b>	24 1/2" (W) x 18 1/2" (D) x 9 3/4" (H) 621 mm (W) x 472 mm (D) x 238 mm (H)
<b>Record/Playback Time:</b>	60 minutes, using NV-P26 tape; length approx. 1,175 ft.	<b>Standard Accessories:</b>	1 pc. AC power cord, VJA33 1 pc. VTR/Monitor connection cable, NV-C15 1 pc. dust cover
<b>Fast Forward/Rewind Time:</b>	Less than 3 minutes w/NV-P26	<b>Optional Accessories:</b>	
<b>Heads:</b>		<b>3/4" Video Cassette Tape:</b>	NV-P23, 30 min. NV-P26, 60 min.
<b>Video:</b>	2 rotary HPF heads	<b>Head Cleaning Tape:</b>	NV-P20
<b>Audio/Control:</b>	1 stationary head	<b>Remote Control Unit:</b>	NV-A152
<b>Erase:</b>	1 full track 1 for channel 1 audio dubbing	<b>RF Modulator:</b>	NV-U105, for TV channel 5 NV-U106, for TV channel 6
<b>Video Input:</b>	LINE: 1.0 Vp-p, 75 ohms, unbalanced, UHF connector TV: 1.0 Vp-p, 75 ohms, unbalanced, 8-pin connector		
<b>Antenna Input/Output:</b>	VHF: 75 ohms, unbalanced, F-type connectors UHF: 300 ohms, unbalanced, screw terminals		
<b>Audio Input:</b>	LINE: -20 dB, 100K ohms, unbalanced, x 2 RCA-type phono connectors MIC: -78 dB, 250 ohms, unbalanced, x 2 phone jacks TV: -20 dB, 100K ohms, unbalanced, 8-pin connector (channel 2 only)		

**Panasonic**  
just slightly ahead of our time

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DISTRIBUTED BY:



ch. E-2, 48.25/53.75		
Austria	Jauerling	ORF-1 60/12kw
Belgium	Aalter	ERT-TV 100/25
Finland	Tai Valkoski	OYE-TV I 15v
	Tampere	OYE-TV II 10v
W. Germany	Grunten	Bayerischer R-I 100h
	Biedenkopf	Hessischer R-I 100/5kw
	Steinkimmen	NDR-TV 100h
	Gottelborner	Saarlander-TV 100/20kw
Norway	Greipstad	NRK-TV 60kw
	Gulen	NRK-TV 30kw
	Melhus	NRK-TV 100kw
	Steigen	NRK-TV 60kw
	Varanger	NRK-TV 30kw
Spain	Madrid	TVE I 250h
	Santiago	TVE II 40h
Sweden	Horby	Sveriges Radio 100h
	Crebo	Sveriges Radio 60h
	Vannas	Sveriges Radio 60h
	Uddevalla	Sveriges Radio 5v
Switzerland	Bantiger	SBC-TV German 100kw

ch. E-3, 55.25/60.75		
Belgium	Cugree	RTB-TV 100/25h
Denmark	Funen	Radio Denmark 10/1h
Finland	Tervola	OYE-TV I 20h
W. Germany	Kreuzberg	Bayerischer Radio-I 100h
E. Germany	Helpterberg	DDR-TV
Iceland	Stykkisholmur	IBS-TV 90kw
Norway	Bagn	NRK-TV 10kw
	Gamlemsveten	NRK-TV 10kw
	Hermnes	NRK-TV 60kw
	Kautokeino	NRK-TV 8kw
Portugal	Coimbra	RTV Portugesa-I 60/12h
Spain	Oviedo	TVE-I 70h
	Alicante	TVE-I 60h
	Zaragoza	TVE-I 35h
Sweden	Skovde	Sveriges Radio-I 60h
	Sveg	Sveriges Radio-I 60h
Switzerland	Uetliberg	SBC-German 60kw
Yugoslavia	Kopaonik	RTV Yougoslave 50/10kw
	Kum	TV-Slovenia-I 50/10kw

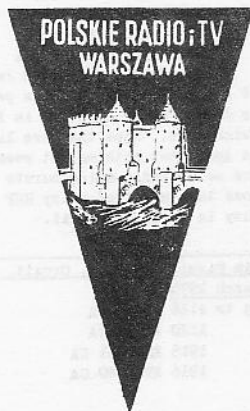
ch. E-4, 62.25/67.75		
Austria	Patscherkofel	ORF-TV-I 60/12h
Denmark	Copenhagen	Radio Denmark 50/5h
Finland	Vuokatti	OYE-TV I 0.2v
		OYE-TV I 40h
W. Germany	Ochsenkopf	Bayerischer R-I 100v
	Flensburg	NDR-TV-I 50h
	Raichberg	SWF-TV 100h
	Cottbus	DDR-TV I 70/14v
E. Germany	Isjesselstein	NCS-TV I 100/10
Holland	Skalafell	IBS-TV 300kw
Iceland	Gagneheidi	IBS-TV 80kw
Italy	M. Penice	RAI-TV I 100kw
	Polmezo	RAI-TV I 0.13kw
	M. Faite	RAI-TV I 40kw
Norway	Bremanger	NRK-TV 30kw
	Hadsel	NRK-TV 30kw
	Kongsberg	NRK-TV 30kw
Spain	Barcelona	RTE-I 150h
	Sevilla	TVE-I 120h
	Coruna	TVE-I 120h
	Bilbao	TVE-I 60h
	Madrid	TVE-I 2h

Ch. E-4 Continued		
Sweden	Stockholm	Sveriges
	Radio-I 60h	
	Ostersund	Sveriges
	Finnveden	Sveriges
	Avlsbyn	Sveriges
	Radio-I 60h	
Switzerland	Dole	SBC-French
	144kw	
Yugoslavia	Labistica	TV Croatia
	I 15/3h	
	Fsunj	TV Croatia
	I 100/20kw	
	Pelister	TV Mace-
	donia I 10/2kw	
Channels E-5 and E-6 will be listed next month.		

Mike has also compiled ch. E stations for Africa and these will be published at a later date.



TéléDiffusion de France



# WESTERN TV-DX

Bill Block  
9307 S.E. Clay St.  
Portland, OR 97216  
(503) 256-2354  
Deadline: 5th

June 1978

Scattered E-skip openings were observed by a few DXers. Skip was seen on March 19th, April 14th, 30th and May 8th and 13th. Skip here in the Pacific Northwest has been slow so far this year. This last week there has been several weak openings. The Es chart will be in the July WUD and now on to the reports.

Doug Everitt, 1710 W. Maine, Enid, Oklahoma 73701 CST

Sony KV1203, KV5100, Magnavox CF4471, Winegard yagis, Pincos P-7 dish.

March 1978

19 Es 2130 XEW? 2 DF (T) 30 Es 1045 WEDU 3 FL 1080mi  
          XHTV? 4 DF (T) 1100 WESH 2 FL 1100mi  
          2159 XEWO 2 1959 WESH 2 FL 1100mi  
                          WREL 3 GA 790mi  
(ID slide: location uncertain) 2000 WSAV 3 GA 1000mi

April 1978

11 Es 2118 ???? 2 south WJXT 4 FL (T)  
30 Es 1045 WPBT 2 FL 1290mi 2100 WEDU 3 FL 1080mi  
2150 XEW 2 DF (T)

I finally got the AR-33 rotator moving again, although it still looks like I'll have to replace it. Es has been surprisingly scarce up thru late April, but it looks as if the season may be getting underway as I write. Another factor is a lack of time to DX. Best of luck for the Es season, and, as usual, 73 & the Best of DX to everybody. Doug

Pat Dyer, 5315 Silvertip Drive, San Antonio, Texas 78228 CST

9" b&w 1976 Penncrest, 17" RCA XL-100, VHF hi-low V-100, 8-bay bow tie UHF array at 20' with rotor.

March 1978

19 Es 2025 XHI 2 SON 715mi  
          2135 f/out  
31 tr 0849 KPLC 7 LA 325mi

April 1978

01 tr 0830 KEST 2 AR 515mi  
          2200 KALB 5 LA 385mi  
          WAFB 9 LA 450mi  
          2235 KPLC 7 LA 325mi  
14 Es 1158 WSJK 2 TN 1010mi  
tr 2300 WAFB 9 LA 450mi  
26 Es 1045-1110 unIDs 2  
          1145 WDTN 2 OH 1075mi  
          1146 WAVE 3 KY 945mi  
28 tr 0006 KTRE 9 TX 265mi  
          0017 WAFB 9 LA 450mi  
          0130 KPDM 6 TX 275mi

April 1978

30 Es 0755 WCIV 4 SC 1120mi  
          0759 WCBF 2 SC 1120mi  
          0810 unIDs 2-6 MUF  
          107.9 by 0918.  
          0829 WECT 6 NC 1250mi  
          WWAY 3 NC 1250mi  
          0857 WAGA 5 GA 880mi  
          WSB 2 GA 880mi  
          0929 WJBF 6 GA 1105mi  
          1129 WSJK 2 TN 1010mi  
          1145 f/out  
          1459 WPSX 3 PA 1370mi  
          WATE 4 PA 1280mi  
          1517 KDKA 2 PA 1280mi  
          1532 WAVE 3 KY 945mi  
          1559 WDTN 2 OH 1075mi

April 1978

30 Es 1700-1800 unIDs MUF  
          98.7 by 1900  
          1759 KNOP 2 NE 815mi  
          1859 WSJK 2 TN 1010mi  
          2059 KOTA 3 SD 1040mi  
          2125 KOA 4 CO 810mi  
          2227 KWGN 2 CO 810mi  
          2354 KTVQ 2 MT 1245mi

May 1978

01 Es 0000-0020 unIDs 2

Well, after a very slow Jan-Feb-Mar Es season the last day of April let us know that it still exists. This was perhaps the best single day since Oct 28 and before that August or July. April 30 TV Es in for some 13 hours. Did fix the tunder proble with Ch 2 & 3 swich lugs. Hope the cure lasts and nothing more befalls it. Some 50-MHz F2 openings in April but nothing got even close to the TV range with it. Lots of flare activity and solar radio noise bursts from them very noticable on the TV (i.e., makes Ch 2 "snow" look like a lot of noisy UHF channels). Aurora up north should have kept a lot of folks busy in March and April.

Jim Pizzi, 300 Park, Orcutt, CA 93454 PST

March 1978

28 tr 1116 KB3BJ CA  
          1120 K29AB CA  
          1915 KMUV 31 CA  
          1916 KTXL 40 CA

28 tr 1916 KQVR 13 CA  
          1920 KTEH 54 CA  
          1920 KGSC 36 CA  
          1926 K74CS CA

28 tr 2001 KMPH 26 CA  
Frontal system passing  
thru excellent opening  
to Sacramento area.

Jim Pizzi continued....

April 1978

03 tr 1845	KBSC 52 CA	03 tr 1847	KHJ 9 CA	13 tr 1520	KMEX 34 CA
1847	KLCS 58 CA		KTTV 11 CA		1521 KTBW 40 CA
	KTEN 40 CA		1933	KCOF 13 CA	1522 KBSC 52 CA
	KWHY 22 CA	10 tr 2159	KSTV 10 CA		1522 KLCS 58 CA
	KCET 28 CA		2159	KFMB 8 CA	1543 KQED 9 CA
	KMEX 34 CA	13 tr 1517	KABC 7 CA	<u>May 1978</u>	
	KSCI 18 CA		KHJ 9 CA	08 Es 1120	KDIX 2 ND
	KHOF 30 CA		KCET 28 CA		1230 KREM 2 WA
	KABC 7 CA		KHOF 30 CA		1142 KXLY 4 WA
					1300 CHCC 2 BC

Bob Cooper Jr., Rt 5, Box 364, Guthrie, OK 73044

It has been more than a year since I updated the TV DX status around here. With more and more of my time occupied with satellite TV reception systems and work terrestrial DX has somewhat neglected I am afraid. I have kept an active interest in tropo and when it is up I pay close attention to what is going on. Es however has slipped in interest here to the point that I often fail to even note it in the log. New stations in the past year have been: KORO-28, KTIN-21, WZTV-17, WXII-12, WCES-20, WRET-36, WJKS-17, KTVP-29, KIIN-24 and KOET-3. For those interested in satellite reception equipment developments in this new field are racing ahead. For example, complete backyard home terminals are now being constructed by reasonably smart people for under \$1,500. Smaller antennas (10 feet in diameter) work everybit as well as the larger versions when the receiver and low noise amplifier are designed for the lower signal levels. In August and September Popular Electronics is scheduled a two part series I have done on satellites and microwave.

Bill Block, 9307 S.E. Clay St., Portland, OR 97216 PDT

May 1978

13 Es 1000	KOA 4 CO 960mi	13 Es 1130	KXJB 4 ND 1190mi	15 Es 1830	KOA 4 CO 960mi	
	1100	KNUH 4 NE 985mi	1130-1240 unIDs 2-5		1900	KTVS 3 CO 930mi

Sony KV2141, Winegard yagis at 30 feet. 73 and good DX.

## TECHNI CORNER

by Frank Aden, Jr.

### A SIMPLE TRAP FOR ADJACENT CHANNEL INTERFERENCE

A simple and inexpensive system to trap out adjacent channel interference requires only a few feet of 300 ohm twin-lead.

By cutting a piece of 300 ohm line proportional to the channel wavelength a relatively good filter is created. Cut the twin-lead to the length listed in the table for the correct channel you wish to trap out. Strip one end off about a  $\frac{1}{2}$  inch and connect the leads to your receiver antenna terminals (do not disconnect antenna). Then let the trap drop or hang. Check your set to see if the interference has disappeared. If not, continue to cut off about  $\frac{1}{4}$  inch at a time until interference does go away.

I used this method in Boise, Idaho for many years to eliminate KBGI-2 from ch. 3. By just cutting the twin lead to  $4\frac{1}{2}$  feet and connecting to set, interference was almost completely gone from ch. 3.

CHANNEL	LENGTH OF TWIN-LEAD	CHANNEL	LENGTH OF TWIN-LEAD
2	$4\frac{1}{2}$ feet	7	$1\frac{1}{2}$ feet
3	4 feet	8	$1\frac{1}{2}$ feet
4	$3\frac{1}{2}$ feet	9	$1\frac{1}{2}$ feet
5	3 feet	10	$1\frac{1}{2}$ feet
6	2 $\frac{3}{4}$ feet	11	1 foot
		12	1 foot
		13	1 foot

If you have any questions or comments write Frank Aden, Jr.



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TO BEAT!**

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VHF-UHF DX  
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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 in the Association of North American Radio Clubs (ANARC).

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The WTFDA is governed by a five-man board of directors, composed of Frank Aden, Jr., Morrie Goldman, Pete Oprisko, Mike Hogan and John Zondlo. ANARC representatives are Morrie Goldman, Pete Oprisko and John Zondlo.

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#####

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