FEBRUARY 1977

INITHIS ISSUE: AUTOMATED FM MS DX, PART 2 UNDERSTANDING POLARIZATION 3 PAGES OF CANADIAN NEWS

Convention '77...

PORTLAND

DUNKIRK

TV-FN

It's Time To Vote!



DEDICATION...This issue of the VUD is being dedicated in remembrance of Pittsburgh DXer Tim O'Malley, WTEDA member since 1975 and a very close friend of your editor. Tim was invaluable during my first few months as editor-in-chief of this magazine, organizing materials and helping out whenever needed. He also served as promotion director and personality on our community radio station for many years. Your editor recalls several memorable all-night DX sessions at Tim's; in fact, more than half of my loggings were made at his hilltop DX site. I was, therefore, very much

shocked and saddened to learn that Tim, a nineteen-year-old college student, had passed away on the morning of January 12. On behalf of WTFDA and its members, I'd like to express my deepest sympathies to the O'Malley family on this sad occasion. A scholarship fund has been established in Tim's name at the South Campus of Allegheny Community College in Pittsburgh; any contributions you might care to make would, of course, be welcomed and appreciated.

UHF TRANSLATOR DX GUIDE...We hope you're aware by now that this popular book is out of print. If you'd be interested in helping to compile an updated version of the GUIDE, we'd appreciate your help. A reminder also that we're still looking for volunteers to compile an update to the WTFDA TV STATION GUIDE. If you'd like to help with either task, please write your editor at the address shown on the back cover of this issue.

CONVENTION BLDS...Portland, OR and Dunkirk, NY are the two sites under consideration for WTFDA's 1977 convention location. Please study the data provided on page 25, then let your editor know which is your preference. Only ballots received by February 20 will qualify, so vote today!

BITS...Due to time limitations, Pete Oprisko's educational FM update article has been delayed indefinitely. We'll let you know when it is prepared...Remember that WTFDA Headquarters is now located at <u>P.O. Box 202, Whiting, Indiana 46394</u>. A new masthead for this page, currently being prepared by member Harry Hayes, did not arrive in time for this issue...Next month, the THIS IS YOUR DX column becomes a part of MEMORABILIA, with Robert Williams the editor of both. Please contribute!

This issue marks the beginning of the second year for WTFDA's new editor-in-chief and publishers. On behalf of everyone, I thank you for a very prosperous 1976... may 1977 be as successful for our club!

73. Clarke for Pete, John and Mike

TABLE OF CONTENTS

FCC FM NEWS: "Your Audacity Is Exceeded Only By Your Bad Judgement (sic)".....4 SOUTHERN FM DX: "Just Plain Miserable Weather" Prevails, Prevents Tropo9 WESTERN FM DX: Pat Dyer's Es Loggings Continue, Guatemala Included10 VHF UTILITY DX: WWV Closes Its 20 and 25 MHz Outlets, To DXers' Dismay15 TECHNI-CORNER: Understanding Polarization Can Increase Your Loggings......17 PHOTO-NEWS: More Pictures of DXers, Antenna Systems and "Shacks" Wanted 19 CANADIAN NEWS: Three Pages of the Latest Data from Mark Lewis at the CRTC 20 EASTERN TV DX: "Will Things Get Any Better? They Can't Get Any Worse!!".....23



John Zondlo Deadline: 15th

New Members: AN Leonard W. Gemar

442-60-5738, NATTC, BEQ Millington, TN 38054 441. Com. Dl. Naval Air Station Memphis (63) 8125 Tuscany 3 Faculty Road

Playa Del Ray, CA 90291 Durham, NH 03824

John A. Peterson Emery Swan

Renewals: Michael Albanese, Tim Benko, James Brown, Jr., Bill Draeb, Mike Harron, Albert Kopec, Rod Luoma, W.J. Mansir, Clint McAuliffe, Richard Stein.

Address Changes: Artie Bigley-1309 Timberview-Arlington, TX 76014

Renewals Due in March:

Renewals Due in March: Jim Alexander, Dale Basten, James Bognar, Fred W. Born, Roger Bortree, Roger Brown, J. David Buch, Danny Buntin, Mike Collins, Thomas Cornell, Clinton Day, Mike Dorner, Wayne Fitzgerald, Bill Frahm, Ricky Glasgow, Bradley Griffin, Fhil Hruskocy, Gerald Katz, David Leibold, Tom Leu, Joe Markewicz, Dean Markoshan, Pat Martin, Henry McCoy, Jr., Dean Niemi, Fred Nordquist, Guy Ogden, Les Price, Theodore Quiroz, John Robertson, R. Rouse, Scott Sampson, Bob Seybold, James Shepherd, Craig Simons, Andrew Smith, Joseph Smith, Jr., Richard Steinberger, Don Storms, Mike Sweeney, Pete Taylor, Stave West, Boger Wissor, Wike Worst. Steve West, Roger Winsor, Mike Worst.

Doug Everitt has done it again! LEONARD W. GEMAR has received the third gift membership given by Doug in a year.

EMERY F. SWAN is a zoology professor who learned about the club thru the World Radio-TV Handbook and Hank Bennett's book "The Complete Shortwave Listener's Handbook". Emery says that what he really wants is "to learn first about receivers good for both FM DX and MW BCB DX."

Tidbits ...

Ye editor was saddened to learn of the death of member Tim O'Malley of Pittsburgh. On behalf of the club, I'd like to extend condolences to his family.

Many thanks to the Buffalo Evening News for their plug of WTFDA. Our address appeared in the TV Topics Mailbox column, thanks to WTFDAer Paul Traska, Bill Thompson sent along a copy of the article to yours truly, and he said, "The nice plug for WTFDA should be credited to Paul Traska. He spotted the item about distant TV reception that triggered the flood of letters, and he wrote to the editor of the column, James Brennan, with a letters, and he wrote to the editor of the column, James Brennan, with a bunch of info on the club. As you can see, Paul chose to remain anonymous-probably to avoid a flood of inquiries that he couldn't possibly have time to answer, hi!" As Bill says, there seems to be quite of number of "closet TV DXers", as he calls them, in the Buffalo. The item has already triggered a number of requests to club headquarters for information on WTFDA. See how easy it is to get publicity for the club? Use your local media....they enjoy "being used". If your local paper has a Radio-TV column or a Question and Answer column, write in and ask a question about TV or FM DXing. Then you can follow it up with information on the club. (Don't make it obvious, tho, that both letters are from the same person, hi.) Newspapers are always looking for people with unusual hobbies, and what's more unusual than DXing, hi? Local radio stations are often interested in people with unusual hobbies, also. Why not give them a try. I'd love to see a flood of letters from your area asking for information on WTFDA. Well, that's it for this month.....see y'all in da month of March......jz.

STATION BREAK Next month we'll be reviving our "STATION BREAK" member ad section in the VUD. If you have a <u>non-commercial</u> ad, send it in!



New Stations Granted AK Nome 100.3 84 watts h,v; 40' 2, 18 miles AZ Safford 94.1 100000 h.v: -370' CO Placerville K209AB *89.7 10 watts (FM translator of KOIO *91.7 Telluride CO) ID Pecatello 104.9 3000 h.v; -582'. m IL Pana 100.9 3000 h.v: 290' 15, 45 miles IA Cedar Rapids KOJC *89.7 10 watts KS Hiawatha 103.9 3000 h.v: 300' 15, 46 mi MA Bexford *88.3 710 (h); 19' 3 miles primary, 19 mi secondary. Boxford is near Andever MA: Schools. MA Pittsfield *89.5 10 watts *89.5 10 * [of Rochester] #1 Monree *89.5 10 * (Sedus is east/ NY Sedus NC Elon College (near Burlington) *89.3 10 OR Ontarie 96.1 27000, 409' h: 3000, 389' v: 43 km primary; 105 km secondary; m music SC Honea Path 103.1 3000 h.v: 300' rk TX Alvin *91.3 10 watts TX Mineela 96.7 3000 h.v: 300' 24, 74 km VA Suffelk 106.9 100000 h,v; 755* 66, 138 kilometers' coverages; initial decision. #A:#alla #alla 97.1 50000 h.v; 1330' 44, 90 miles' coverages; \$tereo, rock. WY Sheridan 96.5 25000 h,v; -13' On Air and DXReady (Presumed) CA Hanford KIOY 103.7 50000 h,v; 500' Music? CA Sacramento KWOD 106.5 50000 h.v; 310' HI Waipahu KULA 92.3 100000 h.v; 1630': \$ IL Summit WARG *88.9 10 - Get it, P. Oprisko KS Hillsbore KHHS *88.1 10 KY Louisville WUOL"-FN" *90.5 35000 h.v: 580'; \$, c, SCA [talk], P. [\$, k (not m) LA Bayou Vista KQKI"-FM" 95.3 3000 h.v: 3007 LA Shreveport KCOZ 100.1 3000 h.v: 300' WD Lexington Park WMDM"-FM" 97.7 MI Midland WRCI 93.5 3000 h,v; 300' [72 km MN Windom KDOM-FM 94.3 2850 h,v; 275' 23, / MT Havre KPOX 92.5 94000 h.v: 1790': \$ PA Sharpsville WFAR-FM 95.9 3000 h,v; 300'cm TX Kileore KKTX 95.9 850 h.v; 510' TX Ozona KRCT 94.3 3000 (h): -55' VA Richlands WGTH 105.5 400 h,v; 798'; \$ WY Terrington KERM 98.3 3000 h.v: 300' \$, km WY Riverton KTAK 93.5 3000 h.v: 278' On Air with Changes (Selected) CA Bakersfield KHIS-FM (from KHIS) 50000 h,v 495'; CA Concord KVHS *90.5 265 h,v; 450' CA Los Angeles KUSC *91.5 10700 h,v; 930* IL Springfield WDBR 103.7 19000 h.v: 320* MA North Adams WJJW from 89.5 to*91.1, 10 m NY Buffalo WBUF 92.9 91000 h,v; 580', \$ [mi. NY Syracuse WOND 107.9 37000 (h); 490' 30,70/ NC Cullowhee WWCU *91.7 10 watts NC Favetteville WQSN 98.1 99000 h.v: 500' NC Jarboro WKTC 104.3 100000 h,v; 220' OH Dayton WDPS *88.7 (from 90.1) and OH Kettering WCXL *88.7, both 10 w, sharing time. OK Enid KCRC-FM 96.9 76000 h,v; 185' Audio improved on this station?

PA Jenkintown WIBF-FM 103.9 270 h,v; 1000" SC Walterbore WALD-FM 100.9 3000 h,v; 300' Stereo, or to be \$tereo IA Sioux City KWIT *90.3 MI Charlotte KY Elkhorn City WECL 103.1 WCER-FM 92.7 ME Auburn WWAV 100.1 (Calls, too) ME Ellsworth WDEA-FM 95.7 MD Glen Burnie WBKZ 95.9 r (was k);"Z-96" MI Gravling WOON 100.1: k IMS Stark-MS Gulfport WTAM 102.3. s lville WSMU MS Ocean Springs WOSM 103.1 9|106.3;k 410' OK Weatherford 97.3 MO Kirksville KRXL 94.5 (on with 42000 h.v/ Not Stereo NJ Eee Harbor (City) WRDR 104.9 (no \$ heard in over a month) NY Buffalo #WOL-FM 104.1 (never heard in \$) SCA (67 kHz) Activities AL Birmingham WERC-FM 106.9 adds SCA CO Denver KADX 105.1 music FL Miami WLRN-FM *91.3 adds SCA IL Champaign WDWS-FM 97.5 delete SCA IN South Bend WWJY 101.5 delete SCA LA New Orleans WRNO 99.5 telemetry only: delete listing as an SCA station LA Shreveport KRMD-FM 101.1 adds SCA MC Farmington 98.5 adds SCA OH Newark WNKO 101.7 adds SCA OR Portland KJIB 99.5 adds SCA WI Fond du Lac WFCN 107.1 adds SCA WA Bellingham KERI 104.3 Mutual (the only station in the world known to carry the Mutual network on its SCA!) WA Seattle KUOW *94.9 talking book KIXI-FN 95.7 Physicians Radio Net. KEZX 98.9 music KSEA 100.7 no SCA; delete list-KRAB*107.7 ethnic (Spanish) ing. PR Mayaquez WOYE 94.1 adds SCA Facilities Changes CA Davis KDVS from 91.5 to *90.3 5000 h,v; 150'; 12, 41 miles; \$tereo, rock CA San Rafael KTIM-FM 100.9 2200 h.v (360') CO Colorado Springs KRCC *91.5 1600 (h). DC Washington WGTB *90.1 delete Dolby FL Apopka WTLN-FM 95.3 300' (3000 h,v)[570' FL Jacksonville WIVY"-FM" 102.9 60000 h,v;/ FL Orlando WBJW 105.1 1380' (100000 h.v). transmitter 25 km e. of Orlando: 50, 99 mi GA Savannah WTOC-FM 94.1 89000 h,v; 1320' ID Pocatello KSIH 94.9 73000 h.v: 1000' KS Manhattan KMKF 101.7 1700 h,v; 400' KY Louisville WFPL *89.3 100000 h,v; 240* LA New Orleans WYLD-FM 98.5 97000 h,v; directional; 360'; 33, 76 miles MD Princess Anne WOLC 102.5 has vertical MI Ann Arbor WCBN to stay permanently on *88.3 (from 89.5). [500' 33, 73 miles MI Grand Rapids WLAV-FM 96.9 50000 h.v: / MN Alexandria KCMT-FM 100.7 800' (100000 h,v; reduces coverage to 58, 140 km) MN Moorhead KIDA 99.9 100000 h,v; 390' [mi. NV Las Vegas KUDO 93.1 30000 h,v; 45' 6, 45/

Bruce F. Elving, Ph.D., Editor 18 1/2 East Fifth Street Duluth MN 55805 218-727-6916 NJ Camden WKDN 106.9 38000 h,v; 550'no \$ NM Albuquerque KHFM 96.3 1350 h,v; 4100" NM Roswell KRSY 97.1 235' (25000 h) NY New Rochelle WVOX-FM 93.5 2400 h.v: 330'; 15, 46 miles; transmitter Yonkers NY New York WCBS-FM 101.1 4600 h.v: 1300' (coverage same at 30, 69 miles). NY Rensselaer WQBK-FM 103.9 300' (3000hv) NY Rochester WNWZ 92.5 28500 h.v (500'): reduces coverage to 29, 67 miles: noNIS NC Burgaw WPJC 99.9 100000 h.v: 510' NC Dunn WQTI 103.1 3000 h.v: 300' [440' NC High Point WHPE-FM 95.5 100000 h.v:/ ND Fargo KENW-FM*97.9 100000 h.v: 350* OK Broken Arrow K60W 92.1 300' (3000 h.v: transmitter to west side of Tulsa) OK Tulsa KWEN 95.5 95000 h.v. directional 640': 39, 83 miles. PA Philadelphia WUSL 98.9 18000 h.v(830') WMGK 102.9 12500 h,v;1010' WRCP-FM 104.5 5000 h.v: 1010' PA Wilkes-Barre WCLH *90.7 2000 h.v: 1000'; 23, 58 mi; Mutual TN Cleveland WCLE-FM 100.7 adds vertical TN McKenzie WKTA 105.9 100000 h.v: 470' TN Red Bank WSIM 94.3 190' (3000 h.v) TX Dallas KVTT *91.7 100000 h.v: 790' g: 41, 86 mi; sharing transmitter site at Cedar Hill TX with KCHU *90.9. TX Fort Stockton KPJH 94.3 3000 h.v: 235' VA Grundy WMJD 97.7 1100 h.v (490') WA Seattle KEZX 98.9 96000 h.v: 1110' WI River Falls WRFW *88.7 3000 (h): 82'. reduces coverage to 11, 48 km; on air with these facilities! Formats/Networks AZ Casa Grande KBFE 105.5 k (not rm); \$ CO Greeley KFKZ 96.1 Mutual; g; SCA dropped; used only for telemetry. IN Bicomington WGTC 92.3 | (net A) IA Ames KCCO 107.1 r (from rp) IA Cedar Rapids KHAK-FM 98.1 drops M; carries commercials but no Mutual news. IA Perry KDLS-FM 104.9 Mutual (M) KY Glasgow WGGC 95.1 UPI Audio LA New Orleans WTUL *91.5 Y (ABC Contemp) MD Baltimore WCAO-FM 102.7 cr MI Bay City WGER 102.5 S (AP Audio) MI Detroit WBFG 98.7 U (UPI Audio) MI Flint WFBE *95.1 c (still monaural) MI Mt. Pleasant WCMU *89.5 cj AZ FTag-MI Sacinaw WKCO 98.1 kr staff KFLG MI Saginaw WKCQ 98.1 kr MN St. Cloud KVSC *88.5 rock; Us 99.9 r MS Fulton WFTA 101.7 r; monophonic MS Laurel WNSL-FM 100.3 Y (from Z) MS Pascagoula WGUD 106.3 k: \$ NJ Franklin WSUS 102.3 rk NJ Millville WMVB-FM 97.3 r (not rk) NY Auburn WRLX 106.9 Mutual NY New York WNWS (now IDs as "Y-97") r. true \$ restored; carries NBC news at times? NY Port Jervis WDLC-FM 96.7 m (from km). NY Poughkeepsie WPDH 101.5rp OH Centerville WCWT *91.9 (not *89.5) r

FCC-FM

OH Mount Vernon WMVO-FM 93.7 k (it was apparently never gospel); S. PA Carlisle WDCV *88.3 p PA Gettysburg WZBT *90.3 p PA Nanticoke WMJW 92.1 ABC-FM PA Philadelphia WUSL 98.9 mr PA Pittsburgh WDVE 102.5 rp (not ABC-FM) WYDD 104.7 ABC-FM PA Uniontown WPOR 99.3 m TX Lufkin KLUF-FM105.1 m TX Sinton KNCN 101.3 p (not mr), \$; was off air for a while, but now back on! TX Tyler KROZ 92.1 k (nto(not m) KTYL 93.1 p (from k) VA Norfolk WOWI 102.9 p (from si);"Wowie" Ont...Burlington CING 107.9 rm Ont.,Windsor CKLW-FM k (was kc); "FM-94" Network Mysteries ??? AL Scottsboro WCNA 98.3 has ABC, but which of ABC's four networks? MT Dillon KDBM 98.3 has ABC, but which? More Formats/Networks IN Elkhart WXAX 104.7 m (not g) IN Huntington WHLT-FM 103.1 rm IN Richmond WRIA 101.3 rm IN Rushville WRCR 94.3 m (not r) IN Wabash WKUZ 95.9 r (not rk) Non-IDers (Selected) CA San Francisco KNAI 99.7 "stereo 99"; \$, rm (to go to KYUU; NBC news?) CT Brookfield WINE-FM 95.1 "1-95." Now separate rock from AM affiliate. KS Salina KSK6 99.9 "99-K6" MI Saginaw #106 106.3 #-106 NY New York WNWS 97.1 Y-97 (to be WYNY) OH Cleveland WGCL 98.5 G-98

Ont., London CFPL-FM 95.9 Stereo 96

Call Letters Assigned AL Stevenson 101.7 WVSV AL Trcy 105.7 WRES (from WTUB) ["K-104" AZ Mesa 104.7 KIOG (KBUZ-FM); automated r/ AR Walnut Ridge 106.3 KCAC CA Inglewood 103.9 KACE (KAGB-FM) CA Paradise 96.7 KNVR CA Ridgecrest 92.7 KZIQ-FM CA Salinas 103.9 KCTY-FM CA San Diego 98.1 KIFM (KDIG) CO Colorado Springs 101.9 KINX (KRYT-FM) CO Glenwood Springs 92.7 KGLS DC Washington 100.3 WOOK (WFAN); Stereo; English (drops Spanish); rs, "OK-100." FL Orlando *89.3 WGAG"-FM" IL Champaign *88.7 WPCD IL Chicago 101.1 WKQX (WNIS); \$, rp, believed to have NBC news. IL Zion 96.9 WKZN-FM (WKZN) IN Evansville *91.5 WUEV (WEVC) IN Indianapolis *91.5 WRFT Franklin School IA Emmetsburg 98.3 KEMB, m; expected to be on air now with 3000 h,v; 300'. Stereo? KS Kansas City 98.1 KUDL (KUDL-FM) INY Utic KS Oberlin 101.1 KSNF 1-90.7 KS Scott City 94.5 KULL (KFLA-FM) WPNR"-ME Bath *91.5 WHOS FM" 105.9 WIGY (WJTO-FM) ME Portland 93.1 WMGX MD Glen Burnie 95.9 WBKZ (WISZ-FM); \$, r MA Brockton 97.7 WCAV (WBET-FM) OH Bain-MI Sault Ste. Marie 101.3 WSUE bridge MN Collegeville *89.1 KSJU 1.90.9 MN Rochester 101.7 KRCH (KWEB-FM) WKHR MS Meridian 101.3 WDAL (WOAL-FM) lok Sapul-MO Overland *90.1 KRSH pa 100.9 NY Gouverneur 92.7 WLUF (WIGS-FM) KXOJ-FH NY Monticello 98.3 WSUL

February, 1977

OK Oklahoma City 100.5 KAIT (KJAK), "The Cat," p, with some light country PA Chester *89.5 WDNR PA Millersville *91.7 WIXQ SC Orangeburg 10 106.7 WPJS (WDIX-FM) SD Aberdeen 94.1 KSDN-FM VIX Lamesa 104.7 TN Germantown 94.3 WGTG TN Jefferson City 99.3 WSBM¹ KCOT TX Dallas 102.9 KMGC (KDTX) change from g? TX Fort Worth 97.1 KFJZ-FW (KWXI) [K's) TX Odessa 99.1 KKKK, \$, g (quad; hence 4/ UT Logan 92.9 KBLW-FM VA Charlottesville 97.5 WWWV (WCCV"-FM") WV Rainelle 96.7 WRRL-FM |WY Torrington WA Walla Walla 93.3 KEXI WV Williamson 96.5 WKCN KERM 98.3;\$; SCA WI Middleton 106.3 WMAD (WMAD-FM) Abbreviations Used (Selected) Program codes: c classical, e ethnic, g gospel, k country, m middle of the road, n all news, p progressive rock, r rock oldies, top hits and "adult rock"; s soul, t all talk. Network codes: A ABC-FM, C CBS, E ABC Entertainment, | ABC Information, M Mutual, N NBC, P National Public Radio, S Associated Press Audio, U United Press Audio, Y ABC Contemporary, Z Mutual Black network. SCA symbols: A ABC networks, E ethnic and foreign language, F farm news, M or MZ

Toreign Language, F Tarm news, m or m2 music or Muzak, N NBC network, Q Physicians Radio Network, S sports, T talk, TB talking book for the blind, X facsimilie, slowscan-TV, teleprinter noise, such as WLVE 94.9 Baraboo-Madison WI has. WNMZ 92.5 Rochester NY said to still have moribund NBC NIS, n, as of Jan. 16, 1977.

Readers' Reports and Comments

"These non-IDers seem to be multiplying like rabbits," said one reporter who supplied many of the non-IDs given above, and as a perusal of Clarke's feature in last month's VUD would indicate. The program format change of WEZX 107.1 Scranton PA from m to r resulted in the station's receiving a letter of complaint from one correspondent, who said there is no longer an easy-listening station in Scranton. Reported off the air: WBJH 101.5 Trenton NJ, which has been having transmitter problems and in maintaining stereo separation, as well as with bass frequencies. WYZZ 92.9 Wilkes-Barre PA heard with Mutual; are they quitting A? WMALFFM 107.3, now being programmed by ABC-FM in Washington DC, p, but with "announcers who seemed to know nothing about the music they played." WCAO-FM 102.7 Baltimore 75% c; about 25% rock. WHFS 102.3 Bethesda MD, "Home Grown Radio" is one of the few stations to help local talent; frequently has live concerts in its studio. A 'reprint of an article, "Nothing New Under the AM Sun," from the Jan. '17 <u>Audio</u> was sent, which concerned the reputedly good AM fidelity of the 1937 30-tube Scott Philharmonic, which was subsequently improved upon with the introduction of 40 mHz and 100 mHz FM bands in models just before Scott Radio Labs expired in the early 1950's. The article points out that viatage Scott receivers would probably not work properly now, without an extensive realignment, cleaning, and tube replacement.

Louisville's two library stations, WFPL 89.3 and WFPK 91.9, hope to both be 100 kw on the air by February (just across the street from WLRS 102.3, and there is a terrible harmonic area there, with 1 classical, 1 talk, and one rock station within 100 yards of each other!).

WBST Muncie IN when it finally gets permission to move to *92.1 with 3 kw, expects to be received within a 37-mile radius; at the present 10 watts "on a clear day, WBST can probably go out about eight miles," they estimate, which seems realistic enough. An Indiana reporter said he talked with a consulting engineer doing some work on FM in Toronto; apparently for a station considering going up on the CN Tower; "they want to know the results of such a concentration of stations relative to auto receiver overload. . . There are 5 FM's up there now; and there is room for a total of 11. Apparently there is considerable expansion in the works for FM in Canada and Toronto, in particular."

KMAG 99.1 Fort Smith AR has its transmitter on Magazine Mt., a good 50 miles from city of license, which should be indicated on my maps. "Your FM column gets better all the time. However, I wish you would run the symbols key every 2-3 months [see above-ed.], as I and many others get

FCC-FM WICH-FM. KCRC-FM attacked. . . KAEZ praised . . . WAUN spawns illegitimacy? "WPAZ" squelched February, 1997

mixed up with all the abbreviations and no reference to clarify them." [I'm surprised to find out that my column "gets better"; I thought it had gotten to a certain point of excellence or mediocrity and stayed there! I have written to WTCH-FM Shawano WI, threatening to complain to the FCC if they continue to stall in moving from 100.1 to 99.3, and got a not-too-friendly response from Ray G. Gruetzmacher, president: "I am appalled at the total ignorance of conditions made manifest in the enclosed communication from you, concerning our frequency change. May I suggest that before you make any threats, you get the facts concerning this case. Your audacity is only exceeded by your bad judgement (sic). If I don't hear from you regarding this, I'll forward copies of this correspondence to the Federal Communication Commission for their records and consideration. Your early response is expected." So I wrote again, enclosing a copy of an ad for the FM Atlas, and would you believe, he didn't order a copy ? An Appleton WI reporter heard the FM Atlas ad on WAUN 92.7 Kewaunee WI, and he's been hearing WAUN over two months now on 103.1 at equal strength from sout to southeast. An extra-legal FM translator in Chilton for WAUN ? I'll check on this. Or maybe Bill Draeb could check this out locally. WORT *89.7 Madison identifies rarely as that; more often as "Back Porch Radio."

One VUD reader suggested my underlining headings in this column, so I have done that. He also sends comments on the Dec. column, noting that the FCC probably won't chastise a broadcaster for combining v & h powers, because he contact the FCC office and talked to a Mr. Allen in St. Paul, who was not at all concerned about the poor audio and high hum level of KDHL-FM 95.9 Faribault MN; he wasn't even too concerned about the illegal "WPAZ" which had been on 92.9, 96.1 and 96.5; "guess the FCC is too snowed under with CB complaints." His comments on the Atlas: "Keep brackets" in the Station Directories for 10-watters, instead of "2 and 9" coverage guesstimates; "keep up the non-IDers feature-much needed in DX. Don't put non-IDs on maps! Will be too cluttered! Also - SCA was active in 1956 (not '58 as noted). I have old article on WLOL, stating one reason to build FM was for Muzak (they came on in Dec., 1956)." KRLX *90.3 Northfield MN not heard for several months; deleted?

KEMB 98.3 Emmetsburg IA to be on the air 6 am to 10 pm 7 days/week, and they were to have come on the air Jan. 10. KMGK 93.3 Des Moines has switched from mild rock to top 40; KDMI 97.3 Des Moines is Mutual, while KTOF 104.5 Cedar Rapids is being sold: "I would guess a change of format -rock or mor probably." KWIT *90.3 Sioux City IA will be on the air about Oct. 1, 1977. "As with all public radio stations we will do our local programming -not repeat programming of any other station, such as WOI-FM. . .Station will have its own building, will be professionally staffed, and full stereo." KMOE 92.1 Butler MO confirms for me that they are not stereo; monaural.

KAEZ 107.7 is the only black-owned radio station in Oklahoma. "Apparently, there had been a good number of other applicants for this, OKc's last open FM. The owner explained [on a public affairs program on KOCO-5] reasons for going FM (better fi, fulltime operation, etc.); he seems technically wellqualified. The station is very well run; audio quality is very good. There was no mention in the interview if the station is very well run; audio quality is very good. There was no mention in the interview if the station would be going \$ in the near future." And 'In the December VUD, I note one reporter cutting down the Atlas—he doesn't know what he's talking about! You're right about 'historical value' of old logos scattered about. On the other hand, I would rather have programming than nets in the frequency section. . . it makes MS DX a lot easier. . . Your non-IDer list is not superfluous, tho it isn't totally complete either. FMorgue sounds okky, too. Use of the W-E format would also suit me better. Drawing major Interstates sounds good--provided it doesn't clutter the maps. The small print for ten-watters is good, too. . . If AM went stereo, records would no longer have a reason to be careful with phase (to make it sound all right in mono); therefore, it might help improve stereo records — on radio, AM or FM, or on the home phono. AM \$ wouldn't be hi-fi, but it has its merits, I guess. . ." KCRC-FM 96.9 End OK has wandered down to 96.5 at times, but hopefully has better audio now that they have higher power on the air (flip back 2 pages). There's a possibility a strike application will be filed against 'em !

New SCA news is sent from Seattle, where the brother of a reporter now has SCA. "We did not have a schematic but between the two of us we managed to find the right places to tap power and SCA." CONTRIBUTORS last month: Fmank Aden, Jr., Bend OR; Larry Bolef, KCHU Dallas IX; Thomas Casuell, Dunnore PA; Tom Cornell, Kokomo IN; David Cox, Birmingham AL; George H. Diller, WOKF Clearwater FL; Mike Dorner, Jr., Metairie LA; Jim Duncan, Kalamazoo MI; John Ebeling, Bloomington MN; Doug Everitt, End OK; Brian James, Eugene OR; Mick Lombardi, Atlanta GA; Joe Markewitz, Hornell Heights,Ont.; Vie Melis, Spring City PA; Eric Norberg, Portland OR; Pete Oprisko, Whiting IN; R. A. Segalas, San Fran. CA; Andy Smith, Dillsburg PA; Ralph Strobel, Muncie IN; Peter V. Taylor, San Fran. CA; Robert Zent, Huntington IN; John Zondlo, Hammond IN. CONTRIBUTORS this month: Robert Baker, Humboldt IA; Caswell; Cornell; Dwight Crabtree, Lafayette WY; W. O. Dickerman, Williamsport PA; Ebeling; Everitt; Ted Fleischaker, Lusisville KY; R. G. Gruetzmacher, WICH-FM Shawano WI; Joel Hermann, Ames IA; Clarke W. Ingram, Pittsburgh PA; Edward H. Isotalo, Appleton WI; Jack K. Latteman, Tempe AZ; Nick Lombardi, Atlanta GA; Clint McAuliffe, Greeley CO; J. R. Mc Clure, Greenville SC; Frank Merrill, Toledo DH; Gary Olson, Lake Forest IL; John Robertson, Croswell MI; David W. Sawyer, KFKZ Greeley CO; Swith; Strobel; James E. Sylvester, WOON Grayling MI; Taylor; Robert W. Thomas, KWIT Sioux City IA; Larry Weil, East Rockawa WY; Steve West, Havertour PA; Zondlo. Also: Gene Sisk, WFO-WTIA Fulton MS; KWD (no stioner) Butler MO.

The National Radio Broadcasters Association filed comments with the FCC opposing the opening of the commercial FM band to 10watt public, noncommercial radio stations, pointing out the difficulty of protecting higher-powered commercial stations from interference and frequency strangulation, which are "dangers posed by the proposed rule-making."

FM DX NORTH

Fred Nordquist 7945 Boxford Rd Clay, NY 13041 Deadline: the 10th

Es was noted on 1/2 by one reporter in MN. Very limited tropo was noted out to the 300-400 mile range as very cold wx conditions prevailed in the North. Most new catches are the result of changes to station facilities, etc. Michael Hogan (Highland, IN) dropped a line to report that there was no DX to speak of from his location -- and I'm just as impatient as he is in waiting for spring (and better DXing conditions) to come. Please report your FM DX to this column if you live in the following states/provinces: ME MA RI CT NH VT NY NJ PA OH IN MI IL IA WI MN NFD PEI NS OW NE

Pelph St	mobel - 25	10 E. Me	Galliard Road - Munc	ie. IN 4	7303	(EST)		
Fat PY	Heathkit	AJ-1510	Ant: Winegard 60' A	GL W/rot	or.	New U	Inderlined	. Total: 607.
O/O The	01 00 1000	103 0 17	Campbellsville	10/19Tr	0715	WNAS	88.1 IN	New Albany, r.s/on
9/14	0000 WENI			10/20		WCCQ		Crest Hill, s/on
9/16	1000 WRCJ			10/21		WDTR		Detroit,s/on
9/17	1230 WDOC			10/25		WBYG		Kankakee, r, s/on
	2300 WKKB		Manitowoc,m	10/25			100.1 OH	
9/19				10/26		WLRA		Lockport,r
9/20	0800 WHSS		Hamilton, r, 10w.	10/29		WRSF		Miamisburg, r, 10w.
9/25	1200 WFBE		Flint,SS	10/23		WFCI		Franklin, r. 10w.
9/29	2330 WQED		Pittsburgh,c	11/1				Freeport,k,SID
	2330 WETS		Johnson City,c	11/2		WLHI		Ft.Wayne,g.10w,s/on
10/1	0130 WKDD	96.5 OH						Indianapolis,#.r
10/2			Y OF C THEFT	11/12				
10/3	0620 WCRF			11/15				Indianapolis,c,r
10/4	1950 WGLT			11/16		WJEF		Lafayette,m
10/5	0001 WJRE	92.1 IL		11/17				Springfield, p, s/off
10/6	2307 WFEM	92.1 PA	Elwood City,k,s/off	11/18				Hasard, k
10/11	0130 WITL	100.7 MI	Lansing.k	1. 11		WCWT		Centerville,r,10w
10/12	0800 WGXM	88.1 OH	Dayton, r, s/on, 10w.	11/30	1700	WCNE	88.7 OH	Batavia,r
	0103 CKY	92.1 MB	Winnipeg	11/30	1700	WISU	88.5 OH	Youngstown, o
10/1500	1200 WINS		West Chester, r, 10w.					
The stat	Home 14ate	d hal out	(including other clo	set , sta	tion	s. and	outside	of DF not listed
Ine sta	CIONS TIRC	Tan	pick up most any tim	In In	11.	Tean	mull in 1	more, but rainy and
here - I	jn) are one	s I can	pick up most any cri	10. 0000			Pass and	
	hasn't hel			unic m	MAR	LICIPO	102 E MT	Bay City,m(250)
12/6 Tr				12/0 IF				
			Owensboro,m(195) ·	1.1.1.1				Pittsburgh,r(280)
	0058 WHNN	96.1 MI	Bay City,r(250)	1				Wauwatosa, m(250)
	0111 WISN	97.3 WI	Milwaukee,m(250)					Cleveland, m(220)
	0112 WKWK	97.3 WV	Wheeling,m(250)	Darbert Hitte				Huntington, g(200)
	0123 WKSW	99.5 OH	Cleveland, m(220)					Cleveland, H,g(220)
	0144 KEZK	102.5 MO	St. Louis,m(275)	1 .	2233	WCBU	89.9 IL	Peoria,c (225)
		1						
John D.	Hathaway -	2109 Tam	arack Court - Champa	ign, IL	6182	0		
Equinmen	t: RX: Zen	th. Pres	ent Log Total: 44					
11/3	1107 WTWC			111/26	1850	WPGU	107.1 IL	Urbana
			Shelbyville		1853	WVLJ	105.5 IL	Monticello
			Springfield	12/11	1954	WINA	106.3 IL	Sullivan
	1141 WMBJ							Litchfield
				12/12			102.9 IL	
	1414 WACF			12/14			95.9 L	
			Champaign	12/16			95.1 L	
11/13	1244 WIAI			12/10				Indianapolis
	1419 WLBH			1.				
	1437 WRTL			1000				Taylorville
			Champaign		2319	WSSR	91.9 IL	Springfield
	1735 WITT	93.5 IL	Tuscola	1				
				and a second				
Fred Nor	dquist - 7	745 Boxfo	rd Road - Clay. NY	13041 (E	ST)			
Equipmen	t: RX: Heat	thkit AJ-	15 Ant: JFD LPL-FM	10A at 4	5' AG	L. Ne	w underli	ned. Totals: 846.
12/22 Tr	1545 WAMO	105.9 PA	Pittsburgh, s(275)	112/27AS	0954	Unid	100.3 TT	his is OK-100"
			Steubenville(296)	1				Washington (300)
			Dearborn, ID (355)	-				Cleveland, 50kw (308)
12/23 -			Akron, m (295)					Altoona,k (225)
			Buckhannon, (360)					Cleveland, g (300)
12/24 Tr			Kent, j (300)	Tr	2130			Williamsport, g, (225)
			Washington (300)	10/04	1000			ently over WDUQ.
MS	0939 Unid	94.7 "8	139" time check	12/31	1003	WRFL	98.5 VA	Winchester (300)

7

February 1977

NORTHERN FM-DX

<pre>put Trucks - G-W Haver Are Difflog. WT 19265 but General-Maisetic Factor MT DATA And Channel Master 94 al. VHF-UHF-M w/built-in pre- map & PM trap. I use the ant. for YU DV, thus resear for trap, so MM DV is comewhat inflog Tr 2000 MOV 105.1 NY DeRiviter 2000 WOV 105.1 NY DeRiviter 12/8 TP 2000 MOV 09.5 PA Pitteburgh 12/1 500 MOV 09.5 PA Pitteburgh 12/1 12/9 MOV 09.5 PA Pitteburgh 12/2 MOV 09.5 PA Pitteburgh 12/3 TP 105 DOV 09.5 PA Pitteburgh 12/1 12/9 MOV 09.5 PA Pitteburgh 12/1 12/1 MOV 09.5 PA Pitteburgh 12/2 MOV 09.5 PA Pitteburgh 12/2 MOV 09.5 PA Pitteburgh 12/2 MOV 09.5 PA Pitteburgh 12/1 TP 00.2 MOV 09.5 PA Pitteburgh 12/1 Pitteb</pre>	CAL PEGIDING CPR	
Deturn Strepkigestor radio AM-M-S4. Ant: Channel Naster 94 el. VHE-UHE-NY M/Dult-Phy method amp & FM trap. Log totals: 70;55.45.85; Prov. 11 226 Number 2000 Will 15: 50: 50: 50: 50: 50: 50: 50: 50: 50: 5	David Theater - All Weaver Ave - Buffelo, NY 1	4206
 maps & M trap. I use the art. for W D., thus resears for trap. So PR.DA is Somewhat index in particular the impact of the impact in the impact of the impact	Paul Iraska - of Weaver Ave Durialo, MI	hannel Master 34 el. VHE-UHE-FM w/huilt-in pre-
 impaired by this trap. Log totals, 70;States, 5; Prov. 11.24 on Blue. On. All JOSEIMSE New. 11/29 on Blue. On. All JOSEIMSE New. 12/20 WORD 90.5 FA Pittsburgh 12/6 1900 WORD 90.5 NY Genesso 12/6 1900 WARD 90.5 NY Genesso 12/12 000 WARD 90.5 NY Genesso 12/12 000 WARD 90.5 NY Genesso 12/12 000 WARD 90.5 NY TH Thaca 12/10 WARD 90.5 NY TH THACA 12/11 WARD 90.5 NY TH THACA 12/12 WARD 90.5 NY TH THACA 12/12 WARD 90.5 NY TH THACA 12/21 1000 WARD 80.5 NY TH THACA 12/21 WARD 90.5 NY TH THACA 12/21 WARD 90.5 NY TH THACA 12/21 WARD 90.5 NY TH THACA 12/21 TH WARD 90.5 NY TH THACA 12/21 TH WARD 90.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH THACA 12/21 TH WARD 90.5 WARD 80.5 NY TH WARD 80.5 NY TH	Eqti Grundig-Majestic radio An-rm-Sw. Anti C	A thus message for twon so FM DY is somethet
 200 WGU 89.3 NY Genesso 12/5 12/5 000 WID 9.17 NY Thesa 12/5 000 WID 9.17 NY Thesa 210 WIT 9.17 NY Thesa 212 NY WID 9.17 NY TY THE 12/21 WID 9.17 NY WIP 70.11 NY NY WIP 7	amp & FM trap. 1 use the ant. for TV D	X, thus reason for trap, so rh by is somewhat
 200 WGU 89.3 NY Genesso 12/5 12/5 000 WID 9.17 NY Thesa 12/5 000 WID 9.17 NY Thesa 210 WIT 9.17 NY Thesa 212 NY WID 9.17 NY TY THE 12/21 WID 9.17 NY WIP 70.11 NY NY WIP 7	impaired by this trap. Log totals: 70; State	st 5; Prov. 1 11 24 on Boud. on. All loggings new.
 200 WGU 89.3 NY Genesso 12/5 12/5 000 WID 9.17 NY Thesa 12/5 000 WID 9.17 NY Thesa 210 WIT 9.17 NY Thesa 212 NY WID 9.17 NY TY THE 12/21 WID 9.17 NY WIP 70.11 NY NY WIP 7	11/29 Tr 2000 WOIV 105.1 NY DeRuyter	12/8 Tr 2000 WDUQ 90.5 PA Pittsburgh
 12/5 0010 WDT 92.3 OH Cleveland Hts 12/12 0300 WAR 90.3 M Constance 12/12 0300 WHS 93.7 M Thasa 2040 WTT 90.1 7 A Philadelphia 210 WOR 95.7 WT 104.5 2040 WAR 90.3 W Cleveland 12/12 0300 WAR 90.3 PC and the series 12/12 0300 WAR 90.3 PC and the series 12/12 0300 WAR 90.3 WT Enthange 12/15 2000 WAR 90.3 WT Enthange 12/15 2000 WAR 90.3 WT Enthange 12/15 000 WT 90.7 WT New York 12/29 0300 WAR 93.3 WT Strutters 1600 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 14 trated W DX on 11/29/76. (Walcome to the good trops conditions one usually expects in Sept. 4 Oxt. 5 of ar this winter, 1 heren't had any Au to speet of the senter 11/20 WT 90.7 WT New York 12/13 Th 2247 WT 91.7 WT 10 Heart 11/2 M M 93.5 L Monroeville 12/13 Th 2247 WT 92.5 M Walcom, new stal 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 95.5 WT 104.7 WI Ann Arbor, 0059 WAR 95.5 WT 104.7 WI Ann Arbor, 0005 WAR 95.5 WT 104.7 WI Annah, 12/15 0007 WHE 95.5 WT 104.7 WI Annarbor, 12/10 0007 WHE 95.7 WI Annah, 12/12/15 0007 WHE 95.7 W	2030 WGSU 89.3 NY Geneseo	12/10 1200 WAUP 88.1 OH Akron
 12/5 0010 WDT 92.3 OH Cleveland Hts 12/12 0300 WAR 90.3 M Constance 12/12 0300 WHS 93.7 M Thasa 2040 WTT 90.1 7 A Philadelphia 210 WOR 95.7 WT 104.5 2040 WAR 90.3 W Cleveland 12/12 0300 WAR 90.3 PC and the series 12/12 0300 WAR 90.3 PC and the series 12/12 0300 WAR 90.3 WT Enthange 12/15 2000 WAR 90.3 WT Enthange 12/15 2000 WAR 90.3 WT Enthange 12/15 000 WT 90.7 WT New York 12/29 0300 WAR 93.3 WT Strutters 1600 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 1300 WT 90.7 WT New York 12/29 1700 WTT 99.5 7 H Hershay 14 trated W DX on 11/29/76. (Walcome to the good trops conditions one usually expects in Sept. 4 Oxt. 5 of ar this winter, 1 heren't had any Au to speet of the senter 11/20 WT 90.7 WT New York 12/13 Th 2247 WT 91.7 WT 10 Heart 11/2 M M 93.5 L Monroeville 12/13 Th 2247 WT 92.5 M Walcom, new stal 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 92.9 AZ Flagstaff.r.New CL 2200 WFG 95.5 WT 104.7 WI Ann Arbor, 0059 WAR 95.5 WT 104.7 WI Ann Arbor, 0005 WAR 95.5 WT 104.7 WI Annah, 12/15 0007 WHE 95.5 WT 104.7 WI Annarbor, 12/10 0007 WHE 95.7 WI Annah, 12/12/15 0007 WHE 95.7 W	12/4 1900 WRVO 89.9 NY Oswego	1545 WEOS 89.7 NY Geneva
 2040 WET 90.1 PA Philadalphia 216 00 WET 90.1 PA Philadalphia 217 010 WET 90.1 PA Philadalphia 218 CKOP 101.3 0W Tilleonburg 12/6 1100 WEN 95.9 CH Tourgstown 12/12 030 WAE 90.3 NY Albany 12/12 12/12 1200 WAE 90.3 NY Albany 12/17 1230 WBO 90.3 0H Isk Laning 12/17 1230 WBO 90.3 0H Isk Laning 12/17 1230 WBO 90.3 0H Isk Laning 12/21 12/20 WIT 97.5 H Esk Laning 12/21 12/20 WIT 97.5 H Esk Laning 12/21 12/20 WIT 97.5 H Esk Laning 12/21 12/20 WIT 97.5 H Herbahay 12/21 12/29 WIT 97.5 H Herbahay 12/2 WIT 97.5 H Herbahay 12/3 Th 12/3 TH 12/3	12/c OOLO WT. VT 02.3 OH Cleveland Hts	1600 WXXI 91.5 NY Rochester
<pre>2100 WUGM 9.17 HT Ann Arbor 12/12 0300 WAEM 90.9 Un Bounger 12/6 12/12 0300 WAEM 90.9 H Boundary 12/12 02/14 HE Start 12/12 0300 WAEM 90.9 H Boundary 12/12</pre>	1000 UTOP OI 7 NY These	2040 WRTT 90.1 PA Philadelphia
 215 C KOT 101, 3 OH Tillsenburg 12/6 100 WAEL 90.3 NY Albany 12/6 12/15 1200 WAEL 90.3 NY Albany 12/17 1200 WHE 90.3 OH Fallowshalle 12/17 1200 WHE 90.3 OH Fallowshalle 12/17 1200 WHE 90.3 OH Fallowshalle 12/17 1200 WHE 90.3 NH Fallowshalle 12/17 1200 WHE 90.3 TH Fallowshalle 12/21 1200 WHE 90.5 TH Sallowshalle 12/21 Th T 200 WHE 90.5 TH Sallowshalle 12/14 Th COMP WHE 90.5 TH Sallowshalle 12/15 TH 200 WHE 90.5 TH Sallowshale 12/16 TH 200 WHE 90.5 TH S	1000 WICE 91.7 NI Ithada	12/12 0200 LIVEN OS O OH Youngstown
 12/6 01.0 VEST 92.1 WF Baldwinskille 12/7 1230 WFC 92.9 PA Wilke Barre 1530 VDC 91.1 GH De Graff 12/7 1230 WFC 90.5 MI 5. Lansing 1700 WFC 90.5 MI 5. Lansing 1700 WFC 90.5 MI 5. Lansing 1700 WFC 90.7 MI Syracuse 12/21 1520 WFC 90.7 MI Syracuse 12/25 100 WFC 90.7 MI Syracuse 12/3 Th 155 WFC 90.7 MI Syracuse 12/3 Th 150 WFC 90.7 MI Syracuse 12/3 WFC 90.7 WFL 90.7 MI Syracuse 12/4 WFC 90.7 WFL 90.7 MI Syracuse 12/4 WFC 90.7 WFL 90.7 MI Syracuse 12/15 WFC 90.7 WFL 90.7 MI	2100 WUOM 9.17 MI Ann Arbor	
 12/19 0300 MAER 83.3 NT Syracuse 15/19 0300 MAER 83.3 NT Syracuse 14/00 WSG 93.3 NT Syracuse 12/11 1620 WWSG 93.3 NT Shracuse 12/11 1620 WWSG 93.3 NT Shracuse 12/12 1620 WTS 93.5 NT Sk. Lanning 12/12 1700 WTEF 93.5 NT Sk. Lanning 12/13 NT 1555 MTE 93.5 NT Sk. Lanning 12/13 T1555 MTE 93.5 NT Sk. Lanning 12/13 T1555 MTE 93.5 NT Sk. Lanning 12/13 T1555 MTE 93.5 NT Sk. Lanning 12/15 T001 WHS 93.5 NT Sk. Lanning 12/15 WTE 93.5 NT Sk. Lanning 12/16 WTE 93		
0230 WIZZ 92.9 PA Wilkes Barre 12/19 12/19 0300 WSEG 89.3 NF Dinghapton 2200 WIZ 93.1 NF Synause 2200 WIZ 93.1 NF Synause 2200 WIZ 93.1 NF Synause 2200 WIZ 93.1 NF Synause 2200 WIZ 93.7 NF New York 12/21 12/19 1500 WSEG 89.3 NF Dinghapton 1300 WSEG 89.3 NF Dinghapton 2200 WIZ 93.7 NF New York 12/29 12/21 1500 WSEG 89.3 NF Dinghapton 2200 WIZ 93.7 NF New York 12/29 1700 WSEG 89.3 NF Dinghapton 2200 WIZ 93.7 NF New York 12/29 1000 WSEG 89.3 PA Pittsburgh 12/19 Tr 29.7 NF New York 12/29 1700 WSEG 89.5 PA Restaurs 12/19 12/19 Tr 29.7 NF New York 12/29 11/15 Tr 0102 ENER 89.5 PM Rochester, r, New 12/13 Tr 155 DMS 95.9 NF Rochester, r, New 12/13 Tr 155 DMS 95.9 NF Rochester, r, New 12/13 Tr 155 DMS 95.9 NF Rochester, r, New 12/14 Tr 105 SP 95.9 NF Rochester, r, New 12/15 Tr 1010 DMS 95.9 NF Rochester, r, New 12/15 Tr 1010 DMS 95.3 NF Windom, new stal 200 WFE 92.5 OF Lacon, met stal 200 WFE 92.5 OF Lacon, met stal 200 WFE 92.5 OF Lacon, met stal 21/14 WOM 91.7 HI Ann Arbor, e 0110 WCM 92.5 OF Lacon, met stal 21/14 WOM 92.5 OF Lacon, met stal 0100 WCCQ 98.3 LC Creat Hill, m, s/off 0127 WDM 166.7 HI Jackson, m 0128 WWM 166.7 HI Jackson, m 0129 WHM 98.5 HI Methagel, r 0129 WWM 98.5 HI Methagel, r 0131 WWM 98.5 HI Methagel, r 014 WMM 98.5 HI Methagel, r 0159 WWM 98.5 HI Metha		
 1630 WDEQ 91.1 GH De Graff 1630 WDEQ 90.3 CH Clevellard 1650 WTE 93.1 NF Syracuse 12/1 1620 WTE 90.7 NF New York 12/2 17 VOU VITF 89.7 NF New York 12/2 17 VOU VITF 89.7 NF New York 12/2 10 VITF 89.7 NF New York 12/2 10 VITF 89.7 NF New York 1 started MF DX on 11/29/76. (Walcome to the world of FM DX you'll like itt - fjn) John Ebeling - 2009 Vincent Area, So Eloomington, MF 55431 This past fall was very poor none of the good trops conditions one usually expects in Sept. & Oct. So far this wintor, I haven't had any Au to speek of . New underlined. 11/29 NF 061 WEE 90.3 LH Monrowrille 12/13 Tr 1155 DDM 99.3 LH Monrowresta. Palph Strobal - 2510 McGallard Road - Aunois, TM 47203 (SET) (This report is a continuation of Ralph's report from the previous page - fjn) (This report is a continuation of Ralph's report from the previous page - fjn) (This report is a continuation of Ralph's report from the previous page - fjn) (This WEE 92.5 OK Toledo,r 0105 WHE 92.5 OK Toledo,r 0105 WHE 92.5 OK Indeco,r 0100 WEE 107.5 NE Detroit,n 0100 WEE 107.5 NE Detroit,n 0100 WEE 107.5 NE Detroit,n 0119 WHEM 95.7 NE Detroit,n 0129 WHE 107.5 NE Detroit,n 013 WAWT 93.7 NT Abland,r 013 WAWT 93.7 NT Abland,r 014 WAWT 93.7 NT Abland,r 015 WEE 107.3 HI Mertampot,r 015 WEE 107.3 HI Mertampot,r 015 WEE 107.7 H Detroit,g 015 WEE 107.9 H Hitsuetee,g 12/40 00	0230 WY77 92.9 PA Wilkes Barre	12/19 0300 WAER 88.3 NY Syracuse
<pre>12/7 1230 WDG 90.3 CH Cleveland 1300 WGE 59.3 FA Pittsburgh 2200 WDT 90.7 NT New York 12/2 1220 WDT 91.7 NT New York 12/2 WDT 91.2 NDT 91.2 ND</pre>	1630 WDPO OI 1 OH De Graff	1400 WSKG 89.3 NY Binghampton
 1650 HKR 90.5 MI E. Lansing [12/2] 1620 WDU 90.7 MT Mey ST Cork 12/29 700 WTT 89.5 FA Hershey 1800 WKSU 69.7 OK Kent 1900 WKSU 69.7 OK Kent 11/2 FM DI 001 KKK 69.7 OK KENT 10/15 TO 000 KKK 69.7 OK KENT 10/15 TO 001 KKK 69.7 OK KENT 10/15 TO 001 KKK 69.7 OK KENT 10/15 TO 000 KKK 69.7 OK TO 000 KKK 69.7	12/2 1220 WEOF 00 3 OH Claveland	2200 WNTO 93.1 NY Syracuse
12/29 1700 WITT 89,5 7A Hershey 12/29 1700 WITT 99,5 7A Hershey 12/21 77 12/29 170 12/29 17 12/29 17 10/29 17	160 TEAD OO E MT E Langing	12/21 1620 WHIV 90.7 NY New York
<pre>1800 WESU 59.7 OR Kant 1900 WESU 59.7 PA Pittsburgh Down Ebeling - 9209 Vincent Ave. So Elcomintton. WH X you'll like (Wilcome to the world of FM DX you'll like (Wilcome to the sect. So far this wintor, I haven't had any An to speak of. New underlined. 1/15 Th OLI EMPR 89.9 MN Rochestar.r.1(Wilcome to the and any An to speak of. New underlined. 1/2 Far 1714 TM DE Card Lines - 1/2 Far 1714 TM DE Card Lines - 0115 WHE 92.5 OK Galliard Road - Muncie, IN 47303 (EST) (This report is a continuation of Ralph's report from the previous page - fjm) 12/9 Th Oil WOTE 91.3 OK Toledo. 0115 WHE 92.5 OK Toledo. 0115 WHE 92.5 OK Toledo. 0116 WHE 92.5 OK Toledo. 0120 WAR 96.1 MI Holtard. 0120 WAR 96.1 MI Holtard. 0120 WAR 96.1 MI Holtard. 0122 WOX 106.7 MI Detrott. 0130 WAR 104.7 OK Toledo. 0131 WAR 93.7 YI Ashinad.r. 0130 WAR 94.5 YI Lexington. 0131 WAR 94.5 YI Lexington. 0131 WAR 94.5 YI Lexington. 0133 WAR 95.3 WI Miwaukee, k 0200 WHM 90.7 WO St. Louis. 0130 WAR 94.5 YI Louis. 0130 WAR 94.5 YI Louis. 0130 WAR 94.5 YI Lexington. 0130 WAR 94.5 YI Lexingto</pre>	adje mane jest me me menne o	12/20 1200 WTTE 89.5 På Hershev
 1900 WGED 59.3 PA Pittsburgh world of PM DX you'll like it! - fjn) John Ebeling - 9209 Vincent Ave. So Elocamington, MS 5921 This past fall was very poor none of the good trope conditions one usually expects in Sept. & Ox. So far this winter, I haven't had any Au to speak of. New underlined. 11/25 MS 061 WARE 99.9 MN Rochester, 10/2 [2017] Provided Physical Physical		The state of the state of the state of the
<pre>John Ebeling - 9209 Vincent Ave. So Elocmington, NN 55431 This past fall was very poor nore of the good trope conditions one usually expects in Sect. & Oct. So far this winter, I haven't had any Au to speak of. New underlined. 1/15 TOO 12 EMPR 89.9 NN Rochestar, 1/04 1/2 Es 1714 KDT 94.1 TH Seaumont, m, New CL 2/13 Th 155 TOOM 94.3 NN Windon, new stat 1/2 Es 1714 KDT 94.1 TH Seaumont, m, New CL 2/15 Th 0155 TOOM 94.3 NN Windon, new stat 1/2 Es 1714 KDT 94.1 PA Seaumont, m, New CL 2/16 This report is a continuation of Ralph's report from the previous page - fm) 12/9 Th 011 WOTE 91.3 OH Toledo, 0 0112 WOTE 91.3 OH Toledo, 0 0112 WOTE 92.5 OH Toledo, 0 0113 WOTU 92.3 CH Columbus, p 0116 CFFL 95.9 ON London, j 0119 WHNN 96.1 MH Holland, r 0120 WJR 96.3 MI Detroit, m 0105 WJRP 85.1 OH Larost, p 0120 WJR 96.3 MI Detroit, m 0105 WJRP 85.5 OH Clarealand, r 0122 WGCL 98.5 OH Clarealand, r 0128 WWN 166.7 HI Jackson, r 0139 WOTU 93.7 XY Ashlard, r 0139 WANK 93.7 XY Ashlard, r 0139 WTAK 93.1 L Chicago, k 0200 WIEN 106.7 IL Des Plaines, r 0139 WTAK 93.7 XY Ashlard, r 0139 WTAK 93.7 YY Ashlard, r 0139 W</pre>		
This past fall was very poor none of the good tropb conditions one shally expects in the winter, I haven 't had any Au to speak of. New underlined. 11/15 Tr 0012 HPR 90.9 MN Rochester,r,104 12/13 Tr 2247 HEGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 12/13 Tr 1155 HDEM 90.3 NM Windom, new stat 1/2 Es 1744 KIGI 96.5 NE Grand Island Ralph Strobel - 2510 McGalliard Road - Muncie, IN 47303 (EST) 12/14 Tr 0052 WKIG 92.5 CH Boaling Green,r, Q-FM Ol12 WOOM 91.7 HI Ann Arbor, 0116 (FFT 95.5 CH Lancaster, k 0059 WALE 97.5 CH Aleron, m Ol14 WHEM 92.5 CH Toledo, r 0103 WHEM 96.1 HI Jackson, m Ol15 WHET 94.1 MI Jackson, m 0103 WHEM 96.3 HI Detroit, m Ol20 WAR 96.3 HI Detroit, p 0103 WHEM 96.1 HI Jackson, r Ol20 WAR 96.3 HI Detroit, p 0130 WER 107.3 CH Elyria, a Ol20 WAR 97.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/14 WEE 89.3 WI Green Bay, nx Ol30 WER 107.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/12 0003 WHE 90.7 WF Fort Gay, r Ol30 WER 107.3 CH Elyria, a 12/26 0020 WHEM 106.3 IL Sullivan, m Ol30 WER 107.4 WHE 99.9 CH C	1900 WQED 89.3 PA Pittsburgh	world of FM DX you'll like it! - Ijn)
This past fall was very poor none of the good tropb conditions one shally expects in the winter, I haven 't had any Au to speak of. New underlined. 11/15 Tr 0012 HPR 90.9 MN Rochester,r,104 12/13 Tr 2247 HEGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 12/13 Tr 1155 HDEM 90.3 NM Windom, new stat 1/2 Es 1744 KIGI 96.5 NE Grand Island Ralph Strobel - 2510 McGalliard Road - Muncie, IN 47303 (EST) 12/14 Tr 0052 WKIG 92.5 CH Boaling Green,r, Q-FM Ol12 WOOM 91.7 HI Ann Arbor, 0116 (FFT 95.5 CH Lancaster, k 0059 WALE 97.5 CH Aleron, m Ol14 WHEM 92.5 CH Toledo, r 0103 WHEM 96.1 HI Jackson, m Ol15 WHET 94.1 MI Jackson, m 0103 WHEM 96.3 HI Detroit, m Ol20 WAR 96.3 HI Detroit, p 0103 WHEM 96.1 HI Jackson, r Ol20 WAR 96.3 HI Detroit, p 0130 WER 107.3 CH Elyria, a Ol20 WAR 97.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/14 WEE 89.3 WI Green Bay, nx Ol30 WER 107.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/12 0003 WHE 90.7 WF Fort Gay, r Ol30 WER 107.3 CH Elyria, a 12/26 0020 WHEM 106.3 IL Sullivan, m Ol30 WER 107.4 WHE 99.9 CH C		
This past fall was very poor none of the good tropb conditions one shally expects in the winter, I haven 't had any Au to speak of. New underlined. 11/15 Tr 0012 HPR 90.9 MN Rochester,r,104 12/13 Tr 2247 HEGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 11/29 MS 063 HMEC 99.3 AL Monroeville 1/2 Es 1744 KIGI 96.5 NE Grand Island 12/13 Tr 1155 HDEM 90.3 NM Windom, new stat 1/2 Es 1744 KIGI 96.5 NE Grand Island Ralph Strobel - 2510 McGalliard Road - Muncie, IN 47303 (EST) 12/14 Tr 0052 WKIG 92.5 CH Boaling Green,r, Q-FM Ol12 WOOM 91.7 HI Ann Arbor, 0116 (FFT 95.5 CH Lancaster, k 0059 WALE 97.5 CH Aleron, m Ol14 WHEM 92.5 CH Toledo, r 0103 WHEM 96.1 HI Jackson, m Ol15 WHET 94.1 MI Jackson, m 0103 WHEM 96.3 HI Detroit, m Ol20 WAR 96.3 HI Detroit, p 0103 WHEM 96.1 HI Jackson, r Ol20 WAR 96.3 HI Detroit, p 0130 WER 107.3 CH Elyria, a Ol20 WAR 97.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/14 WEE 89.3 WI Green Bay, nx Ol30 WER 107.3 CH Elyria, a 12/16 1820 WEFS 89.3 TH Johnson City, c Ol30 WER 107.3 CH Elyria, a 12/12 0003 WHE 90.7 WF Fort Gay, r Ol30 WER 107.3 CH Elyria, a 12/26 0020 WHEM 106.3 IL Sullivan, m Ol30 WER 107.4 WHE 99.9 CH C	John Engling - 9209 Vincent Ave. So Eloom	ington. MN 55431
 Sept. & Oct. So far this winter, I haven't had any AL Co speak C SNE Grand Island 11/15 The Oli LYDPE 90.9 NN Rochester, r, 104 12/13 Tr 2247 EEG 196.5 NE Grand Island 12/13 Tr 1155 MDC 90.9 NN Rochester, r, 104 12/03 (EST) Ralph Strobel - 2510 McGalliard Road - Muncie, IN 47303 (EST) (This report is a continuation of Ralph's report from the previous page - fjn) 12/9 Tr 0111 WOTE 91.3 OH Toledo, r 0112 WOGL 92.3 OH Toledo, r 0113 WCLL 92.5 OH Toledo, r 0116 CFE 95.9 ON London, j 12/15 OUT 96.5 HI Jackson, m 0120 WAR 96.3 HI Detroit, m 0122 WOCL 98.5 OH Cleveland, r 0128 WWWI 91.7 OH Chaeinstni, r 0130 WARI 93.7 KI Ashland, r 0133 WARE 99.5 OH Toledo, r 0133 WARE 99.5 OH Toledo, r 0133 WARE 99.5 OH Toledo, r 0133 WARE 99.5 OH Cleveland, r 0133 WARE 99.5 OH Cleveland, r 0134 WARI 93.7 KI Ashland, r 0133 WARE 99.5 OH Toledo, r 0133 WARE 99.5 OH Toledo, r 0133 WARE 99.5 NI Lexington, r 0134 WARI 93.7 KI Ashland, r 0135 WIRE 99.5 OH Toledo, r 0138 WARI 99.7 NI Ashland, r 0139 WARE 99.5 NI Lexington, r 0139 WARE 99.3 HI Miratkee, p 0159 WIRE 106.7 HI Detremonth, g 0200 WIRE 106.7 HI Detremonth, r 0210 WWR 93.3 HI Miratkee, p 0215 WIRE 105.9 HI Micharde, r 0216 WIRE 96.9 HI Mather, r, s/off 126 0000 WERU 88.9 HI Minre, r, s/off 0215 WIRE	This nest fell was your noor none of the	good tropo conditions one usually expects in
<pre>11/15 Tr 0012 MPR 99.3 AL Monceville 11/29 MS 0012 MPR 99.3 AL Monceville 12/13 Tr 1155 MDCM 99.3 AL Monceville 12/15 Tr 0011 WGTS 91.3 OH Toledo, 0112 WGCM 91.7 HL Ann Arbor, 0113 WGL 92.5 OH Toledo, 0113 WGL 92.5 OH Toledo, 0114 WMTE 92.5 OH Toledo, 0116 CFPL 95.9 OM London, j 0116 CFPL 95.9 OM London, j 0116 CFPL 95.9 OM London, j 0112 WGCM 96.1 MI Hollard, r 0120 WJR 96.1 MI Hollard, r 0122 WGL 98.5 OH Clevelard, r 0122 WGL 99.5 OH Clevelard, r 0123 WWM 91.7 OH Clevelard, r 0123 WWM 91.7 OH Clevelard, r 0123 WWM 91.7 OH Clevelard, r 0130 WGR 107.5 OH Elverott, s 0130 WGR 107.5 OH Elverott, s 0130 WGR 91.7 OH Clevelard, r 0130 WGR 92.7 MI Miles, m 0150 WFR 95.1 MI Detroit, s 0150 WFR 95.9 OH Hillewake, k 0200 WTR 105.7 IL Desended, r 0200 WGR 105.1 IL YNEMED, r, s/off 12/13 0000 WGR 91.5 IH MI betroit, c 0210 WHM 91.7 OH Clever, s/off 12/13 0000 WGR 91.5 IH MI betroit, c 0210 WHM 91.7 OH Clever, s/off 12/14 WGR 92.1 HI Hillewake, p 0210 WHM 93.3 II Peeria, r 0210 WHM 95.3 OH Manfield, r, s/off 12/14 WGR 99.1 W Elver Hatten, m</pre>		
12/13 Tr 1155 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/14 Tr 1055 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/9 Tr 0111 WGTE 91.3 OH Toledo,c 0128 WUMC 91.7 HI Ann Arbor,c 0113 WGL 92.3 GH Columbas,p 0114 WHEE 92.5 OH Toledo,r 12/14 Tr 0052 WITQ 93.5 CH Bowling Green,r,Q-FM 0059 WAEZ 97.5 CH Arcon,m 01000 WCC 98.3 IL Crest Hill,m,s/off 0137 WLAP 95.5 OH London,j 0116 CFEL 95.9 ON London,j 12/15 0017 WHOK 95.5 OH Lancaster,k 0137 WAD 106.7 HI Jackson,r 0037 WAD 106.3 IL Lansing,g,s/off 0137 WIAP 96.3 HI Detroit,m 0128 WWW 106.7 HI Jackson,r 0120 WFR 96.3 HI Betroit,m 0120 WFR 107.3 OH Elyria,m 0120 WFR 107.3 OH Elyria,m 0137 WIAP 94.5 KI Lexington,r 12/16 1620 WSTR 99.3 HI Strugis,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 HI Betroit,s 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0137 WLAP 94.5 KI Lexington,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 WT berts 48,r,r 0139 WTAE 99.9 OH Toledo,r 12/26 0020 WTM 102.9 HI Ann Arbor,p 0035 WGFM 90.7 WIA 106.7 IL Bertser,m 0133 WALP 99.9 OH Toledo,r 12/26 0020 WGM 104.5 HI Muskegon,m 0035 WGFM 90.7 WIA 104.1 CH Portsmouth,g 0153 WILP 99.9 OH Toledo,r 0121 WEMT 91.3 KI Lexington,c,s/off 0130 WHO 93.3 IL Peoria,r 12/26 0020 WGM 105.7 HI Detroit,c 0121 WEMT 91.3 KI Lexington,c,s/off 1300 WGR 90.9 OH Miaslaburg,r,10w. 0121 WHM 93.3 KI	Sept. & Oct. So far this winter, I haven t	10/12 m 22/17 EDGT OG 5 NE Gwand Taland
12/13 Tr 1155 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/14 Tr 1055 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/9 Tr 0111 WGTE 91.3 OH Toledo,c 0128 WUMC 91.7 HI Ann Arbor,c 0113 WGL 92.3 GH Columbas,p 0114 WHEE 92.5 OH Toledo,r 12/14 Tr 0052 WITQ 93.5 CH Bowling Green,r,Q-FM 0059 WAEZ 97.5 CH Arcon,m 01000 WCC 98.3 IL Crest Hill,m,s/off 0137 WLAP 95.5 OH London,j 0116 CFEL 95.9 ON London,j 12/15 0017 WHOK 95.5 OH Lancaster,k 0137 WAD 106.7 HI Jackson,r 0037 WAD 106.3 IL Lansing,g,s/off 0137 WIAP 96.3 HI Detroit,m 0128 WWW 106.7 HI Jackson,r 0120 WFR 96.3 HI Betroit,m 0120 WFR 107.3 OH Elyria,m 0120 WFR 107.3 OH Elyria,m 0137 WIAP 94.5 KI Lexington,r 12/16 1620 WSTR 99.3 HI Strugis,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 HI Betroit,s 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0137 WLAP 94.5 KI Lexington,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 WT berts 48,r,r 0139 WTAE 99.9 OH Toledo,r 12/26 0020 WTM 102.9 HI Ann Arbor,p 0035 WGFM 90.7 WIA 106.7 IL Bertser,m 0133 WALP 99.9 OH Toledo,r 12/26 0020 WGM 104.5 HI Muskegon,m 0035 WGFM 90.7 WIA 104.1 CH Portsmouth,g 0153 WILP 99.9 OH Toledo,r 0121 WEMT 91.3 KI Lexington,c,s/off 0130 WHO 93.3 IL Peoria,r 12/26 0020 WGM 105.7 HI Detroit,c 0121 WEMT 91.3 KI Lexington,c,s/off 1300 WGR 90.9 OH Miaslaburg,r,10w. 0121 WHM 93.3 KI	11/15 Tr 0012 KRPR 89.9 MN Rochester, r, 10W.	12/13 IF 2247 ARGI 90.5 NE Grand Island
12/13 Tr 1155 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/14 Tr 1055 KUME 94.3 HN WINDOM, New Stall 2200 MHD 94.7 HL Firster and the stall 12/9 Tr 0111 WGTE 91.3 OH Toledo,c 0128 WUMC 91.7 HI Ann Arbor,c 0113 WGL 92.3 GH Columbas,p 0114 WHEE 92.5 OH Toledo,r 12/14 Tr 0052 WITQ 93.5 CH Bowling Green,r,Q-FM 0059 WAEZ 97.5 CH Arcon,m 01000 WCC 98.3 IL Crest Hill,m,s/off 0137 WLAP 95.5 OH London,j 0116 CFEL 95.9 ON London,j 12/15 0017 WHOK 95.5 OH Lancaster,k 0137 WAD 106.7 HI Jackson,r 0037 WAD 106.3 IL Lansing,g,s/off 0137 WIAP 96.3 HI Detroit,m 0128 WWW 106.7 HI Jackson,r 0120 WFR 96.3 HI Betroit,m 0120 WFR 107.3 OH Elyria,m 0120 WFR 107.3 OH Elyria,m 0137 WIAP 94.5 KI Lexington,r 12/16 1620 WSTR 99.3 HI Strugis,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 HI Betroit,s 0139 WTAE 99.9 OH Toledo,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0137 WLAP 94.5 KI Lexington,r 12/20 0033 WGMQ 104.5 HI Muskegon,m 0035 WGFR 90.7 WT berts 48,r,r 0139 WTAE 99.9 OH Toledo,r 12/26 0020 WTM 102.9 HI Ann Arbor,p 0035 WGFM 90.7 WIA 106.7 IL Bertser,m 0133 WALP 99.9 OH Toledo,r 12/26 0020 WGM 104.5 HI Muskegon,m 0035 WGFM 90.7 WIA 104.1 CH Portsmouth,g 0153 WILP 99.9 OH Toledo,r 0121 WEMT 91.3 KI Lexington,c,s/off 0130 WHO 93.3 IL Peoria,r 12/26 0020 WGM 105.7 HI Detroit,c 0121 WEMT 91.3 KI Lexington,c,s/off 1300 WGR 90.9 OH Miaslaburg,r,10w. 0121 WHM 93.3 KI	11/29 MS 0631 WMFC 99.3 AL Monroeville	1/2 Es 1/14 KQXI 94.1 TX Beaumont, m, New CL
Rainh Strobel - 2510 McGalliard Road - Muncie, IN 47303 (EST)(This report is a continuation of Ralph's report from the previous page - fjm)12/9 Tr 0111 WOTE 91.3 OH Toledo,c0112 WOCM 91.7 ML Am Arbor,c0113 WOCE 92.3 OH Columbas,p0114 WHEF 92.5 OH Lodedo,r0115 WHFT 94.1 ML Jackson,m0116 CFPL 95.9 ON London,j0120 WWT 95.1 ML Holland,r0120 WWT 96.3 ML Detroit,m0120 WWT 96.1 ML Holland,r0120 WWT 96.3 ML Detroit,m0120 WWT 96.1 ML Holland,r0120 WWT 96.1 ML Hollard,r0120 WWT 96.1 ML Hollard,r0120 WWT 96.1 ML Holtorit,m0120 WWT 96.1 ML Detroit,m0120 WWT 106.7 ML Detroit,m0121 WWT 91.7 OH Chronnati,r0131 WWTU 91.7 OH Chronnati,r0131 WWTU 91.7 CH Chronnati,r0133 WWT 99.9 CH Toledo,r0133 WWT 99.9 CH Toledo,r0133 WWT 99.9 CH Toledo,r0134 WWT 99.7 XL Amalhard,r0135 WWTA 99.6 CH Pathaburgh,r0137 WLAP 94.5 IN Lexington,r0138 WWT 106.7 L Detrotmouth,g0159 WWTA 99.9 CH Toledo,r0200 WWTA 99.9 CH Toledo,r0210 WWTB 99.3 HL Markseq,h0220 WWTB 90.7 WWTA 90.6 XL Louis,c0230 WWTB 99.3 HL Markseq,h12/24 0005 WWTB 90.7 WW Fort Gay,r0230 WWTB 99.3 HL Markseq,h12/24 0005 WWTB 99.9 CH Toledo,r0230 WWTB 99.3 HL Markseq,h0250 WWTB 99.3 HL Markseq,h0260 WWTM 96.3 HL Monro	12/13 Tr 1155 KDOM 94.3 MN Windom, new sta.	2200 KFLG 92.9 AZ Flagstaff, r, New CL
(This report is a continuation of Ralph's report from the previous page - 1)n/ 12/9 Trolli WGTE 91.3 GH Columbus,p 0113 WGTE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0114 WHE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0114 WHE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0116 GFPL 92.5 GN London,j 0059 WAE2 97.5 GH Akron,m 0116 GFPL 95.9 ON London,j 12/15 0017 WHAD 106.3 WI Midleton-Madison,m 0120 WGR 96.3 MI Detroit,n 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0128 WWW 106.7 HI Jackson,r 12/16 1320 WSTR 99.3 HI Strugis,r 0130 WGFR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 HL Lincoln,m 0131 WYLU 91.7 OH Clincinnati,r 12/20 0033 WGFA 94.1 H Watsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 12/26 0020 WFRC 100.1 HL Matsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 0030 WGFA 94.1 H Watsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 12/26 0020 WFRC 100.1 KI Carrollton,k 0200 WILW 103.7 TK Bahami,r 12/26 0020 WFRC 100.1 KI Carrollton,k 0210 WHD 90.7 MO St		
(This report is a continuation of Ralph's report from the previous page - 1)n/ 12/9 Trolli WGTE 91.3 GH Columbus,p 0113 WGTE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0114 WHE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0114 WHE 92.5 GH Toledo,r 0053 WATP 92.5 GH Bowling Green,r,Q-FM 0116 GFPL 92.5 GN London,j 0059 WAE2 97.5 GH Akron,m 0116 GFPL 95.9 ON London,j 12/15 0017 WHAD 106.3 WI Midleton-Madison,m 0120 WGR 96.3 MI Detroit,n 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0122 WGCL 98.5 GH Cleveland,r 0030 WSIU 91.9 HL Carbondale,r 0128 WWW 106.7 HI Jackson,r 12/16 1320 WSTR 99.3 HI Strugis,r 0130 WGFR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 HL Lincoln,m 0131 WYLU 91.7 OH Clincinnati,r 12/20 0033 WGFA 94.1 H Watsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 12/26 0020 WFRC 100.1 HL Matsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 0030 WGFA 94.1 H Watsegon,m 0139 WTAE 96.1 FA Pittaburgh,r 12/26 0020 WFRC 100.1 KI Carrollton,k 0200 WILW 103.7 TK Bahami,r 12/26 0020 WFRC 100.1 KI Carrollton,k 0210 WHD 90.7 MO St	Relah Stanhel - 2510 McGelliand Road - Munch	e. TN 47303 (EST)
<pre>12/9 Tr 0111 WGTE 91.3 OH Teledo,c 0112 WGGM 91.7 MIA Ann Arbor,c 0113 WGGL 92.3 OH Columbus,p 0114 WMHE 92.5 OH Teledo,r 0113 WGGL 92.3 OH Columbus,p 0114 WMHE 92.5 OH Teledo,r 0115 WHFT 94.1 MI Jackson,m 0116 CFFL 95.9 ON London,j 0116 WHNN 96.1 MI Haltand,r 0120 WGR 96.3 MI Detroit,n 0120 WGR 96.3 MI Detroit,n 0120 WGM 96.3 HI Teledo,r 0122 WGCL 98.5 OH Cleveland,r 0128 WWW 106.7 MI Detroit,p 0129 WEEA 107.3 OH Elyria,m 0130 WGFR 107.5 MI Detroit,s 0131 WAVU 91.7 OH Clencinmati,r 0130 WGFR 107.5 MI Detroit,s 0130 WGFN 99.9 OH Teledo,r 0130 WGFN 99.9 OH Teledo,r 0130 WGFN 104.5 IL Answenport,r 0139 WTLE 99.9 OH Teledo,r 0150 WHEN 99.9 OH Teledo,r 0151 WHIN 99.7 KI Ashland,r 0152 WGM 103.7 IL Detroit,s 0153 WKLR 99.9 OH Teledo,r 0153 WKLR 99.9 OH Teledo,r 0250 WFGH 90.7 WI Fort Gay,r 0153 WKLR 99.9 OH Teledo,r 0260 WINN 103.7 IL Detroit,c 0270 WINN 105.7 IL Detroit,c 0270 WINN 105.7 IL Detroit,c 0230 WGRS 105.1 MI Detroit,c 0230 WGRS 105.1 MI Detroit,c 02315 WFFF 105.9 OH Middletwon,j 030 WGFN 93.3 II Teoris,r 0335 WFFF 105.9 OH Middletwon,j 0300 WERP 90.7 MI Milwaukee,p 2330 WHFM 96.9 IL Matona, 3WJ 2330 WHFM 96.9 IL Matine,r 0335 WFFF 105.9 OH Middletwon,j 0340 WHEM 90.7 WI Delafield,nx 0350 WGFN 90.9 IM Markield,r,r,f/off 12/13 0000 WEND 90.5 WI Mansfield,rx 0500 WGFN 90.9 IN Terre Haute,m 0501 WUMP 95.9 IM Mansfield,r,rs/off 1300 WGFN 90.9 IN Terre Haute,m 0501 WUMP 95.9 IM Ansfield,rx 0500 WUME 95.9 IM Mansfield,rx 0500 WUME 95.9 IM Mansfield,rx 0500 WU</pre>	Tota such is a subination of Dalph's ne	mont from the previous page - fin)
0112 WOLM 92.3 GH Hol Arbor, p 0113 WOLM 92.3 GH Holso, p 0114 WMHE 92.5 OH Toledo, r 0115 WHET 94.1 MI Jackson, m 0116 CFL 95.9 WL London, j 0100 WCCQ 98.3 IL Crest Hill, m,s/off 0117 WHMN 96.3 HI Holland, r 0120 WGR 96.5 OH Clevelard, r 0122 WGCL 98.5 OH Clevelard, r 0120 WFR 104.7 OH Toledo, r 0130 WER 107.5 MI Detroit, p 12/16 0131 WAMM 93.7 XF Ashland, r 12/20 0035 WGFA 94.1 IL Watseke, m 0130 WHEN 99.9 OH Toledo, r 12/24 0005 WFGM 90.7 WF Port Gay, r 0130 WH	(This report is a continuation of Ralph S re	to /the me ones were on the Bowling Green a O-EM
0112 WOLM 92.3 GH Hol Arbor, p 0113 WOLM 92.3 GH Holso, p 0114 WMHE 92.5 OH Toledo, r 0115 WHET 94.1 MI Jackson, m 0116 CFL 95.9 WL London, j 0100 WCCQ 98.3 IL Crest Hill, m,s/off 0117 WHMN 96.3 HI Holland, r 0120 WGR 96.5 OH Clevelard, r 0122 WGCL 98.5 OH Clevelard, r 0120 WFR 104.7 OH Toledo, r 0130 WER 107.5 MI Detroit, p 12/16 0131 WAMM 93.7 XF Ashland, r 12/20 0035 WGFA 94.1 IL Watseke, m 0130 WHEN 99.9 OH Toledo, r 12/24 0005 WFGM 90.7 WF Port Gay, r 0130 WH	12/9 Tr 0111 WGTE 91.3 OH TOLEGO,C	12/14 IF 0052 WALQ 95.5 OR DOWLING Green, F, 4-FA
0113 WCGL 92.3 CH Columbus,p 0114 WHE 92.5 OH Toledo,r 0115 WHFT 94.1 MI Jackson,m 0116 CFE 95.9 CN London,j 0119 WHND 96.1 MI Holland,r 0120 WJR 96.3 MI Detroit,m 0122 WGCL 98.5 CH Cleveland,r 0122 WGCL 98.5 CH Cleveland,r 0123 WJNI 106.7 MI Detroit,m 0128 WWW 106.7 MI Jackson,r 0128 WWW 106.7 MI Detroit,m 0129 WESL 90.3 VI Green Bay,nx 0128 WWW 106.7 MI Detroit,s 0130 WCR 107.5 MI Detroit,s 0131 WNTU 91.7 OH Cincinnati,r 0131 WNTU 91.7 OH Cincinnati,r 0133 WANT 93.7 KT Lexington,r 0139 WTAE 96.1 PA Pittsburgh,r 0139 WTAE 99.0 OH Toledo,r 0139 WTAE 99.0 OH Toledo,r 0130 WTME 93.3 IL Chicago,k 12/26 0020 WTMI 102.9 HI Caraf Rapids,m 0200 WTME 91.3 OH Toledo,r 0210 WMED 93.3 IL Deroit,c 0210 WMED 93.3 IL Deroit,c 0230 WORE 93.3 HI Monroe,m,s/off 12/13 0000 WEKU 88.9 KT Hichmod,r 0130 WHED 93.3 IL Peris,r 0130 WHED 93.3 IL Peris,r 0132 WFM 93.3 WI Hilvaukee,b 2300 WORE 93.3 HI Monroe,m,s/off 12/14 0000 WHEN 95.3 OH Midledon, j 2300 WIEB 95.3 HI Monroe,m,s/off 12/14 0000 WEKU 88.1 OH Holladit,r,s/001 12/14 WIEB 90.9 IH Holladit,r,s/001 2310 WIEB 95.9 IH Midleld,r,s/001 2310 WIEB 95.9 IH Midleld,r,s/001 2310 WIEB 95.9 IH Midleld,r,s/001 2310 WIEB 95.9 IL Matron,m, 370J 2310 WIEB 95.9 IL Matron,m, 370	UITZ WULM 91. / HI ANN AFOUL'S	OUJ) HAU OUT ON ALLONY
0114 WHHE 92.5 OH Toledo,r 0100 WCCG 95.3 HL Crest Hill, mg*/011 0115 WHFT 94.1 MI Jackson,m 0137 WHAD 106.3 WL Bendon,j 0116 CFPL 95.9 ON London,j 017 WHOK 95.5 OH Lancaster,k 0120 WCR 96.1 MI Hollard,r 0030 WSIU 91.9 IL Carbondale,r 0122 WCRL 96.5 CH Cleveland,r 0015 WLNR 106.3 LL Benton,p 0122 WCRL 97.5 OH Toledo,p 1730 WFPL 91.9 KI Louisville,c 0127 WJOX 106.7 MI Jackson,r 12/16 1820 WSTR 99.3 WL Strugis,r 0128 WWW 106.7 MI Detroit,p 12/16 1820 WSTR 99.3 WI Strugis,r 0130 WCR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 LL Lincoln,m 0131 WYU 91.7 OH Clincinmti,r 12/20 0033 WGPA 94.1 LW Makega,m 0133 WYL 95.5 IL A Pittsburgh,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0153 WKL 99.9 OH Toledo,r 12/25 0101 WCS 92.1 MI Hillwalkee,k 0200 WKI 100.1 LL Ernaston,e 1/3 1300 WUCL 90.5 HI An Arbor,p 0210 WWH 91.3 KI Lexington,c,s/off 1830 WKSF 89.9 OH Miamimburg,r,10w. 0212 WEM 93.3 L Peoris,r 1/4 0226 WLES 102.3 MI Arban,m, "Cutis" 0213 WHM 93.3 L Peoris,r 1/5 1650 WOC 89.1 H Arban,m, "Cutis" 0224 WHM 93.3 MI Milveakee,p 1/3 1300 WUCL 90.5 KI Louisville,c, new 0225 WWL 106.7 HI Detroit,c 1/3 1300 WUCL 90.5 KI Louisville,r, new 0226	0113 WCOL 92.3 OH Columbus,p	
0115 WHFT 94.1 MT Jackson,m 0137 WHAD 106.3 WT Middleton-Madison,m 0116 WFT 94.1 MT Jackson,m 0137 WHAD 106.3 WT Middleton-Madison,m 0119 WFNN 96.1 MT Hollard,r 0030 WSIU 91.9 LL Carbondale,r 0122 WGCL 96.5 OH Cleveland,r 0075 WHAT 106.3 LL Lansing,g,s/off 0125 WIDT 104.7 OH Toledo,p 1073 WFNE 39.3 WI Green Bay,nx 0127 WHOK 106.7 MI Jackson,r 12/16 0128 WWW 106.7 MI Jackson,r 12/16 0131 WATU 91.7 OH Cincinnati,r 12/19 0133 WATA 94.5 KT Lawington,r 12/19 0133 WATA 94.5 KT Lawington,r 12/20 0133 WATA 94.5 KT Lawington,r 12/20 0133 WATA 99.9 OH Toledo,r 12/24 0137 WLAP 94.5 KT Lawington,r 12/25 0133 WATA 99.9 OH Toledo,r 12/25 0143 WPAT 104.1 OH Portsmouth,g 0905 WFGH 99.7 WT Hord Gay,r 0143 WPAT 104.3 LL Chicago,k 12/25 0144 WFM 91.3 KT Lawington,e,s/off 130 WHO 90.7 MO St. Louis,c 0121 WHW 91.3 L Chicago,k 12/26 0200 WWT 102.3 WI Greenville,r 0200 WHD 93.3 L Peoria,r 1/4 0218 WWT 93.3 WI Milwaukee,p 1/5 12/13 0000 WEN 89.5 NI Itawington,e,s/off 130 WHO 98.3 MI Morce	0114 WMHE 92.5 OH Toledo.r	0100 WCCQ 98.3 IL Crest Hill, m, s/off
0116 CFPL 95.9 ON London, j 12/15 0017 WHOR 95.5 OH Larcaster, k 0120 WFR 96.3 MI Detroit, m 0030 WSIU 91.9 IL Carbondale, r 0122 WGCL 98.5 OH Cleveland, r 0030 WSIU 91.9 IL Carbondale, r 0122 WGCL 98.5 OH Cleveland, r 0105 WLNR 106.3 IL Benton, p 0127 WJON 106.7 MI Jackson, r 1730 WFPL 91.9 KI Louisville, c 0128 WWW 106.7 MI Detroit, p 12/16 0130 WFR 107.5 M Detroit, s 12/19 0131 WXU 91.7 OH Cincinnati, r 12/19 0137 WLAP 94.5 KI Lexington, r 0035 WGFA 94.1 IL Watseka, m 0139 WTAE 96.1 PA Pittsburgh, r 0035 WGFA 94.1 IL Witseka, m 0139 WTAE 96.1 PA Pittsburgh, r 0035 WGFA 94.1 IL Witseka, m 0153 WKIM 106.7 IL Detroit, s 12/26 0153 WKIM 106.7 IL Detroit, s 12/26 0200 WENT 102.7 IL Deserport, r 0205 WFGH 90.7 W Fort Gay, r 0210 WMU 90.7 NO St. Louis, c 1/3 015 WWN 98.3 MI Minwaukee, k 1/2 0210 WMEN 99.3 IL Peris, r 1/4 0220 WGM 93.3 IL Peris, r 1/2 0210 WMM 99.3 MI Minweuke, p 1/3 0210 WMEN 99.3 MI Minweuke, p 1/3 0210 WMEN 99.3 MI Minweuke, p 1/3 0210 WMEN 9	OIIS WURT OU I MT Jackson m	0137 WMAD 106.3 WT Middleton-Madison.m
0119 WHNN 96.1 MI Hollard,r 0030 WSIU 91.9 IL Carbondale,r 0120 WJR 96.3 MI Detroit,m 0045 WQRX 106.3 IL Lansing,g,s/off 0122 WJC 106.7 MI Jackson,r 1731 WNE 89.3 WI Green Bay,nx 0128 WWN 106.7 MI Detroit,p 12/16 1820 WSTF 99.3 MI Strugis,r 0129 WEEA 107.3 OH Elyria,m 12/16 1820 WSTF 99.3 MI Strugis,r 0131 WNK 93.7 KI Ashland,r 12/19 0010 WFRC 100.1 KI Carcollton,k 0131 WNK 93.7 KI Ashland,r 12/20 0033 WGMQ 104.5 MI Muskegon,m 0133 WLR 94.5 KI Lexington,r 12/20 0033 WGMA 106.3 IL Lincoln,m 0139 WLA 94.5 KI Lexington,r 12/20 0033 WGMA 106.3 IL Sullivan,m 0139 WIA 94.5 IL Detroit,s 12/20 0033 WGMA 106.3 IL Sullivan,m 0139 WIA 99.9 OH Toledo,r 12/20 0033 WGMA 106.3 IL Sullivan,m 0143 WPA 104.1 OH Portsmouth,g 0070 WVCH 100.1 KI Carcollton,k 0200 KIKIR 99.9 OH Toledo,r 12/25 0101 WSR 92.1 MI Hillsdle,m 0200 KIKIR 99.9 OH Toledo,r 12/26 0020 WUR 102.9 MI Ann Arbor,p 0201 WJD 104.3 IL Chicago,k 12/26 0020 WUR 102.9 MI Ann Arbor,p 0202 WOR 105.1 IL Exrhaton,c, s/off 1300 WUR 96.9 OH Miamisburg,r,10w. 0211 WHMU 90.7 MO St. Louis,c 1/5 1300 WSF 89.9 OH Miamisburg,r,10w. 0212 WWM0 98.3 MI Monroe,m,s/off 170 WYFN 95.3 OH Kenton,m	OIL) WHIL THE DECKOOLIN	10/16 0012 WHOF OS 5 OF Langaster k
0120 WJR 96.3 MI Detroit,m 0045 WQRY 106.3 IL Benton,p 0122 WGCL 98.5 OH Clevelard,r 0105 WURR 106.3 IL Lansing,g,s/off 0125 WION 104.7 OH Toledo,p 0105 WURR 106.3 IL Lansing,g,s/off 0128 WWW 106.7 HI Jackson,r 12/16 1820 WSTR 99.3 HI Strugis,r 0130 WGR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 IL Lincoln,m 0131 WJXU 91.7 OH Cincinnati,r 12/19 0010 WFRC 100.1 IL Lincoln,m 0133 WIAR 99.5 XI Lexington,r 12/20 0033 WGW 104.5 MI Muskegon,m 0139 WIAE 96.1 FA Pittsburgh,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0153 WKIR 99.9 OH Toledo,r 12/25 0101 WCSR 92.1 MI Hillsale,m 0154 WBCS 102.9 WI Milwaukee,k 12/25 0101 WCSR 92.1 MI Hillsale,m 0200 WIIN 106.7 IL Des Plaines,r 12/26 0020 WTCR 102.9 HI Grand Rapids,m 0204 WIEN 106.7 IL Des Plaines,r 1/3 1300 WICL 90.5 KI Louisville,c, new 0210 WMUM 90.7 MO St. Louis,c 1/4 0218 WIRS 105.1 KI Detroit,c 015 WVMO 98.3 MI Monroe,s/off 1/5 1650 WORC 89.1 HI Malesun, m 0130 WRED 93.3 IL Peoris,r 1/5 1650 WORC 89.1 HI Malesun, m 0132 WQPM 93.3 WI Milwaukee,p 1/5 1650 WORC 89.1 HI Malesun, m 0130 WRED 93.3 IL Peoris,r 1/5 1650 WORC 89.1 HI Malesun, m 0130 WRED 93.3 IL	OITO CEPL 95.9 ON LONDON, J	12/1) 001/ WINN 9/0) OI Dathandale m
0122 WGL 98.5 OH Clevelard,r 0105 WLR 106.3 IL Lansing,g,s/071 0125 WIOT 104.7 OH Toledo,p 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 MI Jackson,r 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 MI Detroit,p 12/16 0129 WIEA 107.3 CH Elyria,m 12/16 0131 WYXU 91.7 OH Cincinnati,r 12/19 0131 WYXU 91.7 OH Cincinnati,r 12/20 0133 WAMA 93.7 KI Ashlard,r 12/20 0139 WTAE 96.1 PA Pittsburgh,r 12/20 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 90.7 WV Fort Gay,r 0143 WPAY 104.1 OH Portsmouth,g 0035 WGFA 106.3 IL Sullivan,m 0154 WTEN 106.7 IL Derston,e 12/25 0200 KILK 103.7 IA Davenport,r 12/26 0201 WJD 104.3 IL Chicago,k 12/26 0202 WJD 105.1 IL Evington,c.s/off 1300 WUCE 90.5 KI Louisville,c, new 0121 WEMY 91.3 KY Lexington,c.s/off 1300 WUCE 95.3 MI Adrian,m, "Cute" 12/13 0000 WEM 98.3 MI Monroe, m,s/off 1300 WUCE 95.3 MI Adrian,m, "Cute" 12/13 0015 WMM 98.3 MI Monroe, m,s/off 13650 WORC 89.1 IL Naperville,r	0119 WHNN 96.1 MI Holland,r	
0122 WGL 98.5 OH Clevelard,r 0105 WLR 106.3 IL Lansing,g,s/071 0125 WIOT 104.7 OH Toledo,p 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 MI Jackson,r 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 MI Detroit,p 12/16 0129 WIEA 107.3 CH Elyria,m 12/16 0131 WYXU 91.7 OH Cincinnati,r 12/19 0131 WYXU 91.7 OH Cincinnati,r 12/20 0133 WAMA 93.7 KI Ashlard,r 12/20 0139 WTAE 96.1 PA Pittsburgh,r 12/20 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 99.9 OH Toledo,r 0035 WGFA 90.7 WV Fort Gay,r 0143 WPAY 104.1 OH Portsmouth,g 0035 WGFA 106.3 IL Sullivan,m 0154 WTEN 106.7 IL Derston,e 12/25 0200 KILK 103.7 IA Davenport,r 12/26 0201 WJD 104.3 IL Chicago,k 12/26 0202 WJD 105.1 IL Evington,c.s/off 1300 WUCE 90.5 KI Louisville,c, new 0121 WEMY 91.3 KY Lexington,c.s/off 1300 WUCE 95.3 MI Adrian,m, "Cute" 12/13 0000 WEM 98.3 MI Monroe, m,s/off 1300 WUCE 95.3 MI Adrian,m, "Cute" 12/13 0015 WMM 98.3 MI Monroe, m,s/off 13650 WORC 89.1 IL Naperville,r	0120 WJR 96.3 MI Detroit,m	
0125 WIOT 104.7 OH Toledo,p 1730 WFPL 91.9 KT Louisville,c 0127 WJOX 106.7 HI Jackson,r 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 HI Detroit,p 12/16 0128 WWW 106.7 MI Detroit,s 12/16 0130 WFPL 91.9 KT Louisville,c 12/16 0130 WFPL 91.7 S MI Detroit,s 12/16 0131 WAN 93.7 KT Ashland,r 12/20 0137 WLAP 94.5 KT Lexington,r 12/20 0138 WFXE 99.9 OH Toledo,r 12/20 0139 WTAE 96.1 PA Pittsburgh,r 12/24 0130 WGPA 104.1 OH Portsmouth,g 0907 WSAE 89.3 HI String Harbor,nx 0134 WFXI 99.9 OH Toledo,r 12/25 0153 WKLR 99.9 OH Toledo,r 12/25 0154 WECS 102.9 WI Milwaukee,k 12/25 0200 KILK 103.7 LA Davenport,r 12/25 0201 WJD 104.3 IL Chicago,k 12/25 0202 WJD1 106.7 IL Des Plaines,r 1/3 0210 WHM 90.7 NO St. Louis,c 1/4 0210 WHM 93.3 MI Milwaukee,p 1/5 12/13 0000 WEKU 88.9 KY Richmod,r 0230 WQRS 105.1 MI Detroit,c 1/5 0210 WHM 93.3 WI Milwaukee,p 1/5 12/13 0000 WEKT 93.3 WI Milwaukee,p 12/13 <td>0122 WGCL 98.5 OH Cleveland.r</td> <td>0105 WLNR 106.3 IL Lansing, g, s/off</td>	0122 WGCL 98.5 OH Cleveland.r	0105 WLNR 106.3 IL Lansing, g, s/off
0127 WJOX 106.7 MI Jackson,r 1731 WPNE 89.3 WI Green Bay,nx 0128 WWW 106.7 MI Detroit,p 12/16 0129 WEEA 107.3 OH Elyria,m 12/16 0130 WGPR 107.5 MI Detroit,s 12/19 0131 WVXU 91.7 OH Cincinnati,r 12/19 0137 WJAF 94.5 XI Lexington,r 0010 WPRC 100.1 IL Lincoln,m 0137 WJAF 94.5 XI Lexington,r 12/20 0138 WAW 104.1 OH Portsmouth,g 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 96.1 PA Pittsburgh,r 12/24 0143 WPAI 104.1 OH Portsmouth,g 0035 WGFA 94.1 IL Watseka,m 0154 WECS 102.9 WI Milwakee,k 12/25 0200 KIIK 103.7 IA Darenport,r 12/26 0201 WJJD 104.3 IL Chicago,k 12/26 0202 WJOI 105.1 IL Evnaston,e 1/3 0202 WJOI 105.1 IL Evnaston,e,s/off 1300 WICE 90.5 XI Louisville,c,new 0210 WHED 93.3 WI Milwakee,p 1/5 0130 WHED 93.3 WI Milwakee,p <t< td=""><td></td><td>1730 WFPL 91.9 KY Louisville,c</td></t<>		1730 WFPL 91.9 KY Louisville,c
0128 WWW 106.7 MI Detroit,p 12/16 1820 WSTR 99.3 MI Strugis,r 0129 WEEA 107.3 GH Elyria,m 2230 WETS 89.3 TN Johnson City,c 0130 WGPR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 KI Lincoln,m 0131 WXU 91.7 GH Cincinnati,r 12/19 0010 WFRC 100.1 KI Carrollton,k 0131 WXU 91.7 GH Cincinnati,r 12/20 0033 WGWQ 104.5 MI Muskegon,m 0137 WLAP 94.5 KI Lexington,r 12/20 0030 WGMQ 104.5 MI Muskegon,m 0153 WKLR 99.9 OH Toledo,r 12/24 0905 WFGH 90.7 WF Fort Gay,r 0154 WECS 102.9 WI Milwaukee,k 12/25 101 WCSR 92.1 MT Hilledale,m 0200 WJJD 104.3 IL Chicago,k 12/26 0020 WFUR 102.9 MI Grand Rapids,m 0202 WJJD 104.3 IL Chicago,k 12/26 0020 WFUR 102.9 MI Grand Rapids,m 0202 WJJD 104.3 IL Chicago,k 1/3 1300 WICL 90.5 KY Louisville,c,new 0204 WIEN 106.7 IL Des Plaines,r 1/4 128 WIENS 102.3 KY Louisville,c,new 0132 WPM 93.3 MI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r,p.10w. 0130 WHE9 93.3 JL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHE9 93.3 MI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r <t< td=""><td></td><td></td></t<>		
 2230 WETS 89.3 TN Johnson City,c 2230 WETS 99.7 MI Johnson City,c 2230 WETS 99.7 MI Johnson City,c 2230 WETS 99.7 MI Johnson City,c 2245 WIN 106.7 IL Detroit,c 2217 WIGE 102.9 MI Ann Arbor,p 2210 WMM 90.7 MD St. Louis,c 2300 WENT 91.3 KT Lexington,c,s/off 12/13 0000 WENT 98.3 MI Minwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r,10W. 2300 WENT 95.3 OH Midletwon,j 2310 WHET 95.3 WI Milelad,rx 2353 WHT 96.9 IL Malton,r 2353 WHT 96.9 U Moline,r 2353 WHT 96.9 U Moline,r 2353 WHT 96.9 U Moline,r 2353 WHT 96.9 IL Malton,m 2414 0000 WEW 105.3 OH Mansfield,rx,s/off 12/14 		
0130 WGPR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 IL Lincoln,m 0131 WYXU 91.7 OH Cincinnati,r 0700 WVCM 100.1 KY Carrollton,k 0131 WAMX 93.7 KY Ashland,r 12/20 0033 WGPA 94.1 IL Watseka,m 0139 WTAE 96.1 PA Pittsburgh,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0143 WFAY 104.1 OH Portsmouth,g 0035 WGFA 94.1 IL Watseka,m 0153 WKLR 99.9 OH Toledo,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0153 WKLR 99.9 OH Toledo,r 12/25 0101 WCSR 92.1 MI Hilledale,m 0200 KIIK 103.7 IA Davenport,r 12/25 0101 WCSR 92.1 MI Hilledale,m 0202 WJJD 104.3 IL Chicago,k 12/25 0101 WCSR 92.1 MI Hilledale,m 0204 WTEN 106.7 IL Des Plaines,r 1/3 1300 WICL 90.5 KY Louisville,c,new 0204 WTEN 106.7 IL Des Plaines,r 1/4 0218 WIRS 102.3 KI Louisville,c,new 0204 WTEN 106.7 IL Des Plaines,r 1/4 0218 WIRS 102.3 KI Louisville,c,new 0120 KMMU 90.7 MO St. Louis,c 1/4 0218 WIRS 93.3 WI Miwaukee,p 0130 WHED 93.3 MI Monroe,m,s/s/off 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHED 93.3 WI Miwaukee,p 1/6 0422 WIR 89.1 MI Kalamasoo,p,10w. 0230 WLEH 96.9 IL Matoon,m 1/6 0422 WIR 89.1 MI Kalamasoo,p,10w.<	0120 WWWW 100.7 MI Detroit,p	
0130 WGPR 107.5 MI Detroit,s 12/19 0010 WFRC 100.1 Hz Lindolli,m 0131 WXU 91.7 OH Cincinnati,r 0700 WFRC 100.1 Hz Lindolli,m 0131 WAM 93.7 KI Ashland,r 12/20 0033 WGNQ 104.5 MI Muskegon,m 0137 WLAP 94.5 KI Lexington,r 12/20 0035 WGFA 94.1 IL Watseka,m 0137 WLAP 94.5 KI Lexington,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0133 WAKI 93.7 KI Ashland,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0135 WKLR 99.9 OH Toledo,r 12/25 0101 WFR 106.3 IL Sullivan,m 0153 WKLR 99.9 OH Toledo,r 12/25 0101 WCST 92.1 MI Hilledale,m 0200 WJD1 104.3 IL Chicago,k 12/26 0020 WFWR 102.9 MI Ann Arbor,p 0201 WJD1 104.3 IL Chicago,k 12/26 0020 WFWR 102.9 MI Carand Rapide,m 0202 WOJO 105.1 IL Evnaston,e 1/3 1300 WICE 90.5 KT Louisville,c,new 0201 WHN 90.7 MO St. Louis,c 1/4 0218 WIRS 102.3 KI Lewington,c,s/off 0130 WHE 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHE 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHE 93.3 WI Monroe,m,s/off 170 WTN 95.3 OH Kanton,m 1900 WCWT 95.3 OH Kanton,m 0130 WHE 93.9 WH Milwaukee,p 1/5 1650 WONC 89.1 IL	0129 WBEA 107.3 OH ELyris.m	
0131 WANX 93.7 KT Ashland,r 12/20 0033 WGWQ 104.5 HI Muskegon,m 0137 WLAP 94.5 KT Lexington,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAE 96.1 PA Pittsburgh,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0153 WKLR 99.9 OH Toledo,r 12/24 0905 WFGA 94.1 IL Watseka,m 0153 WKLR 99.9 OH Toledo,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0153 WKLR 99.9 OH Toledo,r 12/25 0101 WCSR 92.1 MT Hilledale,m 0200 WJD 104.3 IL Chicago,k 12/26 0020 WFWA 106.3 IL Sullivan,m 0202 WJJD 104.3 IL Chicago,k 12/26 0020 WTW 102.9 MI Grand Rapids,m 0202 WJD 105.1 IL Evnaston,e 1/3 1300 HUCL 90.5 KT Louisville,c,new 0210 WHN 90.7 MO St. Louis,c 1/4 0218 WIRS 102.3 KT Louisville,c,new 0212 WHN 91.3 KT Lexington,c,s/off 1/4 0218 WIRS 102.3 KT Louisville,r,p.10w. 12/13 0000 WEKU 88.9 KT Richmond,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHE 93.3 MI Monroe,ms,s/off 1/5 1650 WONC 89.1 IL Naperville,r 0130 WEB 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 0130 WEB 94.9 Middletwon,j 1/6 0452 WILM 95.3 OH Kenton,m 0230 WEB 96.9 IL Maton,m 1/6 0452 WILM 89.1	0130 WGPR 107.5 MI Detroit,s	
0131 WAMX 93.7 KT Ashland,r 12/20 0033 WGWQ 104.5 MT Muskegon,m 0137 WLAP 94.5 KT Lexington,r 0035 WGFA 94.1 IL Watseka,m 0139 WTAP 96.1 PA Pittsburgh,r 12/24 0003 WGFA 94.1 IL Watseka,m 0139 WTAP 96.1 PA Pittsburgh,r 12/24 0907 WSAE 89.3 MI Spring Harbor,nx 0153 WKLR 99.9 OH Toledo,r 12/25 0007 WSAE 89.3 MI Spring Harbor,nx 0154 WECS 102.9 WI Milwaukee,k 12/25 0101 WCSR 92.1 MT Hilledale,m 0200 KILK 103.7 IA Davenport,r 12/26 0020 WFUR 102.9 MI An Arbor,p 0201 WJJD 104.3 IL Chicago,k 12/26 0020 WFUR 102.9 MI Grand Rapids,m 0202 WOJO 105.1 IL Evnaston,e 1/3 1300 WICL 90.5 KT Louisville,c, new 0210 KMMU 90.7 MO St. Louis,c 1/4 0257 WFEB 107.3 MI Greenville,k 0121 WENT 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmod,r 1/5 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 0130 WEB 94.9 OH Middletwon,j 1/6 0452 WIDR 89.1 MI Kaiamasoo,p,10w. 0230 WEB 105.9 OH Middletwon,j 1/6 0452 WIEM 96.7 MI Albion,g <t< td=""><td>0131 WVXU 91.7 OH Cincinnati.r</td><td></td></t<>	0131 WVXU 91.7 OH Cincinnati.r	
0137 WLAP 94.5 KY Lexington,r 0139 WTAE 96.1 PA Pittsburgh,r 0143 WPAY 104.1 OH Portsmouth,g 0153 WKLR 99.9 OH Toledo,r 0153 WKLR 99.9 OH Toledo,r 0154 WECS 102.9 WI Milwaukee,k 0200 KIIK 103.7 IA Davenport,r 0201 WJD 104.3 IL Chicago,k 0202 WJD 104.3 IL Chicago,k 0202 WJD 104.3 IL Chicago,k 0202 WJD 104.3 IL Chicago,k 0202 WJNN 106.7 IL Des Plaines,r 0210 KMNU 90.7 MO St. Louis,c 0210 KMNU 90.7 MO St. Louis,c 0121 WEKT 91.3 KY Lexington,c,s/off 12/13 0000 WEKU 88.9 KY Richmond,r 0132 WJME 93.3 WI Milwaukee,p 12/13 0000 WEKU 88.9 KY Richmond,r 0132 WJME 93.3 WI Milwaukee,p 12/13 0000 WEKU 98.3 MI Monree,m,s/off 0130 WHE9 93.3 WI Milwaukee,p 12/13 0000 WEKU 98.9 CH Middletwon,j 0230 WQRS 105.1 MI Detroit,c 2315 WFEF 105.9 OH Middletwon,j 2330 WLH 96.9 IL Malton,m 2345 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Malton,m 2353 WHTT 96.9 IL Malton,m 2358 WJJ 103.1 OH Johnstown, 3WJ 12/14 0000 WEW 105.3 OH Mansfield,r,s/off 12/14 0000 WEW1 105.3 OH Mansfield,r,s/off		12/20 0033 WOWQ 104.5 MI Muskegon,m
0139 WTAE 96.1 PA Pittsburgh,r 0143 WPAT 104.1 OH Portsmouth,g 0153 WKLR 99.9 OH Toledo,r 12/24 0905 WFGH 90.7 WV Fort Gay,r 0907 WSAE 89.3 MI Spring Harbor,nx 0935 WFWA 106.3 IL Sullivan,m 0154 WECS 102.9 WI Milwaukee,k 0200 KIIK 103.7 IA Darenport,r 12/25 0101 WCSR 92.1 MI Hilledale,m 2217 WIQB 102.9 MI Ann Arbor,p 0201 WJJD 104.3 IL Chicago,k 0202 WJOU 105.1 IL Evnaston,e 1/3 1300 WICL 90.5 MT Louisville,c,new 0202 WJOU 105.1 IL Evnaston,e 1/3 1000 WICR 102.9 MI Ann Arbor,p 0210 WMEU 90.7 MO St. Louis,c 1/4 0218 WIRS 102.9 MI Minsteur,r,10w. 0212 WENY 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmond,r 0132 WQPM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 II Naperville,r 17/10 WKTN 95.3 OH Mainsburg,r,10w. 0213 WIEE 96.9 L Matcon,m 2315 WFBF 105.9 OH Middletwon,j 1/6 0452 WID 89.1 MI Kalamasoo,p.10w. 0500 WEGU 88.1 OH Bowling Green,p 0501 WUFM 96.7 MI Albion,g 0612 WVFE 88.1 IN Elkhart,p.s/on 2353 WHT 96.9 L Maitown,%JJ 0000 WCH 95.3 OH Mansfield,r,s/off 0814 WFE 92.9 IL Olney,m 12/14 0000 WCH 105.3 OH Mansfield,r,s/off 0900 WTH 99.9 IN Terre Haute,m	0137 WIAD OU 5 KY Lerington P	
0143 WPAT 104.1 OH Portsmouth,g 0907 WSAE 89.3 HI Spring marbor,nx 0153 WELR 99.9 OH Toledo,r 0935 WFWA 106.3 IL Sullivan,m 0154 WECS 102.9 WI Milwaukee,k 12/25 0200 KIIK 103.7 IA Davenport,r 2217 WIQE 102.9 HI Ann Arbor,p 0201 WJDD 104.3 IL Chicago,k 12/26 0202 WOJO 105.1 IL Evnaston,e 1/3 0204 WINN 106.7 IL Des Plaines,r 1/4 0210 WMU 90.7 MO St. Louis,c 0218 WIRS 102.3 NT Louisville,p 0210 WMO 98.3 MI Monroe,mx,s/off 1300 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmond,r 1/5 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WDMS 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 12/30 WURB 105.9 OH Middletwon,j 1/6 0452 WIDR 89.1 MI Kalamasoo,p.10w. 0235 WHAD 90.7 WI Delafield,nx 0500 WEGU 88.1 OH Bowling Green,p 0235 WHAP 96.9 IL Maltoon,m 0501 WUFM 89.1 IN Elkhart,p.s/on 0235 WHY 96.9 J Holine,r 0501 WUFM 89.1 IN Elkhart,p.s/on 0244 WIM 103.104 Johnstown, 3WJ 0000 WTH 99.9 IN Terre Haute,m	0100 HEAT OF 1 DA DAttaburgh	12/24 0005 WECH 00.7 WV Fort Gay r
0155 WKIR 99.9 OH Toledo,r 0935 WFWA 106.3 IL Sullivan,m 0157 WKIR 99.9 OH Toledo,r 0935 WFWA 106.3 IL Sullivan,m 0157 WKIR 99.9 OH Toledo,r 12/25 0158 WFWA 106.3 IL Sullivan,m 12/25 0200 KIIK 103.7 IA Davenport,r 2217 WIGB 102.9 HI Ann Arbor,p 0201 WJD 104.3 IL Chicago,k 12/25 0202 WOJO 105.1 IL Evnaston,e 1/3 0202 WOJU 105.1 IL Evnaston,e 1/4 0202 WWIN 106.7 IL Des Plaines,r 1/4 0212 WHY 91.3 KY Lexington,c,s/off 1300 WICE 90.5 XY Louisville,c,new 0121 WHY 91.3 KY Lexington,c,s/off 1300 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WEKU 88.9 KY Richmod,r 1/5 0130 WHME 93.3 UL Peoria,r 1/5 0132 WQFM 93.3 WI Milwaukee,p 1/5 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/6 2300 WQRS 105.9 OH Middletwon,j 1/6 2330 WHH 96.9 IL Malton,m 1/6 2330 WHT 96.9 IL Malton,m 0501 WUFM 96.7 MI Albion,g 0345 WHAD 90.7 WI Delafield,nx 0501 WUFM 96.7 MI Albion,g 2345 WHAD 90.7 WI Delafield,nx 0602 WWFE 88.1 IN Elkhart,p.s/on 0824 WFE 92.9 IL Olney,m	offe unit tob t of participarty	
0154 WECS 102.9 WI Milwaukee,k 0200 KIIK 103.7 IA Davenport,r 0201 WJD 104.3 IL Chicago,k 0202 WOJO 105.1 IL Evnaston,e 0202 WJD 105.1 IL Evnaston,e 0202 WJM 90.7 MO St. Louis,c 0210 KMMU 90.7 MI Monree,m,s/off 0130 WHED 93.3 IL Peoria,r 0132 WQFM 93.3 WI Milwaukee,p 2300 WQRS 105.1 MI Detroit,c 2315 WFEF 105.9 OH Middletwon,j 2320 WQRS 105.1 MI Detroit,c 2315 WHEF 96.9 IL Malton,m 2345 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Moline,r 2358 WJJ 103.1 OH Johnstown, 3WJ 12/14 0000 WCWI 105.3 OH Mansfield,r,s/off 1/2 /25 100 WCMT 91.9 OH Centerville,r,p.10w. 200 WCMT 95.3 OH Kenton,m 1/6 0452 WIEM 89.1 MI Kalamazoo,p.10w. 0501 WUPM 96.7 MI Albion,g 0834 WSEF 92.9 IL Olney,m		OOOT UNIT 106 2 TL Sullimon w
0200 KIIK 103.7 IA Davenport,r 2217 WIGE 102.9 HI Ann Arbor,p 0201 WJJD 104.3 IL Chicago,k 12/26 0202 WJJD 104.3 IL Chicago,k 12/26 0202 WJD 105.1 IL Evnaston,e 1/3 0204 WIRN 106.7 IL Des Plaines,r 1/4 0210 KMMU 90.7 MO St. Louis,c 0218 WIRS 102.3 KT Louisville,p 0210 KMMU 90.7 MO St. Louis,c 0257 WPLB 107.3 HI Greenville,k 0121 WENT 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmond,r 1/5 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 2300 WCRS 105.1 MI Detroit,c 1/6 0452 WIRD 89.1 MI Kalamasoo,p.10w. 2330 WLBH 96.9 IL Matoon,m 0500 WEGU 88.1 OH Bowling Green,p 2345 WHAD 90.7 WI Delafield,nx 0501 WUFM 96.7 MI Albion,g 2353 WHTT 96.9 IL Matoon,m 0501 WUFM 82.1 IN Elkhart,p.s/on 0834 WESE 92.9 IL Olney,m 0834 WFE 92.9 IL Olney,m 12/14 0000 WCW 105.3 OH Mansfield,r.s/off		
0201 WJJD 104.3 IL Chicago,k 12/26 0020 WFUR 102.9 HI Grand Rapids,m 0202 WOJO 105.1 IL Evnaston,e 1/3 1300 HUCL 90.5 KY Louisville,c,new 0204 WTEN 106.7 IL Des Plaines,r 1/4 0218 WLES 102.3 KY Louisville,c 0210 KMHU 90.7 MO St. Louis,c 1/4 0218 WLES 102.3 KY Louisville,r 0210 KMHU 90.7 MO St. Louis,c 1/4 0218 WLES 102.3 KY Louisville,r 0121 WENT 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmond,r 1900 WCWT 91.9 OH Miamisburg,r,10w. 0132 WQFM 93.3 HI Monroe,mr,s/off 230 WQTE 95.3 HI Adrian,m,"Cutie" 0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/6 0452 WIDR 89.1 MI Kalamasoo,p.10w. 2330 WLEH 96.9 IL Maiton,m 1/6 0452 WIDR 89.1 MI Kalhamsoo,p.10w. 2353 WHAT 96.9 IL Malton,m 0501 WIFM 96.7 MI Albion,g 0814 WFE 92.9 IL Olney,m 12/14 0000 WCW 105.3 OH Mansfield,r.s/off 1900 WTHI 99.9 IN Terre Haute,m	0154 WBCS 102.9 WI Milwaukee,k	
0201 WJJD 104.3 IL Chicago,k 12/26 0020 WFUR 102.9 MI Grand Rapids,m 0202 W0J0 105.1 IL Evnaston,e 1/3 1300 WUCL 90.5 KY Louisville,c,new 0204 WTEN 106.7 IL Des Plaines,r 1/4 0218 WLRS 102.3 KT Louisville,p 0210 WMU 90.7 MO St. Louis,c 0257 WPLB 107.3 MI Greenville,k 0121 WENY 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WENU 88.9 KY Richmond,r 0015 WVMO 98.3 MI Monroe,mx,s/off 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/6 0452 WIDR 89.1 MI Kalamasoo,p.10w. 2330 WLEH 96.9 IL Matcon,m 1/6 0452 WIDR 89.1 MI Kalton,g 2353 WHT 96.9 IL Malton,r 0501 WUFM 96.7 MI Albion,g 0501 WUFM 96.7 MI Albion,g 12/14 0000 WCW 105.3 OH Mansfield,r,s/off 1900 WTH 99.9 IN Terre Haute,m	0200 KIIK 103.7 IA Davenport,r	2217 WIQE 102.9 MI Ann Arbor, p
0202 WOJO 105.1 IL Evnaston,e 1/3 1300 WUCL 90.5 KY Louisville,c,new 0202 WOJO 105.1 IL Evnaston,e 1/3 1300 WUCL 90.5 KY Louisville,c,new 0202 WOJO 105.1 IL Des Plaines,r 1/4 0218 WLRS 102.3 KY Louisville,p 0210 KMMU 90.7 MO St. Louis,c 1/4 0218 WLRS 102.3 KY Louisville,p 0210 KMMU 90.7 MO St. Louis,c 0257 WPLB 107.3 HI Greenville,k 12/13 0000 WEKU 88.9 KY Richmond,r 1830 WRSF 89.9 OH Miamisburg,r,10w. 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WQRS 105.1 MI Detroit,c 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/6 9245 WHAD 90.7 WI Delafield,nx 2330 WDFF 96.9 IL Malton,m 1/6 9245 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Malton,m 0501 WUFM 96.7 MI Albion,g 0312 WVFE 88.1 IN Elkhart,p,s/on 0824 WVFE 88.1 IN Elkhart,p,s/on 03258 WJJJ 103.1 OH Johnstown, 3WJ 0000 WCHI 99.9 IN Terre Haute,m	0201 WJJD 104.3 IL Chicago.k	
0204 WTEN 106.7 IL Des Plaines,r 1/4 0218 WLRS 102.3 KT Louisville,p 0210 KMMU 90.7 MO St. Louis,c 0257 WPLB 107.3 MI Greenville,k 12/13 0000 WEKT 91.3 KT Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WEKU 88.9 KY Richmond,r 1900 WCWT 91:9 OH Centerville,r,p,10w. 0130 WMED 93.3 IL Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0132 WQRM 93.3 WI Milwalkee,p 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/6 94.2 WDR 89.1 MI Kalamazoo,p,10w. 2310 WDEH 96.9 IL Matoon,m 1/6 94.2 WDR 89.1 MI Kalamazoo,p,10w. 2353 WHTT 96.9 IL Moline,r 0501 WUPM 96.7 MI Albion,g 0501 WUPM 96.7 MI Albion,g 2358 WJJ 103.1 OH Johnstown, 3WJ 0000 WCW 105.3 OH Mansfield,r,s/off 0834 WSEI 92.9 IL Mole,m	0202 WOID 105 1 TT. Fornaston e	1/3 1300 WUCL 90.5 KY Louisville.c.new
0210 KMMU 90.7 MO St. Louis,c 0257 WPLB 107.3 HI Greenville,k 0121 WENT 91.3 KY Lexington,c,s/off 0257 WPLB 107.3 HI Greenville,k 12/13 0000 WENU 88.9 KY Richmond,r 1900 WCNF 91.9 OH Centerville,r,p.10w. 0130 WHED 93.3 IL Peoria,r 1217 WIL 95.3 HI Milwaukee,p 1/5 0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHED 93.3 UI Peoria,r 1/5 1650 WONC 89.1 IL Naperville,r 0130 WHEP 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 0130 WLEH 96.9 IL Matoon,m 1/6 0452 WIDE 89.1 MI Kalamasoo,p.10w. 0230 WLEH 96.9 IL Matoon,m 0500 WEGU 88.1 OH Bowling Green,p 02353 WHTT 96.9 IL Moline,r 0501 WUFM 96.7 MI Albion,g 02358 WJJ 103.1 OH Johnstown,3WJ 0834 WSEI 92.9 IL Colney,m 12/14 0000 WCW 105.3 OH Mansfield,r,s/off 1900 WTH 99.9 IN Terre Haute,m	Opoli untat 106 0 TT Des Distance T	1/1 0218 WIRS 102.3 KT Louisville.n
0121 WEKT 91.3 KY Lexington,c,s/off 1830 WRSF 89.9 OH Miamisburg,r,10w. 12/13 0000 WEKU 88.9 KY Richmond,r 1900 WCWT 91.9 OH Centerville,r,p,10w. 0015 WVM0 98.3 MI Monroe,mr,s/off 1900 WCWT 91.9 OH Centerville,r,p,10w. 0130 WRED 93.3 IL Peoria,r 2217 WNIL 95.3 MI Adrian,m,"Cutie" 0132 WQFM 93.3 WI Milwaukee,p 1/5 2300 WQRS 105.1 MI Detroit,c 1/5 2315 WPEF 105.9 OH Middletwon,j 1/6 2330 WLEH 96.9 IL Matoon,m 0452 WIDR 89.1 MI Kalamasoo,p,10w. 2345 WHAD 90.7 WI Delafield,nx 0500 WEGU 88.1 OH Bowling Green,p 2353 WHTT 96.9 IL Maliown,%JJ 0000 WCW 96.7 MI Albion,g 12/14 0000 WCW 105.3 OH Mansfield,r,s/off 0834 WFEF 92.9 IL Olney,m	UZU4 WIEN 100.7 IL Des Flaines,r	
12/13 0000 WEKU 88.9 KY Richmond,r 0015 WVM0 98.3 MI Monree,m,s/off 1900 WCWT 91.9 Centerville,r,p,10w. 0130 WMED 93.3 IL Peoria,r 0132 WQFM 93.3 WI Milwaukee,p 2300 WQRS 105.1 MI Detroit,c 1/5 1650 WONC 89.1 IL Naperville,r 2315 WPBF 105.9 OH Middletwon,j 2330 WLEH 96.9 IL Matoon,m 2345 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Malioe,r 1/6 0452 WIDM 96.7 MI Albion,g 2358 WJJ 103.1 OH Johnstown, 3WJ 0000 WCWI 95.3 OH Mansfield,r,s/off 1900 WCWI 99.9 IL Materville,r	0210 KWMU 90.7 MU St. Louis,c	
0015 WTM0 98.3 MI Monroe,mt,s/off 2217 WNIL 95.3 MI Niles,m 0130 WMED 93.3 IL Peoria,r 2300 WQTE 95.3 MI Adrian,m,"Cutle" 0132 WQTM 93.3 WI Milwaukee,p 1/5 2300 WQRS 105.1 MI Detroit,c 1/5 2310 WLBH 96.9 IL Matoon,m 1/6 2345 WHAD 90.7 WI Delafield,nx 0500 WBCU 88.1 OH Bowling Green,p 2353 WHT 96.9 IL Moline,r 0501 WUFM 95.7 ON Biolastield,r,s/off 12/14 0000 WCW 105.3 OH Mansfield,r,s/off		10 10 WKSF 09.9 UN MIAMISOURG, F, 10W.
0015 WVM0 98.3 MI Monroe, mr, s/off 2217 WNL 95.3 MI Niles, m 0130 WMED 93.3 IL Peoria, r 2300 WQTE 95.3 MI Adrian, m, "Cutie" 0132 WQTM 93.3 WI Milwaukee, p 1/5 2300 WQRS 105.1 MI Detroit, c 1/5 2300 WLEH 96.9 IL Matoon, m 1/6 2345 WHAD 90.7 WI Delafield, nx 0500 WEGU 88.1 OH Bowling Green, p 2358 WJJ 103.1 OH Johnstown, 3WJ 0612 WVEF 88.1 IN Elkhart, p, s/on 12/14 0000 WCW 105.3 OH Mansfield, r, s/off	12/13 0000 WEKU 88.9 KY Richmond,r	
0130 WHED 93.3 IL Peoria.r 2330 WOTE 95.3 MI Adrian.m."Cutle" 0132 WQTM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville.r 2300 WQRS 105.1 MI Detroit.c 1/5 1650 WONC 89.1 IL Naperville.r 2315 WHEP f05.9 0H Maideletwon.j 1/6 0452 WIDR 89.1 MI Kalamasco.p.10w. 2345 WHAD 90.7 WI Delafield.nr 0500 WBCU 88.1 OH Bowling Green.p 2353 WHT 96.9 IL Moline.r 0501 WUFM 96.7 MI Albion.g 2358 WJJ 103.1 0H Johnstown.WJ 0834 WSEI 92.9 IL Olney.m 12/14 0000 WGW 105.3 0H Mansfield.r.s/off 1900 WTH 99.9 IN Terre Haute.m		
0132 WQFM 93.3 WI Milwaukee,p 1/5 1650 WONC 89.1 IL Naperville,r 2300 WQRS 105.1 MI Detroit,c 1/10 WKTN 95.3 OH Kenton,m 2315 WPBF 105.9 OH Middletwon,j 1/6 0452 WIDR 89.1 MI Kalamasoo,p.10w. 2330 WLBH 96.9 IL Matoon,m 1/6 0452 WIDR 89.1 MI Kalamasoo,p.10w. 2345 WHAD 90.7 WI Delafield,nx 0500 WBGU 88.1 OH Bowling Green,p 0501 WUFM 96.7 MI Albion,g 2353 WHTT 96.9 IL Matoom, MJ 0834 WSEI 92.9 IL Olloy,m 0834 WSEI 92.9 IL Olloy,m 12/14 0000 WCW 105.3 OH Mansfield,r.s/off 1900 WTHI 99.9 IN Terre Haute,m	0130 WMED 93.3 TT. Peoria r	
2300 WQRS 105.1 MI Detroit.c 2315 WFEF 105.9 OH Middletwon,j 2330 WEH 96.9 IL Matcon,m 2345 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Moline,r 2358 WJJ 103.1 OH Johnstown, JWJ 2358 WJJ 103.1 OH Johnstown, JWJ 12/14 0000 WEW 105.3 OH Mansfield,r,s/off 1710 WTN 95.3 OH Kenton,m 0452 WIDR 89.1 MI Kalamazoo,p.10w. 0500 WEW 96.7 MI Albion,g 0501 WUPM 96.7 MI Albion,g 0834 WSEI 92.9 IL Olney,m 1900 WTHI 99.9 IN Terre Haute,m	0132 WORN 03 3 WT Milwaukas B	
2315 WPBF 105.9 OH Middletwon,j 2330 WLBH 96.9 IL Matoon,m 2345 WHAD 90.7 WI Delafield,nx 2353 WHTT 96.9 IL Moline,r 2358 WJJ 103.1 OH Johnstown, 3WJ 12/14 0000 WEW 105.3 OH Mansfield,r,s/off 2315 WPBF 105.9 OH Middletwon,j 1/6 0452 WIDR 89.1 MI Kalamasoo,p,10w. 0500 WEGU 88.1 OH Bowling Green,p 0501 WUFM 96.7 MI Albion,g 0812 WVPF 88.1 IN Elkhart,p,s/on 0834 WSEI 92.9 IL Olney,m 1900 WTHI 99.9 IN Terre Haute,m		
2330 WLBH 96.9 IL Matoon,m 0500 WBGU 88.1 OH Bowling Green,p 2345 WHAD 90.7 WI Delafield,nx 0501 WUFM 96.7 MI Albion,g 2353 WHT 96.9 IL Moline,r 0812 WVFE 88.1 IN Elkhart,p,s/on 2358 WJJ 103.1 OH Johnstown, 3WJ 0834 WSEI 92.9 IL Olney,m 0894 WSEI 92.9 IL Olney,m 12/14 0000 WCW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m		
2345 WHAD 90.7 WI Delafield,nx 0501 WUFM 96.7 MI Albion,g 2353 WHT 96.9 IL Moline,r 0834 WSE 88.1 IN Elkhart,p.s/on 2358 WJJ 103.1 OH Johnstown, 3WJ 0834 WSE 92.9 IL Olney,m 12/14 0000 WEW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m		1/0 0452 WIDK 09.1 MI NALAMASOO, P. 10W.
2353 WHTT 96.9 IL Moline,r 0812 WVPE 88.1 IN Elkhart,p,s/on 2358 WJJJ 103.1 OH Johnstown,JWJ 0834 WSEI 92.9 IL Olney,m 12/14 0000 WCLW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m		0500 WBGU 88.1 OH Bowling Green, p
2353 WHTT 96.9 IL Moline,r 2358 WJJJ 103.1 OH Johnstown, JMJ 12/14 0000 WCLW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m	2345 WHAD 90.7 WI Delafield.nx	
2358 WJJJ 103.1 OH Johnstown, JWJ 0834 WSEI 92.9 IL Olney,m 12/14 0000 WCLW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m		0812 WVPE 88.1 IN Elkhart, p.s/on
12/14 0000 WCLW 105.3 OH Mansfield,r,s/off 1900 WTHI 99.9 IN Terre Haute,m		
0030 WERN 88.7 WI Madison, j.c No Es noted for many months Ralph.		
0030 WERN 85.7 WI Madison, J.C No Es noted for many months Kalph.	12/14 0000 WCLW 105.3 UN Mansile.d, F, S/0.	The second second second second second
	0030 WERN 88.7 WI Madison, j,c	NO F2 HOLGO IOL MWHAN WOULUS WETDU'

Southern F. M.D.X

Dave Cox 2007-E Brandywine Ct. Birmingham, AL 35216

February 1977

Deadline: 10th

If you can believe it, DX in the South got even worse in December. This month, there was absolutely no FM DX reported. This apparently was caused by the cold, rainy, wintry, just plain miserable weather which was prevalent over most of the Southeast. A spokesman for the Atlanta office of the National Weather Service summed up the December weather picture as not being one with record breaking cold, but still one with below normal temperatures. Practically all weather fronts which affected the South were cold fronts that produced no DX, only rain, ice, and snow.

This month, we have another report from Hank Holbrook on his DX from last summer which we have been saving for bleak times such as this. Hank's report covers April, May, and June of 1976 and is not, of course, current DX. Maybe though, it will help remind us that things will be getting better soon, hi.

Hank Holbrook, 7211 Chestnut Street, Chevy Chase, MD 20015 EDT

DXing from our cottage at Fair Haven, MD overlooking the Herring and Chesapeake Bays 15 miles below Annapolis, MD. Receiver is a Scott 310E FM tuner with Blonder-Tongue booster. Antenna is a Finco 10 element single bay FM yagi with CDE AR-33 rotor. Antenna is about 110 ft. above the water as our cottage is situated near the top of a hill. Reception to the S and SW is blocked somewhat by cliffs so best trop reception is from N and NE. 6-12-76 4-24-76 Es 1307 WBTR 92.1 Carrollton GA 595mi. 1257 WABE 90.1 Atlanta GA c;560mi. tr 1904 WWOC 94.3 Avalon NJ rm; 300miles many oldies with PSA, wor & ads Plenty of announcements for ID 4-25-76 tr 1207 WXTR 104.1 La Plata MD k; 30mi. WETR & WABE first from GA here 6-15-76 2002 WPGT 90.1 Poanoke Rapids NC g;180mi tr 1216 WKTV 92.3 New York City r:220ml. hard to copy, WOTB off air good with antenna pointed on them. 5-29-76 Many NYC educational stas heard tr 0716 WRCV 92.1 Mercerburg PA r;100mi. daily at good strength. 9% kw "Stereo 92, WRCV", QRM from with ant, atop Empire State Eldg. WLPL/WCTX/WOTS 6-26-76 5-31-76 tr 1134 WJLY 92.1 Moyock NC r;160mi. NC DI Es 1229 WCMQ 92.1 Hialeah FL L;920mi. all SS rare here. "Music Radio WJLY" 1239 WAMR 92.1 Venice FL 865mi. In til 1310 though WCMQ was the dominate 6-11-76 station on the channel Er 0510 WKSS 95.7 Hartford CT m;275mi. 1245 WWRN 92.1 West Palm Beach FL 850mi. "KISS, WKSS 96 - All music all In and out between WCMQ & WAMR the time." They expressed sur-1242 WFIN 92.5 Key West FL m; 1030mi. prise as they null in this direction. 50kw. (My thanks again, Hank, for these old reports. 0759 WWPH 90.3 Princeton Junction NJ ... dsc)

Don't forget to report the results of the winter Es season, and to start getting ready for the spring tropo season. Maybe temperatures will warm up soon and we can get an early start on those good ole spring ducts. Til next month,

Best of DX.

SV-FM DX 0 a

140mi. only 16 watts!

We're pleased that so many members have taken advantage of the new WTFDA REPRINT SERVICE in recent months. By anyone's standards, this new club institution has been a rousing success: we've received nearly 1500 pages of orders since our first catalogue was published in July! If you're new to WTFDA, reprints of past articles are a great way to get started in the TV-FM DX hobby. For more information, just see your copy of the catalogue!

For FM DK	ers West of		SIPPI Rive		Send in Your	Steven C. Wiseblood 707 Loma Way Santa Maria, CA 93454 Deadlines: 10 th R report TODAY!
-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		- 10 IN 10 IN 10			
7/16 Tr 0 8/9 Tr 0 The MS but	315 KEUT 94 210 KZAM 92 rst of 11/3	.1 WA Seatt .5 WA Belle 0 was very	tle, KPDQ o wue,KGON o strong for	ff 10/17 ff 11/30 15-20 seco	MS 2015 KQHU	2 90.3 <u>OR</u> Eugene, j 12104.1 <u>SD</u> Yankton,(EL) m Listening music. A couple
Jim Pizzi.	, 300 Park,	Orcutt CA	93454 (PST	(7/31 - 1)	0/10)	
7/31 Es 1 1 1 1 1 1 1 1 1	455 KNCT 91 514 KWED105 518 <u>KHER 10</u> 519 KFWD 100 529 KSUC 8	.3 TX Kille .3 TX Segui 0.3 TX San 2.1 TX Fort 8.3 TX Keen	en, ID @ 1 In - Antonio, m Worth, FM Me, ID	500 8/2 Es (EL) -102	1444 KPAS 1447 KEZB 1448 KLOZ 1 1449 KOPE 1 1451 XHTO 1	<u>93.9 TX El Paso</u> , g, mono <u>96.3 TX El Paso</u> , \$ m,(EL) <u>02.1 TX El Paso</u> , \$ r <u>04.9 TX Mesilla Park</u> , ID <u>04.3 CHih Ciddad Juarez</u>
Dong Ever	itt. 1710 W	. Maine, En	id OK 7370	1 (December	· 1976!) (CST	•)
6 17 10 12 MS 20 13 MS 00 19 Es 17 17 Equipment	041 KWTX 9 214 KFJB 10 006 KJSK 10 710 XEBS 8 712 XHM 8 t used: KT-	7.5 <u>TX</u> Waco 1.1 <u>IA Mars</u> <u>1.1 NE Colu</u> 9.7 <u>DF</u> Mexi 8.9 <u>DF</u> Mexi 8007 tuner	halltown mbus, ann. co, c co, r & 10-el FM	340 19 Es 460 350 1200 20 Es yagi @ 35	1737 XEJP 1750 XHSH 1805 XEOY 1 1807 XHQK 1845 XHRA?	93.7 Dr. Mexico, m 1200 95.3 Dr. Mexico, rm 1200 00.9 Dr. Mexico, L 1200 91.3 Dr. Mexico, ann. 1200 89.1 JAL Guadalajara
TV Es has	been mark	edly improv	ed in Dece	mber, altho	ugh much of	it so far has been towards
Mexico. 1	MUP of 19 D	ec stayed a	t 100.9 fo	r over 1 ho	ur. Very nic	e Tr ducting into IA & NE
						pre_amp! -sw)
Pat Dyer,	2215 Silv	ertip Dr.,	San Antoni	11 10220	(CST) (7 Oct	- / Jan /
						tal SAX-1 preamp
11/17 Es				SL) 12/19		88.1 CA Long Beach, ID
the second second		89.5 MI Mt.		-		88.9 CA Los Angeles, ID
	1846 KYUP			75		? 88.5 CA Northridge 1210
Es	1852 WVPE			D	1935 KPCS	? 89.3 CA Pasadena 1195
	1911 UnIDs	88.9, 90.9	1	12/21 1	Es 1834 XHNP'	? 89.3 PUE Puebla, 735
	1920 WNUR	89.3 IL EV	anston, wa		1955 KSDS	? 88.3 CA Sam Diego, j 1120
		90.1 IL Ch		1045	1955 KPBD	? 89.5 CA San Diego 1120
11/25 Es	1557 WVPE?			1095	1958 KPSD	? 94.1 CA San Diego, c 1120
>		88.7 ONT W	indsor. m	(EL) 12/25 I	A 1802 KSDS	? 88.3 CA San Diego 1120
11/26 Es	1707 XHNP?	89. 3 PUE P	uebla. m	735	1812 KPCS	89.3 CA Pasadena 1185
and stress stress		88.5 MOR 0		735		89.5 CA San Diego 1120
		88.9 DF 1		690	1812 XHTS	90.3 CA Tijuana 1100
		89.7 DF		690	ARIE KRSD.	- 94.1 CA San Diego, promo
	1/19 10.	88.1 GUAT	Guatemala		ADAE KUTM	93.7 CA Coachella, L 1070
	1745 TODY?	94.9 GUAT	Quatemila	1120		
			Guatemala	1120		93.9 <u>CA</u> Los Angeles, m 94.9 <u>CA</u> Los Angeles, p
	1746 TGY	88.8 GUAT				
	88-89's in		Gus comara	1124		98.7 <u>CA</u> Los Angeles, EL 99.9 <u>CA</u> San Berbardino
10/10 P.	1925 KBYU?			1045		
12/10 28				1080		97.9 CA Long Beach, EL
	1935 KULAI	90.1 UT SI 94.1 UT SI		1080	ADAT KOME	98.5 CA Cathedral City
40 8-	1945 MILLI	80 3 DITE 1	Dueble m	Constanting of the second s	1015 NULL	106.3 CA Lancaster, ad
12/18 58	1628 XHNP?	99.0 PUL 1	ruebia, m	735		95.1 CA Ventura, r, ID
		88.9 DF M				95.5 CA Los Angeles, r
		89.7 DP M		690 690		107.9 CA San Clemente, ABC
		90.5 DF M		690		106.7 CA Pasadena, p, ads
	ACTO VETDO	91.3 DF M	ari co	690	1074 MRC	105.5 <u>CA</u> Long Beach 1180
	10 0 ALUP?	93.7 DE M	rico	690	10 74 ADUA	105.1 CA Los Angeles, ads
	10 yy Anony	88 5 MOP	Champavage			105.9 CA Los Angeles, ads
		88.5 MOR (AONT KDTOR	100.7 CA San Diego 1120
		96.9 DF M				98.1 CA San Diego 1120
		98.5 DF M		690		96.3 CA Los Angeles 1190
		97.7 DF M		690	1903 KIAY?	96.5 CA San Diego., EL
		799.3 DF M		690	1922 KPRI	106.5 CA San Diego, r, ads
		105.7 DE M			a 1730-1745	unID 88.1 Latin mx (GUAT?)
	1650 XHD?	106.5 DF M	00100	690 1/1 E		unIDs through 106.7
	1715 TG?	88.1 GUAT	Guatemala	1/2 E	8 1655 WIAA	88.3 MI Interlochen, c
	1726 TGY		Guatemala		1656 WCMU?	89.5 MI Mt. Pleasant 1235
		94.9 GUAT			1659 WPNE-	89.3 WI Green Bay, ID
	TGRT	88.8 GUAT	Guatemala	1120		88.7 WI Madison(//89.3)
		1.00			Pats repor	t continued next month!

AUTOMATED FMs DX

Part 2 of 2

Peter Sawatzky 244 Neilson Ave. Waterloo, Ontario N2J 2M3

In the last installment of this article a description was given of a technique designed to log ID'able meteor scatter based on the principle of taping automatically on locally "quiet" channels at times of highest ID probability.

The system now to be described differs significantly functionally from that previously described. It should be noted that the pre-vious system was compatible with any receiving system, i.e. it did not depend functionally on the type of receiver used with regards to any special electrical signals derived from same. This system, on the other hand, while more closely approaching the ultimate goal of taping all MS, and virtually only MS, has the drawback that a single design is not necessarily compatible with all types of receivers, the reason for this being that the signal used to detect MS is derived from the stereo pilot lamp. For this reason, I shall not attempt to present any specific cir-cuitry, but rather to demonstrate what is functionally being attempted. Using TTL logic circuitry, the circuit is basically designed to perform the following "OR" function (as can also be seen in Fig. 1):

A tape recorder whose "auxiliary" input is connected to the "tape output" of the receiver is caused to remain idle (i.e. not recording) with the recorder keys in record mode under 1 or more of the following conditions: 1) When the stereo pilot lamp is off

OR

2) From 20 seconds after the stereo pilot has been turned on until the next time that it turns on again after an interruption OR

3) For a 15-minute period after the pilot lamp has turned on a prechosen number of times within a prechosen period of time To explain all this: #1 is obvious. When the stereo pilot lamp is off, no signal is

present, at least not from a stereo station. Therefore, we do not want any recording to be done.

#2 is explained as follows: Let us assume that virtually all MS receptions are of a duration below 20 seconds. Therefore, if the stereo pilot lamp remains on for more than 20 seconds continuously, we can assume with reasonable confidence that what we have is not MS, but possibly an unanticipated Tr reception on the chosen channel (proabably not rare DX that would be wanted on tape), unanticipated spillover from an adja-cent frequency, local electrical noise triggering the stereo pilot lamp, or one of any number of other things which is not desired on tape in the quest for ID'able MS. Feature #2 is also useful for monitoring frequencies which are occupied by daytime-only locals. At most only 20 seconds will be taped of the local before it goes off, the night will be spent normally taping MS, and only the first 20 seconds will be taped of the local when it goes back on the air.

#3 has shown itself to be a particularly useful function when monitoring by this method on frequencies occupied by stations which are in the 150-200 mile range. These stations are not desirable on tape but occasionally surface above the stereo threshold. We know that MS comes in more or less discrete bursts, not generally great in number per unit time. Weak Tr (of the non-ducting variety), however, has the tendency frequently to flutter in and out with some semblance of periodicity. This phenomenon is particularly noticeable with airplane scatter. We could say, under most circumstances, that if we were monitoring one of the pre-viously mentioned channels and the stereo pilot lamp turned on and off, say, 10 times in a 15-second period, what we were receiving was not MS, but Tr of the type described. As this mode of propagation has a tendency to linger it would be desirable to disable the tape recorder entirely for 15 minutes or so. As well as omitting the taping of Tr, this function also frequently deletes local electrical noise which may cause the stereo pilot lamp to react in a similar fashion. It should be mentioned at this point that features 1, 2 and 3

presuppose that the receiver in question has a stereo threshold adjustable to a point just above the noise level. The tuner for which design was originally intended was the Heathkit AJ-15 which meets this specification satisfactorily. The 20 seconds and 15 minutes are, of course, periods of time which were chosen somewhat arbitrarily, based only on past



FIG. 1

experience and personal preference. Having now discussed the basic function, let us take an overall look at the system (Fig. 1).

The stereo pilot lamp provides the signal to be processed. An interface to condition the voltage for TTL compatability is required as well as probably a Schmitt trigger to speed up rising and falling voltage

levels to improve the noise level during switching. Function #1 is accomplished straightaway with the signal simply fed to the CR gate. Function #2 is accomplished with a non-retriggerable 20-second monostable (using a 555 timer) and this signal is again fed to the OR gate.

Function #3 requires somewhat more circuitry. The signal from the interface is fed to a serial-in/parallel-out n-bit shift register.An n-position single-pole switch (non-shorting) chooses the appropriately significant output bit and relays this to a 15-minute non-retriggerable monostable (again a 555) and from there again to the OR gate. A reset oscillator clears the shift register periodically. The reset oscillator performs the function of setting the "predetermined time" within which stereo pilot lamp "bursts" will be counted, and the single-pole n-throw switch performs the function of setting the"predetermined number" of switch performs the function of setting the predetermined number of bursts within that period of time. Providing the predetermined number is never reached within the predetermined time, the 15-minute monostable will not disable the system. Flexibility of the system is greatly enhanced by making the frequency of the reset oscillator variable (1 pulse/15 sec.; 30 sec.; 60 sec.; and 120 sec. was used) and the addition of the n-position single-pole switch (bits 3-14 were used with a 12-position switch). This flexibility is desireable during meteor showers and also to accommodate local signal conditions on different frequencies.

Once all 3 functions have been achieved and fed to the OR gate, it is useful to add a one-second delay circuit such that the tape recorder does not stop immediately after an MS burst, because weak remnants of the MS may still exist immediately following the point at which the stereo pi-lot lamp can no longer recognize a signal. At the expense of 1 second of tape time it would be well advised to tape these probable remnants for the possibility of ID's. Another reason for the delay is to ensure that the tape recorder does not turn on and off repeatedly when a string of bursts is recognized. The tape recorder has a certain start-up time and under some such circumstances, on playback, nothing readable might be heard with-

out such a delay circuit. The delay circuit drives a relay which turns the tape recorder on and off (in the case of cassette recorders) via the "remote" jack (the smaller of the 2 jacks that microphones plug into).

To allow the operator to recognize what is happening throughout

the circuitry at any time, it is good practice to have front-panel LED's. Under heavy meteor shower conditions it is also desireable to make features #2 and #3 defeatable.

This block diagram description is merely intended to offer the reader insight to the approach taken by this DX'er and in no way intends to show specific circuitry and logic levels throughout. A thorough desciption of one such circuit already built would involve considerable more space than is economical in the VUD. Hopefully, however, it will stimulate sufficient interest with some DX'ers familiar with TTL logic to encourage them to designa similar system. Earlier systems have been attempted incorporating only feature #1, but an unacceptable amount of Tr is taped in this manner on all but a very small number of totally quiet frequencies.

One obvious disadvantage of this entire approach is the fact that it is impossible to tape monaural MS. This problem is, of course, not found in the system described in the previous article. Both techniques have been tried and it has been found that the system described in this article yields a high degree of initial success in terms of new MS loggings (an average of nearly one new MS logging per week for an initial lo-month period, plus numerous MS relogs). However, before long, it appears that relogs become increasingly more frequent as the number of frequencies suitable for monitoring by this technique is fairly low in most areas. The technique described in the previous article, of course, permits one to monitor frequencies adjacent to locals in spite of spillover causing stereo pilot lamp triggering and other frequencies unsuitable in general for the circuitry described here. Spillover, etc. would cause the tape recorder to be turned off most of the time despite possible incoming MS with the technique decribed herein.

Both techniques suffer the problem of not being able to pinpoint the time at which an MS reception was made. This problem can be entirely solved with the previous technique by using a stereo recorder and simultaneously recording WWV on one channel. But with the technique decribed here this is not as easily done as taping does not always occur when a voice time check is provided by WWV.

The photographs below show finished versions of the systems described in this and the previous article.





FIG. 2a - Front view FIG. 2b - Rear view MS taping equipment showing, from top to bottom, cassette tape recorder, MS tape unit described in Part 1 of this article (including digital electronic clock), and MS tape unit described in this article (Part 2).



AT THE TOUCH OF A BUTTON...you can switch from American to British and European television standards and back again, with this miniature television set by Sinclair Radionics which will be on the market by the time you read this. It's 4 inches wide, 6 inches long and 1.5 inches deep, and is billed as the world's first multistandard TV receiver! Priced at about \$300, it should be a real DX bargain when F2 starts to bring in European television! Our thanks to members Dave Cox, Ken Simon, and Tom Yingling. CWI

C. C. [UNIDENTIFIED DX]

Frank Aden, Jr. 1535 NW Ithaca Bend OR 97701 503-389-5488 Deadline: 10th FEBRUARY 1977

Send all your unidentified DX here!

Doug Everitt, 1710 W. Maine, Enid OK 73701 (1976 unIDs) Sun Dec 12 MS ch 3 0111 CST--"Canal 3" ID slide with musical tones. Ant. west. XHBC? XHEC schedule shows them on to 0200 GST with movie, I have seen them run more "Canal 3" IDs than XHEC IDs but still is hard to say if this is them (FEA). Frank Aden, Jr., 1535 NW Ithaca Ave., Bend OR 97701 (1976 & 1977 unIDs) Sun Dec 5 MS ch 3 1224 PST--Wedge type TP with grey background. Call letters or other written information in upper left hand corner. Ant. east. KLNE reports it is not them. No other ch. 3 schedules would have them running a TP at this time. Suspect central US & Canada (FEA). Wed Dec 22 MS ch 3 2202 PST--Ad for "Brauns". Is this company name familar to anyone? Suspect Central US and Canada as ant pointed east. Fri Jan 7 MS ch 3 2354 PST--CB with digital time in lower right corner. Time on TP was 0054 MST 1554 but seconds unknown. Three bursts were seen with 0154 CST antenna pointed east. Could this be an AST station or were 0254 EST they messing with the clock? Anyone have any ideas? 0354 AST

Mike Reid, 109 Arjay Cres., Willowdale ONT M2L 1C6 (1976 unIDs) Sat Aug 21 TR ch 5 0616 EDT--"I Love Lucy" to 0622. VA, DC were in that morning. All schedules for ch. 5s in this area are negative (FEA), 0449 EDT--Spot for "The Best Deal". Illinois heard. Ant. WSW. Thu Oct 7 MS ch h Tue Oct 12 MS ch 4 0559 EDT--Sign on? KIT-35. STL call? (Probably FEA). Ant. South.

Identifications

Sept. TV-CCI, Paul Gaines, June 28, ch. 5, 0030 EDT. KXAS definitely. Mike Reid reported he watched this for quite a while.

Oct. TV-CCI, Morrie Goldman, June 29, ch. 3, 0017 CDT. Mike Reid reports this is not CKVR as Canada uses Celcius scale.

Regional Networks.



5 A

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

FEBRUARY 1977

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

F UTILITY D

<u>7-21:</u> 1907, <u>8-9:</u> 0825, <u>12:</u> 1353,	KXR 71 KHBA	119.7 156.54 157.3	nr Bal. (Coast Guard HH52A helic.; 25 w) Bal. (Baltimore Maritime Exchange) off Annapolis (EXXON HOUSTON, Tanker)
<u>18</u> 1949,	N481A	119.7	27 mi s Bal. (Altair Airlines, Inc.; Flt 56; NORD-262; 29-passenger; 25 w)
2-251 1540, 1559,	N7 27 6	132.85	(Braniff Flt 17, NY-Dallas; 25 watts)
1559,	N7 29 2	132.85	25 mi w NewCastle, DE(Braniff Flt 2:25w)
<u>10-15</u> , 2120,	N444T	119.1	18 mi se Wash N'tl Apt (Fairway Corp.; Beechcraft 99; 2-eng turbo, 15-pas.; 8 w)
<u>161</u> 1658,	N70MD	134.4	nr DC (J.Ray McDermott & Co., Inc.; Falcon Fan Jet 20, 2-eng, 12-s; 20 w)
2058,		122.2	n McGuire AFB, NJ(General Thermodynamics Corp.; Beech J-35, 1-engine, 5-seat)
<u>171</u> 1448,	N701MG	131.0	vic West Minister, MD(Midland Glass Co., Inc.; Falcon Fan Jet, 2-e, 12-s)
22: 2139,	-	127.95	n Roanoke, VA (Piedmont 74; 737; 30 w)

David Cox, 2007-E Brandywine Ct., Birmingham, AL 35216

Reports as of Dec 9th that the new weather station in Birmingham, KIH 54 on 162.55 MHz was on 24 hrs/7 day for the past several weeks; test transmissions with very complete ID's every 3-5 minutes; antenna is "atop" WBIQ-TV's.

Now, my loggings. Allied A-2586, Hallicrafters SX-62, Hammarlund SP-600-JX10; two 30' long-wires at 12' (ne-sw, nw-se runs); all are Es except * F2 daily MUF peak; GMT used

12-12: 1440,	30.30 *
15: 0315.	Los Angeles, 35.38, Mobile phone
19: 1530.	30.30 *
20: 1938.	KIN 645 35.22 Miami, FL (tone pager)
231 2040.	Los Angeles, 35.46, mobile phone
26, 1820.	30.02 * (Canadian medical pager)
27: 0245,	KSC 645 35.58 Chicago, IL (tone pager)
	Los Angeles, 35.38
0712,	Los Angeles, 35.46
4: 1910,	Los Angeles, 35.46
51 1646,	KOE 257 35.22 Phoenix, AZ (tone pager)

Canada operates a hospital paging service on 30.02, 30.22, 30.42. It's a tone alert with voice messages. Any members with more info on them? I've never caught any ID's on them, just doctors names, ward numbers, etc.

WWV pronouncement - effective February 1 the outlets on 20 and 25 MHz will become mute. The 2.5-MHz outlet has been "saved". WWVH will keep 20 MHz alive with its signal. It is regretable that such useful propagation indicators have been lost. They did serve as well in F2 as Es conditions.

73, Pat WASIYX

QUESTIONNAIRES STILL NEEDED...We're not yet giving up hope that you'll return your WTFDA MEMBER SURVEY, which was included with your July 1976 VUD and has remained dormant since that time. Any DX club needs the participation of its members to prosper, and we need your opinions and comments to determine future policies! We've been holding the survey results until a majority of WTFDAers have returned the postpaid cards; at this writing, we need those of 24 more members, and are hoping that yours will be one of them! It'll take you no more than ten minutes to fill out your card and indicate WTFDA's weaknesses and strengths, and it will be appreciated! If you've ignored the survey until now, have been busy with other things, or simply forgot, please send your survey in today! ---CWI

FM-Q		Freq.	Thomas J. Yingling, jr. 221 Pinewood Road Baltimore, MD 21222 Phone # 1-301-282-5649 Deadline: 10th
DE VA	WJBR	99.5 95.7	Wilmington, 2617 Ebright Rd, 19810, send qsl card in 4 days. (tjy) Norfolk, 720 Boush St, 23510, letter from John B. Zaun, manager of
VA.	WEBS	33.7	Engineering in 5 days. New call for WTAR-FM. Letter on WTAR-FM letter head paper. (tjy)
TV-Q	SL	Ch.	property dispering all
IL	WTTW	11	Chicago, 5400 N. St. Louis. Ave, 60625, Letter from Larry W. Ocker Chief Engineer. Reply in 4 days. (jdh)
IN	WLFI	18	Lafayette, P. O. Box 18, 47902, note on returned report, hard to read looks like Rober Handle, Dir. of Engineering. Reply in 43 days. (jdh)
IN	WIIL	38	Terre Haute, Box 719, 47808, Letter from Mary C, Childers, promotion manger. Reply in 16 days. (jdh)
Ont.	сксо-з	42	Wallaceburg (site at Oil Springs, Ont.), verie on glazed paper, with information of CKCO-TV ch. 13, CKCO-2, CKCO-3, CKCO-4, CFCA-FM stereo,
			& CKKW-AM 1090khz. No signature. Report send 4-5-76, verie received 11-5-76 a total of 214 days. Address is Central Ontario Television

Limited, 865 King St., Kitchener, Ont. N2G 1E8, Canada. (fw)



Reporters are John D. Hathaway of Champaign, IL, Frank Wheeler of Erie, PA, and me. The above dial card is from my collection. I hope to have more contributions once more members send in their reports to the new qsl column. I also hope to have some more reports for right now I'm out of items for the column. Please report something. I did get a new typewriter, for my old one traded in for a Olivetti. 73's to later on.

PSB DXers!

On behalf of Tom Yingling, I'd like to encourage you to send in some of your QSL's to the new QSL CORNER. PSB QSL's are often difficult to come by, as detailed by Terry Colgan in a past series, since public service stations aren't interested in casual listening; they exist only to provide information (i.e. private point-to-point communication) in emergencies. Air and sea QSL's may be the most difficult of all! We'd also be interested in knowing if anyone has managed to obtain QSL's from any of the dozens of NOAA Weatheradio stations across the United States; these low-power outlets are among the easiest PSB targets to ID, with station identification typically coming every 5-7 minutes, and location (i.e. street address) given frequently. Although some FSB stations forbid divulging of information heard (under the Privacy of Communications Act), it can often be avoided by providing just enough info to secure the QSL. So whatever your PSE QSL's, send them in!



INCREASE YOUR STATION TOTALS BY UNDERSTANDING POLARIZATION PART I

This series, originally presented as a lecture at WTFDA's 1976 Convention, basically is divided into three parts: first, exactly what polarization is; second, what we know about polarization at TV and FM frequencies; and most important of all, how we can take advantage of what we know, so that we can indeed increase our station totals as described in the title.

What is polarization? I suppose we should immediately go to the dictionary definition and determine that it is "the direction of an electromagnetic field as radiated from a transmitting antenna." It's very difficult to illustrate this concept in a single plane, but we have attempted to do so with the drawings on the next page.

Figure 1-A shows a folded dipole transmitting antenna, which because of its length is inherently cut to a specific frequency. It radiates an electromagnetic field in its horizontal plane, and only in that plane. We call these signals that are radiated only in a single plane <u>linearly polarized</u>.

Practically, if a transmitting station wanted to transmit that type of signal in all directions, it would have to utilize a turnstile, or use two folded dipoles crossed by about 90 degrees. In that manner, the electromagnetic radiation would still be in the same plane, but would be radiated in about 360°. This gives us what we call an <u>ommidirectional</u> pattern. Some of you may be familiar with such an antenna for FM also, which is an attempt to receive signals from all directions. The turnstile arrangement is shown in Figure 1-B.

The other way we can go, and the one we're most familiar with is the AM antenna, which is said to be vertically polarized (Figure 1-C). If you were to place a folded dipole perpendicular to the ground, the radiation is still broadside to the dipole, but because it is vertical, it is automatically radiated in all directions (360°) . This, of course, is the reason why car radio AM antennas are situated in that direction, and most FM car antennas are unfortunately are that way as well.

An analogy for this difference between horizontal and vertical radiation would be driving into a private parking area and putting your parking card into the slot. The slot has to accept the card in one plane; it simply cannot enter any other way. A coin and a vending machine work similarly. The importance of this analogy, and of having everything properly aligned, will be discussed shortly.

If we look at that same horizontally polarized transmitting antenna, keeping it in the same plane, and place a dipole receiving antenna in the same plane, then tie a field strength meter (FSM) to it, we will receive a certain amount of signal, depending upon power transmitted, and so forth. But we find that we can rotate the receiving antenna through a certain amount of angular displacement, perhaps about 40 degrees, and the signal appreciably remains the same. This is primarily due to the capture effect of the receiving antenna, and the height of the transmitted wave. So, we need not align the antenna perfectly in the plane of the radiation; the signal will remain reasonably the same otherwise (an arbitrary signal level of 1000 microvolts has been chosen for the example in Figure 2-A).

However, if we take the receiving antenna and rotate it 90° in free space, the signal theoretically will drop off by a factor of nearly thirty to one. Therefore, in the example shown by Figure 2-B, we now have perhaps only 30 microvolts. So, we severely decrease the signal in this manner, and we can rotate that antenna through quite a wide area with much-reduced signal, until we reach a direction about 40° from the transmitting plane. The conclusion of all this, of course, is that the receiving antenna must remain in the same plane as the transmitting antenna for maximum gain.

FEBRUARY 1977

Dare

TECHNI-CORNER

The polarization of TV and FM stations in the United States basically fall into these two categories: For TV, basically, horizontal is used. This is why, if you drive around town and look at TV antennas, they are standard in that the elements are all parallel to the ground. For FM, some stations transmit horizontally-polarized-only signals, but the majority radiate signals that include both horizontal and vertical polarization. I say include because they may be circular, they may be elliptical; but the end result is that they send out signals that are, in fact, both horizontal and vertical.

The big "push" to vertical polarization for FM stations began, in earnest, perhaps five or six years ago. During that time, a lot of DXers could have taken advantage and received a lot more stations, if they had known which were horizontal and which were both horizontal and vertical. With vertical, the stations are obviously aiming at cluttered areas in cities where listeners may have a line cord or no antenna at all; and in many cases, stations didn't put out as much power in the vertical plane as in the horizontal.

Some of you have probably heard about the circular polarization tests at WLS-7 in Chicago. As opposed to linear polarization, circular polarization is one in which the polarization is constantly changing--from horizontal to vertical and everything in between. Basically, it is constantly rotating. An analogy might be a screw being turned to hold a piece of wood in place. The theoretical advantages of circular polarization, which agree with those proven by the WLS tests, is that in extremely cluttered areas with tall buildings, etc., ghosting is immensely reduced. There has been no evidence that the range of the station has been extended, although most of us feel that it will be.

So what does all this mean to the DXer? Well, he doesn't particularly care whether or not he can receive ghost-free signals if he lives in a cluttered city area--he doesn't care about locals whatsoever. But the possibility of more stations going to circular polarization can open up a tremendous new amount of avenues for DXers, and increase their totals immensely, as will be shown later.

For the moment, though, let's just say that the circular polarization tests have proven to be beneficial in eliminating ghosts, particularly in areas where there are tall buildings. A trade publication article which attempts to show how this is done basically shows a "cancellation" effect, with the end result being that ghosts are reduced. I won't spend any great deal of time discussing the effect here, as it is probably of minimal use to DXers.

Next month, Part II of this series will discuss how polarization relates to TV and FM, and some of its peculiarities.





Jim Alexander 4 Brook Court Parsippany NJ 07054

WEDU 908 So. 20 th St. Tampa, Fla. (33605



WEDU- 3 Tampa, F1 Es (PG)

KIII- 3 Corpus Christi, Tx 485 mile tropo (RL)







KBTX-3 Bryan, TX Es (KS)



WKOW-27 Madison, WI 315 mile tropo (PG)

WANTED: More photos of DXers, antenna systems, and DX "shacks"

Contributors:

<u>FG</u> = Paul Gaines, Detroit, MI

<u>RL</u> = Ron Le Blanc, Marrero, LA

KS = Ken Simon, West Palm Beach, FL

73 and good DX,



CANADIAN NEWS REPORT

Welcome to another edition of the Canadian news column. In spite of M.Lewis' relocation to the CRTC in Ottawa, technical information re: stations is still hard to come by...the D.O.C. compiles all the lists. Many CBC "A.M. Network" rebroads are

Mark L. Lewis 701-345 Waverly St. Ottawa, Ont. K2P OF4 J.J. Rosenberg 909-40 Godstone Rd. Willowdale, Ont. M2J 3C7

oming on-air over F.M. transmitters, some have a "mix" of the CBC Am and Fm networks, carrying the FM net. from 6-9 a.m., 4-6 pm, with the "AM" network the rest of the time. Some stations heard carrying the "mix" plus a special "regional" network. ie. CBCN-fm North Bay,Ont., heard with the "Mid-Canada" network from 6-9 am.

FM RADIO	
Newfoundland:	The following stations will have a "Top-40" format. Licensee: Nfld.Bcing.Co.
	All authorized for 67khz SCMO probably programme relay & telemetry.
St. John's	93.9 100,000 watts
	96.3 31,330 "Some other new calls issued:
Marystown	
Gander	99.9 4,000 Prochaille Opt (BOF-fm-7 (Fx.CBOF)
Corner Brook	92.9 50,600 CBOB-fm (Ex. CBO)
Red Rocks	96.9 1,120
Argentia	100.5 5,650 Reterborough Ont, CHEX-fm now: CEMP-fm
Bonavista	* 92.1 28,580 (KPT-fm (new)
Rattling Brook	95.9 3,430
Stephenville	98.5 4,270 " Montreal: CN/L-fm nov CFOI pronounced
	"ruoi" (ids: C'est ruoi? C'est Ourbec-
Nfld. St Alban	99.1 /8 Watts
Ramea	95.5 779 " Both relays of CBN (am) St. John's OJS:)
PRINCE EDWARD	ISLAND
Charlottetown	CBC-FM 59.2 watts to 92,500watts to relay CBH(am) Halifax plus local.
NEW BRUNSWICK	
	The lot's 100 000 webbs themes OPC "PM" actionsh
Fredric ton /St	John 101.5 100,000 watts \$tereo CBC-"FM" network
Moncton	103.9 24,600 watts \$tereo Rock Island Bcing Co.
Moncton	CKCW-fm -new calls: CFQM-fm
Nova Scotia H	alifax CJCH-fm 100.1 erp to 100,000 watts \$tereo
Ouébec	
Trois-Rivieres	93.9 28,800 watts educational semi-commercial
Joliette	103.1 4,000 " denied
Rouvn-Noranda	96.5 51,000 watts Radio Nord. Partly Local-commercial,
Lithium Mines	97.3 52.000 watts partly CBF- am relay
Montreal	CINO-fm 99.3 7.2 w. NOW: 102.3 36 Watts "Radio Centreville"
Drummondville	CFDM-fm now relay of CBF-fm(Monreal) Calls will change, when sold to CBC.
	CHGB-fm affiliates with CBC fm-FRnetwork (CBF-fm Montreal)
La Pocatiere	
Québec City	CHRC-fm now CHOI-fm
Québec City	104.7 100,000 watts ex. CBM-am Montreal
Montreal	CBM-fm 95.1 moves to 93.5 (now change FRP/ant.)(adds 67khz relay CBM-am)
Montreal	GBF-fm)
Quebec City	CBV-fm all add 67khz SCMO to relay CBC-AM-French Network
Chicoutimi	CBJ-fm)
Ontario	
Ottawa	CKCU-fm 93.1 was 4,000 watts Now: 12,500 watts 852'(Ryan Tower, P.O.)
Ottawa-Hull PQ	CKCH-fm 94.9 now CIMF-fm (Prog.Rockcalls pronounced "C" "EE" "M" "F"
Brampton	CHIC-fm now CFNYadds \$, still 857watts, ro.for 100kw denied hy CRTC
Toronto	CFGM-fm 107.1 100,000 watts Prog.Rock \$(spring '77 target)
Toronto	99.1 100,000 Canadian News Radio Network target '78-see below
Toronto	CHIN-fm 100.7 4,000 watts rq.for 107.1/100kw, deniedsee CFGM-fm
Wingham	CKNX-fm 101.7 22,000 watts \$ (MOR format) Target Spring 77.
Coburg	CFMX-fm 103.1 100,000 watts \$ Target spring '77
Barrie	CHAY-fm 93.1 50,000 watts \$ (67khz scmo-fr.lang pgms)
Sudbury	CKSO-fm new calls: CIGM-fm
Sudbury	CBCS-fm CBC-Eng AM net/ CBC "mid Canada network." Mono
Sudbury	CBJS-fm CBC-Fr. AM net
Timmins	CKGB-fm 94.5 425 watts Now: 92.1, 17,220 watts, new site. CFTI-f
	CBCN-fm CBC-Eng AM net/ CBC "mid Canada network" Mono
North Bay	CBJN-fm CBC-Fr. Am Net.
North Bay	
Cornwall	CJSS-fm 104.5 was 850 watts now 9,700 watts, new calls: CFLG-fm

CANADIAN REPORT

FEBRUARY 1977

Cornwall	CBOC-fm	95.5	on air	:relay	s CBO-fm 6-9am/4-6pm, CBO-am other times
Cornwall	CBOF-fm				ys CBOF-am CBOF-fm at different times
Chatham	CBEE-fm				relay of CBF-am Windsor
Sarnia	CBEG-fm	106.3			relay of CBF-am Windsor
Ottawa	CHEZ-fm	106.1	100,000	watts	\$ Prog.rock Target Feb.77 Ryan Tower
London		93.5	100,000	watts	ex.CBL-am Toronto/ CBL-fm 6-9am &4-6pm
Burlington	CING-fm	107.9	50,000	watts	\$ calls itself "sing stereo 108"
Kenora		93.5	20,000	watts	ex.CKSB St.Bonifice Man. CBC-AM-Fr.
Dryden		102.7	1,500		n n n
Dryden		100.9	100,000		Ex.CBO Thunder Bay,CRW Vinnipeg CBC-Am-Eng
Sioux Narrows		95.7		00 "	
Savant Lake		104.9	78		s " " "
Osnaburgh		104.5	81		"
Pickle Lake		105.1	83		
Pikangikum		100.3	34	.2watt	s " " "
Sandy Lake		101.1	36	.9 "	
MANITOBA					
Winnipeg	CHIO-fm	04 2	was 6,500		now 100 000 watta
Brandon	CHIO-IM	94.3			
Baldy Mtn.		105.3	100,000		
Fairford		105.3			ex. CBW Winnipeg Eng. AM net.
Fisher Branch		95.7	11,800	watts	
Jackhead		92.7	33,000		
				watts	
SASKAICHEWAN					
Regina	CBKF-fm		to:13,700	watts	
Regina		96.9	100,000		
Fond Du Lac		100.1		watts	
Black Lake		93.3		watts	
La Ronge	CBKA-fm				inations for community groups.
Stanley Mission		95.5		watts	
Pinchouse Lake		94.1	86	watts	ex CBK
ALBERTA					
Calgary	CBRF-fm	103.9	10,000	watts	ex.CHFA Edmonton CRC FP AM
Peace River	CKTA-1	96.9			CKUA-fm
Grand Paarie		100.9			ex. CBC AM Edmonton (CBR)
Lethbridge	CHFA-1	104.3			ex. CHFA Edmonton CBC FR AM
Lethbridge	CBRX-fm				ex. CBR-am/ CBR-fm Edmonton
Chateh		103.5			CBC Edmonton Eng. AM
Calgary	CFCN-fm		alls: CJAY.		
Calgary	CFVP-fm	92.1			\$tereo
Cranmore		97.9		watts	
Pincher Creek		97.5		watts	
Exshaw		100.7		watts	
BRITTEN COLUMPIA					
BRITISH COLUMBIA	-	105 1			
Alert Bay		105.1		watts	ex.CBU-am CBC Vanc.
Woss		92.9	125		CHERY LED
Vancouver	OFFH (94.5			CHUM LTD applicant: DFNIED
Lytton	CFFM-6	106.1		watts	and Chill and Hanna
Hope		107.1		watts	
Kelowna Penticton		95.7		watts	ex. CBU-am
And a second state of the		93.3		watts	relay of Kelowna above
Vernon Kamloops		105.5		watts	
Golden		94.1		watts	relay of CBU
Golden		101.7	130		
N.W.T. Eskimo P Port Radium	t CBIG-f	m & Iş 105.1	gloolik CBI 82	II-fm watts	add local studios ex CFYK Yellowknife
Several frequenc: visual alpha-num change, ie: erps London On.99.3	ies have eric news , here is Halifa enied no	not at s, possi s aparti txunk statior	this date bly with o al listing nown ; a) Vancouv	been o commerce of fi St Jo yer 96.	ohn NB. 98.9; Winnipeg Man. 99.1; .1; Fdmonton 105.9; Calgary 103.1;
More From Québec:					
Trois-Rivieres	Camp L-	G3 Jame 100.1			15 watts Fr.lang
Povungnituk		99.9	4,326		
TOVALIZITEAN		22.9	29	watts	Fng.Fr, Inuktitut Languages 21
					41

CANADIAN REPORT

NEW	BRU	NSW:	ICK

Cambellton	CHCR-tv was: 15,400 wts vid. now: 13,830 watts video
Cambellton	CKCD)
Upsalqulch	CKAM) To disaffiliate from CBC and rebroadcast CKCW Moncton, CTV.
Newcastle	<u>CKAM-1</u>)
	e CKRS-tv was 20kw now 208 kw, therefore delete CKRS -1 -2 -3 on channels espectively.
Chicoutimi	CBJET-tv ch.58 10kw vis. (mav id as Saguenay, relay of CRMT Montreal)
	ch.5 Pembrookecurently relays CBOT-tv ch.4 Ottawa, but has been sold to rian Bcing.,ow ners of CKSO Sudbury. Feed may change in the future CKNY-TV now owned by Cambrian (CKSO Sudbury) pgm feed may change.
Barrie	CBLFT7 ch.55 7,000 watts vis. relay of CBLFT-ch.25 Toronto
	CBLFT-TV-8 ch.34 11,300 watts vis. relay of CBLFT-7 above
Sarnia	CBLFT-TV-? ch.68 39,700 watts vis.
Driftwood	CBFOT-3 was:10 watts now: 1.22kw vis.
Kenora	CBWAT was 9.3kw now 8kw vis, but much higher antenna. (ehaat unknown
Sioux Lookout	
	Objer a way of wated live Jorw.
MANITOBA	
Fairford	ch.7 2,000 watts vis. relay of CBWT Eng-CBC
Jackhead	ch.5 3,400 watts vis. "
Saskatchewan	
Stanley Mission	Ch.8 333 watts sat. of CRKST Saskatoon
Uranium City	CBKAT 370 watts
Black Lake	ch.7 320 watts ex. CBKAT
Argourg	CKYA-tv ch 8 was 1,940wts.vis. to: 31,000watts vis, and moves TX to
Swift Current	ch.12 13,000 wts.vis. (ex.ckck-tv) Fisher Branch
ALBERTA	
Burmis	ch.47 588 watts vis. (ex. CBC-TV eng. Lethbridge)
Lethbridge	CJOC-TV affiliation change to CTV network 1/9/1976.
Calgary	ch.16 2,590 watts ex. CBXFT EDMONTON
Lethbridge	ch.23 620 watts "
Rosemary	CBRT-5 was: 25,300 watts vis nl now: 125,450 watts vis.
Lethbridge	ch.10 123,000 watts vis. directional ex. CBRT
Chateh	ch.5 151 watts vis. ex.CBXT Edmonton.
BRITISH COLUMBIA	
Vancouver	CBUFT ch.26 105,500 watts vis. On air. CBC Fr.
Vancouver	CKVU ch.21 880,000 watts vis On air. Indep.
Port St. John	CFPV-1 to: 146 watts vis.
Trail	ch.8 4,400 watts vis (CHAN repeater via CHKL Santa Rosa)
Oliver Osooyos	ch.3 930 watts vis. Chan repeater
Nelson	ch.3 130 " " " "
Victoria	ch.10 160,000 watts vis. CBC ENGLISH, local studios.

Some other interesting notes: Over the air, scrambled Pay-TV to begin by April via KBSC TV Ch.52 Los Angeles --National Subsription Teleivion (50% owned by Oak industries, of Ill.) owns KBSC and seeks licenses or authority to lease many other U's including WXON-20 Detroit. WTCG-17 Atlanta began relaying its signal via RCA Satcom Dec.17/76. It is now receivable, via stllite, anywhere south of Prudhoe Bay Ak, and James Bay Canada.expect CRTC hearings soon on SCMO (SCA). It will be used as an additional radio spectrum, just like am and fm..rather than private "muzak" in the U.S..with receivers available to the general public......also expect the silly Buffalo Ny. "Bordåer War" to dissipate, following a Canadian Cabinet decision to back-down on cable-tv commercial deletion from Buffalo signals....the CRTC is faced with mounting pressure to allow Pay-TV on cable and over the air. Spring hearings are expected, with some new hardware for coding signals. 73's for now, MLL and JJR

CCI (continued from page 14)

FEBRUARY 1977

WUAB-43 Cleveland is now listed in the Pittsburgh Metro edition of TV GUIDE.

Last November some Bend mail was stolen and none of it has been returned. If anyone sent in a report but has not seen it in the last few columns, I suggest you send it in again, as it may be part of the missing mail. Thanks to Clarke Ingram for this month's information on KET.

73's until next month,

Frank

EASTERN TV·DX

Bill Thompson 1907 Seneca Street Buffalo, NY 14210

February 1977

TV-DX from the Northeastern U.S. and Eastern Canada

Both the Northeastern U.S. and Eastern Canada have been experiencing what is now being regarded as the worst winter of the century so far. The situation we described last month has generally gone from bad to worse, so apart from the occasional scattered regional opening, tropo has been insignificant. The annual (more or less) midwinter ducting over long-haul paths in the Northeast and Midwest may not occur this year, and the reason why is very obvious. As the extremely cold and unusually constant southerly arctic flow continues, the west-to-east storm track across the continent continues to move through the extreme southern part of the U.S., hundreds of miles further south than usual. This may well be part of the reason that the expected midwinter Es openings never really showed up at the traditional peak period. Those DXers who are interested in the relationship between heavy thunderstorm activity and E-skip cloud formation should note that areas where such violent weather is apt to occur during the midwinter peak had record cold weather--and even smow--instead. Will things get any better? They <u>can't</u> get any worse!!!

Roy Barstow 70 Heritage	Circle	Teaticket,	Massachusett	02536	(617)548-2329
October (EDT)	4 Tr	2330 WEDY-6	5 CT 27	Bs 1430	KGLO-3 IA
4 Tr 2155 WVTA-41 VT	5	0015 WERE-28	B PA	1500	WMT-2 IA
2200 WETK-33 VT		0200 WCBB-10	ME		"more off-
WEKW-52 NH	26 Es	2330 WEDU-3	FL		season Es
2300 W61AC-61 CT	27	0030 KTEW-2	OK		channels 2,
Waterbury (WEDW)	1330 WISC-3	WI		3, 4 at times"
Varies hack from WKPT-19	THIS & CI	CO3-42 ON	What much th	a reno	rting period.

veries back from WKPT-19 TN & CKC03-42 ON. "Not much this reporting period. I am having tower problems, etc. Almost lost the TRI EX tower twice. First time, base cracked on one side, with 7' dish in some trees holding up tower at 45° angle. Found out the hard way not to lower tower in the wind. With tower all the way up, reception was very bad. I must have a bad connection or maybe the 7' dish & VHF antenna are too close and degrading performance. Hope to clear up the problem before it gets too cold outside."

Paul D. Traska 64 Weaver Avenue Buffalo, New York 14206 (EDT/BST) September 28 MS 0550 WJXT-4 FL 2 Tr 2040 WKBS-48 PA 30 Tr 1200 WOUC-44 OH 30 Tr 0540 WHIO-7 OH "snow free 1215 WOPC-38 PA Dayton most times" 1930 WTPA-27 PA MS 0630 WDTM-4 OH 2041 WLVT-39 PA WHP-21 PA December "snow free" 0ctober 4 Tr 1945 WKAR-23 MI 2041 WLVT-39 PA 3 2330 WAB0-49 OH "cCI on 19" 2041 WLT-52 KJ 3 2330 WAB0-49 OH "cCI on 19" 2041 wLDF-66 "Litr" 3 2330 WOUC-44 OH January 1977 2043 WTPA-27 PA 4 Tr 1930 Very good WHP-21 PA WHP-21 PA 7 1300 WOUC-44 OH Signals from:" WDCA-20 DC 1700 WDCA-20 DC Youngstown U's CCI on 22 WHP-21 PA Bingharon U's from MD; CCI WKJT-52 KJ Detroit, Cleve- 2150 WFEZ-69 PA
30 Tr 1200 WOUC-44 OH 1215 WOPC-38 PA 30 Tr 0540 WHIO-7 Dayton OH Dayton "snow free most times" 1930 WTPA-27 PA WHP-21 PA MS 0630 WDTM-4 OH 2041 WLVT-39 PA "snow free" 2041 WLVT-39 PA "snow free" 0ctober 4 Tr 1945 WKAR-23 MI 2041 WLVT-39 PA "snow free" "snow free" 1 Tr 1230 W63AB-63 PA MS 0630 WDTM-4 OH 2041 WLVT-39 PA "snow free" "snow free" 2 323 WAB0-49 OH "cCI on 19" 2041 WLVT-39 PA "good signal" "good signal" 3 2330 WAB0-49 OH "cCI on 19" 2041 WLD-66 "slite" "good signal" 2 322 W39AA-39 IN 2 3232 W39AA-39 IN 2 300 WOUC-44 OH January 1977 2 Tr 1930 "Very good WHP-21 PA WHP-21 PA WHP-21 PA WHP-21 PA 7 1300 WOUC-44 OH 1700 WDCA-20 DC Youngstown U's CCI on 22 from MD; CCI WHP-21 PA On 43 from PA WKBS-48 PA WNJT-52 NJ Binghamton U's on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150 WHR-69 PA
1215 WOPC-38 PA Dayton most times" 1930 WTPA-27 PA MS 0630 WDTN-4 OH 2041 WUTT-39 PA WHP-21 PA December 4 Tr 1945 WKAR-23 MI 2041 WUTT-39 PA 1 Tr 1230 W63AB-63 PA WUHQ-41 MI "good signal" 3 2330 WABO-49 OH "CCI on 19" 2041 wIID-66 "Litr" 4 OOD5 WOSU-34 OH "CCI on 19" 2041 wIID-66 "Litr" 2322 W39AA-39 IN January 1977 2043 WTPA-27 PA 4 005 WOSU-34 OH signals from:" WDCA-20 DC WHP-21 PA 7 1300 WOUC-44 OH signals from:" WDCA-20 DC IND CCI on 22 Ir 00 WHP-21 PA Binghamton U's from MD; CCI MHP-21 PA WHE-21 PA
1930 WTPA-27 PA MS 0630 WDTN-4 OH 2041 WLVT-39 PA 0ctober MHP-21 FA December 4 Tr 1945 WKAR-23 MI "snow free" "snow free"
WHP-21 FA December 4 Tr 1945 WKAR-23 MI "snow free" 0 ctober 1 Tr 1230 W63AB-63 FA 4 Tr 1945 WKAR-23 MI 2041 WNJT-52 NJ 3 2330 WAE0-49 OH 2332 W39AA-39 IN 2332 W39AA-39 IN 1300 W0UC-44 OH 1 To 005 WOSU-34 OH 1 To 00 WDCA-20 DC January 1977 2 Tr 1930 "Very good NOUC-44 OH 1300 WDCA-20 DC 2041 WNJT-52 NJ 4 0005 WOSU-34 OH 1 To 00 WDCA-20 DC January 1977 2 Tr 1930 "Very good NUCA-20 DC 2043 WTPA-27 FA WHP-21 FA 9 000C-44 OH 1700 WDCA-20 DC 1000 gstown U's WHP-21 FA CCI on 22 From MD; CCI 0 A3 From FA WHF-21 FA Binghamton U's WNJT-52 NJ from FA WHF-21 FA Binghamton U's WNJT-52 PA from FA WKBS-48 FA Klmira, Detroit, Cleve- 2150 WTFA-69 FA
October 4 Tr 1945 WKAR-23 MI 2041 WNJT-52 NJ 1 Tr 1230 W63AB-63 PA WUHQ-41 MI "good signal" 3 2330 WAEO-49 OH "CCI on 19" 2041 unID-66 "Litr" 232 3732 W39AA-39 IN January 1977 2043 WTPA-27 PA 4 0005 WOSU-34 OH 2 Tr 1930 Very good WHP-21 PA 7 1300 WOUC-44 OH signals from:" WDCA-20 DC WHP-21 DA 1700 WDCA-20 DC Youngstown U's CCI on 22 WHP-21 PA Binghamton U's from MD; CCI WKBS-48 PA Rimira, Akron, WNJT-52 NJ on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150
1 Tr 1230 W63AB-63 PA WUHQ-41 MI "good signal" 3 2330 WABO-49 OH "CCI on 19" 2041 unID-66 "litr" 2 2322 W39AA-39 IN January 1977 2043 WHP-21 PA 4 0005 WOSU-34 OH 2 Tr 1930 Very good WHP-21 PA 7 1300 WOUC-44 OH signals from:" WDCA-20 DC WHP-21 PA 1700 WDCA-20 DC Youngstown U's CCI on 22 from MD; CCI wHP-21 PA WKBS-48 PA Binghamton U's from MD; CCI on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150 WHR-26 PA
3 2330 WABO-49 OH "CCI on 19" 2041 UNID-66 "Itr" 2332 W39AA-39 IN January 1977 2043 WTEA-27 PA 4 0005 WOSU-34 OH 2 Tr 1930 "Very good WHE-21 PA 7 1300 WOUC-44 OH signals from:" WDCA-20 DC WDCA-20 DC 1700 WDCA-20 DC Youngstown U's CCI on 22 WHEP-21 PA Binghamton U's from HD; CCI WHEP-24 PA Binghamton U's from YD; CCI WHS-48 PA Binghamton U's from YD; CCI WNJT-52 NJ Detroit, Cleve- 2150
2532 W39AA-39 IN January 1977 2043 WTPA-27 PA 4 0005 W05U-34 OH 2 Tr 1930 Wery good WHP-21 PA 7 1300 W0UC-44 OH signals from:" WDCA-20 DC 1700 WDCA-20 DC Youngstown U's CCI on 22 WHEP-21 PA Binghamton U's from MD; CCI WKBS-48 PA Elmira, Akross, on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150 WFMZ-69 PA
4 0005 WOSU-34 0H 2 Tr 1930 Very good WHP-21 PA 7 1300 WOUC-44 0H signals from:" WDCA-20 DC 1700 WDCA-20 DC Youngstown U's CCI on 22 WHP-21 PA Bingharton U's from MD; CCI WKBS-48 PA Bingharton U's on 43 WNJT-52 NJ Detroit, Cleve- 2150
7 1300 WOUC-44 OH signals from:" WDCA-20 DC 1700 WDCA-20 DC Youngstown U's CCI on 22 WHEP-21 PA Binghamton U's from MD; CCI WKBS-48 FA Elmira, Akron; on 43 from FA WNJT-52 NJ Detroit, Cleve- 2150
1700 WDCA-20 DC Youngstown U's CCI on 22 WHP-21 PA Binghamton U's from MD; CCI WKBS-48 PA Blmira, Akrow, on 43 from PA WNJT-52 Detroit, Cleve- 2150
WHP-21 PA Binghamton U's from MD; CCI WKBS-48 PA Klmira, Akron, on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150 WFMZ-69 PA
WKBS-48 PA Rimira, Akron, on 43 from PA WNJT-52 NJ Detroit, Cleve- 2150 WFMZ-69 PA
WNJT-52 NJ Detroit, Cleve- 2150 WFMZ-69 PA
8 1230 WLVT-39 PA land U's, plus Allentown 14 1700 WKBS-48 PA Svracuse. 2355 W60AD-60 HY
1702 WNJI-52 NJ Utica, Savona (WSKG)
WDCA-20 DC WAKR-23 MI 3 0000 W64AB-64 PA
20 1650 WDCA-20 DC WOUC-44 OH 0007 CICO-24 OH
23 2245 W63AB-63 PA WEYI-25 MI 0030 W68AD-68 NY
Corning (WSKG)

"A long wait for those WSKG xltrs...what are they, half-watts???' Log at 431."

Mave you notiged ?

Prices of WTFDA supplies and DX literature are now lower than ever before! Here's your chance to stock up on such items as club stationery, QSL report forms, and VUD boxers—all at prices equal to or less than what they were several years ago! And if you're a new member, you can purchase such items as EEYOND SHORTWAVE, the WTFDA TV STATION CUIDE, and back issues of the VUD at incredibly low prices! We can't guarantee how long these super-reduced prices will be in effect, so we suggest that you order immediately. For full details, see our back cover!

GENTRAL TV-DX

William J. Draeb Ellis St. R.R.#2 Kewaunee, Wi. 54216

February 1977 Deadline: 10th For TV-DXers in the states of Il, In, Ia, Mi, Mn, Oh and Wi.---Report Today!!!!

Another lousy month for dx. Cold temperatures being the main deturrent . I was listening to the weather report the other day and the wx man said Dec-ember (1976) was the coldest on record (records go back around a hundred years). The temperature averaged 15 degrees below normal for the month. It looks like January is going to be the same. This morning the temperature was -25 deg.

Jim Gould: R.R.#3. Kokomo. In. 469 11-8 Tr 1759 KTTC-10 Mn 2412 (396) 46901 EST (317)-452-9585

"With no dx in last 2 months to report I would like to use the space to request from fellow members to please include tropo distances in their reports. This is especially true when loggings are listed by call and state. I usually go ov-er all reports in the VUD and in many cases I miss some good distances in other reports because I'm not familiar with the stations or DXers' location.

I would also like to ask if any club member has access to 200' of .75 cable with RG-59 adapter ends that they would be willing to sell and send to me. If so, please drop me a line."

 Paul Gaines:
 15920 Puritan St..
 Detroit.
 Mi. EST

 WCBS-2 Ny
 (490)
 seen almost every day from 11-10 to 12-8.

 11-17 Ms
 0353 WWL-4 La 1012(940)
 11-27 Tr 0517 WSAZ

 12-1 Tr
 0112 WOWK-13 Wv 1022(280)
 11-27 Tr 0517 WSAZ 11-27 Tr 0517 WSAZ-3 WV 1022(280)

John D. Hathawar: 2109 Tamarack Court, Champaign, Il. 61820 CST? 11-2 Tr 2226 WIIL-38 In., Terre Haute 11-3 Tr 2355 KDML-30 Mo., St. Louis.

Equipment used: Zenith TV and indoor antenna. Present log total: 44 stations.

Back Battin: 4305 Pitt, Duluth, Mn 55804 CST Report period: 12-4 to 12-31.
4 Tr 0245 WBAY-2 W1(255) 18 Tr KTTC-10 Mn(195)@0117 26 Tr 1100 WKBT-8 W1(210)
5 Tr 0045 KTCA-2 Mn(140) 0140 WJMI-3 M1(250) 28 As 2018 chs.2-5; North. 1030 WPNZ-38 W1(255) 0141 WFRV-5 W1(255) 29 Es 2232 at 35Mhz.
11 Tr 0100 WBAY-2 W1(") 23 Tr 0630 KGLO-3 Ia(260) 31 Es 2140 " "
Equipment: Jerrold antennas; UHF Para-cy; Lo VHF--two 10 element yagis, one vert. polarized, the other horiz. polarized. Hi VHF--one ten element yagi. Antennas range in height from 20 to 35 ft. Also, a 30-50Mhz receiver with ground plane antenna. "My antenna system is now completely installed including a ground plane for de-

tecting Es building up at 35Mhz and a vertically mounted low band yagi. So far the best I've been able to do with five antennas, two rotors, two TV sets and a radio is a very weak signal on some Green Bay stations at 255 miles and one lowa station at 260. Or, to put it another way, DX has been lousy.

On the subject of TV sets, the Admiral 16" color set I'd been using for DX died -so I replaced it with two black and white sets. Not knowing any way to test a set for DX in a showroom, I sort of twisted some knobs, made my best guess and shelled out. I came up with a K-Mart 9" solid state model and a Sylvania 12" tube type. Both sold for under \$90. The K-Mart seems surprisingly well made. It has the same weak-signal pulling power on VHF and UHF my Admiral did. The dials are easy to read and the UHF detent tuner always reads right on the channel. The picture is stable, right down to fade out. My only complaint is that the audio lags behind the picture. A signal strong enough to bring in a stable snowy picture may be very weak on audio.

The Sylvania has less pulling power than the K-Mart. It's just the opposite of the K-Mart though; in **that** it provides good audio even after the picture fades out. The dials are hard to read and it has an annoying hum. However, it has one real advantage--the adjacent channel rejection is fairly good for a small set--on the K-Mart it's typically poor. Anyway, for what it's worth, those are in my observations on the two models."

Don Ruland: 4448 68th Place, Kenosha, Wi. 53140 CST Report period: 11-17--12-19

 17 Es 1900 KTES-3 La(780)
 11 Tr 0658 WEHT-25 In(320)
 19 Tr 0200 WLEX-18 Ky(330)

 24 ES 1730 Unided-2; S.
 14 Tr 0555 WLKY-32 Ky(330)
 0900 WUAB-43 Oh(310)

 25 Tr 0855 KEMA-41 Mo(430)
 WUAB-43 Oh(310)
 WVIZ-25 Oh(330)

 11 Tr 0645 WLKY-32 Ky(330)
 19 Tr 0200 WDRB-41 Ky(330)
 Log total:438

 24

CENTRAL TV-DX

FEB. 1977

William J. Draeb; Ellis St	R.R.#2. Kewaunee, Wi. 54	216 CST 12-13 to 1-5
13 Tr 2038 KTSB-27 KS(560)	15 Tr 1958 KMTC-27 MO (588) 2 Tr 0915 WYTV-33 0H(420)
2052 KCBJ-17 MO (450)	KOZK-21 " "	WJET-24 PA(405)
KDNL-30 MD (432)	2020 KTVJ-16 " (630	
WICS-20 WI(325)	16 Tr 2111 WVIZ-25 OH(355) 0930 WUAB-43 OH (340)
2103 WKYT-27 KY(473)	WUAB-43 * (340 2125 WDSU-34 * (395) 0942 WP GH-53 PA (480)
2104 WKS0-29 " (538)	2125 WDSU-34 " (395) 0944 WQIN-54 " (405)
KMTC-27 " "	1943 KOZK-21 " (588) 1355 CICA-19 ON (410)
2118 KHIN-36 IA(457)	1943 KOZK-21 * (588 KMTC-27 * *	1401 CBLFT-25 " "
2138 WUSI-16 IL(402)	18 Tr 1655 KDNL-30 " (432) 1407 CICO-28 " (345)
2153 WKMA-35?KY(499)	19 Tr 0823 WEHT-25 IN (420) 1515 CBLFT-76
14 Tr 1227 KINL-30 MD (432)	WI.KY-32 KY(437) Es 1900 KMID-2 or KIEW-2
15 Tr 1820 " " "	1 T. 1833 KGLO-3 IA(300)	5 Tr 1900 WKEN-27 OH(420)
1850 KHIN-36 IA(457)	Es KTVX-4?UT(1264) WUTV-29 NY(445)
1853 KBIN-32 IA(476)	2 Tr 0915 WFMJ-21 0H(420) 1920 CBLFT-25 ON (410)
1910 KYNE-26 NE(481)	WKEN-27 " "	CICA-19? " "

My sincere apologies to Michael Hogan whose report I seem to have misplaced. I was about to type it up but when I looked in the envelope in which it came, nothing was in there. I remember receiving the xmas card which I have but thought there was a DX report with it; makey not, I guess my mind is failing me. (Thanks for the card Mike and to the other DXers who sent me cards).

I just received a last minute post card from Michael Hogan which reads: "There is no TV-DX to report from this location due to the re-evaluation of my DX set up. A new receiver (TV) is in the offing, and finally, the addition of a long awaited rotor. 73's"

CONVENTION BIDS '77

In accordance with our notice last month that convention bidding would close on January 20, the two offers below are the only ones which can be considered for the 1977 WTFDA convention site. Please examine both possibilities, and then make your preference known to your editor.

PORTLAND, OREGON Hosted by Bill Block, Pat Martin, and Frank Aden

Portland would provide the first WTFDA Convention on the west coast and would allow many western members to attend. Possible activities would be tours of local TV and FM stations, and a DXpedition to one of the nearby hills. The Holiday Inn near the famous Lloyd Center (one of the largest shopping malls in the US) has indicated that if 25 or more members were to attend, a free meeting room would be provided. Probable dates would be the first weekend in August.

Portland is a very beautiful city in itself with a population of over 380 thousand and about a million in the metro area. The area has many tourist attractions with the Cascade Mountains to the east and the Pacific Ocean less than 100 miles to the west. Portland is served by many airlines, as well as Amtrak and Greyhound, among others. A local tour agency has indicated that special air fares would be available to anyone wishing to attend a Portland WTFDA Convention.

DUNKIRK, NEW YORK Hosted by Bob Seybold, also '70 and '73 WTFDA host

The third Dunkirk WTFDA Convention would probably be on the first weekend in August, and would be either at Bob's hilltop DX location or at his traditional repair shop. A large equipment display is planned, including TV/FM receivers and antennas with rotors, a 7-foot UHF parabolic dish, and all types of UHF amplifiers including B-T, Winegard, etc. Expeditions to Bob's hilltop location will be made if the convention is not held there. There will be at least one cookout, as well as snacks and refreshments throughout the convention.

On Saturday evening, a banquet will be held at the Vineyard Motel, at which many attendees stayed during the '73 convention. The motel features a swimming pool and playground, as well as 39 airconditioned rooms with (of course!) TV. Of historical interest is nearby Fredonia, NY, while the area provides many tourist attractions such as golf, boating on Lake Erie, tennis courts, etc.

If there is the slightest possibility that you might be able to attend a convention at either location, please drop a note to your editor (Clarke Ingram, 5201 Colewood Drive, Pittsburgh 15236) indicating your choice for the '77 convention site. <u>Votes must be received by February 20, 1977</u>. We expect to have a confirmed site and dates for an announcement in the March VUD. We also expect considerably more votes than the <u>13</u> we received for the 1976 site! Cast your vote today!

SOUTHERN TV.DX:

1415 .WUAB-43 OH

John F. Combs 816 W. Harvard Orlando FL 32804 Deadline: 10th!

TY

NM

TX

1900 KMID-2

т

Т

After complaining about the lack of good tropo openings in last month's column, the past month's activity seems to have made up for it. Several good openings have occurred, with UHF loggings in the neighborhood of 500-700+ miles. Ken Simon reports several instances of 400-500 mile UHFs coming in at VAFI 5555!! As for myself, my work schedule has caused me to miss three of these nice sessions! (Aaarrghh!!!) The winter E-Skip season has been going quite well. (See E-Skip chart below). Most of the skip here in the Southeast seems to have come from the west, including one really bang-up Mexican opening in which all channels 2-6 were 2-3 stations deep!!

<u>E-</u> :	Ski	p Cha		of re	porte: least	rs:		3 3	2 1	1	24 28 1 3 3 6		2	13			
			. Clark	. RT5	Dutc	h R	id	ge, Pa	arker	sbu	urg WV	2610	1	(ES	ST)		
		iber			1000	1.44	-	-	Sector 1	100							-
7	T	0200	WICD-1	5 IL	т	18	E	1417	Cuba	-2	(Which		1	E		unIDs-2	
			WQED-1		T				one	22-	-jfc)				2220	KMID-2	TX
					-		T	4700					2	T		KENW-3	
11	T	1200	WVIZ-2	5 OH		28	E	1700	WL91	-2	L T		2	2	1000	VTUM-)	TAL

"I will be going to another QTH/college later, about February the first...hope-fully! I will possibly be going to WV Tech to get my B.S.E.E. degree. Of course they have their own college radio station--WMON-1340, 1 kw, which is, unfortun-ately, AM. But anyway, I'll probably find out that there's an FM station as well! Maybe!" (Randy reports that his log totals are now "over 180"--jfc)

1714 KPRC-2 TX

T

Kenneth R. Simon, 528 Pil	grim Rd., West Palm Beach FL	33405 (EST)
December	and the second second second	January
4 T.2220 WECA-27 FL 360	4 T 0900 WYEA-38 GA 480	1 T 0610 WJXT-4 FL 285
2220 WGIQ-43 AL 1		0610 WJCL-22 GA 390
5 T 0730 WECA-27 FL		0620 WYEA-38 GA 480
6 T 0753 W69AA FL 40		
9 T 1330 WJCL-22 GA 390		Baton Rouge
1330 WCJB-20 FL 260		0635 WJCT-7 FL 285
2105 WJSP-28 GA		0650 WECA-27 FL 360
2105 WETV-30 GA 1		0720 WHAE-46 GA 560
16 T 2100 WCJB-20 FL 260		Atlanta
2100 WECA-27 FL		0729 WCWB-41 GA 465
18 T 0700 WJCL-22 GA 390		0729 WRBL-3 GA 480
0700 WRBT-33 LA		0729 WKAB-32 AL 535
(Most likely, Ken, a		Mpntgomery
		0729 WETV-30 GA 560
I had them at my QTH		0729 WCJB-20 FL 260
at this timejfc)		0745 WTCG-17 GA 560
0725 "All WCIX xltrs	24 T 2119 WCES-20 GA 500	0745 WDTB-13 FL T
VAFI 4555!!"	2123 WCJ3-20 FL 260	0905 WGIQ-43 AL 475
0900		0905 WJSP-28 GA 495
to 0930 WEBA-14 SC 1		0922 WDHN-18 AL 440
WCJB-20 FL 260		1000 WLPB-27 LA 720
WACS-25 GA 430		Baton Rouge
WJSP-28 GA 495		"VAFI 5555!
WECA-27 FL 360	28 E 1755 KYTV-3 MO 1080	That I John

(I have taken the liberty of approximating some of Ken's distances which he left out of his report. A phone call from Ken tells of more good DX, including yet another good spell of tropo with such goodies as WMAA-29 logged. That's over 700 miles. Unfortunately, I am pressed for time as I type this, so these log-gings will have to wait. Ken promised to send a quick updater, but I just don't have time to wait for it. Sorry, Ken!--jfc) (Ken's log now at 225--jfc)

John F. Combs, 816 W. Harvard, Orlando FL 32804 (305) 843-4829 (EST) It's been a bit of a frustrating month for me, missing some nice tropo. But I have added a few new ones, bringing my log up to 251. Most of my tropo log-gings have been quite weak. My antennas just aren't high enough!! Got a nice camera for Christmas, a Fujica ST605. I plan to photograph my DX and be able to contribute to Jim Alexander's column. (My report on next page ...)

SOUTHERN TV-DX

February 1977

		F. Combs (cont.)				LILE & SARAH SALA
		DOTA9 KATC-3 LA T	18 3	1607	XHIT-4 CHIH 1525	1 E 1736 KMID-2 TX T
-		0812 WSAV-3 GA 242			(Estado #5:promo	1738 KENS-5 TX T
10	т	0108 WCIX-6 FL 226				1740 KACB-3 TX T
		0113 WKRG-5 AL 417		1615	XHCH-2 CHIH T	1745 Had to leave
	M	0115 KALB-5 LA 689		1651	XELN-4 COAH T	for work
	-	(prev. by Tr)		1657	XEZ-3 QRO 1315	RATS!
	т	0121 WJTV-12 MS T		1659	XHD-4 TAMS 1135	2 T 0244 WAGA-5 GA T
		1954 WJWJ-16 SC 290		1720	XHZ-5 QRO 1315	4 T 2056 WMAZ-13 GA T
12	т	1044 WRBL-3 GA T			Cerro El Zamor-	2102 WATL-36 GA 403
		1830 WFSU-11 FL 230			ano Es in through 6, had to go to	Atlanta
		1830 WECA-27 FL 221		1745	Es in through 6,	(Station #250)
		1830 WABW-14 GA 244				
		1845 WDHN-18 AL 301			work many oth-	
		2243 WDCO-15 GA T			er unIDs not not-	
	м	2243 WJWJ-16 SC 290 2301 unID-7		4070	ed!	2246 WMAH-19 MS 479
		2332 WSAV-3 GA T			WECA-27 FL 221 KGBT-4 TX 1023	2248 WDHN-18 AL 301
16		1535 WFSU-11 FL 230	L		KGBT-4 TX 1023 KRGV-5 TX T	2252 WYEA-38 GA 341 2252 WJSP-28 GA 357
10	-	1535 WECA-27 FL 221			XEFB-3 NL T	2252 WECA-27 FL 221
		1705 WABW-14 GA 244	22 F		XEW-2 DF T	2314 WLOX-13 MS T
17	т	0020 W33AA(!)FL 191			XHTV-4 DF T	2322 WETV-30 GA 403
	-	0857 WEBA-14 SC 320			XEZ-3 QRO T	2330 WAGA-5 GA 403
		0900 WJWJ-16 SC 290			KGBT-4 TX T	2331 WKAB-32 AL 394
	5	0910 WSAV-3 GA 242			XEFB-3 NL T	2351 WHAE-46 GA 403
		0911 WRJA-27 SC 373		1728	KIII-3 TX T	5 T 0013 WTCG-17 GA 398
		0914 WVAN-9 GA T			KFDX-3 TX T	(All UHFs extre-
		0923 WBTW-13 SC T	27 I		WJSP-28 GA 357	mely weak)
1.0		0925 WJBF-6 SC T			WYEA-38 GA 341	9 T 0220 WTVM-9 GA 329
		0939 WETV-30 GA 403			WECA-27 FL 221	0222 WSFA-12 AL 380
		0943 WHAE-46 GA 403			WDC0-15 GA 294	0222 WYEA-38 GA 341
40	-	0955 WEAR-3 AL T	28 E		WCIA-3 IL 951	0225 WCIX-6 FL 226
18	т	0215 t/in after work			WOC-6 IA T	(Many stations
		0215 WRBT-33 LA 603			KMOX-4 MO T	on late w/East
		(Local quality all-nite movies)			KQTV-2 MO 1089	West FB game)
		0215 WYEA-38 GA 341			WDAF-4 MO 1048	0743 WCWB-41 GA 318
		0702 WRBT-33 LA 603			KTVO-3 MO T	1301 WRBL-3 GA 329
		(Still in. weak)			KYTV-3 MO 896 KCMO-5 MO T	1303 WDHN-18 AL 301
	E	1244 KDFW-4 TX T	Janu		KCHO-5 MO T	1303 WYEA-38 GA 341 1321 WTVY-4 AL 299
	-	1246 KIII-3 TX T			WTCG-17 GA 398	1423 WECA-27 FL 221
		1300 unID-2 (full CB;	Ē	1715	KPRC-2 TX 857	1459 WDC0-15 GA 294
		diagonal CCI)			KMOL-4 TX 1025	2315 WHFT-45 FL 191
		1437 XHIA-2 COAH T		(181	t time w/new	Miami (quite a
		1512 XEFB-3 NL 1185		call	Ls)	nice birthday gift)
		* * * * * * * * * * * *	* * .	* * *	********	

Since I have some space to fill up, allow me to mention a couple of things. First of all--in perusing the old AIPA bulletins (see Memorabilia column), I find that DX tests were often run during MS showers in those days. I started wondering--why doesn't the WIFDA arrange such tests? It would be ideal for educational stations and others that may be off during peak MS hours. I'd like some comments on this, please. (Mostly, it's a lack of volunteers and cooperation --CWI) Secondly, I am a bit frustrated concerning the lack of reports. According

Secondly, I am a bit frustrated concerning the lack of reports. According to my membership list (accurate to 2/3/76), there are 41 members in the Southern TV-DX reporting area. This means less than 10% of these members have responded to this column. If you have a copy of last month's VUD, please re-read my comments concerning this. Finally, I think it would be a good idea if members sent in a short bio-

Finally, I think it would be a good idea if members sent in a short biography of themselves with one of their reports. This would be a good idea for all DX columns and would include age, family, occupation, other hobbies, etc. To start it off, here are my "statistics": I'm 19 years old and a student at Florida Technological University. I plan to go to a Bible college after graduation and work in some sort of Christian ministry. My girlfriend's name is Karen, also an FTU student. I play trumpet, am very interested in music, most especially Baroque (Bach, Handel, etc.) and have two dogs and a cat. I've been interested in TV-DX since 1970 and have DXed actively since 1972.

27

WESTERN TV-DX

Doug Everitt 1710 W Maine Enid OK 73701 Deadline: 10th

For TV DXers in the states of AK AZ CA CO HI ID KS MT ND NE NM NV OK OR SD TX WA WY &

First off, we have a delayed report of November DX from Pat Dyer. The holiday mail rush strikes again!

-	1000000	States of the second	ALCONT ACCOUNTS OF		00202000	100.050.50776		1.000	CRIME AND DESCRIPTION	onio 1	100.000									
																	HF arra			
07	tr							3 Es	2058	KCPX	? 4	UT	1080	25	Es	1545	WDTN?	2	OH	1075
		0000	WAFB?	9	LA	450			2228	KNOP	2	NE	815			1545	WKYC?	3	OH	1250
		0154	KFDM	6	TX	275	2	4 Es	0759	KTWO	2	WY	1015			1700	WJBK	2	MI	1225
08	Es	1308	KTWO	2	WY	101	5 -		0802	KOA?	4	00	810			1700	WTWO	2	IN	935 -
14	Es	0925	KDKA?	2	PA	1280)		0805	KWGN	2	co	810			1702	CKGN?	6	ON	
_		1020	WFMY	2	NC	1175	5		0859	WCBD	2	SC	1120			1712	WWJ?	4	MI	1225
		1055	WCCO?	4	MN	1110	* (0930	ch.2	83 on	tu	ner	de-			1802	WCIA	3	IL	935
			KTCA							wierd							KTVI			
			WAVE					ain.							Es	1600	TGV?	3	Gua	1120
		1159	WDTN	2	OH	1075				WTHS	2	FL	1150	-			YSR			
		1210	WTTV?	4	IN	950				WTVJ				27	Es		WESH?			
15	MS	0552	:30 WK	RG	5	AL.				WJEK			1225	-			WTVJ?			
			WJBK							WMT			945				WEDU			985
										WDTN							Cuba	2		
19	MS		-30 10							WWJ?			1225				WPBT?	2	FL.	1150
			YSR?							WBBM	0.5		1045		Es		YSR?			
			KID?							KNBC							YSU?		and the second second	
-			KUTV							KNXT							TGV?		Contractor and the	
		2020	nort	-					- 355	. KIWI	~	~	1190					-	oua	1120
Bol	C	OODer	Ire	R	t.5	Box	782.	Gut	hrie	OK 730	044	10	ST)	U	Hŀ	MS				
														n off	IOT	Dort	ions of	F +	ho	coun-
+																	l: one			

try in recent months. A heavy travel schedule has also taken its toll: one three week period saw me in SF on one trip, DC, back to LA, and then back to DC. fortunately, I apparently picked a good time to be gone! December 1976 12 tr 0935-1005 WILL 38 IN 18 tr 0805 KYNE 26 NE,

December 1970	10	CT.	0933	-1002	WT.	10 20	114	10	LT	0000	RINE	20	NC,	
09 MS 2105 on ch.16	_		1000	WFIE	14	IN,					KHNE	29	NE,	
In years of looking have never				WEHT	25	IN					KCBJ	17	MO	
seen for positive-sure meteor			1030	WXIX	19	OH		19	Es	1425	XEW	2	DF	
burst at UHF. This was it, at	15	tr	0735	WAPT	16	MS		100		1605	XEZ	3	QRO	
2105, a full two second CCI	17	tr	0725	KIDZ	24	TX,		Jan	nua	ry 19	77			
burst against KTVJ-16; 10kHz	_			KDOG	26	TX		01	Es	1830	WEDU	3	FL	
offset, making it either +	18	tr	0805	KMEG	14	IA,		- Charles		1832	TV C	ubar	na 3	
or minus	_			K18A	A KS	s		02	Es	2000	KORK	3	NV	
12 tr 0935-1005 KDNL 30 MD				KXNE	19	NE				2130	KTVQ	2	MT	

Robert J Williams, 251 6th Avenue Bast, Twin Falls ID 83301 Equipment: Curtis-Mathes 21" color TV (in radio-TV-phono combination); Magnavox b&w portable TV. Antennas: 17-el. outdoor antenna on rotor; two-bay stacked 5-el. ch.4 homebrew yagis on rotor; two dipoles in 90° phased array; vertical dipole with Wineoard booster. (If anvone feels like it. add Bob's Es dates to past charts--de)

gard booster. (In anyone ree	is like it, add bob 5 ES	dates to past charts-de
December 1975	17 Es 1230 WBAY 2 WI	09 Es 1700 KDLO 3 SD
22 Es or MS 2134 KLNE 3 NE	1244 KTCA 2 MN	1703 WMT 2 IA
23 Es 1100 KTVO 3 IA	1918 KNOP 2 NE	1713 KMTV 3 NE
1119 KXJB 4 ND	1920 KDUH? 4 NE	1725 KXJB 4 ND
1125 KDLO 3 SD	19 Es 1958 KMID 2 TX	1742 CHFD? 4 ON
1159 CKPR 2 ON	1958 KENW 3 NM	1800 CBWFT 3 MB
1205 CBWFT 3 MB	27 Es 1229 KNXT 2 CA	2028 CKCK 2 SK
January 1976	1301 KNBC 4 CA	2342 CFAC 2 AT
03 Es 2100 KFDX 3 TX	1331 KEYT 3 CA	2348 CFRN 3 AT
2122 KTBS 3 LA	28 Es 1914 KTIV 4 IA	11 Es 0859 KENW 3 NM
.04 Es 1024 KMOL 4 TX	June 1976	12 Es 1324 KOTV 2 MD
07 Es 2141 KMID 2 TX	01 Es 2251 KTVO 3 IA	13 Es 1110 CFRN? 3 AT
09 Es 1051 KMID 2 TX	2310 KQTV 2 MO	1409 KTEW 2 OK
May 1976	06 Es 1030 KTEW 2 OK	1459 KGFE 2 ND
17 2E 1213 WCBS 2 NY	08 Es 0759 KENW 3 NM	1513 CBWT 6 MB
(about 2100mide)	0833 KACB 3 TX	1518 CBWFT 3 MB
Es 1214 WJBK? 2 MI	09 Es 1359 KMID 2 TX	1658 KTVY 4 OK
Contraction of the second s		

WESTERN TV DX

February 1977

the second se	
Robert J Williams continue	ed
13 Es 1930 KAMR 4 TX	16 ES 2100 KFDX 3 TX 26 ES 2124 KTBS 3 LA
2059 KMID 2 TX	21 Es 1530 KBTX 3 TX 2127 KFDX 3 TX
2108 KACB 3 TX	1800 KTBS 3 LA 2144 KAMR 4 TX
14 Es 1728 KDBC 4 TX	2309 KQTV 2 MO 27 Es 1059 KBTX 3 TX
1830 KENW 3 NM	25 Es 1028 KARD 3 KS 1131 KDFW 4 TX
1900 KMOL 4 TX	26 Es 1000 KFDX 3 TX 1215 KTBS 3 LA
16 Es 2359 KMID 2 TX	1429 KTVI 2 MO 1227 KTVY 4 OK
2000 KYTV 3 MD	1459 KMTV 3 NE 1258 KTIV 4 IA
2058 KDFW 4 TX	1519 KTIV 4 IA 1336 KDLO 3 SD
	1515 KILV 4 IN 1550 KDLO 5 50
John Anderson, Box 186, Low	ve Farm MB ROG 1EO (December)
07 tr 2030 KWCM 10 MN 290	12 MS 0614 KYTV 3 MO 858 17 tr 0215 WTCN 11 MN 360
11 early AM: KTCA 2 MN via	0630 KTWI 3 in 0230 KDLO 3 SD 305
tropo, aurora, and MS 360	
MS 2350 KCKT 2 KS 758	0730 KWGN 2 CO 765 1315 WTCN 11 MN 360
12 MS 0545 WTWO 2 IN 830	0800 KCKT 2 KS 857 27 tr 1405 KTCA 2 MN 360
	shack" recently and came across my long-lost page of log-
gings. Here's the contents:	
June 1976	27 Es 1450 WCBI 4 MS 1181 July 1976
21 Es 1200 KMID 2 TX 1233	
1200 WBRZ 2 LA 1337	1700 KTVY 4 0K 950 02 tr 0905 WIRT 13 MN 242 28 Es 2100 KETS 2 AR 1045 0905 WDIO 10 MN 300
1840 WMAR 2 MD 1228	
1900 WCBS 2 NY 1279	29 Es 0000 KCKT 2 KS 758 both snowfreel
	1305 CKSA 2 AT 474 Es 2300 KMID 2 TX 1233
1900 WNBC 4 NY 1279	1315 CFAC 2 AT 757 04 tr 2100 KUMV 8 ND 298
	1330 v1tr=2 of KSTW 11 WA 72 John
22 Es 0000 KOAI 2 AZ 1215	
	i unIDs on 12 December, including a couple on chs.10 &13de
(John also noted several MS	unIDs on 12 December, including a couple on chs.10 &13de
(John also noted several MS Doug Everitt, 1710 W Maine,	unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST)
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5	unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) 100 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana-
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) ilo0 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K	inlDs on 12 December, including a couple on chs.10&13de <u>Enid OK 73701</u> (CST) 100 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band 10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped	i unIDs on 12 December, including a couple on chs.10&13de <u>Enid OK 73701</u> (CST) 1000 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band :-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators.
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) GLOO (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 O2 Es 2010 KVVU 5 NV 960
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) Elio0 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band E-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 223 Es 1510 KTVN 2 NV 1210 2011 KORK 3 NV 960
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XEZ? 3 QRO 1200	initial state initial state initial state
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 IO Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020	initial state initial state<
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 LO Es 1850 XE2? 3 QRO 1200 L2 MS Oll1 XHBC? 3 BCN 1020 L3 tr 1905 KCPT 19 MO 260	initial constraints including a couple on chs.10 & 13de Enid OK 73701 (CST) itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- tver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band itoo RKCR 3 NV 960 02 Es 2010 KVVU 5 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KNRT 3 CA 1220 itoo 1512 KCRL 4 NV 1210 2029 KNRT 4 CA 1150 itoo 1630 KNRT? 2 CA 1150 2100 KSBY 6 CA 1250
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XEZ? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBJ 17 MO 350	initial constraints including a couple on chs.10 &13de Enid OK 73701 (CST) ito0 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- twer; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1630 KNEC? 4 CA 1150 1630 KNEC? 4 CA 1150 1630 KNEC? 4 CA 1150 2100 KSEY 6 CA 1250 1630 KTLA? 5 CA 1150 2130 KTVQ 2 MT 850
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCB1 17 MO 350 0850 KXNE 19 NE 380	 innIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola ES711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KEYT 3 CA 1150 1630 KNXT? 2 CA 1150 2030 KNXT 2 CA 1150 1630 KNXC? 4 CA 1150 2100 KSBY 6 CA 1250 1630 KTLA? 5 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRET 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 0850 KCNE 19 NE 380 0850 KYNE 26 NE 350	initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initi
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 ES 1850 XE2? 3 QRO 1200 12 MS Oll1 XHEC? 3 ECN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBJ 17 MO 350 0850 KXNE 19 NE 380 0850 KXNE 29 NE 290	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KNRC 4 CA 1150 1630 KNKT? 2 CA 1150 2100 KNST 2 CA 1150 1630 KNEC? 4 CA 1150 2100 KSBY 6 CA 1220 1630 KTLA? 5 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRET 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 0850 KCNE 19 NE 380 0850 KYNE 26 NE 350	initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS O111 XHEC? 3 ECN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBJ 17 MO 350 0850 KXNE 19 NE 380 0850 KXNE 29 NE 290	initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state initial state inititial state initial state
John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBL 17 MO 350 0850 KYNE 26 NE 350 0850 KYNE 29 NE 290 0850 KHME 14 LA 420	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola ES711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 l and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KEYT 3 CA 1220 1630 KNXT? 2 CA 1150 2030 KNXT 2 CA 1150 1630 KNXC? 4 CA 1150 2100 KSBY 6 CA 1250 1630 KNXC? 4 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVQ 6 MT 1000 1700 WESH 2 FL 1100 2135 KXLF 4 MT 1000 1702 WTVJ 4 FL 1290 2210 KIVI 6 ID 1100 1732 WEDU? 3 FL 1080 03 MS 1228 WCBC? 2 SC 1060 1738 WCIX 6 FL 1290 2E 1610 WKAQ 2 PR 2000+
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCRJ 17 MO 350 0850 KXNE 19 NE 380 0850 KXNE 26 NE 350 0850 KHNE 29 NE 290 0850 KHSG 14 IA 420 0922 K18AA K34AA KS	initial state initial state<
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRET 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 13 tr 1905 KCPT 19 MO 260 0850 KCNE 19 NE 380 0850 KINE 29 NE 290 0850 KHNE 29 NE 290 0850 KHME 29 NE 290 0850 KHME 14 IA 420 0922 K18AA K34AA KS 0935 K71B0 KS 160	in IDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VIR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 i and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KETT 3 CA 1220 1630 KNKT? 2 CA 1150 2030 KNKT 2 CA 1150 1630 KNKT? 2 CA 1150 2130 KTVQ 2 MT 850 1630 KNLA? 5 CA 1150 2130 KTVQ 6 MT 1000 1700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 2130 KTVI 6 ID 1100 1738 WCDU? 3 FL 1080 03 MS 1228 WCBD? 2 SC 1060 1738 WCIX 6 FL 1290 21610 WKAQ 2 PR 2000+ 30 Es 1502 KTVN 2 NV 1210 Es 1600 XEM 2 DF 1200 130 KTVM 4 DF 1200
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 ES 1850 XE27 3 QRO 1200 12 MS Oll1 XHBC? 3 ECN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBJ 17 MO 350 0850 KNNE 19 NE 380 0850 KNNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHSG 14 IA 420 0922 K18AA K34AA KS 0935 K71BO KS160	in IDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) i000 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 i and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KETT 3 CA 1220 1630 KNXT? 2 CA 1150 2030 KNNT 2 CA 1150 1630 KNXC? 4 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 2100 KTVM 6 IM 1000 1732 WEDU? 3 FL 1080 03 MS 1228 WCED? 2 SC 1060 1738 WCIX 6 FL 1290 2E 1610 WKAQ 2 PR 2000+ 30 Es 1502 KTVN 2 NV 1210 Es 1800 XEW 2 DF 1200 1800 XHRY 4 DF 1200 1800 XHRY 4 DF 1200 191 Es 1723 WCIX 6 FL 1290 1800 XHRY 5 DF 1200
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCRJ 17 MO 350 0850 KXNE 19 NE 380 0850 KKNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHSG 14 IA 420 0922 K18AA K34AA KS 0935 <u>K71B0</u> KS 160 0955 KVFD still 21 0950 KDUB?40 IA 560	 inlDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola ES711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KNRC 4 CA 1150 1630 KNRC? 2 CA 1150 2100 KSBY 6 CA 1250 1630 KNRC? 4 CA 1150 2100 KSBY 6 CA 1250 1630 KNRC? 4 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000 1700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 2210 KIVI 6 ID 1100 1732 WEDU? 3 FL 1080 03 MS 1228 WCBD? 2 SC 1060 1738 WCIX 6 FL 1290 1800 XHW 2 DF 1200 January 1977 1800 XHTV 4 CA 1350 OL Es 1723 WCIX 6 FL 1290 1800 XHVC 5 DF 1200 1729 WEDU 3 FL 1080 04 Es 1335 KTVU 2 CA 1340
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 0850 KCRL 19 NE 380 0850 KCNE 19 NE 380 0850 KKNE 29 NE 290 0850 KHNE 29 NE 290 0850 KMEG 14 IA 420 0922 K18AA K34AA KS 0935 K71B0 KS 160 0945 KVFD still 21 0950 KDUB? 40 IA 560 0955 K7ØEN KS 190 Es 1930 XEFB? 3 NL 740	inition
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 13 tr 1905 KCPT 19 MO 260 13 tr 1905 KCPT 19 MO 260 14 tr 0850 KCBJ 17 MO 350 0850 KNNE 19 NE 380 0850 KNE 29 NE 290 0850 KHSG 14 IA 420 0922 KI8AA K34AA KS 0935 K7JED KS 160 0945 KVFD still 21 0950 KDUB? 40 IA 560 0955 K7ØEN KS 190 Es 1930 XEFB? 3 NL '740 tr 2005 KGLD 11 s/free	in units on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) itoo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band ind use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KETT 3 CA 1220 1630 KNKT? 2 CA 1150 2030 KNKT 2 CA 1150 1630 KNKT? 2 CA 1150 2130 KTVQ 2 MT 850 1630 KNEC? 4 CA 1150 2130 KTVG 6 MT 1000 1700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 2130 KTVI 6 ID 1100 1738 WCIX 6 FL 1290 2210 KIVI 5 RP 200+ 30 Es 1502 KTVN 2 NV 1210 203 MS 1228 WCBC? 2 SC 1060 1738 WCIX 6 FL 1290 1800 XHTV 4 DF 1200 January 1977 1800 XHTV 4 DF 1200 1729 WEDU 3 FL 1080 04 Es 1335 KTVU 2 CA 1340 1736 WPBT 2 FL 1290 1336 KFR 4 CA 1340
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recef yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 13 tr 1905 KCPT 19 MO 260 13 tr 1905 KCPT 19 MO 260 13 tr 1905 KCPT 19 MO 350 0850 KYNE 26 NE 350 0850 KYNE 26 NE 350 0850 KHNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHNE 314 IA 420 0922 KL8AA K34AA KS 0935 K71B0 KS 160 0945 KVPD still 21 0950 KDUB? 40 IA 560 0955 K7ØEN KS 190 Es 1930 XEFB? 3 NL '740 tr 2005 KGLD 11 s/free 19 Es 1511 XEW 2 SF 1200	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) 100 (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS? 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KEYT 3 CA 1220 1630 KNKT? 2 CA 1150 2100 KNST 2 CA 1150 1630 KNKT? 2 CA 1150 2100 KSBY 6 CA 1250 1630 KNKT? 2 CA 1150 2130 KTVM 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000 1700 WESH 2 FL 1290 2210 KIVI 6 ID 1100 1702 WTVJ 4 FL 1290 2210 KIVI 6 ID 1100 1732 WEDU? 3 FL 1080 03 MS 1228 WEDD? 2 SC 1060 1738 WCIX 6 FL 1290 1800 XHVV 4 DF 1200 30 Es 1502 KTVN 2 NV 1210 Es 1800 XHVV 4 DF 1200 1729 WEDU 3 FL 1080 04 Es 1335 KTVU 2 CA 1340 1736 WPTV 5 FL 1240 1347 KRON 4 CA 1340 1800 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 02 MS 1200 WESH 2 FL 1100 1354 KCRA 3 CA 1300
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCRJ 17 MO 350 0850 KKNE 19 NE 380 0850 KKNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHSG 14 IA 420 0922 K18AA K34AA KS 0935 <u>K71B0</u> KS 160 0955 KVFD still 21 0955 KUFD still 21 0955 KJ0EN KS 190 Es 1930 XEFB? 3 NL 740 tr 2005 KGLD 11 s/free 19 Es 1511 XBW 2 SF 1200 1515 XHTV 4 DF 1200	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) Enid OK 73701 (CST) IOO (AC/DC color); Motorola ES711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 I and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS7 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KEYT 3 CA 1150 1630 KNEC? 4 CA 1150 2100 KSBY 6 CA 1250 1630 KNEC? 4 CA 1150 2100 KSBY 6 CA 1250 1630 KNEC? 4 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPET 2 FL 1290 2130 KTVM 6 MT 1000 1700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 2130 KTVM 6 MT 1000 1702 WTVJ 4 FL 1290 210 KIVI 6 ID 1100 1732 WEDU? 3 FL 100 2135 KXLF 4 MT 1000 1732 WEDU? 3 FL 100 2135 KXLF 2 CO0+ 30 Es 1502 KTVN 2 NV 1210 Es 1800 XEW 2 DF 1200 1729 WEDU 3 FL 1080 03 MS 1228 WCBD? 2 SC 1060 1738 WCIX 6 FL 1290 1800 XHW 2 DF 1200 1729 WEDU 3 FL 1080 04 Es 1335 KTVU 2 CA 1340 1736 WPTV 5 FL 1240 1347 KRON 4 CA 1340 1800 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 20 MSJK 2 TN 800 1416 KVIE 6 CA 1300
John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/receival yagi at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 M0 260 18 tr 0850 KCRJ 17 M0 350 0850 KINE 19 NE 380 0850 KINE 19 NE 380 0850 KINE 19 NE 380 0850 KINE 19 NE 360 0935 K71B0 KS 160 0945 KVFD still 21 0950 KDUB? 40 IA 560 0955 K7ØEN KS 190 Es 1930 XEFB? 3 NL '740 tr 2005 KGLD 11 s/free 19 Es 1511 XEW 2 SF 1200 1515 XHTV 4 DF 1200 1649 XH3C 5 DF 1200	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) Enid OK 74 (CST) E
John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei Equipment: Sony KV1203, KV5 sonic 19" VTR monitor/recei gaja at 30 feet; Winegard K feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCPT 19 MO 350 0850 KINE 19 NE 380 0850 KINE 29 NE 290 0850 KINE 29 NE 290 0850 KINE 29 NE 290 0850 KINE 29 NE 350 0935 K71B0 0945 KVFD still 21 0950 KDUB? 40 IA 560 0955 K70EN KS 190 Es 1930 XEFB? 3 NL '740 tr 2005 KGLD 11 s/free 19 Es 1511 XEW 2 SF 1200 1515 XHTV 4 DF 1200 1649 XK3C 5 DF 1200 1845 XEHL? 6 JAL	inlbs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 i and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 22 as 1510 KTVN 2 NV 1210 2029 KETT 3 CA 1220 1 a630 KNKT? 2 CA 1150 2030 KNKT 2 CA 1150 1 630 KNKT? 2 CA 1150 2100 KSBY 6 CA 1250 1 630 KNKT? 2 CA 1150 2130 KTVM 6 MT 1000 1 700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1 702 WTVJ 4 FL 1290 2210 KIVI 6 ID 1100 1 738 WCIX 6 FL 1290 2210 KIVI 2 SC 1060 1 738 WCIX 6 FL 1290 1800 XHC 2 SD F1200 1 736 WPBT 2 FL 1290 1335 KTVU 2 CA 1340 1 736 WPBT 2 FL 1290 1350 KPIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 720 KDKA? 2 NN 800 1416 KVIE 6 CA 1340 1 720 KDKA? 2 FL
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recef Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recef Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recef to est all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 02 tr 1344 KHIN 36 IA 340 03 tr 1399 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHEC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 16 tr 0850 KCNE 19 NE 380 0850 KXNE 26 NE 350 0850 KNNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHNE 29 NE 290 0850 KVFD still 21 0955 KCFD still s/free 19 Es 1511 XEW 2 SF 1200 1649 XHCC 5 DF 1200 1645 XHL? 6 JAL 21 Es 1813 XHIA 2 COA	 unIDs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band -10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 2237 KTVS7 3 CO 410 2011 KORK 3 NV 960 23 Es 1510 KTVN 2 NV 1210 2029 KEYT 3 CA 1220 1512 KCRL 4 NV 1210 2029 KEYT 3 CA 1150 1630 KNXT? 2 CA 1150 2100 KSBY 6 CA 1250 1630 KNXT? 2 CA 1150 2130 KTVQ 2 MT 850 28 Es 1700 WPBT 2 FL 1290 2130 KTVM 6 MT 1000 1700 WESH 2 FL 1290 2210 KIVI 6 MT 1000 1700 WESH 2 FL 1290 2210 KIVI 6 MT 1000 1702 WTVJ 4 FL 1290 2210 KIVI 6 MT 1000 1702 WTVJ 4 FL 1290 2210 KIVI 6 MT 1000 1702 WTVJ 4 FL 1290 2210 KIVI 6 MT 1000 1732 WEDU? 3 FL 1080 03 MS 1228 WCBD? 2 SC 1060 1738 WCIX 6 FL 1290 1800 XHW 2 DF 1200 January 1977 1800 XHTV 4 DF 1200 1729 WEDU 3 FL 1080 04 Es 1335 KTVU 2 CA 1340 1736 WDTV 5 FL 1240 1347 KRON 4 CA 1340 1736 WDTV 5 FL 1290 1350 KPIX 5 CA 1300 Es 1630 WSJK 2 TN 800 1416 KVIE 6 CA 1300 1718 WCMH 4 OH 850 1435 KTVN 2 NV 1210 1720 KDKA? 2 PA 1020 1435 KCRL 4 NV 1210 1743 WWAY 3 NC 1140 05 Es 1952 XHY 3 YUC
(John also noted several MS Doug Everitt, 1710 W Maine, Equipment: Sony KV1203, KV5 sonic 19" VIR monitor/recei feet; all antennas preamped December 1976 02 tr 1344 KHIN 36 IA 340 07 tr 1239 WRBT 33 LA 570 10 Es 1850 XE2? 3 QRO 1200 12 MS 0111 XHBC? 3 BCN 1020 13 tr 1905 KCPT 19 MO 260 18 tr 0850 KCBJ 17 MO 350 0850 KKNE 19 NE 380 0850 KKNE 29 NE 290 0850 KHNE 29 NE 290 0850 KHSG 14 IA 420 0922 K18AA K34AA KS 0935 <u>K71B0</u> KS 160 0955 KVFD still 21 0955 KUFD still 21 0955 KCPE N KS 190 Es 1930 XEFB? 3 NL '740 tr 2005 KGLD 11 s/free 19 Es 1511 XBW 2 SF 1200 1845 XEHL? 6 JAL 21 Es 1813 XHIA 2 COA 1835 XEFE? 2 TAM 620	inlbs on 12 December, including a couple on chs.10 &13de Enid OK 73701 (CST) iloo (AC/DC color); Motorola BS711CS, Quasar XE4242; Pana- ver; NV3020 b&w VTR. Antennas: Winegard K-10-26 lo-band i-10-713 hi-band yagi at 40 feet; Finco P-7 UHF dish at 35 i and use RG-59/u foam coax. CDE AR-33, AR-40 rotators. 21 MS 2230 KORK 3 NV 960 02 Es 2010 KVVU 5 NV 960 22 as 1510 KTVN 2 NV 1210 2029 KETT 3 CA 1220 1 a630 KNKT? 2 CA 1150 2030 KNKT 2 CA 1150 1 630 KNKT? 2 CA 1150 2100 KSBY 6 CA 1250 1 630 KNKT? 2 CA 1150 2130 KTVM 6 MT 1000 1 700 WESH 2 FL 1290 2130 KTVM 6 MT 1000 1 702 WTVJ 4 FL 1290 2210 KIVI 6 ID 1100 1 738 WCIX 6 FL 1290 2210 KIVI 2 SC 1060 1 738 WCIX 6 FL 1290 1800 XHC 2 SD F1200 1 736 WPBT 2 FL 1290 1335 KTVU 2 CA 1340 1 736 WPBT 2 FL 1290 1350 KPIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 736 WPBT 2 FL 1290 1350 KFIX 5 CA 1340 1 720 KDKA? 2 NN 800 1416 KVIE 6 CA 1340 1 720 KDKA? 2 FL

I was very confused at 1813 on 21 Dec when I saw an ad card flashed for 15 sec. on ch.3 for XETB, until I thought to look up the call to see if it was a radio outlet. Sure enough, according to Vane Jones' Station Guide, it was in Torreon, thus leading me to ID the ch.3 as XHIA.

WKAQ on 03 Jan was my first double-hop Es. True, no positive ID was seen, but heavy circumstancial evidence, such as repetitive mention of Puerto Rico, make it pretty certain. Quality ranged from fair to very good, often in color.

The DX antennas will probably remain atop 1708 for a while, until tower plans have been fully formulated. The additional downline losses don't seem to be hurting me too much. DX seems a lot easier without so many distractions over here.

I plan to take my new 5" color AC/DC set on a trip to Chicago in February; I'm going by plane--it'd be interesting to DX at 30,000 feet..... We'll see what turns up. I can forsee many uses for the new set; it should make DXpeditions much easier. So much for my stuff... I only hope the next few months aren't a letdown! WESTERN TV DX

February 1977

-

5

1

Steven C Wiseblood, 707 Loma	Way, Santa Maria CA 93454 (PST) (19 Dec-05 Jan)
Receiver: 1959 Packard Bell	19" b&w Antenna: ACA-525 25-element VHF at 25'
19 Es 1753 MUF ch.4	22 Es 1731 XHCH? 2 CH 24 Es 1745 XHCH? 2 CH
1800 KMID 2 TX 1066	1731 XHI? 2 SON 25 Es 1636 MUF ch.5
2100 XHI? 2 SON	23 Es 1445 KCKT 2 KS 1205 1646 KMID 2 TX 1066
2107 XHBS 4 SON	1732 XHCH 2 CH 1641 KAMR? 4 TX
20 Es 1707 MUF ch.5	24 Es 1445 MUF ch.5 1649 KOCO? 5 OK
1730 XHCH 2 CH	1455 KMOL? 4 TX 26 Es 1654 KMID? 2 TX 1066
1737 XHIT 4 CH	1504 XHIT 4 CH 02 Es 1830 KMID 2 TX 1066
21 Es 1747 XHCH? 2 CH	1520 XHCH 2 CH 1932 KCKT 2 KS 1205
1920 XHI? 2 SON	1530 XEPM? 2 CH

Not an awful lot of tropo (try <u>none</u>--de), but a heck of a lot of Es. In fact, Es was seen for eight days in a row, with the MUF peaking around 1730 local time each day! Not much noted in January, though. It is raining today (postmarked 07 Jan--de), snowing down to 2500'. I guess many xmtrs will be snowed in on Mt.Wilson, etc. 73s!

Pat	D	yer, 5315 Silvertip Driv 1159 WESH 2 FL 1055 1215 WEAR? 3 FL 685 1225 WPBT? 2 FL 1150 1235 f/out 1336 YSR 2 EIS 1200 1355 TGV? 3 Gua 1120 1420 f/out	ve.	Sar	Antonio TX 78228 (CS	T)	(07 Dec-07 Jan)	
08	Re	1159 WESH 2 FL 1055	18	Fs	1557 Cuba 3	25	Es 1758 XHBC 3 BCN 1	010
	1.5	1215 WEAR? 3 FL 685	-		1625 XHTV? 4 DF 690	_	1759 KNXT 2 CA 11	90
		1225 WPBT? 2 FL 1150			1628 XHGC 5 DF 690		1759 KNBC? 4 CA 11	90
		1235 f/out			1650 MUE 106.5 MHz		1759 KVOA? 4 AZ 75	0
		1336 VSP 2 F15 1200			1945 f/out's		1809 XETV? 6 BCN 1	100
		1355 TGV? 3 Gua 1120	19	Fe	1425 YSU? 4 EIS 1200		1833 MUF 107.9 MHz	
		1355 TGV? 3 Gua 1120 1420 f/out 1101 KPLC? 7 LA 325 1900 WCBD? 2 SC 1120 1910 f/out 2115 MUF ch.2 1029 KTCA 2 MN 1110 1045 f/out 1159 KTWO 2 WY 1015 1915 KID? 3 ID 1215 1915 KUTY 2 UT 1080 1920 KCPX? 4 UT 1080			1445 YSR 2 EIS 1200	26	Es 1545 YSR? 2 E1S 1	200
00	+-	1101 KPLC2 7 1A 325			1458 XHBC? 3 BCN 1010	_	1555 YSU? 4 EIS 1	200
	En	1000 WCBD2 2 SC 1120			1610 Jull to 1627		1600 TGV? 3 Gua 1	120
	cs	1010 f/out			1640 KNBC? 4 CA 1190		1730 MUF 88.1 MHz	
		2115 MIE ab 2			1655 KTLA? 5 CA 1190		1915 apx f/outs	
10	-	1020 KTCA 2 MN 1110			1715 KVVII? 5 NV 1040	28	Es 1600 MUF ch.2	
10	ES	1029 KICA 2 MIN 1110			1717 KOPK 3 NV 1050	29	Es 2158 KORK 3 NV 10	50
		1150 KTWO 2 WW 1015			1755 KDIH2 4 NE 040		2220 f/out	
		1015 KINO 2 WI 1015			1750 KOTA 2 SD 1040		2255 KUTV? 2 UT 10	80
		1915 KID: 5 10 1215			1022 MUE 90 2 MUZ	01	Es 1527 KTVO 3 MO 83	5
		1915 KUIV 2 01 1080			2028 XHBC 3 BCN 1010		1534 WMT 2 TA 94	5
		1920 KCPX? 4 UT 1080			2028 ANDC 3 BCN 1010		1550 KTTV? 4 TA 90	5
		1935 KSL? 5 UT 1080			2032 KNX1 2 CA 1190		1610 KTCA2 2 MN 11	10
		2041 KORK 3 NV 1050			2045 f/outs		1622 WCCO2 4 MN 11	10
		MUF 94.1	20	Es	1810 KVOA? 4 AZ 750		1625 WCCO: 4 MM 11	5
		2058 KEYT 3 CA 1270			1830 KNBC? 4 CA 1190		1625 KGLO 3 1A 90	00
		2105 KNBC? 4 CA 1190			1835 XETV? 6 CA 1100		1027 WBAY 2 WI II	90
		2115 XHBC? 3 BON 1010			2030 KNXT 2 CA 1190		1820 WRBL! 3 GA 83	0
		2117 KNXT 2 CA 1190	21	Es	1110 KDKA? 2 PA 1280		1831 MUF 106.7 MHz	
		2145 f/outs			1115 WAVE 3 KY 945		1901 WESH 2 FL 10	55
13	MS	0517:15 KMOX 4 MO 790			1115 WTAE? 4 PA 1280		1902 WSAV 3 GA 10	50
21.14		0524:45 WRTV 6 IN 995			1117 WDTN? 2 OH 1075		1910 WJXT? 4 FL 10	15
		(both prior by Es)			1125 f/out		2033 WCBD 2 SC 11	20
		0601:15 WOWT 6 NE 830			1605 YSR? 2 E1S 1200		2040 WCIV? 4 SC 11	20
		0611:45 WHBF 4 IL 945			1730 WJXT? 4 FL 1015		2120 WWAY? 3 NC 12	50
	Es	1928 KORK 3 NV 1050			1739 WESH? 2 FL 1055		2130 f/outs	
		1929 KOAI 2 AZ 855			1807 XHFA? 2 SON 740	02	Es 1600 YSR 2 E1S 1	200
		1932 KVVU? 5 NV 1040			1810 KORK? 3 NV 1050		1605 YSU? 4 EIS 1	200
		1945 KNBC? 4 CA 1190			1815 KTVK 3 AZ 835		1710 MUF 98.5 MHz	
		1958 KNXT 2 CA 1190			1815 KPHO? 5 AZ 835		1759 KUSD 2 SD 92	0
		2010 XHBC? 3 BCN 1010			1825 XHBC? 3 BCN 1010		1900 MUF ch.4	
20	30	lull to 2050; out 2058			1825 KOAI? 2 AZ 855		1959 KID 3 ID 12	15
14	Es	2120 KNXT? 2 CA 1190			1825 KVOA? 4 AZ 750		2025 KUTV? 2 UT 10	080
-		2128 XHBC? 3 BCN 1010			1830 KNBC? 4 CA 1190		2200 f/outs	
		2130 KNBC? 4 CA 1190			1830 KTLA? 5 CA 1190	03	Es 1830 MUF 98.5 MHz	
		2132 KITY 2 UT 1080			1842 KUAT? 6 AZ 750		1925 f/outs	
		2150 f/out			1854 XEWH? 6 SON 765	04	Es 1250-1320 KNXT 2 C	A?
14	E	1050 MUE ob 4 Movico			1955 MUE 95.5 MHz	-	1310 KTVK? 3 AZ 83	5
+0	ES	1930 MUP CII.4 MEXICO			2010 XETV2 6 BCN 1100		1820 WSIL 3 IL 81	0
1/	. Es	1025 MIE ab 4			2045 f/outs		1820 WTTV? 4 IN 95	0
		1015 5/auta	22	R-	1605 WIEK 2 MT 1225		1827 WTWO? 2 IN 93	15
1.0	-	1915 I/OUTS		D.5	1625 WW12 4 MT 1225		1859 WNGE 2 TN 82	0
18	Es	1225 WCBD? 2 SC 1120			1710 f/out	05	tr 0118 KNOF 8 LA 44	0
		1240 I/out			1915 MUE at 4		0120 KEDM 6 TX 27	75
		1340 Cuba 2	20	-	1245 MUP CH.4		Fs 2110 MUE ch.2	-
		1435 TGV? 3 Gua 1120	23	ES	1630 MUF ch.4	06	Fe 1455-1555 YSP 2 FI	S?
		1915 KIDF 3 ID 1243 1915 KUTV 2 UT 1080 1920 KCPX? 4 UT 1080 1935 KSL? 5 UT 1080 2041 KORK 3 NV 1050 MUF 94.1 2058 KEYT 3 CA 1270 2105 KNBC? 4 CA 1190 2115 XHBC? 3 BCN 1010 2115 XHBC? 3 BCN 1010 2115 XHBC? 4 MO 790 0524:45 WRTV 6 NE 830 0611:15 WOWT 6 NE 830 061:15 WOWT 7 NU 1040 1928 KORK 3 NV 1050 1928 KORK 3 NV 1050 1932 KVVU? 5 NV 1040 1945 KNBC? 4 CA 1190 2128 XHEC? 3 BCN 1010 111 to 2050; out 2058 212	25	ES	1740 KODK2 2 NR 1050	10	mments next pagede)	
		1445 WPBT? 2 FL 1150	ngin -		1740 KORK? 3 NV 1050	10	muchtes next hade-del	-

February 1977

WESTERN TV DX

Pat Dyer's comments

Got the 1971 model in working shape again, and using it for ch.2,3 & UHF, as the solid-state tuner still a mess. Geminids provided some nice new catches for me, but the Quadrantids peaked too late in the day (apx 1000 CST); bursts either too short or with too many signals anyway. A very good December Es season -- with levels still good now. 73, WA5IYX

Date <u>November</u> # reporters MUF at least	1 3	5 4	4	1 3	2 1		1 1	3	2 1	1 1	1	T	
December 18 # reptrs 2 MUF 106.5	3	4	4	2 3	1	3	2	2		3		02 4 98.5	0 <u>3</u> 4 107.9

A recent letter from Patrick Martin of Portland OR expresses displeasure at the new policy of editing reports under 200 miles (320 km). It should be made clear that reports under that distance which are "especially newsworthy" will be included in the column. Examples are as outlined last month (i.e. new station, large bulk of new member's contribution, unusual xltr logging), plus loggings over difficult paths. Patrick mentions the difficulty of receiving many stations under 200 miles in the Northwest and mountainous regions. These are good examples of rough terrain and dry, relatively tropo-less conditions, making for difficult paths, therefore making many loggings under these conditions newsworthy.

I'd like to see more comments included with reports in the future; it sure makes for more interesting reading. How about it?

Don't forget that monthly reports are always preferable; even if you haven't been seeing much, you can contribute some comments, even gripes about the lousy cx, if you like! Anything and everything (within limits...) is welcome! If you haven't reported lately, get on the ball! WTFDA depends on YOU!

73 & the Best of DXI

INTERNATIONAL NOTES from West Palm Beach, Fla. 33405 (305) 585-7415 FEB., 1977

I'm still looking for some of our more technically minded members to come through with plans or ideas for a converter or modifications so we can see and hear F2 skip from Europe as the sunspots climb to the topof the cycle.

A glance at our membership list show foreign members in West Germany, England, Australia, Sweden, Switzerland and Jamaica. Surely you can send an airletter with a brief outline of your local TV and FM stations. Would also like to trade magazines that pertain to TV/FM DKing with our DX members.How 'bout it?

It's been a lousey year for me trying to watch Cuban stations but it appears the ICE-Canal 6 network has change to using a 3/4 eb and Reloj Nacional AM audio. I have not been able to tell if they are using color but heard an announcement over AM radio saying that color would begin Jan.1,1976. If so they are using the SECAN system which won't show on an NTSC(US) color set.

73'0 Kim

-	Post Offi	ce Box 202 - Whiti WIDE TV.FM	ng, Indiana	46394	AV.EM DA
676		WIDE IV-FM	DA ASSU	CIATION	. ×
R	TO BEAT	Established	1967	SERVING THE YHF-UHF DX ENTHUSIAST	We LI GW
DUES: USA	and Canada	, \$11 (via first cl	lass); overs	eas, \$18 (vi	a air mail).
Associati	on. WTFDA is	s the official publ s a non-profit orga American Radio Clu	anization an	the Worldwidd d a member c	e TV-FM DX lub in the
do so wit	hout any mor	their efforts for netary compensation nd other expenses.	the Worldwin. Dues and	de TV-FM DX / all other rev	Association Venue cover
Morrie Go ANARC rep	ldman, Mike resentative	d by a five-man boa Hogan, Clarke Ingr s are Morrie Goldma	ard of direc cam, Pete Op an, Clarke I	tors, now con risko, and Jo ngram, and Po	nposed of ohn Zondlo. ete Oprisko.
CIRCULATI	ON	Clarke Ingram Pete Oprisko John Zondlo Mike Hogan	BOOKKEEPER PROCESSING	RBi Dav Mori	ruce Elving Ve Janowiak
SUPPL	IES and	DX LITERA	TURE	WTFDA member	rates only.
REPRINT S	ERVICE	Articles from May 1 A complete 1976 cat	972 to the palogue can l	present are r	now available. From WTFDA HQ.
VUD Back	IssuesA	Available: Nov 1973 Sent by first class	issue to the or special	he present. book rate.	50¢ each
BEYOND SH	ORTWAVE	An introduction to DX written and edit	TV, FM, and ed by promin	V-U radio nent DXers.	\$1.00
TV STATIO	ł	an accurate listing merican TV station each channel pinpoi	s, featuring	g maps for	\$3.00; nonmember price, \$5
THE FM AT STATION D (Newest Ed	IRECTORY I	n accurate and det maps and many speci . Elving, VUD FCC-	al articles	by Bruce	\$3.50 via First Class Mail
UHF TRANSI DX GUIDE	n	complete listing otes call, locatio lso: a section on	n, power, an	nd primary.	Sold Out (No Longer Available)
Club Rubbe	P	official WTFDA embl age, but 37 mm in Weldon Patterson-Bo	diameter. (Order from	\$3.50
WTFDA Stat		eatures the offici op of this page pr			45 sheets \$1.00
DX Log She	eetsI h	hese sheets punche elp to keep DXers'	d for a 3-ri running log	ng binder s orderly.	Pad of 100 \$2.50
VUD Boxers	зА о	ttractive cases de f the VHF-UHF DIGE	signed to ke ST neat and	ep copies organized.	\$1.50 each
Station QS Report For	SLF cms T	or requesting QSLs V and FM stations.	(verificati Now offset	ons) from printed!	45 sheets \$1.00
DX Column. Report For	F	or reporting to the rinted each month :	e numerous I	X columns	Free for a SAȘE
411 1					

35002

All columns and feature articles to be printed in any VUD issue should be sent to editor Clarke W. Ingram, 5201 Colewood Drive, Pittsburgh PA 15236. All information for VUD columns should be sent to the appropriate editors; all club business (supply orders, etc.) should be sent to HQ in Deerfield. SUPPORT WTFDA BY PARTICIPATING----REPORT TO COLUMNS AND PURCHASE SUPPLIES. Serving VHF. UHF DX Enthusiasts W T F D A