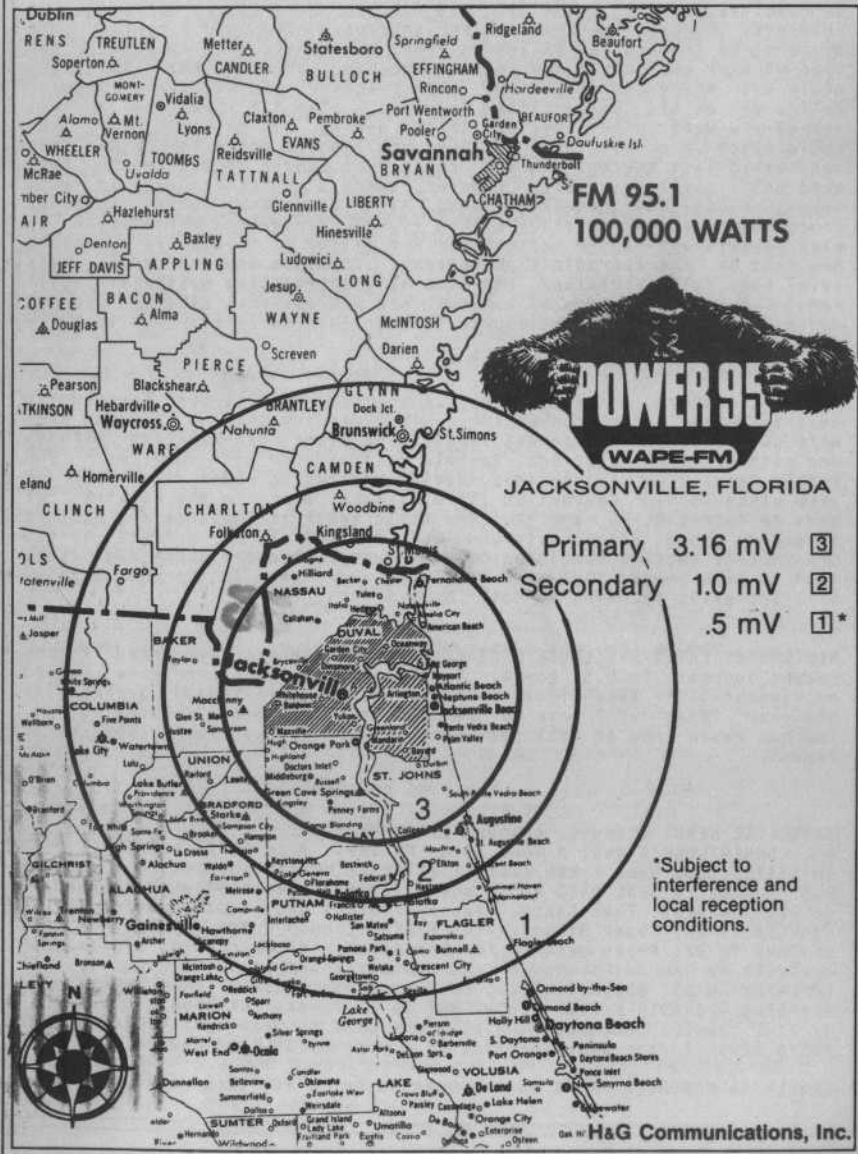


Vhf-Uhf DIGEST

The Official Publication of the Worldwide TV-FM DX Association

FEBRUARY 1991



WORLDWIDE TV-FM DX ASSOCIATION
POST OFFICE BOX 514-BUFFALO, NY 14205-0514-U.S.A.



THE VHF-UHF DIGEST IS THE OFFICIAL PUBLICATION OF THE WORLDWIDE TV-FM DX ASSOCIATION, W.T.F.D.A. IS A NON-PROFIT ORGANIZATION, A MEMBER CLUB IN THE ASSOCIATION OF NORTH AMERICAN RADIO CLUBS, AND IS GOVERNED BY A FIVE-PERSON BOARD OF DIRECTORS, COMPOSED OF: BILL FRABER, MICHAEL HOGAN, DAVID JANOWITZ, STEVEN SPRACHMAN, BILL THOMPSON. PERSONS CONTRIBUTING THEIR EFFORTS FOR THE WORLDWIDE TV-FM DX ASSOCIATION MUST DO SO WITHOUT ANY MONETARY COMPENSATION. ALL MEMBERS, INCLUDING BOARD MEMBERS AND EDITORS, ARE REQUIRED TO PAY DUES. DUES AND ALL OTHER REVENUE COVER PRINTING, POSTAGE, AND OTHER CLUB EXPENSES.

first class mail

Vhf-Uhf DIGEST

The Official Publication of the Worldwide TV-FM DX Association

OPINIONS EXPRESSED IN THIS PUBLICATION ARE THOSE OF THE INDIVIDUAL CONTRIBUTOR, AND DO NOT NECESSARILY REFLECT THE VIEWS OF THE PUBLISHER OR BOARD OF DIRECTORS. WE RESERVE THE RIGHT TO EDIT MATERIAL TO MEET PUBLISHING STANDARDS, UNLESS PREVIOUSLY AGREED UPON IN WRITING. ALL MATERIAL SUBMITTED FOR PUBLICATION IN THE VHF-UHF DIGEST BECOMES THE PROPERTY OF W.T.F.D.A.

REPRODUCTION OF MATERIAL FROM THE VHF-UHF DIGEST WITHOUT PERMISSION OF W.T.F.D.A. IS PROHIBITED. INDIVIDUALS AND OTHER ORGANIZATIONS ARE GRANTED SUCH PERMISSION PROVIDING PROPER CREDIT IS GIVEN TO THE SOURCE.

11/91
WILLIAM N NOLLMAN
35 NYE ROAD
GLASTONBURY CT 06033

ANNUAL DUES - UNITED STATES: \$17
CANADA: \$18
OUTSIDE NORTH AMERICA: \$27
NAME CHECK OR MONEY ORDER PAYABLE TO WORLDWIDE TV-FM DX ASSOCIATION.

From The STAFF



SATELLITE NEWS

GEORGE W. JENSEN
4604 Annapolis Avenue
Baltimore, MD 21206-4220

HELP BLAST THOSE DX "BLAHS"...The February-March period is well known to VHF/UHF enthusiasts as the worst part of the year--in general--for DX conditions. It's not so bad if you have other DX areas of interest; longwave, mediumwave, and shortwave bands are a pretty good place to be looking for DX action right now. But, what if you are the type of DXer who only likes to tune the bands above 30 MHz? Well, you could sit there and count and then re-count your stations logged, follow up on old unidentified loggings, plan for that new antenna set-up you want to put together in the Spring, and so forth. Or, you could catch up on all those projects you ignored while the DX was "hot and heavy" last season. Or you could just bundle up and try to stay warm until April arrives. However, there's a better idea in this issue, on page 35. Check out Doug Allen's proposal for an informal concentrated effort to study E-skip signal propagation as observed by club members--it is the neatest way for all of us to acquire possible new data on the sporadic-E phenomenon. Certain aspects of Es have never been fully explained, and some very interesting mysteries still remain--even after years of amateur and professional study. Please, don't just sit there--participate in what just could turn out to be a very useful study!

IT'LL BE DUNKIRK (AGAIN) IN '91...A volunteer has stepped forward to host this year's club convention. After reading that no definite bids were put forth for the annual event, none other than longtime WTFDAer and pioneer TV/FM DXer Bob Seybold has offered his services. Bob really knows club conventions, having hosted no fewer than FOUR of them since 1970! Convention '91 will take place in the Dunkirk, NY area on August 9, 10, and 11. The hills south of the area are sort of legendary among enthusiasts who have managed to be present during tropospheric ducting conditions in the summer (history shows that they tend to peak around that weekend almost every year!). Further details will appear in upcoming issues. Many thanks, Bob!

NEW POSTAL RATES MAY CAUSE DUES RISE...Some members have asked if the recent increase in U.S. Postal Service rates--which some have called outrageous--will mean higher WTFDA dues. It may indeed, perhaps by mid-year. This will have to be discussed by club directors first. You can renew now at \$17 per year for up to two years (\$34, U.S. funds).

TABLE OF CONTENTS

| | |
|---|----|
| SATELLITE NEWS: Changes, changes EVERYWHERE!..... | 3 |
| QSL CORNER/LOGO'S RUN: A look at an FM verie from COSTA RICA!..... | 4 |
| FM STATISTICS: Here's the latest all-time FM Scoreboard..... | 8 |
| FCC FM NEWS: W232AL 94.3 NY is not exactly a beacon of good stereo..... | 10 |
| TELEVISION NEWS: East Coast, beware--Florida gets superpower ch 68..... | 14 |
| EASTERN TV DX: Super Missouri-to-Florida tropo; great UHF trap tip..... | 22 |
| WESTERN TV DX: Draeb gets Es for Christmas; editor changes address..... | 26 |
| NORTHERN FM DX: Off-season brings mystery propagation to B.C..... | 28 |
| SOUTHERN FM DX: 900-mile Texas FM ducts into Alabama in December!..... | 33 |
| PROPOSED SPORADIC E-SKIP STUDY: Why do Es "pests" show up so much?..... | 35 |
| TV TIME TUNNEL: Remember when stations used to have test patterns?..... | 36 |
| PHOTO NEWS: Editor bags snapshot of a rare ch 30 from Quebec..... | 38 |

Thanks to NORTHERN FM DX editor Greg Coniglio for this month's cover.

Changes, Changes, Changes EVERYWHERE!
University of Alaska noted testing on Aurora at 143 W XPDR 21

Satcom F1 is now Satcom C-1 The services remain unchanged.
Satcom F1 will replace F3 at the end of the month. F3 will be turned-off so to speak!

Galaxy 1
The New Inspiration Network will move and be replaced by TNT currently on F-3.

Satcom F3/F1 - New Inspiration Network will take over the TNT slot on XPDR 18. This will not occur for several weeks. For a brief period of time prior to the move to XPDR 18 Inspiration will be on Galaxy 3 XPDR 2.

SPACENET 1
XPDR 3 - PBS C
XPDR 5 - PBS B
XPDR 9 - PBS D
XPDR 23 - PBS A
XPDR 13 - Star TV Heaven from 9
XPDR 7 - Three Angels from 23

Morelos 2
TNT Latin American Service testing on XPDR 16
Several other transponders are active, but too weak hear to ID.

WESTAR 4 - All PBS feeds silent - now fully on Spacenet 1.

Galaxy 6 - Saudi Pool full time on XPDR 3
ID card on XPDR 15

Spacenet 3 - XPDR - Empire Sports Network a regional sports channel
Starion Premier Cinema XPDR 19 to cease at end of January.

Telstar 302 - Drop USA Direct Home Shopping - ceased ops.

Satcom 4 - XPDR 2 - Sports News Network - ceased operations. International Channel to switch from XPDR 20 to 12 in a few months.

Satcom 2 - XPDR 22 - AFRTS - OFF - possibly the B-Mac on Spacenet 2 XPDR 20.

A few SCPC notes:

ANIK c-3 - CBC English and Indian services noted
G-Star 2H - CNN News/Italian service from New York noted.
G-Star 1H - Many background music type services noted = also WFOR Country 106.7 FM Detroit
SBS 4H - Background Music Services plus KWLM in Minnesota
Spacenet 2 - NBC Radio News feed
PanAmSat Ku - H - BBC World Service - primary transAtlantic Feed.

That's all for now - see you in 30.

George

QSL CORNER & LOGS RUN

Thomas J. Yingling, Jr., KA3TCC
221 Pinewood Road
Baltimore, MD 21222-2345
Phone # 301-282-5649

OH WQHS 81 Cleveland, % 2861 W. Ridgewood Dr., Parma, OH 44134. Pre-Prepared Card (PFC) signed by David Smith, CE in 3 weeks. (Ross)
 NY WCVF 88.9 Fredonia, 109 Gregory Hall, SUNY College at Fredonia, zip 14063. PFC & letter from Tom Naslund, Prg Dir in 1 month (Ross)
 TX KZFX 107.5 Lake Jackson, % 3080 Post Oak Blvd., suite 1100, Houston, TX 77066. PFC & letter from Mike Hudson, CE in 1 month (Ross)
 OH WKKR 94.5 Port Clinton, % 811 Lemoyne Rd., Northwood OH 43819. PFC & letter in 1 month from Chief Eng. name unreadable ! (Ross)
 ONT CIII-27 27 Peterborough, % 81 Barber Greene Rd., Don Mills, ONT M3C 2A2, PFC & letter from A.C. Willis, Asst. Dir of Eng. in 2 months (Ross)
 IN WINN 108.1 North Vernon, % 1910 National Rd., Box 166, zip 47202. PFC back in 3 weeks from Joe Ammerman, PD. (Ross) (very odd that WINN-AM 1400khz. is in Baltimore, MD ! ty)
 KY WCCZ 88.9 Paris, % Box 11788, Lexington KY 40578. PFC back in 3 weeks from Mike Cooper, PD. (Ross)
 MI WGFH 106.1 Cheboygan, 1366 Mackinaw Ave. zip 49721. PFC back in 1 month from Del M. Reynolds, Owner (Ross)
 KY WUOL 80.5 Louisville, University of Louisville, zip 40292. PFC back in 3 weeks from Jay Landers, Station Mgr. (Ross)
 MO KDHX 88.1 St. Louis, Box 63328, zip 63118. PFC & letter from David Taylor, Mgr. in 3 weeks (Ross)
 IN WBTU 89.3 Kendaerville % 2100 Goshen Rd, Fort Wayne, IN 46808. PFC in 3 weeks from someone, unreadable name ! (Ross)
 KY WJIE 88.5 Okolona, % 3701 Fern Valley Rd., Louisville, KY 40219. PFC in 3 weeks from another unreadable person name ! (Ross)
 ONT CIXK 88.7 Windsor, 300 Cabana Rd. East, zip N9G 1A3. Partial detail letter & business card in 4 months from Ian Davies, Prg Dir. (Walker)
 OH WCRF 103.3 Cleveland, 9756 Barr Rd, zip 44141. Full detail letter, stickers & station info in 2 weeks from Bob Devine, no title. (Walker)
 OH WFMJ 21 Youngstown, 101 W. Boardman St, zip 44503. Partial detail letter in 5 weeks from Rudy Recklies, CE. (Walker)
 Costa Rica Radio Reloj 94.3 San Jose, % Sistema Radiofonico H.B. , P. O. Box 341-1000, San Jose, Costa Rica, Central America. QSL Post Card back from Francisco Barabona G. back in 19 days. (note from Christopher S. Dunne) Sept 27, 1990 was fantastic with FM stations on E-skip from Guatemala, Costa Rica, Panama, Colombia & Honduras. (see copy of qsl)-(Dunne)
 MA WLVI 58 Cambridge % 75 William T. Morrissey Blvd., Boston, MA 02125. Short note from Ed Keth (? hard to read-see copy of qsl) for 1015 mile tropo (Kadet)
 NJ WLGE 98.7 Rio Grande, P.O. Box 177, zip 08242. Brief letter & coverage map from Todd Moreland, CRNC-Station Mgr. (Holbrook)
 NJ WBSS 97.7 South Vineland, Box 144, zip 08360. QSL after 1 follow-up report. Returned my letter with note on it "WE confirm your reception" & signed by Dave Powers. (Holbrook)
 TX KGKL 97.5 San Angelo, Box 1878, zip 76902. PFC & letter in 4 weeks from Eddy Smith, CE. (Ross)
 TX KRBE 104.1 Houston, 9801 Westheller, suite 700, zip 77042. PFC in 5 weeks from

John R. Shade, Eng. (Ross)
 NE KUCV 90.9 Lincoln, Box 83111, zip 68501. PFC in 5 weeks from Ralph Sennby, Prg Dir. (Ross)
 MI WTGV 97.7 Sandusky, 19 S. Elk St., zip 48471. PFC in 3 weeks from Robert (? on last name) (Ross)
 MI WUCX 90.1 Bay City, % Public Broadcast Center, 3065 E. Broomfield Rd., Mt. Pleasant, MI 48850. PFC in 2 weeks from Thomas (????? last name), Stn Mgr (Ross)
 ONT CFJB 96.7 Barre, Box 95, zip L4M 5A1. PFC & sticker in 1 month from Len Morris, CE (Ross)
 WY KNGW 94.5 Casper, 150 North Nichols Ave., zip 82801. QSL Sheet in 1 1/2 months from Dan Boucher, CE (Ross)
 TX KTYL 99.1 Tyler, South Park Centre, 1828 ESE Loop 323, suite 317, zip 75701. PFC in 1 1/2 months from Stu Coser (?), CE (Ross)
 MI WDXD 92.9 Detroit, % Box 905, Southfield, MI 48037. Letter in 2 weeks from Neil Schweitz, CE. (Ross)
 TX KWTX 97.5 Waco, Box 2836, zip 76702-2836. PFC in 1 1/2 months from William Moore, CE. (Ross)
 PA WEZE 104.7 Pittsburgh, % 810 5th Ave, New Kensington, PA 15088. PFC & card back in 1 month from Randy Dieterich, CE. (Ross)
 TX KRLT 94.5 Harlingen, Box 1751, zip 78551. PFC in 1 month from Ray States. (Ross)
 AL WLF 89.1 Montgomery, 381 Mandel Parkway East, Box 17140, zip 38117. PFC & letter in 1 month from Alex Saks, GM. (Ross)
 ONT CBON-18 88.1 Sault Ste. Marie, % 15 Mackenzie St., Sudbury, ONT P3C 4Y1. PFC in 1 month from Edell (??? last name), no title. (Ross)
 TX KLUX 89.5 Robstown, % 1200 Lantana, Corpus Christi, TX 78407. PFC & letter from Cathy Graves, Operations. Mgr. in 8 weeks. (Ross)
 IN WLHN 97.9 Anderson, Box 151, 2000 West 53 rd St., zip 46015. PFC & letter in 1 month from David C. Hood, CE. (Ross)
 IN WENS 97.1 Shelbyville, % 1099 N. Meridian, suite 1167, Indianapolis, IN 46204. PFC in 1 month from Bob Hawkins, CE. (Ross)
 KY WSSS 101.1 Hazard, P. O. Drawer 7898, zip 41702. PFC in 3 weeks from Robert Hale, CE. (Ross)
 TN WUOT 91.9 Knoxville, 232 Communications & Univ. Extension Bldg., zip 37908-0322. PFC & letter from Tim E. Berry, Asst. CE in 3 weeks. (Ross)
 TN WSSQ 94.7 Cookeville, 698 South Willow Ave., Box 3146, zip 38501. PFC & letter from Mark Richards, Pgr Dir in 3 weeks. (Ross)
 MI WGLQ 97.1 Escanaba, 524 Ludington St., suite 300, zip 49829. PFC in 3 weeks from station manager, name unreadable ! (Ross)
 MI WUPQ 97.9 Newberry, Box 152, zip 49868. PFC back in 3 weeks from an unreadable name ! (Ross)
 WI WAPL 105.7 Appleton, Box 1519, zip 54913. PFC & letter from Stephen J. Brown, CE. (Ross)
 PA WYOU 22 Scranton, 415 Lackawanna Ave., zip 18503. PFC in 1 month from Stanley Zevilck, A.C.E. (Ross)
 MI WCEN 94.5 Mount Pleasant, Box 407, Bluegrass Rd., zip 48804-0407. PFC & card in 1 month from Richard Somerville, GM. (Ross)
 NY WEIH 18 Elmira, One Broadcast Center, zip 14845. PFC in 1 month Christopher Zeu. (Ross)
 ONT CKOD 11 Dwight, % 884 King Street West, Kitchener, ONT N2G 4B9. PFC & letter in 1 month from Lynda Gevaert, Eng. Sec. (Ross)
 NY WCID 89.1 Friendship, % Box 508, Bath, NY 14810. PFC & letter in 1 month from James L. Travis, CE. (Ross)
 MI WCJL 103.9 Manicowine, % Box 689, Martinette, WI 54143. PFC in 1 month from J.R. Callar, GM. (Ross)
 MI WKLT 97.5 Kalamazoo ?, % 745 S. Garfield, Traveres City, MI 49884. PFC & letter from Reggie Box, GM. (Ross)



WLTO 109.9 Harbor Springs, Zip 49740. PFC in 1 month from J. Dugan, Pgr Dir. (Ross)
 MI WIMK 98.1 Iron Mountain, 105 E. Kent St., zip 49801. PFC & T-Shirt in 1 month from an unsigned person, but station manager hand stamp. (Ross)
 TN WIVK 107.7 Knoxville, Box 10207. PFC in 3 weeks from Cleve Hayes, CE. (Ross)
 OH WSNY 94.7 Columbus, 4401 Carriage Hill Lane, 43220. PFC & letter from John Marsoch (?), CE. (Ross)
 FL WTJT 90.1 Crestview, X Box 187, Baker, FL 32531. PFC in 4 month from Robert Wilkinson. (Ross)
 MI WIAA 88.7 Interlochen, Interlochen Center for the Arts, zip 49843. PFC & letter in 1 month from Thomas M. Paulson, Stn Mgr. (Ross)
 MI WLEW 102.1 Red Axe, 835 S. Van Dyke Rd, zip 48413. PFC & sticker in 1 month from John ??? no last name, CE. (Ross)
 WI WQZZ 99.7 Sturgeon Bay, 228 North 3rd Ave., zip 54235. PFC & letter in 1 month from John Nelson, PD. (Ross)
 AR WFIN 107.9 Jonesboro, P. O. Box 1737, zip 72403. PFC & stickers inl 1/2 month from Clyde Bass, GM. (Ross)
 WI WLST 95.1 Marinette, 400 Wells St., zip 54149. PFC in 1 month from Frank Lauerman, GM. (Ross)
 OH WASH 107.7 Dayton, 101 Pine St., suite 300, zip 45402. Letter from Doug Walker, CE who send key ring & fridge magnet. (Hall)
 IN WZZY 98.9 Winchester, P. O. Box 427, zip 47394. Letter back from E.E. Miller, GM also send a bumper sticker. (Hall)
 WI WHAD 90.7 Delafield-Milwaukee % 821 University Ave., Madison, WI 53706. Letter from Allen J. Rieland, Dir. of Eng & Operations. who tells of some other dx'er even gave them a phone call from his cellular phone to report of his dx. Reply back in 3 months after sending to wrong address. They did send a complete Wisconsin Public Radio Network list of stations. (Hall) (The letter does not even show the call sign, frequency or city. It just shows the main station address. ty)
 ONT CHRY 105.5 North York, 258-A Vanier College, 4700 Keele St., zip M3J 1P6. Letter from Lisa Roosen-Runge, Pgr Dir in 1 month. Also send a T-Shirt. They were amazed to know I heard their 50 watts signal! (Hall)
 SD KKL5 104.7 Sioux Falls, 3205 S. Meadow, zip 57106. Letter from Reid Holson, Pgr Dir. who says until now that Duluth, MN was the farthest north I've received a letter from. Also send bumper sticker. (Hall)
 ONT CHRR 93.9 Windsor, 1640 Ouellette Ave., P.O. Box 480, Windsor, ONT N9A 6M5 or 28400 Leaser Rd, suite 100, P. O. Box 282, Southfield, MI 48037. Letter from Wally Dowhan, Ce. (Hall) - (send to the USA address & save 5 cents postage-ty)
 GA WAYS 99.1 Macon, no address given. Large QSL CARD signed by William D. Sowell, CE. (Hall)
 IN WVIN 88.3 Evansville, 405 carpenters St., 47708-1027. Friendly verie letter from Cevin Whitsett, Sta Mgr, mentions being heard in CA & CD. Also send 2 bumper stickers. (Coniglio)
 OH WPF8 105.9 Dayton, 200 West 2nd St. # 190, zip 45402. Letter from Randy Robbins, Pgr Dir. He figured out the mileage as 378 miles, also "Dayton Rebel 105.9" bumper stickers enclosed. (Coniglio)
 MN KDAL 95.7 Duluth, 425 W. Superior, zip 55802. Verie letter in 1 month from John R. Snee, VP/GM. I was gied to get this one veried as this is my tropes record. (Coniglio)
 TN WGSQ 94.7 Cookeville, 698 S. Willow Ave., zip 38501. Verie letter from Mark Richards, Pgr Dir mentions recent power upgrade, also send bumper stickers. (Coniglio)
 TN WOKI 100.3 Knoxville, 1800 Winston Rd., suite 800, zip 37919-3908. Short letter from Butch Johnson, no title, send bumper stickers. (Coniglio)
 TN WLAC 105.9 Nashville, 10 Music Circle East, zip 37203. Letter from Rick Willis, Asst Pgr Dir & Promotions Dir. also send refrigerator magnets & key chain. (Coniglio)
 TN WEZK 97.5 Knoxville, P. O. Box 27100, zip 37927-7100. Verie letter from Kim

106
WLAC FM
WLAC
1510

106
 W.L.A.C.
 Nashville's Hometown Favorite!

102-FM 300-AM
WDRM
 Box 789 • Decatur, AL 35602
 (205) 353-1750 • 837-1021

WPTN 780AM
 OLDIES • NEWS • SPORTS

THE COUNTRY
GIANT 94.7
 WGSQ

WPTN/WGSQ INC.
 898 SOUTH WILLOW AVE.
 P.O. BOX 346
 COOKEVILLE, TN 38501

Hansard-Shultz, Promotions Dir. (Coniglio)
 ONT CJSD 94.3 Thunder Bay, 87 North Hill St., zip P7A 5V8. Letter from Tim Goebel, Pgr Dir who also send bumper stickers & an invitation to write to the Ontario DX Assn for sample issue. (Coniglio)
 MN WTBX 93.9 Hibbing, Box 1080, zip 55746. Letter from Denny (no last name) also send bumper stickers. (Coniglio)
 TX KSCS 96.3 Fort Worth, One Broadcast Hill, zip 76103. Verie letter, bumper stickers from Duane A. Sedge, Eng. (Coniglio)
 IL WHMS 97.5 Champaign, Box 3699, zip 61828-3699. Letter & lots of promotional material from Judy Duncan, no title. (Coniglio)
 IL WSSU 91.9 Springfield, Sangamon State University, zip 62794-9243. Verie letter, but no signer. (Coniglio)

Reporters this time are: Robert S. Ross, VE3JFC in London, Ont.; Robert C. Walker, K8VQB in Wixom, MI; Jeff Kadet in Mccomb, IL; Christopher S. Dunne in Pembroke Pines, FL; Hank Holbrook in Fair Haven, MD; & Greg Coniglio on Williamsville, NY. Two interesting news items: If you have mail ordered anything from Amco in Virginia Beach, VA you will be receiving a certified letter from the FCC soon. Kevin M. Coyle, alias David Winchester, doing business as Amco, was recently convicted in US district Court, Norfolk, VA of selling illegal descrambling devices for the unauthorized reception of premium cable tv programing. You will be told to return to the FCC whatever you did buy. The most common item is the filter to stop the pay tv beep-beep, channel filter. The other news is a filter that you can buy without any FCC letter. The Microwave Filter Co. Inc. has a filter to help your tv dx'ing. I wrote to them for filter to help block out my local tv channel 2 from bothering my channel 3 reception. I got the filter 5KV-2 at \$15.70 each. This trap has a notch (70db) at the video of channel 2. It works so well, I got another one! They say if you are receiving channel 3 off the air, and using any amps or boosters, they recommend installing the trap between the antenna & amp. I gave them another phone call asking for one for uhf channel 24, but they only go up cable tv channel NN, audio freq. 379.25Mhz - video freq. 383.75Mhz. They did tell me that maybe later on will have a filter for the higher freq's. Another interesting point is that the invoice shows item as a standard video pay tv trap, as it traps out the entire channel! They also say if you use two (2) of the same channel together, the channel trapping may be more than just the channel that it is made for. Call 1-800-448-1688 to order. I hope this may help someone's dx'ing. '3's to later on.

WLVI TV56

Bill Butler

10/1/90

Mr. Kadet:
 You were indeed
 watchy WLVI-TV
 on September 4th.

[Signature]

SISTEMA RADIOFONICO H. B.
 Roger Barahona y Hnos. S. A.

No. 1 EN COSTA RICA
 GRACIAS A USTED.

RADIO RELOJ

730 KHZ
 ONDA MEDIA

94.3 MCZ
 F.M.

6005 KHZ
 49 METROS

4832 KHZ
 60 METROS

PERMANENTE... CON EL SOL.

Gracias por su reporte de sintona, retransmisor coincide con nuestra programación, por lo que gustosamente le enviamos esta confirmación. Su reporte fue con

Thank you for your report on tuning in it retransmits which our programming, so we send you this confirmation with pleasure. Your report was

Fecha SEPTIEMBRE 27 19 90
 dated

para nuestra frecuencia de for our frequency of 94.3 MHz
 on the F.M. waves meter band.

Cordially
 Francisco Barahona R.
 Sistema RadioHnos H. B.
 San José, Costa Rica, Central America
 P.O. BOX 341 - 1000.



Mr. CHRISTOPHER S. DUNNE
21500 HAWKMAN ST. BOX 511
PEMBROKE PINES FL
U.S.A. 33029



STATISTICS

FRED NORDQUIST
7945 BOXFORD RD
CLAY, NY 13041
DEADLINE: THE 5TH

UPDATED 1/5/91

ALL-TIME FM SCOREBOARD

| DXER NAME | DXER LOCATION | TOTAL 88-92 | ES | MS | AU | USA | CN | MX | FD | TPU | YB | AS OF: |
|---------------------|---------------------|-------------|-----|------|-----|-----|-----|----|----|-----|----|-------------|
| DYER PAT | TX SAN ANTONIO | 2426 | 389 | 1981 | 59 | 0 | 44+ | 4 | 21 | 5 | 75 | 70 05/31/90 |
| STROBEL RALPH | IN MUNCIE | 1900 | 512 | 587 | 147 | 6 | 43+ | 7 | 2 | 0 | 53 | 72 01/02/91 |
| BUNTIN DANNY | OK STILLWATER | 1900 | 317 | 1146 | 4 | 0 | 48+ | 5 | 9 | 2 | 65 | 74 09/01/90 |
| ELVING BRUCE | MN DULUTH | 1662 | 289 | 1322 | 9 | 8 | 45+ | 3 | 1 | 0 | 50 | 48 12/07/89 |
| EBELING JOHN | MN BLOOMINGTON | 1604 | 269 | 923 | 46 | 82 | 47+ | 6 | 5 | 0 | 59 | 52 01/01/90 |
| PUGH KEITH | AL NEW HOPE | 1590 | 238 | 811 | 44 | 3 | 43+ | 7 | 10 | 2 | 63 | 83 09/08/90 |
| FELA JOSEPH | NJ S. PLAINFIELD | 1569 | 326 | 842 | 2 | 9 | 37+ | 6 | 0 | 3 | 47 | 68 10/07/90 |
| NORDQUIST FRED | NY CLAY | 1534 | 310 | 751 | 44 | 58 | 41+ | 5 | 0 | 2 | 49 | 69 01/05/91 |
| BUGAJ MIKE | CT ENFIELD | 1502 | 212 | 834 | 17 | 23 | 37+ | 3 | 0 | 1 | 42 | 74 06/07/90 |
| NIEMAN DAVID | NY AKRON | 1377 | 376 | 417 | 48 | 24 | 43+ | 8 | 0 | 3 | 55 | 59 12/23/90 |
| MCCORMACK FRED | ND FARGO | 1339 | 305 | 990 | 3 | 52 | 48+ | 6 | 3 | 0 | 58 | 74 08/03/90 |
| SEYBOLD BOB | NY DUNKIRK | 1326 | 212 | 611 | 0 | 2 | 45 | 8 | 3 | 3 | 59 | 58 06/24/90 |
| CONIGLIO GREG | NY WILLIAMSVILLE | 1224 | 202 | 624 | 13 | 10 | 37+ | 8 | 1 | 3 | 50 | 85 01/01/91 |
| JEFFERSON JOHN | CA ANTIPOCH | 1130 | 250 | 662 | 160 | 0 | 29 | 4 | 5 | 0 | 38 | 74 10/17/90 |
| EBELING JOHN | MN PROSIT | 1053 | 192 | 705 | 3 | 5 | 48+ | 8 | 2 | 0 | 59 | 75 01/01/90 |
| HOWINGTON CARLOW | FL ST PETERSBURG | 1002 | | | | | 39+ | | | 13 | 87 | 12/01/89 |
| HOLBROOK HANK | MD CHEVY CHASE | 859 | 220 | 232 | 18 | 0 | 35+ | 6 | 0 | 3 | 45 | 59 12/06/89 |
| SMOLAREK BOB | NJ OLDWICK | 818 | 138 | 344 | 0 | 0 | 36+ | 3 | 0 | 1 | 41 | 78 09/12/89 |
| NICHALEK ALAN | MA SPRINGFIELD | 812 | 106 | 495 | 0 | 0 | 36+ | 5 | 0 | 0 | 42 | 52 10/01/90 |
| BRUMFIELD DAVE | IN RICHMOND | 778 | 151 | 240 | 13 | 0 | 42 | 4 | 2 | 0 | 42 | 81 03/01/90 |
| ALLEN DOUGLAS | CO WOODLAND PARK | 711 | 116 | 489 | 44 | 0 | 39 | 4 | 3 | 0 | 46 | 88 10/30/90 |
| STEINBERGER RICHARD | MA HUDSON | 703 | 147 | 323 | 12 | 6 | 35+ | 4 | 0 | 0 | 40 | 58 10/28/89 |
| BRUMFIELD DAVE | IN MUNCIE | 682 | 149 | 65 | 1 | 0 | 29 | 1 | 1 | 0 | 31 | 79 03/01/90 |
| ROSS ROBERT | ON LONDON | 578 | 160 | 230 | 0 | 0 | 32 | 6 | 0 | 2 | 40 | 76 08/06/89 |
| KRETSCHNER BILL | NY N. SYRACUSE | 564 | 97 | 128 | 1 | 1 | 35+ | 3 | 0 | 1 | 40 | 74 09/07/89 |
| NIENAJADLY BILL | NJ CLIFTON | 501 | 96 | 169 | 5 | 0 | 34+ | 2 | 0 | 0 | 37 | 75 07/11/90 |
| SHAFTON RICHARD | NJ ROCKAWAY | 459 | 116 | 142 | 0 | 0 | 30 | 3 | 0 | 0 | 34 | 78 06/29/90 |
| MEADE LARRY | IL CHICAGO | 459 | 85 | 65 | 6 | 0 | 23 | 2 | 0 | 0 | 25 | 79 09/05/90 |
| HALL D. BRUCE | ON BRANTFORD | 403 | 66 | 9 | 36 | 0 | 28 | 4 | 0 | 1 | 33 | 90 12/18/90 |
| BRANDENBURG TODD | KS SILVER LAKE | 300 | 46 | 32 | 0 | 1 | 24 | 0 | 0 | 0 | 24 | 80 09/02/90 |
| HEPBURN WILLIAM | OH MISSISSAUGA | 251 | 93 | 62 | 1 | 0 | 24+ | 1 | 0 | 1 | 27 | 79 02/04/90 |
| SITTEL MATT | NC RALEIGH | 243 | 39 | 0 | 0 | 0 | 8+ | 0 | 0 | 0 | 9 | 88 12/18/90 |
| MANCUSO GUS | MD CHEVERLY | 216 | 32 | 20 | 0 | 0 | 16+ | 0 | 0 | 0 | 17 | 70 08/04/89 |
| MEADE LARRY | KY PRICE | 165 | 35 | 0 | 14 | 0 | 10+ | 0 | 0 | 0 | 11 | 79 09/05/90 |
| WHEELER FRANK | PA ERIE | 162 | 23 | 2 | 0 | 0 | 8 | 1 | 0 | 0 | 9 | 64 08/20/90 |
| STRICKERT MARK | IL CHICAGO | 153 | 38 | 8 | 0 | 0 | 5 | 2 | 0 | 0 | 7 | 79 10/17/89 |
| SORENSEN MORRIS | ON MILTON | 136 | 27 | 24 | 0 | 0 | 16 | 1 | 0 | 0 | 17 | 83 08/29/89 |
| SORENSEN MORRIS | ON PORT CARLING | 131 | 20 | 21 | 0 | 1 | 15 | 2 | 0 | 0 | 17 | 71 08/29/89 |
| RENFREW JIM | NY ROCHESTER | 126 | 25 | 1 | 0 | 0 | 3 | 2 | 0 | 0 | 5 | 76 08/10/89 |
| ONYSCHUK KEN | IL COUNTRY CLUB HIL | 124 | 25 | | | | | 7 | 0 | 0 | 7 | 68 02/01/90 |
| HEPBURN WILLIAM | NT CORAL HARBOUR | 58 | 5 | 57 | 0 | 0 | 5 | 8 | 0 | 0 | 13 | 84 02/12/89 |

* VERIFIED.

COLUMN DEFINITIONS: are as follows: Total = Total number of FM stations logged from DXer's location (All loggings should be received within 25 mile radius of this location to count.) Freq. changes count as a station, call letter changes DO NOT count. Also count a station only once regardless if logged by different propagation modes. 88-92 = All stations logged from 88.0 to 91.99 Mhz. Es = Total number of stations logged via E-skip. MS = Total by meteor scatter. Au = Total via Aurora. USA = Total number of states and the "+" = Washington, DC. CN = Number of Canadian provinces logged. MX = Number of Mexican states logged. FD = Number of foreign countries, but not Canada or Mexico. TPU (Total number of political units) = Sum of USA CN MX and FD. YB = The year you began DXing from this location. Other groundrules for computing log totals are included in AUGUST 88 VUD Page 48. Note: This is a listing of entries received after 1988. Please update/submit your latest stats to keep on the Scoreboard.

Personal Bests - Bill Nienajadly - Clifton NJ (7/11/90)
Farthest Es: KTLG-99.7 TX 1539 Mi. Farthest Tr: WKXA-100.5 OH 495 Mi.
Closest Unheard State: Maine

Personal Bests - Todd Brandenburg - Silver Lake KS (9/2/90)
Furthest logging: K10K-94.9 WA 1283 Mi. Closest Unheard States: KY and IN

Personal Bests - Greg Coniglio - Williamsville NY (1/1/91)
Furthest Tropo: KDAL-95.7 MN 704 Mi.

AS OF: 1/05/91

STATES STATS USA

| PU | DXER | DXER | PU | DXER | DXER | PU | DXER | DXER | KEY TO DXER INITIALS/LOCATION |
|----|----------|----------|----|----------|----------|----|----------|----------|-----------------------------------|
| AL | 106 KPU- | 54 TMC- | LA | 72 RSA- | 60 FMC2 | OH | 211 RST- | 177 FMC- | AMI- ALAN NICHALEK MA SPRINGFIELD |
| AK | 11 JJE3 | 0 None | ME | 40 RST2 | 30 KPU- | OK | 122 DBU- | 51 FMC- | BEL2 BRUCE ELVING MN DULUTH |
| AZ | 48 PDY- | 36 JJE2 | ND | 54 JFE- | 48 GMA- | DR | 31 JPI- | 29 FMC2 | DAL- DOUG ALLEN CO WOODLAND PARK |
| AR | 86 DDB- | 61 VEA- | MA | 94 RST2 | 77 NBU- | PA | 157 DMI- | 128 FMO- | DBR- DAVE BRUMFIELD IN MUNCIE |
| CA | 360 JJE2 | 120 PDY- | MI | 146 RST- | 139 FMC- | RI | 14 WMO- | 12 RST2 | DBU- DANNY BUNTIN OK STILLWATER |
| CO | 107 DAL- | 69 JJE2 | MO | 160 JEB- | 146 JEB2 | SC | 53 PDY- | 50 MS11 | DMI- DAVID NIEMAN NY AKRON |
| CT | 49 NBU- | 42 AMI- | MS | 78 KPU- | 64 TMC- | SD | 39 KPU- | 35 JJE2 | DDB- DAVID ODELL AR LITTLE ROCK |
| DE | 11 SWE- | 10 DGE- | MO | 118 FMC1 | 84 DBU- | TX | 110 KPU- | 93 JAY- | DOE- DANIEL OETTING PA BROOMALL |
| FL | 146 DBU- | 142 PDY- | MT | 29 JJE2 | 25 JPI- | TX | 293 PDY- | 211 RSA- | FMC- FRED MCCORMACK MD DES LACS |
| GA | 102 KPU- | 92 PDY- | NE | 50 JJE2 | 44 KPU- | UT | 29 PDY- | 22 DBU- | FMC2 FRED MCCORMACK MD FARGO |
| HI | 0 None | 0 None | WV | 24 PDY- | 24 DBU- | VT | 14 KPU- | 13 AMI- | FMC- FRANK NEKRILL NJ MILAN |
| ID | 28 DBU- | 26 PDY- | NH | 27 RST2 | 17 AMI- | VA | 59 DBU- | 54 JFE- | FMC1 FRANK NEKRILL IL MACOMB |
| IL | 198 FMC1 | 193 RST- | NJ | 74 JFE- | 61 RSC- | WA | 46 FMC2 | 30 JJE2 | FMO- FRED NORDQUIST NY CLAY |
| IA | 171 RST- | 112 DBR- | NM | 45 JJE2 | 44 KPU- | WV | 39 RST- | 33 FMC- | GMA- GUS MANCUSO MD CHEVERLY |
| IA | 120 RBR- | 100 FMC1 | NY | 204 FMO- | 172 DMI- | WI | 132 BEL2 | 120 JEB- | JAY- JIM AYERS TN MURFREESBORO |
| KS | 89 DBU- | 78 TBR- | NC | 111 NS11 | 79 PDY- | MI | 26 RST- | 24 PDY- | JEB- JOHN EBELING MN BLOOMINGTON |
| KY | 96 RST- | 60 PDY- | ND | 34 FMC- | 34 FMC2 | DC | 13 GMA- | 13 DMI- | JEB2 JOHN EBELING MN PROSIT |

CANADA/MEXICO/FOREIGN STATS

| PU | DXER | DXER | PU | DXER | DXER | PU | DXER | DXER |
|--------|----------|---------|---------------|---------|---------|---------------|---------|--------|
| CANADA | | | MEXICO (CONT) | | | MEXICO (CONT) | | |
| AB | 26-JJE2 | 24-JEB2 | CHI | 8-FMC1 | 6-FMC- | SLP | 2-TMC- | 0-None |
| BC | 20-JJE2 | 10-DAL- | CHP | 3-PDY- | 0-None | SOM | 3-JJE2 | 3-PDY- |
| MB | 15-FMC- | 13-FMC2 | COA | 8-FMC1 | 6-PDY- | TAB | 2-TMC- | 2-PDY- |
| NB | 9-FMC1 | 6-RST- | DFR | 21-TMC- | 21-JPI- | TAM | 8-PDY- | 6-KPU- |
| NF | 13-FMO- | 12-DMI- | BUR | 1-PDY- | 0-None | VCZ | 9-JPI- | 6-KPU- |
| NS | 15-FMC1 | 9-KPU- | GRD | 5-PDY- | 1-JPI- | YUC | 2-JPI- | 2-PDY- |
| ON | 114-DMI- | 78-FMO- | GTO | 9-JPI- | 2-TMC- | | | |
| PEI | 2-JFE- | 2-RST- | HGO | 1-JPI- | 0-None | FOREIGN | | |
| PQ | 28-FMC1 | 26-DMI- | JAL | 12-TMC- | 10-PDY- | CUBA | 5-FMC1 | 3-JFE- |
| SK | 9-JJE2 | 8-FMC1 | NEX | 3-JPI- | 3-PDY- | BELIZ | 3-PDY- | 1-JPI- |
| WMT | 1-WHE2 | 1-JEB2 | NIC | 3-JPI- | 1-PDY- | BERMU | 3-DMI- | 2-FMO- |
| | | | NOR | 5-PDY- | 3-JPI- | EL SA | 4-PDY- | 1-KSI- |
| MEXICO | | | NL | 16-PDY- | 14-KPU- | GUATE | 11-PDY- | 4-KSI- |
| AGU | 1-JPI- | 0-None | OAX | 1-JPI- | 1-PDY- | HONDU | 2-KSI- | 2-PDY- |
| BCN | 14-PDY- | 10-FMC- | NAY | 1-PDY- | 0-None | JAMA1 | 14-KPU- | 3-JPI- |
| BCS | 1-PDY- | 0-None | PUE | 5-PDY- | 4-TMC- | PUERT | 4-KSI- | 1-DMI- |
| CAM | 1-JPI- | 0-None | SIN | 2-JJE2 | 1-DBU- | D.REP | 1-KSI- | 0-None |

ABOVE STATS REPRESENT MOST NO. OF STATIONS FOR EACH POLITICAL UNIT (PU) LOGGED FROM A SINGLE SPECIFIED DXER'S LOCATION. FIRST AND SECOND PLACE DXERS ARE LISTED ONLY. OTHERS THAT ARE TIED FOR SECOND ARE NOT LISTED....F.M.

FM STATISTICS - PERSONAL BEST'S - 1/91

Channel Metrics - Bruce Hall - Brantford ON (12/18/90) Total Logged = 403

| Mhz | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| .1 | 5 | 6 | 2 | 1 | 4 | 3 | 5 | 4 | 3 | 2 | 18 | 5 | 4 | 4 | 3 | 2 | 3 | 1 | 2 | |
| .3 | 2 | 5 | 5 | 2 | 3 | 5 | 8 | 1 | 4 | 3 | 28 | 3 | 5 | 1 | 2 | 3 | 7 | 1 | 4 | 5 |
| .5 | 4 | 1 | 4 | 1 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 7 | 2 | 2 | 1 | 4 | 3 | 5 |
| .7 | 5 | 2 | 5 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 5 | 3 | 4 | 6 | 3 | 3 | 8 | 3 | 4 | 5 |
| .9 | 5 | 5 | 3 | 0 | 2 | 7 | 4 | 1 | 2 | 3 | 5 | 4 | 5 | 7 | 2 | 4 | 1 | 5 | 4 | 1 |
| Total | 21 | 19 | 19 | 8 | 11 | 22 | 26 | 15 | 15 | 17 | 44 | 31 | 23 | 25 | 13 | 15 | 29 | 16 | 16 | 18 |

Personal Bests - Bruce Hall - Brantford ON (12/18/90)
Farthest Tr: CJSJ-94.3 ON 920km Farthest Es: KODA-99.1 TX 2024km
Farthest MS: WRTO-98.3 FL 1978km Closest Unheard States: NH & VT



FM NEWS

Bruce F. Elving, Ph.D., Editor
241 Anderson Road
Esco MN 55733-9413
FM Station Stereo News Earnestly Solicited!

Readers' Reports and DXing Technology Updates

John Sulak, who reads the VUD like a hawk, sent a copy of "Ron Smith's Aerial Guide," covering TV and FM antennas. "This 'Galaxie 23' appears to be the best FM antenna on earth! Do you know of anyone with first-hand experience?" It's a company I never heard of. The aeriels are made in England and the Galaxie 23 model is centered at 93 mhz—way off to the low end of the FM band, and not having relevance to DXing conditions we would expect in the U.S. Such a British design would rule out its consideration for even a casual listener, much less a serious DXer. Prices are no bargain, either. The "suggested retail price" for the G23 antenna is \$445. Their distributor in the U.S. is Nain Audio North America, Inc., 1748 North Sedgwick St., Chicago IL 60614.

The 1990 Radio Ontario book with addresses and station lists, published by member Andrew W. Reid, RR 7, Peterborough ON K9J 6X8, is ready. It shows AM, FM and TV stations, and a good guide to anyone wanting to QSL Canadian stations. As you know from my vendetta of last month, Canadian stations are notoriously uninteresting to DX since they generally don't identify. Those wanting to DX those strange stations will need a guide like Andy's to know what they might be picking up. I don't know what his guide costs, but you could write him and ask. The book also has information on the Ontario DX Association. I thank him for the plug for my FM Atlas—and also the nice words Dave Nieman had for it in the VUD of last month. Dave went picture-taking and sent a shot of WEZQ 107.7's transmitter atop Wethersfield Mountain (?) NY showing a bunch of bays on a stick; color photo won't reproduce here. Caption reads: "Short tower with 10 bay antenna must be used as a backup."

I heard it from a couple of Canadian DXers about my "sock it to the CBC" remarks of last month. Here's a person not about to rub the noses of his area CBC executives in last month's VUD. Michael Reid, of North York ON says: "The CBC probably wants to be known as a regional or national service with outlets across the country. They would consider it pointless to have local IDs with no content local to each station's area. I wouldn't mind it if there were IDs for each station, but do mind DXers who won't adjust their ID standards to what stations are actually doing, rather than the other way around. Most CBCs can be IDed with an up-to-date list and knowledge of regional feeds. Listen near the top of the hour or after the news for regional feed."

Andy Reid: "I would like to respond to your editorial in the Dec. VUD, which just arrived. Hmhmhmhm [the only word in the English language with three or more consecutive letters the same—b.e.e.]... Simply, to suggest that the CBC should install identifiers for their hundreds of broadcasting stations across Canada so that people in a community may identify more closely with their own relay instead of one big 'monolithic system' or so DXers can determine where a given station is coming from for their log, is ludicrous. Canada is a different country and our broadcasting rules are not the same as America's. In the case of the CBC, call letters do not play a part in the network and each transmitter does not have an identity as you would suggest. Imagine the

TV station in Savent Lake ON: 'This is CBWDT-TV-3 channel 8'. Talk about confusing the masses. And besides, the CBC couldn't afford the equipment."

Dr. Joel Rosenberg notices that CIRV 88.7 Toronto is stronger, making WBFO Buffalo harder to get (now 250 h,v; and embracing stereo!). He said that CFNC 103.9 Ohsweken, an "experimental" station, has been on two years without the blessing of a CRTC licence; now 50 watts. Mike Reid says CJLX 91.9 Toronto was a temporary station, that CBC cutbacks have had little effects on AM/FM nets, and that the CBC plans a new network, as well as one that might have commercials, as noted last month.

"Sure glad to see a new FM Atlas," writes Frank Merrill. "It really seems that they nowadays go out of date at a faster rate than in the past. . . Your FMedia! tends to be a horrible harbinger of really bad news, but am glad that I receive it! I really miss seeing applications regarding FM stations, because they were early warnings of frequencies to possibly be savaged." [I haven't printed applications since about the fifth edition FM Atlas, now out of print, and M Street Radio Directory quit listing applications last year.] Frank wants formats listed by frequency, and I do not have time or space for that. He DXes 800 FM stations a year! Slow down, Frank. Listen to and savor each station, rather than frantically dialing 20 or so stations each minute during an opening! That way, maybe I can stay ahead of you in my own totals! Frank wants to DX CA, and he's found a likely candidate on 105.5 in Desert Center. The fact that it's going from an A to a C shouldn't help it skip out any better. But he says, "Finally, something in SE CA with some power, and on a good frequency!" Actually, 105.5 is not good for skip, with the MUF starting below 88 mhz and not always migrating as high on the band as 105.5.

Somebody who doesn't have to resort to DX to hear CA stations is W. R. McIntosh who sent a story, "KPCC Muscles In," mentioning its increased power (now 600 h,v; 891 m) and ability from Pasadena at 89.3 to invade the public radio turf once dominated by KCRW *89.9 Santa Monica. I believe KPCC is still me, middle of the road with a tinge of classical. Correct me, if I'm wrong. KPCC once had a reading service to the blind SCS, but now it's two ethnics at 67 and 92 kHz. Wonder when So. CA will get a reading service again?

Tom Bryant sympathizes on the loss of my father-in-law and he sent a cassette tape showing that WAMB-FM1 Donelson TN (106.7) really does ID that way, along with its AM. Now if the Canadian FM stations would learn to give a decent ID. . . But I digress. He says WAMB-FM1 is not really directional—just a slight null caused by its tower mounting. It is a nighttime-only station, and operating in stereo.

Also reporting in from Nashville is Douglas E. Smith, who has moved from Wisconsin. While moving, he heard the new WBVN 104.5 Carriers Mills IL, IDing with Marion; I need to know if this has Stereo. WDXR-FM Golconda IL will not be on 105.1, but is already on 94.3; stereo? He finds AM preferable to FM, even for fidelity, amazing as that sounds. When there's no interference or storm activity, AM can be quite good, he contends. Now with the new Docket 80-90 FM stations, more stations are coming on the air and will cause a lot

of interference on FM, just as AM has. Awful formats and lack of dynamic range are hard pills for AM to swallow, but yet Doug sees some hope in digital transmitters for curing the dynamic range lack of AM. He sees two possible futures for AM: 1) Absolutely nothing. "In about 10 years, there are only 10 profitable AM stations left; the rest close down and the FCC makes 'free' radio legal, as long as they stay on AM. . . 2) The FCC and broadcast community make a special effort to shut down redundant AM stations, and take about 75% of the existing stations off the air." This would make wider AM fidelity possible. Then, "in about 10 years, there are only 10 profitable FM stations left; the rest close down, and the FCC makes 'free' radio legal. . . Probably a good thing, as usually pirates have the best programming on the air."

Ken Onyschuk kindly called about the new WXAV *88.3 and learned they are poised to come on the air stereophonically, aimed S and SE. "Reception reports go to Kevin Cumow, WXAV, St. Xavier College, 3700 W. 103rd St., Chicago IL 60642. Ken's a good music fan and misses the former WLOO-WXEZ. Now it's WPNT-FM, "what a shame." Even WPNT 820 AM can't cut the mustard. That former simulcaster has bitten the dust, apparently permanently, as it can't afford the rent on the land where its transmitter sat. He mentions the NRC's DX Audio Service, a tape version of their club bulletin for the blind and print handicapped. "Personally, I'd like to see an FM radio version for blind listeners who perhaps would like to hear the FCC news on tape." There's even an AM travelog, where John Bowkers selects an AM frequency and plays station IDs onto the tape from around the U.S. and Canada (Canada IDs—you gotta be pulling my leg!—b.e.). "It's really good! Can something similar to DX Audio Service be done on FM? I'd like to see this banded about in March's VUD. A tape can be 45 minutes on each side." I don't have the time to do that, but any other WTFDA member who might like to tape this column is free to do so, providing credit goes to the WTFDA. Perhaps club HQ has some comments, or might know about the legalities of quoting from this or any other column. I tend to be rather candid, and there are times when material sent to certain stations, or to an entire country notorious for not requiring its stations to properly identify might be offensive.

DXer Bruce Hall is getting "amazing results on 98.3 (next to strong adjacent 98.1 CHFI Toronto, filters again!). He's done meteor scatter DX on 98.3 and gotten 28 catches, with razor-sharp filters and "constant monitoring. Thanks to [meteor] shower, I reached my goal of 400 catches for my first year of FM DX. Began April 4, '90." He also sent info on a lawsuit by WRQN "Maume OH" of the lip-synching duo Milli Vanilli, claiming \$200 in damages for each person who attended the performance and \$500,000 in punitive damages. Seems like a publicity stunt by the Toledo rim-shooter. In other OH news, WBBY 103.9 Westerville didn't go off the air after all. They've decided to stay on and keep fighting their license revocation. DX it to your hearts content!

Here's from info FM filters' czar Bill Nienadjadly (or is he the pathologist of "lame" radio?). Edwin H. Armstrong would have been 100 late last year, and WFDU *89.1 Eaneck NJ celebrated by dedicating a plaque in Armstrong's honor in the studio adjoining the tower which Armstrong built in 1937, and which WFDU uses. "Yes, I still will renew FMedia! but I have other priorities for now. . . I deleted the 'muting' function on the Sony ST-260. I can now DX weak stereo stations.

Whoopie! The muting/stereo switch had wires coming from it. After trial and error I found the right two wires to solder together. On the Pioneer TX-9800 I found a potentiometer with the 'muting' threshold. I turned the muting down as far as possible. Now I can DX weak stereo stations with that! So be pleased to know I can find out if a station has 'stereophony.' Hi!" Be sure to read Bill's article in last month's VUD on modifying digital tuners to tune more finely. But remember, it's spelled "their" (not "thier"); an exception to the rule "i before e, except after c."

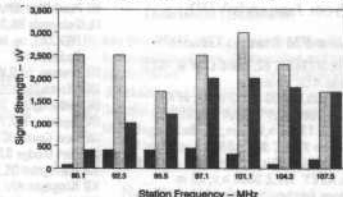
Dennis Park Smith says his local KDB Santa Barbara is no more—something like KSPE, but he doesn't listen to AM and like who cares? This did create a situation of a three-letter call for the FM on 93.7. He was interested in knowing that KDFM 92.1 Walnut Creek, before it was KKIS-FM, had its transmitter for a while on much taller Mt. Diablo, "years ago."

Also from CA, Albert S. Lobel says he's still in the WTFDA, but hasn't DXed FM, or any band, "the past few years," and might want a new SCS adapter.

Hawaiian DXer Sheldon Remington wondered if I might be able to expand my Atlas to cover Pacific-territory stations. "I have been receiving FMs from the west coast via 4000-km tropo, and I suspect it might also be possible to reach U.S. possessions, such as Midway, Marshall Islands, and Micronesia. Other sources, such as the WRTVH have inferior accuracy and completeness. I imagine there are very few such stations, so maybe you could tuck them into some corner of the 14th edition." All I know about is Guam, and that's too far away to DX, so I leave that stuff out, as I mentioned to Sheldon.

Clint McAuliffe is hoping to DX in earnest; now that he has a Jerrold antenna on his Oregon roof with a rotor. He's interested in filters for improving his Pioneer receiver DXing. Keith Pugh sent several updates and FM Atlas corrections, as well as condolences in the loss of Weldon Patterson. "I recall Weldon's name being mentioned many times in past FCC-FM columns. You've done another great job with FMA-13. Not much DX happening. Trying for meteor scatter with very little luck so far."

John Ebeling sent another stupid review by Leonard Feldman of the Terk P12 antenna from Audio. I still



wonder when Len is going to learn his FM dial and stop comparing reception only on local stations. One frequency that intruded into his ratings of NYC FM stations is "90.1." I challenge the accuracy of his measurements, unless he is hearing WUSB Stony Brook NY! Here's his graph of station signal strengths and frequencies across the dial, with the dark lines being signals on the highly touted antenna vs. a single folded dipole. That antenna lists for \$79.95 and is NOT recommended for FM DXing! John also sent an article on WLOL 99.5 Minneapolis being sold to Minnesota Public Radio for \$12 million. KSJN *91.1 would go monophonic talk, while classical music would migrate to 99.5, once home of commercial classical WLOL.

Television news

BILL FAHBER, EDITOR
336 ATLANTIC ST
BRIDGETON NJ 08302-2525

ABBREVIATIONS USED IN THIS COLUMN:

AATm Height (meters) above average terrain
AG Antenna height above ground
ASL Antenna height above sea level
AZ Azimuth (North=0°)
BT Beam Tilt
CIR Circular polarization
CP Construction permit
CRTC Canadian Radio-television and Telecommunications Commission
DA Directional antenna
ELL Elliptical polarization
ERP Effective Radiated Power
FCC Federal Communications Commission (USA)
HOR measured along a horizontal plane
MAX In the direction or elevation of maximum signal strength
MP Construction permit modification
TL Transmitter or tower location
+ carrier frequency offset 10 kHz above standard
- carrier frequency offset 10 kHz below standard
z carrier frequency not offset

APPLICATION FOR NEW TELEVISION STATIONS

| ST | CH | ERP | AATm | CITY/APPLICANT |
|----|----|-----|------|------------------------------------|
| GA | 34 | 482 | 147 | Baxley; Upchurch Broadcasting Inc. |

APPLICATIONS DISMISSED

CA San Bernardino; ch. 30; All Nations Christian Broadcasting Inc.; A & R Broadcasting Co.; Buenavision; Channel 30 Inc.; Good News Broadcasting Network; Inland Empire Television; Religious Broadcasting Network; San Bernardino Broadcasting Ltd Network; SSP Broadcasting Ltd. Partnership; Television 30 Inc.
FL Miami; ch. 35; Coral Way Broadcasting Ltd.; Cuban-American Ltd.; Adib Eden Sr.; First Latin Women Broadcasting Inc.; Grace Broadcasting Network Inc.; Lamar Communications Inc.; Miami 35 Corp.; Minority Broadcasting Corp.; Range Communications, Ltd. Partnership; Spanish Broadcasting Corp. (all denied)
LA Columbia; ch. 11; Caldwell Broadcasting Ltd. Partnership; Giles Broadcasting Inc.; KTVB Inc.; Love Broadcasting Co. (initial decision).
LA Hammond; ch. 62; Florida Parishes TV Ltd.
MN Thief River Falls; ch. 30; Northern Minnesota Public Television Inc. (withdrawn)
MO Kansas City; ch. 32; Channel 32 Broadcasting Co.; Holt Ltd. Partnership; Kansas City Skywave Inc.; Kansas City Television Ltd.; Mid-Continental Communications Inc. (Review Board, upholding initial decision)
NV Las Vegas; ch. 15; PZ Entertainment.
OR Grants Pass; ch. 30; Freedom Communications Inc. (denied)
TX Arlington; ch. 68; Arlington 68 TV Inc.; Briscoe Broadcasting Ltd.; Channel 68 North Texas Television Ltd. (original CP under initial

decision); Johnson Television Inc.; Metroplex Communications Ltd.; Native American Broadcasting Co.; Sammy A. Thornton; Southwest Communications Ltd.; The LouRay Corporation; United Broadcasting Group Ltd. (Review Board decision, reversing initial decision).
VA Charlottesville; ch. 64; Achernar Broadcasting Co. (Review Board decision, upholding initial decision).

CONSTRUCTION PERMITS GRANTED

| ST | CH | ERP | AATm | CITY/APPLICANT |
|----|----|------|------|--|
| CA | 30 | 2500 | 773 | San Bernardino; Sandino Telecasts |
| FL | 64 | 3500 | 414 | Inverness; West Florida Television (FCC decision, reversing Review Bd) |
| FL | 35 | 5000 | 358 | Miami; Miami Latino Bcng Corp. |
| LA | 11 | 215 | 301 | Columbia; Pears Broadcasting Inc. (initial decision) |
| MO | 32 | 5000 | 322 | Kansas City; TV 32 Inc. |
| TX | 68 | 5000 | 438 | Arlington; Charisma Broadcasting Corp. (Review Board decision) |
| VA | 64 | 5000 | 78 | Charlottesville; Lindsay Television |
| WY | 11 | 1.67 | 70 | Rawlins; First National Broadcasting Corp. |

CONSTRUCTION PERMITS CANCELLED

| ST | CH | CALLS | CITY |
|----|----|-------|----------------------------|
| FL | 64 | ---- | Inverness (Meredith Corp.) |

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS

| ST | CH | ERP | AATm | CALLS | CITY |
|----|----|------|------|---------|----------------|
| FL | 53 | 1493 | 262 | WGFL | High Springs |
| FL | 59 | 3311 | 289 | WJEB-TV | Jacksonville |
| FL | 22 | 5000 | 33 | WYDH | Key West |
| FL | 57 | 1858 | 28 | WTLN | Live Oak |
| FL | 46 | 5000 | 309 | WNPL-TV | Naples |
| IA | 22 | 883 | 39 | KFSC | Waterloo |
| KY | 49 | 2786 | 602 | WDKA | Paducah |
| MS | 40 | 4624 | 142 | WBUY | Holly Springs |
| MT | 23 | 1808 | 642 | KTMF | Missoula |
| NE | 17 | 217 | 86 | KTVG | Grand Island |
| NY | 48 | 136 | 129 | WYDC | Corning |
| OR | 23 | 12.4 | 190 | KVPP | Coos Bay |
| TN | 50 | 4508 | 239 | WPGD | Hendersonville |
| TX | 54 | 4345 | 267 | KCFP | Austin |

CONSTRUCTION PERMIT MODIFICATIONS GRANTED

| ST | CH | ERP | AATm | CALLS | CITY |
|----|----|------|------|---------|--------------------------|
| AZ | 46 | 4898 | 818 | KXGR | Green Valley |
| CA | 30 | 2510 | 440 | KBCP | Paradise (ex-ch.46) |
| FL | 59 | 3311 | 289 | WJEB-TV | Jacksonville |
| FL | 46 | 5000 | 309 | WNPL-TV | Naples |
| GA | 23 | 3378 | 447 | WELF | Dalton |
| MI | 53 | 1680 | 299 | WLAJ | Lansing |
| MS | 40 | 5000 | 248 | WBUY | Holly Springs (5/11/90) |
| MS | 40 | 4624 | 142 | WBUY | Holly Springs (12/14/90) |
| MT | 23 | 1808 | 642 | KTMF | Missoula |
| NY | 52 | 74.6 | 254 | WACA | Ithaca |
| OR | 23 | 12.4 | 190 | KVPP | Coos Bay |
| PA | 80 | 12.2 | 231 | WBPH-TV | Bethlehem |
| TX | 54 | 4345 | 267 | KCFP | Austin |
| TX | 61 | 2776 | 518 | KZJL | Houston |
| TX | 51 | 2560 | 294 | KNWS-TV | Katy |
| VA | 14 | 2750 | 219 | WTHW | Arlington |

FEBRUARY, 1991

TELEVISION NEWS - page 2

FEBRUARY, 1991

APPLICATIONS TO CHANGE EXISTING FACILITIES

| ST | CH | ERP | AATm | CALLS | CITY |
|----|----|------|------|---------|------------------------|
| CA | 36 | 490 | 207 | KMIR-TV | Palm Springs (cp) |
| FL | 35 | 617 | 65 | WFGX | Fort Walton Beach (cp) |
| FL | 4 | 100 | 304 | WTVJ | Miami (cp) |
| FL | 10 | 316 | 458 | WTSP-TV | St. Petersburg (cp) |
| MS | 19 | 1611 | 478 | WMAH-TV | Biloxi (cp) |
| NC | 26 | 5000 | 504 | WUNL-TV | Winston-Salem (cp) |
| OH | 16 | 1500 | 351 | WPTD | Kettering (cp) |
| OK | 35 | 2761 | 256 | KXON-TV | Claremore (cp amended) |
| PA | 35 | 1918 | 284 | WYBE | Philadelphia (mp) |
| VT | 13 | 1000 | 1239 | WETK | Burlington (cp) |
| VA | 56 | 1259 | 215 | WNVV | Fairfax (cp) |
| VA | 53 | 2290 | 230 | WNVV | Goldvein (Lic Mod) |

CHANGES GRANTED STATIONS ON THE AIR

AR Rogers; KFAA, ch. 51; granted license to cover CP for changes. I question if these are changes in their ERP, height and location, or just in their license, since these changes were applied for before the station went on the air. ERP reduced from 5000 kw to 200 kw max; antenna height reduced 182 meters ASL to 140m AAT/52m AG/527m ASL; TL 2.4 km northeast of Springdale AR; coordinates 36°12'14.5"/94°06'05" (Az. 356°, or slightly west of due north, 13.0 miles from original TL). Can anybody tell me if the station ever operated at 5000 kw?
CA Palm Springs; KMIR-TV, ch. 36; granted CP to change ERP from 547 kw max/164 kw hor to 490 kw max (is that an increase or a reduction? I guess it depends on where you are.); reduce antenna height 7 meters to 207m AAT/31m AG/511m ASL; same TL.
CA San Francisco; KWBB, ch. 38; granted license to cover MP for changes; antenna raised 18 meters to 440m AAT/221m AG/475m ASL; same ERP (5000 kw max); TL to Mt. Sutro Tower; coordinates 37°45'20"/122°27'05" (about 3 miles WNW of former TL); DA BT. Don't expect any change.
CO Denver; KRMA-TV, ch. 6; granted CP to reduce ERP from 100 kw max to 37.2 kw; raise antenna 93 meters (ASL) to 375m AAT/141m AG/2433m ASL; TL on Lookout Mountain, 3 km SW of Golden CO; coordinates 39°43'48"/105°15'00" (which might be the same as present tower, or next to it). Get it while you can; the increased height will help them save money by reducing power without reducing coverage area, but you can bet it's gonna hinder e-skip DX.
FL Clermont; WKCF; the FCC switched channel assignments for Clermont and Cocoa, requiring WKCF and WRES to switch channels, which they wanted to do anyway; granted MP (never got a license since it began broadcasting) to change from 68z to 18-; ERP remains at 5000 kw max; antenna lowered 56 meters ASL to 458m AAT/447m AG/467m ASL; TL to 20,000 Fort Christaan Road, Christaas FL; coordinates 28°34'51"/81°04'32" (Az. 148°, or roughly SE, 27.7 miles from present TL).

FL Cocoa; WRES; granted CP to change from ch. 18- to 68z ch. 68; to raise ERP from 28.3 kw max to 5000 kw max (but reference says only 6 kw aural, so be sure to turn your volume way up!); antenna to be raised 171 meters ASL to 287m AAT/284m AG/298m ASL; TL Deseret Ranches, State Route 150, approximately 19 km WSW of Cocoa FL; coordinates 28°18'26"/80°54'48" (Az. 242°, or WSW, 6.75 miles from present TL). Watch out, Atlantic and Golf Coasts!
FL Jacksonville; WJKS, ch. 17; license changed to 4680 kw max (formerly 4570 kw max/1450 kw hor); 304m AAT/298m AG/309m ASL (10 meters lower than formerly called for in license).
GA Columbus; WJSP-TV, ch. 28; granted license for changes; ERP raised from 921 kw to 5000 kw max; antenna height reduced 8 meters to 461m AAT/328m AG/725m ASL; same TL. Looks like a big boost fo DX.
ID Moscow; KUID-TV, ch. 12; granted CP to raise ERP from 115 kw max to 316 kw max; raise antenna 46 meters to 346m AAT/89m AG/1186m ASL; same TL. Sure, better coverage, but who's out there to know?
IA Iowa City; KIIN-TV, ch. 12; granted license modification to reduce antenna height 17 meters to 439m AAT/425m AG/669m ASL.
MA Boston; WQTV, ch. 68; granted CP to change ERP from 1337 kw max to 1350 kw max; reduce antenna height one whole meter to 249m AAT/269m AG/272m ASL; same TL.
OH Cincinnati; WSTR-TV, ch. 64; granted CP to raise ERP from 1000 kw max/851 kw hor to 5000 kw max; raise antenna height 12 meters ASL to 337m AAT/284m AG/557m ASL; TL approximately 0.2 km southwest of the intersection of North Bend Road and Winston Road; coordinates 39°12'01"/84°31'22" (Az. 197°, or SSW, 1.32 miles from present TL).
OK Claremore; KXON-TV, ch. 35; granted MP to raise ERP from 70.15 kw max to 2761 kw max; raise antenna 119 meters ASL to 256m AAT/248m AG/461m ASL; TL 1650 feet east of Oowala Road, 9 km north of Claremore, Rogers County; coordinates 36°24'05"/95°36'33" (Az. 74°, or ENE, 5.96 miles from present TL)
OR Bend; KOAB-TV, ch. 3; granted license to cover change in ERP from 19.55 kw to 19.5 kw. So why am I reporting this? Because there is supposedly still a CP to raise it to 58.5 kw, as reported in the 5/89 VUD, and I don't know what the story is on that. Is it still active? Did somebody just goof these figures?
PA Philadelphia; WYBE, ch. 35; granted MP to raise ERP from 323.6 kw max to 1918 kw max.
VA Charlottesville; WVIR-TV, ch. 29; granted CP to raise ERP from 1290 kw max/427 kw hor to 5000 kw max; reduce antenna height 11 meters to 362m AAT/82m AG/527m ASL; same TL. Look for better DX on those coastal tropes.
WI Milwaukee; WDJT-TV, ch. 58; granted license to change ERP from 2800 kw max to 2820 kw max.
WI Racine; WJJA, ch. 49; granted license to change ERP from 2670 kw max to 2609 kw max. Wow!

CALL LETTER APPLICATIONS: NEW STATIONS

| ST | CH | CALLS | CITY/APPLICANT |
|----|----|-------|-------------------|
| IN | 58 | WFTE | Salem; WXZA |
| LA | 44 | WGMB | Baton Rouge; WPFT |
| TX | 48 | KNZS | McAllen; KNVO |

CALL LETTER GRANTS: NEW STATIONS

| ST | CH | CALLS | CITY/APPLICANT |
|----|----|---------|--|
| AZ | 9 | KVPY | Flagstaff; G&D Communications |
| CA | 68 | KNOK | Novato; North Bay TV Inc. |
| FL | 57 | WFXU | Live Oak; WTLT |
| IN | 58 | WXZA | Salem; Greater Louisville TV Inc. |
| OR | 23 | KVPP | Coos Bay; KMTR Inc. |
| TX | 28 | KHFI-TV | Bryan; Silent Minority Group Inc. |
| VA | 44 | WXZF | Danville; A.W. Broadcasting |
| VA | 44 | WPCT-TV | Danville; A.W. Broadcasting (which one is correct?) |

CALL LETTER GRANTS: EXISTING STATIONS

| ST | CH | CALLS | CITY/APPLICANT |
|----|----|---------|---|
| GA | 14 | WTLK-TV | Rome; WAMA-TV |
| OK | 34 | KGMC | Oklahoma City; KGMC (not KOGB, as per 12/90 VUD) |
| OR | 16 | KMTR | Eugene; KMTR-TV |

NEW STATIONS ON THE AIR

CA Paradise; KBCP, ch. 30z (formerly ch. 46, but allotment table was changed, and new MP changed this to ch. 30), went on the air 11/14/90; 2510 kw max ERP; 440m AAT/115m AG/119m ASL; TL west side of Cohasset Road, 1.8 km northeast of the junction at Villas Road, 32 km northeast of Chico, Butte County; coordinates 39°57'45"/121°42'40"; Univision affiliate; satellite of KSC0, ch. 19, Modesto CA; address: Sainte Ltd., 2842 Iowa AV, Modesto CA 95351.

CO Denver; KSHP, ch. 50z, went on the air 10/18/90; 5000 kw max ERP; 293m AAT/58m AG/235m ASL; TL Colorow Hill, 2 miles southwest of Golden CO; coordinates 39°43'47"/105°14'59"; independent station; address: Golden Hills Broadcasting Corp., 111151 W Eighth ST, STE C, Lakewood CO 80215.

FL Naples; WNPL-TV, ch. 46, went on the air 10/22/90; 5000 kw max ERP; 309m AAT/305m AG/313m ASL; TL 21990 Carter Road, Estero FL; coordinates 26°25'22"/81°37'49"; independent station; address Southwest Florida Telecommunications Inc., 840 Goodlett RD, STE 201, Naples FL 33940.

MI Lansing; WLAJ, ch. 53-, went on the air 10/22/90; 1660 kw max ERP; 299m AAT/301m AG/588m ASL; TL Baseline Road, east of Arland Road, 4 km southeast of Onondaga FL; coordinates 42°25'11"/84°31'26"; ABC affiliate; address: Lansing 53 Inc., 5815 S Pennsylvania AV, Lansing MI 48911.

OR Eugene; KEPB-TV, ch. 28, went on the air 9/29/1990; educational station; address: State of Oregon Commission on Public Broadcasting, 7140 SW Macadam AV, Portland OR 97219.

CHANGES IN THE TABLE OF CHANNEL ALLOTMENTS

CA Paradise: add 30z; delete 46z. (KBCP, ch. 46 seeks change to ch. 30)

CA Chico: add *46z; delete *30z.

FL Clermont: delete 68z; add 18-.

FL Cocoa: delete *18-; add *68z. (Joint application by WKCF-TV and WRES-TV. See changes granted stations on the air.)

FL Kenansville: add 31z (site restriction 15.4 km south to avoid short spacing to WMFE-TV, ch. 24, Orlando FL).

GA Baxley: add 34z.

NY Arcade: add 62- (site restriction 15.2 km east to avoid short spacing to CP in Corning NY and vacant ch. 55 in Niagara Falls Ont.; not Frozen by FCC).

NY Springville: add 67+ (site restriction 8.8 km south to avoid short spacing to ch. 60, St. Catharines Ont. and proposed ch. 62- above, Arcade NY).

OR Coos Bay: add 41z (site restriction 12.2 km south; frozen by FCC because of proximity to Portland OR).

OR Medford: add 26+; delete 27 (not Frozen by FCC).

FORUM

An interesting technical article this month from BILL NIENAJADLY (Clifton NJ). The 11/21/90 *Wall Street Journal* has an article on television technology. "A powerful group of cable-television companies said it plans to launch a test in several big cities of a new technology that would bring extra-crisp pictures to existing TV sets. The new technology, invented by a small Silicon Valley company called Faroudja Research, has drawn investments from several big media companies, including Capital Cities/ABC Inc. and Westinghouse Electric Corp., and from cable giants Tele-Communications Inc. and Continental Cablevision Inc. Tele-Communications, Continental and two other cable companies said they will test the technology with subscribers early next year.

"The test would let the cable companies sidestep the tangled international battle over the future of high-definition television. Government regulators are sifting through at least half a dozen proposed standards for the next generation of brilliantly clear TV signals, most of which would require advanced new TV sets. Faroudja's alternative approach is a technique for sharpening the quality of the existing TV signal. The cable companies backing Faroudja said they're eager to offer viewers a better signal right away, while they wait for a long-term winner to emerge from among the warring high-definition TV factions.

"It is important to keep our eyes on the ultimate objective - that of digital television towards the end of the century," says John Sie, senior vice president of Tele-Communications. "During the 1990s, however, our consumers deserve the best that NTSC can offer." NTSC is the name of the existing U.S. TV standard. It was established half a century ago by the National Television Standards Committee, but has come to be derided as an outdated design that offers 'Never the Same Color.'

"The Faroudja method, dubbed SuperNTSC, offers a new way to encode a color-TV signal that reduces the familiar tendency of a picture to bleed and smear on the screen."

"A committee set up by the FCC is preparing an elaborate test of six competing advanced TV technologies and plans to make a recommendation in September 1992." "Many of the competitors in that test, taking place at a new Advanced Television Test Center in Alexandria, Va., are proposing to computerize TV signals or to upgrade them in other ways that would require new TV sets. By contrast, a consortium of N.V. Philips, Thompson S.A., General Electric Co.'s NBC unit and the David Sarnoff Research Center is proposing an 'enhanced NTSC' approach that, like Faroudja's, would work on current TV sets."

More articles from Bill since I received the above. This one, from the 12/18/90 *North Jersey Record* deals with a standard for HDTV: "Zenith Electronics Corp. and the American Telephone and Telegraph Co. on Monday announced a new high-television system that could set a standard in the emerging industry. Like other versions of HDTV, the new all-digital system promises to deliver pictures of movie-theater quality and produce crystal-clear sound similar to that of compact disks. Zenith and AT&T said their system will provide 'better quality by transmitting 1,575 horizontal picture lines 30 times a second. Competing HDTV systems transmit 1,050 or 1,125 lines; standard TV delivers about 525 lines. The [FCC] is expected to decide on U.S. technical standards by spring 1993.

"Zenith - the only remaining indigenous U.S. television maker - got a boost in March when the FCC backed its proposal for simulcast of high-definition signals. Under the simulcast plan, HDTV signals will be broadcast at the same time as standard TV signals. That way, viewers with regular sets will be able to see all available programming. Under Europe's MAC system, viewers with regular sets will be able to get HDTV signals only by using converters, which will not give them the benefit of the extra clear pictures or sound. In Japan, viewers need special sets to receive the HDTV signal, which is currently transmitted by one station for an hour a day." "Because no single world standard is emerging, analysts said, the U.S. system could turn out to be the most advanced."

More on HDTV from the 1/7/91 *Star-Ledger*: "The current issue of Video Magazine notes that Europeans will be able to buy wide-screen television sets beginning this month and that Sony is about to introduce an \$18,000 Trinitron wide screen in the Japanese market. The Sony set will also be able to receive the new High Definition TV signal now being broadcast one hour a day in Japan." "The new TVs look different even before you turn them on. The boxy 4:3 ratio of current television tubes is replaced by a superwide tube with an aspect of 16:9." "The new TV will be able to work with a number of broadcast systems and formats, including the current European standards-PAL and SECAM-and a new, superior satellite-delivered TV system now being tested in Europe called MAC for multiplexed analog components. In addition, France and Germany are scheduled to start broadcasts of a

Wide-MAC format in 1991 which will have the same 16:9 format of the Thomson tube. Also, the set will be able to receive HDTV broadcasts when high-definition becomes a fact of life on Europe's airways a little later in the decade."

On a different subject from the 1/3/91 *North Jersey Record*: "WPIX-TV in New York has met its New Jersey news coverage obligations, the [FCC] found in rejecting a union request to take away the station's license. Although the Newspaper Guild of New York said the station cut its New Jersey-related news assignments, editorials, and public-affairs programs from 601 in 1985 to 238 in 1988, the FCC said such reductions did not 'necessarily demonstrate a station's failure to meet its programming obligations.' Don't forget, since people in New Jersey don't know how to count past thirteen, VHF stations in Pennsylvania and New York have to increase news coverage of New Jersey.

From new member ERIC VOYTKO (McLean VA), this article relating to proposed station WMTW, ch. 14 (470-476 MHz), in Arlington VA, from the 11/15/90 *Washington Post*: "A 2.75 million-watt television transmitter planned for Fairfax County could disrupt public safety communication signals throughout the Washington Region, placing area residents at risk, police and fire officials said yesterday. If approved and licensed by the [FCC], the transmitter would operate on the 470-megahertz frequency. Officials said the TV station could overpower the area's emergency medical and public safety signals, which are much weaker and are on neighboring radio frequencies. "The transmitter is planned by Urban Broadcasting Corp. The District-based firm plans to operate a new local station on Channel 14 that will emphasize home shopping and other local programs. Public safety officials said the transmitter would be near Routes 29 and 211 in Merrifield, less than two miles from Fairfax Hospital and within three miles of similar sites for Fairfax County police, fire and rescue communications."

"However, company officials, who said they hope to see the station operating in two or three months, maintain that such problems will be addressed before licensing. 'We are comfortable (sic) that this can be built and will not interfere with any public communications,' said John Feore, a consultant for with (sic) Urban Broadcasting Corp."

"In response to concerns raised by the fire and police chiefs, the Metropolitan Council of Governments board of directors voted unanimously yesterday to urge the FCC to assign a different transmitting frequency to Channel 14. The board also asked the FCC to interrupt the signal immediately if it interferes with public safety."

Eric adds, "It is my impression that the Council of Governments has good reason to be concerned. As radio monitors kn this area well know, there is a tremendous amount of public safety use of frequencies near 470 Mhz. The Virginia State Police are on VHF hi and the Fairfax County are above 853 Mhz but the Fire Department, with dispatch and hospital channels at 460.525 and up could be devastated. The D.C. Police also have a dozen or more channels on

460 Mhz.
 "The location of the transmitter may very well be on the other side of WNVN-56's tower, which sits near the intersection of Lee Highway (r.t.29) and Gallows Road in Merrifield, Virginia. There are two antennas atop the tower and currently only Channel 56 is being broadcast (WDCA-20 and WETA-26 share a tower in Bethesda, Maryland that is identical to WNVN's).
 "As a TV DXer I'm pretty worried about the impact that a station that powerful could have. I'm already using five Winegard UT-2700 traps on my dish, and Channel 56, at about two miles distant is barely under control. A station running 2.7 Mw (more than double WNVN's) would be devastating. It's like going from tropospheric propagation to catastrophic penetration!" (Eric, don't you think that's a rather cataclysmic proclamation? -wbf)
 "If that's not bad enough, the station is proposed to be another home shopping channel, exactly what we don't need in this area. (That's an academic observation. -wbf) Most of the metro area is already wired for cable, and Fairfax's Media General service has no less than three shopping channels on its system."
 A short note from **LARRY FUSS** (Fayetteville GA), who reports that KVHF, ch. 6 in Kailua-Kona HI, is on the air with home marketing of some kind. (I have it as proposed to be a satellite of KMGH, ch. 26, Honolulu. What is that station broadcasting? -wbf)
 Larry sent this article from the 11/26/90 Atlanta Journal about channel 14 in Rome GA: "Channel 14 changed its call letters from WAMA to WTLK in preparation for its foray into the Atlanta TV market. Station President Hal Gore plans to move toward a 24-hour talk-show format by February. Mr. Gore's 750-foot tower atop Bear Mountain near Canton stands 3,126 feet above sea level and cost about \$2 million to construct. Last-minute testing was still under way over the weekend, and Mr. Gore said he hopes to be on the air during prime time in Atlanta by midweek. The station currently airs movies, a local Rome newscast, religious programming, and reruns.... It also shows 'Donahue'...and 'Sally Jessy (sic) Raphael'...." "To fill his prime-time schedule, Mr. Gore hopes to hire local celebrities to host talk shows."
TOM BRYANT (Nashville TN) sent an article about new television station WJFB in Lebanon TN. From the 11/27/90 Nashville Banner: "Nashville gets a new television station at 7 tonight when WJFB-Channel 66 signs on with 14 hours of live local programming every weekday in an attempt to carve a niche in the tightly contested battle for TV viewers here. The station, licensed by the FCC to Dr. Joe Bryant of Lebanon, has previously operated as a low-power station and has been off the air in recent weeks. Channel 66 has undergone some technical adjustments as it prepares to broadcast - in stereo - with an increase in power that will cover an area from southern Kentucky to northern Bedford County and from Cheatham County to Smith County in the east."
 "Programming for Super 66, as the station is being called in promotional material, is being provided by The Jim Owens Corporation, headed

by longtime program producer Jim Owens, who reached an agreement earlier to purchase the station from Bryant Communications. The FCC has yet to approve the Owens deal."
 Unfortunately, the 11/27 Banner reported, "WJFB-Channel 66, the Lebanon-based new local independent station, did not sign on Monday night as planned. The station...was knocked off the air when Middle Tennessee Electric blew a transformer just an hour before Channel 66 was to debut. When the power was restored to the station's transmitter, Channel 66 engineers found some equipment had been damaged." Owens said the station could probably sign on today or Wednesday, but he and Bryant decided to hold the debut until next Tuesday...."
 Additional information on the station comes from the 11/25/90 Tennessean Showcase: "The station...will offer 19 hours of programming daily, with 14 hours live. The station will be on air daily from 6 a.m.-1 a.m. Owens says the station will offer 'strong local flavor and featuring local personalities and live broadcasting. Channel 66 will bring to the people what television is supposed to be - good quality local television that's also fun and exciting and informative.'" Here's one interesting program: Pillow Talk. "Former radio personality Chappel Fisher, clad in pajamas, broadcasts from a bedroom. Guests join Fisher in the bed to discuss what's happening in Nashville."
 Lastly, comments from Todd: "Their tower is near Lebanon and it's my understanding that the ERP is 1.25 million watts with a directional lobe toward the metro Nashville area. They are snowy at my QTH (big rock ridge between me and their tower), but a much better signal than WTHN (39) in Murfreesboro which has approximately the same tower height (about 900' ag) and 2.5 million watts ERP.
 "On another note, there is another LPTV here. It's a HSN on 68 (W68CG, footnote) operated simultaneously with W24AE and W12BV. Transmitters for 12 and 68 are BOTH on the WZEZ-FM stick approx. 12 miles west of downtown Nashville. A source close to the operation told me that it was likely that the W24AE operation would be curtailed due to interference with full service educational WKYU-TV in Bowling Green, KY." (Aha! Sounds to me like an interferic curtailment! -wbf)

JIM NAHIRNIK (Warren MI) reports that "WADL-38 Mi. Clemens MI continues their relationship with WJBK-2 Detroit, running more CBS programs that WJBK doesn't use." "They still have few commercials, but lots of promos for TV-2 programs. Most air time is filled with home shopping."
 Jim also sent Canadian news, to follow.
RONALD PURDUE (Byron MN) writes, "It is apparent that KXLT (ch. 47 -wbf) has run into several technical problems and now running on reduced power. And KXLT still duplicating the programs of KTMA-23 in Minneapolis, most of the time, KXLT has lots of audio and video problems. It is mostly impossible to even watch KXLT in Rochester."
 "Now onto the xlator of K1TN-29 in Rochester, they are off the air from 6 - 6:30 pm weeknights when 'The Cosby Show' is on. All

because KAAL-6 in Austin, MN carries 'The Cosby Show' from 6:30 - 7 pm weeknights. I wonder if this is illegal or the FCC rules require this for translators?"
 "As of this date, still no sign of KVBM-45 in Minneapolis or WEUX-48 in Chippewa Falls, WI. I wonder if their CP's has been cancelled by the FCC? It's been at least 4 years since their CP's were granted by the FCC, I am in serious doubt now that either KCBM or WEUX will ever go on the air!" (I see no activity with either station, and it has been several years. My guess is that they gave up the idea like a lot of others did when syndicated programs became expensive. -wbf)
 "By the way, did you ever receive a copy of a newspaper article that I sent you last August? Since I never seen the report on the return of KXLT on September 29th in the VUD! I think that someone in the USPS has swiped the letter that I have sent you!"
 I probably didn't receive it. I tend to pass over some articles dealing with program content, station ownership, or cable systems, but not any article dealing with stations going on or off the air.
 While on this subject, one member sent me a letter addressed to Barry Fabber. I don't mind wrong first names, but not that one. I often get mail for a Barry at #336 on the next street over, and he probably gets my mail.
DENNIS SMITH (Santa Barbara CA) reports on reception in Wasco CA (near Bakersfield): two translators which he suspects are about 1 kw TPO, "One is K15CO Porterville (TBN), at apx 40 miles, comes in snowfree. The other is the one I have some good news about--K66CQ Fresno (Home Shopping Club). It comes in very good with a little snow--distance may be apx 85 mi. I noticed in VUD back issues that some LPTVs have been mentioned in your TV News as trying to resemble regular TV stations with made-up call letters. The Fresno edition of TV Guide says this in their list of stations: 'Although not carried in this edition, KHST, Channel 66, in Fresno, is available to some viewers. It schedules Home Shopping Club programming seven days a week.' The station never uses that identification on the air; apparently it is only in the TV Guide that way. The only ID I've noticed is every half hour as K66CQ in Morse Code with the code tones superimposed on the video signal."
 A new LPTV came on in Bakersfield sometime in October. A Spanish on ch. 58--apparently the usual 100-watt type as it is on the weak side. Don't know where xatr is--it could be 25 to 45 miles distance." "There seemed to be ads for programs, under a 'GALAVISION' heading, if that means something." (Galavision is a Spanish-language cable network with programming supplied by The Galaxy I satellite. -wbf)
 Dennis gives a description of television stations in Tijuana, Mexico: "Of course, there is XETV 6, the English-language Fox affiliate. There is XEWT 12 with the Univision network. There are some UHF stations in Tijuana. One is on ch. 33, apparently with the XEW-TV network, as that is the only way they usually identify, not with their own call. Once, I did see their own call with the number 33, but was in such small letters on my

tiny screen that I couldn't read it, even though it was received quite nicely. The other station is XHBJ 45, I suppose an independent, with music videos as their major (or only) programming, usually in Spanish but English has been heard now and then. They identify quite often. Is there some amount of UHF TV on in Mexico now? (I don't know. I haven't been able to get updates on Mexico. -wbf)
 Dennis mentions that a copy of the VUD "mentions something about a North American TV Station Database. I haven't been able to find out anything about this. Is it a TV station list, and if so, does it include translators/LPTV?" There have been more requests lately for an updated list. And quite a few changes took place in the several years since the first NATVDB was published. I'm still sure there will be another one out this late spring, but again, with my work load and heavy schedule, I can't get maps or LPTV lists into this one. And there will be little change in the international station lists.
 I also want to credit **KERMIT REID** (College Park GA) with sending a copy of the 11/26 Atlanta Constitution on WTLK, ch. 14 in Atlanta GA. Below is a sketch of a coverage map included in that article.

North Carolina
 South Carolina
 ATLANTA
 Alabama
 WTLK COVERAGE AREA
 WXIA-TV COVERAGE AREA

FORUM CANADA
 Back to **JIM NAHIRNIK** (Warren MI), who writes, "I have enclosed a clipping about the end of CBET channel 9 Windsor Ontario as a local TV station. Years ago, before the CBC took over, channel 9 was an extremely popular 'Detroit' TV station. They provided quite a bit of local programming, probably more than the three American network affiliates, and acted as Detroit's independent station, running sitcom reruns and a lot of movies. They only ran a small amount of CBC programs - early morning kiddie shows and some prime time stuff when they didn't have movies. Obviously, most advertising was sold in Detroit, but this money was used to produce local Windsor newscasts and public affairs programs, documentaries and specials. They probably served Windsor better than the CBC has done in the last few years, cutting out everything local but news, and now that is gone too. Under the CBC, the Canadian taxpayer paid for most of it. Under previous private

ownership, American advertisers did. (Windsor is too small a market to support a TV station). Windsor needs local news to keep its own identity and not become a suburb of Detroit. The Canadian government ought to license a commercial TV station to Windsor with the understanding that they would tap the Detroit advertising market to support a Windsor news operation. Maybe they could acquire the CBET facilities (formerly CKLW-TV) right on the riverfront across from Downtown Detroit. Channel 9 used to have a good signal in Detroit until a short while after the CBC took over and turned the elements on the antenna to put a stronger signal in Windsor and Canada instead of Detroit."

The article is from the 12/6/90 *Detroit Free Press*: "Up to 82 of 101 full-time employees at CBET-TV (Channel 9) in Windsor received word Wednesday that they are being laid off as a part of a massive cutback by its government-owned parent, Canadian Broadcasting Corp (CBC). The move reduces the once-powerful station to a relay point for Toronto-based national programming." "The cuts, part of an ongoing commitment by the network to help the Canadian government reduce costs, are the result of a \$108-million (Canadian) CBC budget shortfall caused by a weakening Canadian economy and softening TV ad market." "Channel 9 will continue to telecast, but all programming will come from the CBC's Toronto headquarters." "There no longer will be locally produced Windsor newscasts or feature programming." "Channel 9 will become what is called a 'repeater' station, a far cry from the broadcast powerhouse of the 1950s and '60s when, as CKLW-TV, owned by the U.S. conglomerate RKO-General, it was considered an equal with Detroit's Channels 2, 4 and 7." "The CBC purchased the station in September 1975, as Canada tightened rules on non-Canadian ownership of its broadcast outlets."

RANDY MILTIER (San Jose CA) sent an article from *The Daily Tidings* (an Ashland, Oregon paper), which expands on the CBC problem. "Pink slips go out next month for about 1,000 employees of the [CBC], the government-owned network many see as the glue that holds together this vast and diversification of 26 million people." "Declining advertising revenues, reduced government funding and rising TV production costs have hurt the network deeply. About 75 percent of production costs comes from the government." "Angry public protests have occurred from Newfoundland to Ontario to the Gaspé Peninsula of Quebec over what many feel are cuts in one of the few things that make Canadians really different from Americans." "A major element in the cost-saving program was closure of three television stations entirely and reducing eight others to small news reporting bureaus feeding their reports into regional and national centers." "Employees in Saskatoon, Saskatchewan have received a provincial grant to study the feasibility of buying the local CBC station, reduced to a reporting bureau for the regional center in Regina." "Closure of Goose Bay, which served 35 small communities, means news for Labrador will be produced in St. John's, 450 miles away. The same is true for Saskatoon

and Regina."

Several articles came in the past few months from DAVE SINCLAIR (Vancouver B.C.) The 10/23 *Globe and Mail* reports on CRTC decisions which will affect some of the more powerful stations in Canada. "The federal broadcast regulator has approved more than \$200-million worth of acquisitions that solidify the power of two already influential broadcasters and could lead to the creation of a third national English-language television network. Saying it expects the deals to lead to better quality Canadian programs for viewers in Southern and Northern Ontario, the [CRTC] yesterday gave its blessing to:

"* Manitoba broadcaster I.H. (Izzy) Asper's \$131-million purchase last December of the 39 per cent of Global Communications Ltd. of Toronto - which operates Southern Ontario's Global Television Network - that he did not already own.

"* Toronto-based Baton Broadcasting Inc.'s \$57-million purchase a year ago of seven Northern Ontario CTV Television Network Ltd. and Canadian Broadcasting Corp. stations from Mid-Canada Communications (Canada) Corp. of Sudbury, and, for \$15-million, CBC and CTV stations in Sault Ste Marie, Ont., from Huron Broadcasting Ltd.

"Mr. Asper's Winnipeg-based CanWest Communications Enterprises Inc. bought the balance of Global from his two estranged former partners - Paul Morton and Seymour Epstein - in a court-ordered auction that ended five years of bitter boardroom and court battles. CanWest owns independent stations CKND in Winnipeg, CFRE in Regina, CFSK in Saskatoon and CKVU in Vancouver, and Mr. Asper yesterday reiterated his plans to weld these stations and Global and other independent stations into a cross-Canada co-operative or quasi-network that would compete with the CBC and CTV." "The CRTC also rejected objections CTV raised to CanWest's application to take control of Global to the effect that, in concert with the Winnipeg company's other stations, it already forms a network and therefore should be compelled to seek a full network license."

Baton president Douglas Bassett expressed pleasure at the CRTC's approval of the Mid-Canada and Huron Broadcasting deals, which will give the company a stranglehold on TV broadcasting in Northern Ontario. Baton already is the most powerful player in CTV, owning its Toronto flagship CFTO, and its affiliate stations in Ottawa (CJOH) and in Saskatchewan - where it also owns several CBC affiliates." Mr. Bassett singled out the CRTC's approval of Baton's purchase of CHRO-TV in Pembroke, Ont., northwest of Ottawa, and its plans to convert the station from being a CBC affiliate to a CTV affiliate."

From the 12/20/90 *Globe and Mail*: "Maclean Hunter Ltd. and Blackburn Group Inc. must be starting to wish they had never heard of Hamilton television station CHCH. The federal broadcast regulator said yesterday that it has turned down the two companies' proposal to roll the money-losing station into a mini-network in Southern Ontario with Blackburn's CFPL-TV in London and CKNX in Wingham. This is the second

time in little more than a year that the [CRTC] has stomped on a deal between the two companies involving CHCH..."

It looks like somebody is planning to bring Direct Broadcast Satellite to Canada, according to the 10/7/90 *Seattle Times - Seattle Post-Intelligencer*: "A Seattle company offering a new technology called direct broadcast satellite (DBS) is making a bid to provide programming in a cheaper and more efficient fashion than any other form of video entertainment. There were many failed attempts to get DBS off the ground in the 1980s during the heyday of consumer satellite-dish buying. DBS was intended to supplant the big dishes of C-band receivers, which consumers were using to intercept network feeds and other relay broadcasts. Although C-band was not meant as a consumer format, it caught on anyway. DBS would be used to reach homes directly, as its name implies.

"One of the advantages of DBS is antenna size. The low power of C-band required a large dish antenna; medium-powered DBS uses the high-frequency Ku-band, and needs only a flat antenna a few feet wide. In theory DBS was very attractive, but finding the millions of dollars to launch a satellite service from scratch, let alone convincing consumers they needed it proved too burdensome.

"But what could not be accomplished in 1985 may come to pass in 1991. By March, a Seattle company called SkyPix Corp. is promising to have a DBS service on line. The lures are comparatively low-cost, a vast number of channels and a steady barrage of hit movies delivered by an interference-free digital signal to a small rooftop antenna. The privately funded system has been in development for four years. Engineers have come up with a digital compression technique that can squeeze up to 20 channels into the frequency space usually occupied by a single channel on C-band. Thus, where previous DBS proposals were limited to a handful of channels because of a shortage of available satellite space, SkyPix is promising 80 channels immediately and an eventual 250 as new satellites are launched."

From the 10/31/90 *Vancouver Province*, this article red tape in Canada: "The [CRTC] is cutting paperwork to speed up its decision-making, says commission chairman Keith Spicer. 'We're going to accelerate our decision-making without losing any of the quality - we had a lot of paper we didn't need so we're having a little bonfire,' Spicer said after addressing about 600 members of the Canadian Association of Broadcasters. Spicer said the commission will set up a permanent directorate to deal with issues such as transfer of ownership."

Other comments from Dave Sinclair, which should have been put with the United States news, but I already printed that out. "About two weeks ago (middle October - wbf) I heard from a neighbor that he saw an item in a Seattle-Tacoma newspaper about six months or so ago from a relative; about Channel 24, Anacortes, Washington, to the effect that a business group is trying to bring this station back into operation."

"About a month or so ago I noticed that KBGE-TV Channel 33, Bellevue, Wash., (Seattle suburb)

is no longer on the air. This station had home shopping and came on air in May, 1989. Mike Cherry also noticed this."

More on CBC cutbacks from JOEL ROSENBERG (Richmond Hills, Ont.). From the 12/4/90 *Toronto Sun*, a view on the story from Ontario: "There was confusion, anger and sadness at CBLT-TV in Toronto yesterday as they faced massive cutbacks and dismissals sweeping the CBC." "Closed are CBC stations in Goose Bay, Nfld., and Matane, Que. Services are being cut drastically in Windsor, Corner Brook, Nfld., Sydney, N.S., Sept-Îles, Que., Rimouski, Que., Saskatoon, Calgary and the French-language operation in Toronto. Newsworld - CBC's all-news cable channel - isn't affected. And local and regional CBC radio stations won't be affected."

I'm glad Joel clarified something here; "Closed" CBC stations mean that local production studios closed, e.g. re: newscasts. CBLFT will repeat CBOFT Ottawa. ID's have been regional or after the parent stn. e.g. 'CBC Ontario' 'CBC Toronto.' I don't know if this will change."

I'm really organized here. Here is another article pertaining to the United States coming from Canada. Source unknown. "America's [FCC], under the gun to keep the U.S. in the race with Japan and Europe to develop the next generation of television, has an 'ambitious but realistic' test schedule to select a high-definition TV standard by mid-1993. Five companies, including the Japan Broadcasting Corp. and Europe's major TV manufacturers, will compete for the coveted HDTV standard, the sole format to be used to provide Americans with HDTV's crystal-clear pictures and compact disk quality sound by cable, satellite and the major commercial networks. Beginning April 8, 1991, at an Advanced Television Test Centre in a Washington suburb, each system will be evaluated for two months. Viewer-testing will follow in Canada, along with field testing. The FCC's advisory committee on advanced television service is to recommend a winning format by September, 1992. The commission is scheduled to announce a standard by June, 1993. So that millions of TVs will not become obsolete, the FCC has already said the winning HDTV system must allow two signals - one in today's NTSC format and the other in high-definition on a separate channel - to be broadcast. Viewers would have to buy new and costly TVs to watch HDTV programs, which could become available by 1995. The FCC also says it will test a sixth proposal, a partial HDTV system proposed by a David Sarnoff Research Centre consortium, which included Thomson Consumer Electronics and NBC."

After having discussed LPTV, DBS, HDTV, various color standards, digital and other future technologies, let me finish this rather lengthy column with this quotation I came across. It appeared in the Jan-Feb, 1984 issue of the non-defunct *Science 84* magazine, and was originally said by television pioneer Lee DeForest back in 1926. "While theoretically and technically television may be feasible, commercially and financially I consider it an impossibility, a development of which we need waste little time dreaming."

EASTERN TV-DX

Bill Nienajdly
PO Box 2999
Clifton NJ 07015-2999
Deadline March 5th 1991

February 1991 Cutoff 3 Months from deadline

Anybody looking for cheap UHF traps? How about \$31.00 each but there is a catch....look on the last ETVDX page for details. On the DX front, Keith Pugh reports in a letter to me that he did not see any E-skip except lowband scanner activity to PA. Karl Zuk did get E-skip as well as Greg Coniglio. Trop was....Outstanding for Mike Reid in ONT who saw stuff out to KY & IL on Nov 22. John Combs in Tallahassee logged KBSI-23-MO on 12/31! Ed Phelps reports seeing TX & said local Ham's in his area of KY were working into CO, NM, TX & LA on 1/2/91. And trivia question of the month is: Did you know that WPSD-6-KY xmttr sight is in...Monkeys Eyebrow KY? That tidbit from Ed Phelps. And..coming soon, E-skip season! It is only 3 1/2 months away...Hi!

Karl Zuk 154 Old Post Road North, Croton-on-Hudson NY 10520 (Edited down from 3 postcards-BN)
Today (12/12) seeing bars from new W38AM (Long Island City) NY..it is another satellite of 44/54 w/ 16 KW at 95th & 3rd Avenue about 450 feet HAAT. Had a nice opening to WEAR-3-FL and WSB-2-GA two nights in a row last week. Best Wishes Karl Zuk

Keith Pugh 227 Martin St New Hope AL 35760 (Portion of what was written to me-BN)
The annual ES has yet to show, Still early though. Odd year was 1986..The Dec 86 ES happened Jan 3 1987! Anyway, the past 3 Dec's have produced ES, and 30-50 Mhz has been ES active to PA It never fails, ES from PA. on low band means a MUF below ch 2 Good DX & Happy Holidays Keith

Robert Ross VE3JFC Box 1003, STN B, London Ont N6A 5K1 Canada
November 1990
28 ES 1355 2 WPBT FL 28 ES 1359 3 CUBA 28 ES 1430 WIVJ 4 FL
1st E-skip EVER noted here in November!!

Eric Voytko 1721 Dalewood Place McLean VA 22101 40 stations logged
Equipment:C/M 6' dish, Winegard PA-4975 Pre-amp, Five Winegard UT-2700 Traps (set for 20-26-32 -50-56) RG-11 coax, Up 35 ft. AG.

October 1990
31 Tr Mediocore tropo evening:Philly 17,23,29,57;York 43, Lancaster 15, Hagerstown 68,Salisbury -16-47.

November 1990
3 Tr (Early AM)Usuals + hi-band:Richmond 12,Wilmington 12 and Lancaster 8 (a hard one over locals 7 & 9, Altoona 10, U's strong till 11 AM, new loggings WIVZ-33 Norfolk and WGNT-27 Portsmouth; PM and next day bought only leftovers.
24 Tr (Early AM) Action always seems hot at the end of the month, no exception here: Philly & Harrisburg U's: WBRE-28 very strong, WVIA-44 (new) and unid 38 in the same direction (Likely WOLF Scranton-BN) also Richmond 12 & 35 in this morning.

December 1990
12 Tr (AM) tropo getting more scarce, but a strong showing from Richmond 12,23,35,57, SalisburyU
Nothing to shout about ,nevertheless I'll take what I can get.The November 3 opening did allow me to see the difference my new traps have made. WGNT-27 was watchable from sign on almost until noon,even after local 26 signed on about mid morning. 26's strong signal had a noticeable but harmless effect. I would also like to request information from club members who own or are familiar with those roof top mini towers of the 5-15ft variety that I see the Hams around here using-g.I'd like to put my dish up on one of them, but would like to know whats involved in installing one. Please drop me a line if you can advise. I hope everyone has a great year in '91 (Eric, I cut out trap comments,you letter on it is in detail elsewhere-BN) Lefty

Greg Coniglio 5100 Glenwood Drive Williamsville NY 14221
Equipment: Emerson ECR 137 color TV, VHF Jerrold 10 element, UHF 4 bay w/20 db amp, CAC-11 coax & QM rotor
December 1990
13 Tr tentative WCBS-57,WLIG-55,WLIW-21,WIXX-20 cci, Scranton & Elmira in OK time at 2100
14 Tr 0900 Elmira,Binghamton, Scranton U's
24 ES 2245 KSNC-2-KS 25 ES MUF 3 in/out all day 26 ES 1430 CBHT 3 NS 757 also UNID French & a station whose offset was way off
Interesting to note there was skip on Oct 31, Nov 28 and Dec 25, all 28 day intervals. 73 Greg

=====
Symbols used in ETVDX
s/E-snowfree ns/E-near snowfree ES-E-skip Tr-tropo MS-meteor scatter 2H- 2 hop E-skip
lcl-local s/off-sign off cci-co channel interference MUF- maximum usable frequency

Mike Reid 1408-65 Spring Garden Ave. North York ONT M2N 6H9
Equipment: 19" Zenith (1977) RS 2 bay, Winegard AC-4990 & ICOM R-7000

| | | | | |
|-----------------------|-------|------------------|-------|------------------------|
| November 1990 | 22 Tr | 2015 CBLFT 68 ON | 23 Tr | 0150 W63AU 63 PA |
| 18 Tr 2337 WENY 36 NY | | 2019 W67AL 67 OH | | 0207 W54AF 54 OH |
| 19 Tr 0140 WNEP 16 PA | | 2022 WGGN 52 OH | | 0210 W52AZ 52 IN |
| 0907 CBOT5 33 ON | | 2025 WCVK 52 MI | | 0212 W68AP 48 OH |
| 0910 CBLN4 45 ON | | 2030 WOSU 34 OH | | 0225 WPCB 40 PA |
| 0914 CICO59 59 ON | | 2031 WITTE 28 OH | | 0235 KNDL 30 MO |
| 0917 WVIA 44 PA | | 2035 WEHS 60 IL | | 0236 W26AB 26 MI |
| 0917 WMGC 34 NY | | 2037 CBOT4 51 ON | | 0237 W25AK 25 NY-Olean |
| 0917 WBRE 28 PA | | 2046 WTLW 44 OH | | Home Shopping Spree |
| 21 Tr 0142 WWO 24 OH | | 2047 WEVV 44(KY) | | 0245 WACC 23 IN |
| 0142 CICO32 32 ON | | see note # 1 | | 0245 WAKC 23 OH |
| 0157 WOIO 19 OH | | 2057 WCMU 14 MI | | 0250 W21AI 21 OH |
| 0352 WUPW 36 OH | | 2102 WANE 15 IN | | Portsmouth-TBN |
| 0357 CIII7 7 ON | | 2112 WIII 64 OH | | 0352 WNDU 16 IN |
| 0417 WXON 20 MI | | 2127 WSFJ 51 OH | | 0347 W60AJ 60 NY |
| 0605 WYOU 22 PA | | 2140 WPIE 14(KY) | | w/WDLI-17-NY |
| 0607 WAKC 23 OH | | 2145 WMBB 40 IN | | 0600 W32AC 32 IN |
| 0640 WVIA 44 PA | | 2147 WHSB 63 IN | | (s/on- Muncie) |
| 0653 WBRE 28 PA | | 2205 WXIN 59 IN | | 0615 W72AQ 72 NY |
| 0654 WPGH 53 PA | | 2213 W59AM 58 OH | | 0615 W76AM 76 NY |
| 1653 WMGC 34 NY | | Youngstown-WNEO | | 0615 W80AK 80 NY |
| 1711 CIVO 30 PQ | | 2235 W60AJ 60 NY | | 0615 W81AT 81 NY |
| 22 Tr 1929 WBAK 38 IN | | 2238 WLLA 64 MI | | see note # 2 |
| 1933 WSMH 66 MI | | 2238 W65AJ 65 NY | | 0650 CBFT 54 ON |
| 1935 W64AK 64 OH | | 2317 WITU 30 IN | | 0714 WTAP 15(OH) |
| 1940 WRGT 45 OH | | 2322 WLTG 35 OH | | 0718 WHME 46 IN |
| 1952 WPTO 14 OH | | 2340 WLKY 32(IN) | | 0718 WGVX 35 MI |
| 2000 WPTD 16 OH | 23 Tr | 0000 WKON 52 KY | | 0815 WQEX 16 PA |
| 2002 WKFP 22 OH | | 0007 WCVN 54 KY | | 0815 WKPC 15 KY |
| 2005 WBGU 27 OH | | 0010 WRGB 53 KY | | 0900 WKHA 35 KY |
| 2011 WCET 48 OH | | 0026 CIVO 30 PQ | | 0903 WRMR 23 KY |
| 2011 WSOBE 50 OH | | 0130 W66BV 66 MI | | |
| Mansfield lcl rx | | 0144 W65AJ 65 NY | | |
| 2011 WKBD 50 MI | | (w/WDLI-17) | | |

Note # 1 Noted with a (-) offset, This agrees with a 10 year old allocation plan I have, but not the TVDB.

Note # 2 These four xlters are all the WNEO xlters that operate above ch 70, chs 72 & 76 were all snowfree at their best. Chs 80 and 81 only receivable on the ICOM due to cellular phone crud blanking the screen.

The un-id 61 confirmed as WITC-61. (I knew it!-BN) They were running Fox net cartoons. WTGI does not run cartoons. Last fall I wrote to WYOU-22, asking them a few questions. I never got a reply Recently, I phoned them up to ask them the same questions. They said they got my letter and responded to it along with two letters from "shortwave listeners" who received their station (I didn't know that UHF can be heard on shortwave, did the BBC & WRNO & KUSW give image problems to WYOU ? Hi!-BN) Anyone who wrote to them last fall and did not get a reply should write again. 73's Mike

John F Combs N4SFS PO Box 7581 Tallahassee Florida 32314 904-878-6317
December 1990 Tr (Phoned in to me, John says he will have more detailed soon-BN)

31 Tr KBSI-16-AR...WPTI-30-IN ...WLMT-30-TN...KBSI-23-MO
565 mi 458 mi 458 mi 568 mi

Doug Smith (W9WI/4) 14 Brookside Court Nashville TN 37209-4503 ****NEW REPORTER****
Just moved down here from WIV territory. Had a nice surprise on New Years Eve-big tropo! The Indianapolis and Cincinnati area stations are especially interesting; sure didn't think I was going to see anything I've already seen from Wisconsin!

| | | | | | | |
|---------------|-------|---------------------|-------|---------------------|------|---------------------|
| December 1990 | 31 Tr | 1745 WKPD 29 KY 116 | 31 Tr | 1800 WGRB 34 KY 108 | 31 T | 1845 WDKY 56 KY 160 |
| | | WRMU 21 KY 97 | | 1806 WHNT 19 AL 95 | | WAFF 48 AL 97 |
| | | WRMA 35 KY 78 | | 1811 WITG 21 AL 177 | 1925 | WLKY 32(IN)158 |
| | | WRGB 53 KY 64 | | 1829 WTUP 60 AL 157 | | WAAY 31 AL 95 |
| | | WBKO 13 KY 66 | | 1840 WBMG 42 AL 177 | | WKYT 27 KY 182 |

Doug's report continues on the next page

Doug Smith continued

December 1990

31 Tr 1925 WHIO 25 AL 95
 1945 WJSU 40 AL 174
 1950 WDRB 41(IN)157
 1955 WKLE 46 KY 178
 WKON 52 KY 193
 2051 WQWL 15 AL 115
 2135 WTVQ 36 KY 182
 (Note #1)
 2137 WNAL 44 AL 150
 2141 WCAI 68 AL 178
 2157 WTCI 45 TN 106

31 Tr 2202 WCLJ 42 IN 221
 2213 WKOT 43(OH)254
 2218 WRGT 45 OH 276
 2224 WBBJ 7 TN 105
 2232 UNID 46 WSW
 (Note # 2)
 2232 WKMR 38 KY 229
 2241 WZLX 54 AL 102
 2242 WIII 64 OH 235
 2243 WXLX 19(OH)233
 2247 WCET 48 OH 234

(note # 3)
 31 Tr 2358 WCHST 8 WV (304)
 WOWKt13 WV (294)
 January 1991
 1 Tr 0003 WIVA 9 MS 198
 WKEF 22 OH 275
 WFIE 14(KY) 121
 WHEI 25(KY) 130
 UNID 35 (339)
 (note # 4)
 0026 WLIB 63 IN 219
 0745 Evans-louis-ville
 still in

- Note # 1 Audio only ID. Video just cci to local TBN LPTV. (dam they & channel 24 were off the air most of last week..)
- Note # 2 TBN. LPTV in Jackson? (No 46 LPTV listed in Jackson, however I show W46AV that is a TBN listed in Pascagoula MS: my list shows a Cp for it. I can't tell you if they are on the air or not, hope you can find out if they are on the air-BN)
- Note # 3 Both tentative: ch. 8 ran a ad for 'CLARK BRIDALS FORMAL' (will try to check with Charleston phone book): ch 13 was rerunning the late news-WBKO should have been ABC's New Years special. Besides, the 13 logo on the ID (unfortunatly I couldn't read the rest) wasn't WBKO's.
- Note # 4 Suspect WLIO-OH, but all I have to go on is really weak NBC and the direction the band was open in. (Dayton was real loud at this time) Could also be WSMV-4 overload..

Hmmm... it's about 20 degrees below normal, clear—and we get a monster tropo! 6 states in 5 hours with indoor antennas! WRGT-45 comes pretty close to equalling my tropo record from Madison (I had a tentative on WKEF-22 also). In Madison, my antenna was up about 25 feet, out doors & in the clear, 5 miles from the nearest transmitter, and helped with two preamps. Down here, it's as high as I can hold it, indoors, no preamps, and I'm 2000' from two TV's and two FM's. Would love to have had the full antenna setup for this one!

Ed Phelps Rt 2 Box 266 Benton KY 42025 502-527-2289 (Phoned in report-BN)

January 1991 All Tropo

2 Early Morning: (no times listed-BN) —KLMG-51-TX-450/ WALA-10-AL-450/ WZFA-12-AL/ WDM-7-MS W56AG-56-(Franklin)-NC-1 KW at 300 miles/ WIVC-9-TN/ WIVM-9-GA/ KNOE-8-LA/ KLAX-31-LA-450 KCMV-8-MO-250/ WWSB-27-MS / WDEF-12-TN/ WPTD-16-OH/ WPTO-14-OH/ WHOA-32-AL-350/ WSRN-47-VA WCBI-4-MS/ WHNT-19-AL-200/ KTHV-11-AR-250-s/f/ WYMT-57-300/ WDSI-61-TN-210/ WJSU-40-AL

4 WMC-5-TN-150/ KTVI-2-MO-175/ KELJ-19-125/ Ch 11 St Louis MO

(Ed indicates that local Hams were working into CO,NM,TX & LA around 1/2/91,Ed says that he is on 444.2 and 147.13 often and his call is NN2E) 360 TV stations since August 1989

That dude from Joisey PO Bocks 2999 Clifton NJ 07015-2999 QTH: Ackerman Ave,Clifton

Equipment; Radio Shack U-120 at 80 feet, 200 ft above sea level approx, Winegard AC-4990 amp
 Radio Shack 6 element ant FM only used for VHF at 75 feet, RS rotor, RG-59 coax
 2 separate feeds for VHF/UHF, Teknika tuner, Sharp color TV 13", 10 db post amp for VHF.

January 1991 all tropo unless indicated:

8 0610 DC 50, York PA, a slight trace of Baltimore area, no Delmarva, avg to below avg tropo 2000 A couple of hours before a snow/ice storm, WCNV-24-Syracuse near s/f (rare) nice video taped ID, Binghamton up, Scranton up, a slight trace of Elmira 36 (need them still)
 Albany 23 & WCDC-19-MA way up, something to the north on 45, Schenectady possibly,why don't they come in when 23 Albany makes it here.

15 0730+ Harrisburg U's, WNEP-16-PA (not common), Binghamton, Syracuse up + New England a bit.

Added W38AM Long Island City NY per Karl Zuk tip, they are // 44/54 LI simulcast but run a separate feed on W38AM, for \$2.00 per minute you can have your fortune told. The \$2 a minute includes holding time! What a waste of the public airwaves . This of course kills WSBK Boston when W38AM is on.

WNET-13-NY has NWS (some of the time) on thier SAP. WGBS-57-PA also runs NWS on thier SAP (all the time).

24 NEXT PAGE: UHF traps for 31 bucks each, and thier performance in a metro area.

After seeing Eric Voytko had success with traps in his area, I wrote to him asking for more info. I know when my local WNUM-50 will soon go to 5 million watts at 4 miles away, it will kill the UHF band for me unless I get a UHF trap for 50.

To date, the only traps for UHF I was aware of, was from a outfit up in Syracuse NY and they sell for \$150.00 EACH! So until now I never bothered to get one for that price (I can't afford it!) But now comes word that UHF traps are available for \$31.00 each, I felt that it would be worthwhile to pass on this information to other TV DXers looking for UHF traps at a reasonable cost. A lot of you out there have been asking about traps so here it is.

The Catch: You have to buy in quantity...SIX at a time (NO problem there, really...just get 6 DX-ers together and split the cost..)

Get them at: Davis Antenna, Inc. Box 335, Hwy 925 North, Waldorf MD 20601, 1-800-426-8366 and ask for George Clark. The unit is model UT-2700 Winegard variable UHF trap. Specs listed are: Trap range: 470-810 MHz, Attenuation 8.5 1 trap in place, 15 db both traps in place. (this unit is really 2 traps in one!). Insetation loss: only 0.5db!

How does it work? Below is a letter from Eric Voytko, Eric lives near the DC area in McLean VA.

(Edited down a bit-BN)

When I recently purchased my Parascopes and 4990 and initially got massive bleed over and 15 channel imaging I thought I had wasted my hard earned dough. The first solution was to lengthen the lead-in from the antenna terminals to the amp to a total of about eight feet. A long coax attenuated the strong signals to a tolerable level, but then it dawned on me that this set up would kill weak signal DX just as effectively. So I began to consider traps.

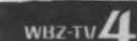
I saw the spec sheet for the UT-2700 trap at the store where I bought my antenna. It seemed like the ticket on paper: 15db attenuation (8.5 per side if used for two channels), 0.5 db insertion loss, 75 ohm and AC/DC passive. Unfortunately, the store did not carry the traps so they sent me to the local Winegard distributor, Davis Antenna.

The traps ran \$30.76 each, but are non-stocking items and required a pre-paid order for six units. All told they would run more than my dish, but with the number of locals it made sense to try. I was really buying blind, trusting the spec sheet, because I have about three months experience in TV equipment. Tim McVey had no info on this particular model, and could only offer general advice on traps. The risk did pay off, though!

After installation, I noticed that almost all 15 channel images dissappeared (56 on 41 and 20 on 35 remain but are weak) Adjacent channel interference remained but was confined to one above and below. I did however, lose WHAG-25 Hagerstown, at 65 miles, due I believe to a mis-tuned trap (adjustment is finicky and critical) but found WJAL-68 Hagerstown, which had never even had sync bars before. Also new was W44AA Morgantown, another non-regular scatter station (26 Kw) WTXF-29 in Philly, once only tropo material, is now in daily scatter and is my Northeast tropo barometer. Then the conditions picked up and I saw how sweet it was. (see my report)

Early on November 3, I had logged WTVZ-33 and then WGNT-27 from the Norfolk, VA area. I had positively ID'ed both, with WGNT doing the best of the two. Later that morning I was watching a program on 27 when I saw a negative image of WETA-26's TP appear, but amazingly it did not obliterate WGNT's signal. Throughout the morning, I watched programming and got several good videos with only a faint interference visible. Yes, it was true. Strong tropo COULD override even the adjacent channel interference of the locals even when amplified. Subsequent loggings of Harrisburg 27 and 33 were really impressive. They are only 100 miles away, but are almost directly in line with 26 and 32. When the conditions are right, the locals can be nulled out to receive these stations, although it is a much tighter 'squeeze' than Norfolk is. This could not have even been dreamed of before I had traps. Channel 21 is the lone "Harrisburg hold-out" as local 20 is a tad stronger than the others (sady, I don't even know all my local ERPs, but I am in the process of amassing that information) "

Eric, we thank you for your comments and information on the UT-2700 UHF traps, DXers are invited to write in at any time to ETVDX about traps, amps, antennas or anything related to TV DXing and any helpful hints that they might have. Though ETVDX is a DX column and it is mainly for DX catches and DXing the TV band (East of the Mississippi River for ETVDX) I feel some information is too valuable to keep out of ETVDX (such as the case of the traps).



WNET-TV/WNEQ-TV
 PO Box 1263, 184 Barton Street, Buffalo, NY 14240
 (716) 881-5000

WVAT-TV 19

WVPT TELEVISION

25

WESTERN TV-DX

February 1991

Fred McCormack
Box 17860
St. Paul MN 55117

Deadline: 03-08-91
Cut-off: 12-01-90

**** PLEASE NOTE NEW MAILING ADDRESS FOR WESTERN TV-DX REPORTS ****

New ___ New Mode __ Tent. - t Unidentified - unid S/On - + S/off - =
ID Color Bars - # Unid Color Bars - % Misc. Test Patterns - &
Parallel Programming - // MTS Stereo - \$

Mike Cherry, Box 631, Ganges BC V0S-1E0 (604-537-5201) PST

Equipment: (See December 1990 Western TV-DX)

| | | |
|---------------------------|----------------------------|-----------------------------|
| October 1990 | 8 F2 1719 unid 49.230 MHz | 30 tr 1047 25, 42 Tricities |
| 31 tr 0836 KNDU 25 WA 279 | (Video sync) | 1059 KYVE 47 WA 213 |
| 0839 KVEW 42 WA 279 | 12 tr 0709 CBUT27 59 BC 65 | |
| 0847 KTNW 31 WA 284 | (Very rare!) | |
| (Over CBUT35-31) | December 1990 | |
| | 17 au 2350 CFRNt 3 AB | 1 tr 1749 KAPP 35 WA 213 |
| | 20 tr 1152 24, 32 Portland | 3 ms 0905 unid 3 4sec 110° |
| | 22 tr 2246 24, 32 Portland | (Video & audio) |
| November 1990 | 8 F2 1551 NZTV 42.240 vid | 7 tr 0700 KATU 2 OR 236 |
| | 50.740 aud | 0700+ 24, 32 snow free |
| 1612 TVQ 46.170 MHz | 26 au 2337 unid ch 4+ 20° | 0813 KCKA 15 WA 165 |
| (Vid, no audio) | (Weak audio) | (Snow free) |
| 1704 unid 48.245 MHz | 30 tr 1042 KEPR 19 WA 277 | |
| | (Over CBUT36-19) | |

F2 opening provided weak video signals. F2 above 45 MHz also noted on November 27th and December 5th but no traces of any TV-DX - not even "sync" buzz, although there were southwestern US, Central American and Mexican pagers/repeaters coming through loud and clear. Aurora on the 17th brought in a few Edmonton FM stations, so I am guessing that CFRN-3 was the horribly distorted signal coming through. Aurora on the 26th was coming in on FM from the north and northwest, so I have no clue who this was. (CFJC-4??) December 3rd meteor scatter had Joan Rivers - this reminds me of the killer May 27/28th opening when I got to see the same episode of the Joan Rivers Show (yecch!) eight different times and channels thanks to E-skip!!!! I've noted "venetian blinds" and vertical offset bars on channel 3 a few times in the last couple of days (early December) so maybe we'll get some E skip openings here soon. It was this time last year that Dave Sinclair over in Vancouver got double-hop E skip from western Illinois on channel 3, so maybe a Christmas E skip treat awaits!!!! Happy New Year to all WTFDA members - especially to those whom I've been corresponding with this last year. This winter/spring should be the last time for about 9-10 years for F2 so get it while you can!!!!!! 73s, Mike

Dennis Park Smith, 3703 Dixon Street, Santa Barbara CA 93105-2419

This is a summary of relatively recent DX activity and some background about my original DX'ing location in Wasco, California, approximately 25 miles northwest of Bakersfield. I DX'ed there at 450 Poplar Avenue from 1954 when the family got a TV set until 1974 when the house burned down. My parents then bought another Wasco house at 822 Rosewood Avenue which they still have. I get to Wasco only occasionally now -- too bad because virtually all VHF channels there are open for DX.

Wasco is in the southern San Joaquin Valley at 325' a.s.l. with high mountains (5-10000 feet) in 50 mile radius from east through south to west and flat and open for 400+ miles to the north and northwest. Nearest VHF TVs are behind mountains or are distant. Our local U's use some of these mountains for transmitters. My antennas in old days were various TV and FM up to 45' agl; present antenna so far is only UHF 4 bay conical at 15' agl.

Lots of E skip possible -- quite a bit seen in arc from northeast Mexico and Texas around to Washington state and southwest Canada, from 550 to 1500 miles, and some double-hop (or extended-range), most memorable being channel 2 Pittsburgh (2150 miles) and channel 6 Milwaukee (1800 miles). Distances are approximate.

Strong locals are channels 17 and 45, Bakersfield (35 miles), 23 and 29 Bakersfield (45), 26 & 49 Visalia (70). Strong enough to be consistently snow free are 18 and 24 Fresno (80). Consistently very good, but not quite as strong (I need more height) are 21,30,47,53,59 Fresno area (100). With VHF antenna, I would have, southerly, 6 San Luis Obispo (75) fair, and these, poor: 12 Santa Maria (70), 3 Santa Barbara (80), 2,4,5,7,9,11,13 Los Angeles (115), 8 and 10 San Diego (220), 6 and 12 Tijuana (245). Northerly, always

Western TV-DX

February 1991

Dennis Park Smith (continued) there poor and occasionally better on tropo: 8 Salinas (140), 11 San Jose (175), 3,6,10,13 Sacramento-Stockton (210), 2,4,5,7,9 metro San Francisco (225). Seen on tropo only (not consistently) have been 12 Chico (320) and 7 and 9 Redding (390). With present UHF antenna, sometimes seen up to fair on tropo: 19 Modesto (180), 31,40,58 Sacramento-Stockton (210). Seen once, fair tropo, was 65 San Jose (175), maybe last summer -- I should write things down again. Consistent, but weak and with a deep up-down fade cycle over approximately four minutes is 64 Barstow (125), the only UHF I've ever seen over the south mountain barrier.

Then there is translator/LPTY, nearby and tropo. On VHF would be consistently from Springville: 7 (for 47 Fresno?), 9 (6 San Luis Obispo), 13 (30 Fresno), maybe fair (50 miles). UHF seem like usual flea-powered 100 Watt signals with two exceptions noted. Closest is run by public elementary school in oil country: channel 50 Belridge School near McKittrick, good signal (20). Next nearest but only fair at most are Bakersfield 39 (for 21 Hanford/Fresno), 55 (TBN), 58 (on air approximately November. Spanish, maybe Mexico City based?) (20-45 miles -- don't know transmitter sites). Next two must have 1 kW transmitters and mountain sites: 15 Porterville (Visalia?) (TBN) (70), consistently snow free; and 66 O'Neals (Fresno area, Home Shopping Club) (80), consistently very good. Less than year ago, channel 15 TBN was channel 57 with fair-poor signal. Channel 66 shown in Fresno paper and TV Guide as "KHST Fresno" but only ID's as K66CQ in code approximately every half hour with sound superimposed on video signal rather than on audio signal. Still get 56 Fresno (TBN) (85) occasionally on tropo, poor-fair, but have never seen 34 Fresno (for 42 Concord) in Wasco.

Perhaps next time, an intro to Santa Barbara DX'ing and space permitting, notes about a little LCD color TV I've been playing with. Best of DX to all.

Frank Merrill, P.O. Box 669, Macomb IL 61455 (309-833-2661) CST

December 1990

8 tr 0317 KPLR 11 MO NOTED OFF FOR MY FIRST TIME EVER.
K11SNT 11 MO
(Columbia CNTV)

Something is obviously on there with Country Music Television. Jeff had it a few days ago when HE found KPLR off. Audio was on channel 11+.

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

December 1990

| | | |
|--------------------------|----------------------------|--------------------------------|
| 1 tr 2103 WCET 48 OH 400 | 5 tr 2040 WXMT 30 TN 585 | 25 Es 1100 KCWC 4 WY 1065 |
| 5 tr 1820 WCET 48 OH 400 | 10 tr 2120 WDRB 41(IN) 437 | KDUHt 4 NE |
| | WDRB 41(IN) 437 | KTVXt 4 UT |
| | WXIX 19(OH) 400 | 24 Es 2049 unids 2+, 2- s 1115 |
| 1823 WTVQ 36 KY 473 | 25 Es 1045 KTWO 2 WY 964 | KCNCt 4 CO |
| 2035 WEVt 44(KY) | KOTA 3 SD 787 | KNGt 2 CO |

Some unexpected Christmas DX but not much of anything else.

William Eckberg, 1032 Sterling Road, Dixon IL 61021 CDT/CST

Equipment:

1966 Zenith b&w tube receiver ch 14N22, modified Zenith 175-1962 detent tuner. Channel Master 1110 VHF antenna. Channel Master 7 foot UHF parabolic antenna with RDX Labs UA900 preamplifier on a 40' tower.

| | | |
|----------------------------|---------------------------|---------------------------|
| October 1990 | 31 tr 0525 KSAX 42 MN 404 | 14 tr 0445 WBRA 15 VA 583 |
| 4 tr 2230 W65BY 65 IL 82 | (Springfield WSEC-14) | 0450 WSBN 47 VA 483 |
| | | 0455 WMSY 52 VA 533 |
| 11 tr 0430 W43AV 43 WI 108 | 28 Es 1820 WPBT 2 FL 1229 | 16 ms 0325 KCNC 4 CO 811 |
| (Waukesha CHA) | | 19 tr 1830 WXMT 30 TN 408 |
| 12 tr 0335 CKCO 13 ON 461 | December 1990 | |
| 0430 CHCH 11 ON 488 | 10 tr 2055 WVAH 11 WV 463 | |

I have replaced my Winegard PA4975 with an RDX Labs UA900 preamplifier as it appears to be superior in performance. In the spring, I am planning on installing a Winegard 11 foot satellite dish for UHF at 48 feet. There are many problems. Keeping it up due to the antenna's large wind resistance is one. Many UHF stations have come on the air recently in the area and I need a more directional antenna system.

NORTHERN FM-DX

GREG CONIGLIO
5100 GLENWOOD DRIVE
WILLIAMSVILLE, NEW YORK 14221

For DXers in: Canada, ME, VT, NH, MA, CT, RI, NY, PA, NJ, OH, MI, IN, IL, WI, MN, IA, NE, SD, ND, MT, WY, ID, WA, OR

FEBRUARY 1991

DEADLINE: The First

Another short column for the off-season. Thank you John Sulak of Florida for sending information on the "Galaxy-23", a very impressive looking new FM antenna. I have forwarded the information to HQ for a special report. Also thanks for all the nice comments from members. I appreciate your feedback. Your comments make doing NFM well worth it.

MIKE CHERRY - BOX 631 - GANGES, BRITISH COLUMBIA V0S 1E0 (604) 537-5201

Equipment: See August Northern FM FM @ = mobile

NOVEMBER 1990 DX

11 Tr @ VANCOUVER

| | |
|---|-----|
| 0927 KXL 95.5 OR Portland, soft r | 270 |
| 0929 KQBE 103.1 WA Ellensburg, r\$ | 165 |
| 0932 KKCW 103.3 OR Beaverton, rm\$ | 273 |
| 0934 KMJK 106.7 OR Lk.Oswego, CHR\$ | 272 |
| 0938 KWJJ 99.5 OR Portland, k, ads | 270 |
| 0939 KBVM 88.3 OR Portland, g\$ | 270 |
| 0942 KMHD 89.1 OR Portland, NPR t | 270 |
| 0943 KBPS 89.9 OR Portland, choir | 270 |
| 0946 KOPB 91.5 OR Portland, weak | 270 |
| 0948 KKEE 94.3 WA Long Beach, PSA | 185 |
| 0952 KDUX 104.7 WA Aberdeen, AOR\$ | 164 |
| 0954 KGHO 95.3 WA Hoquiam, church service, CCI = KXLE? | 164 |
| 0956 KFFM 107.3 WA Yakima, legal ID | 201 |
| 0959 KHPE 107.9 OR Albany, g\$ | 290 |
| 1001 KBOO 90.7 OR Portland, ID, j | 270 |

NOV.11 Vancouver Tr cont.

| | |
|--|-----|
| 1007 KLYK 105.5 WA Longview, ads\$ | 174 |
| 1010 KLLM 103.9 WA Forks, ads, ID | 160 |
| 1014 KXYQ 105.1 OR Salem, CHR\$, PSA | 278 |
| 1032 KEYQ 98.3 WA Pasco, j, id, Q-98 | 265 |
| 1037 KDCN 95.9 Ephrata, ID w/KULE 810,g | 205 |
| 17 Au | |
| 2344 CKRA 96.3 AB Edmonton, Lite 96 | 544 |
| 2359 CBX 90.9 AB Edmonton, CBC Stereo service, ID, net.prog | 542 |
| 26 Au | |
| 0018 (CBRX) 94.3 BC Prince George r | 370 |
| 0059 CBYI 88.1 BC Hagensborg, CBC AM network, // CBU 690 | 495 |
| DECEMBER 1990 DX | |
| 4 propagation unknown?? @-Ganges | |
| 1906 unID 107.1, 12 seconds, see notes | |
| 5 TrS | |
| 0612 KPQ 102.1 WA Wenatchee, ads, r | 185 |

ID always needed to verify 107.9, tricky! both KMBI Spokane and KHPE Albany have religious programs and g music!! Dec. 4 I was listening to semi local KKNW 106.9 Seattle when I heard very strong adjacent channel interference. Tuned 107.1 (mono) station had a hockey broadcast - signal was clear but didn't abruptly cut out like MS or Airplane Scatter but faded out like Es!! No other activity noted and local 10 metre hams had no Es. Was not CISC Gibsons-Sechelt. (Sounds pretty weird, could have been MS though, I have heard some bursts that do not sound like MS bursts at all-gc). I've enjoyed discussing propagation recently with Doug Allen. I hope to write for my ham ticket mid-January. Now I gotta find some time to study! 73\$, Mike.

DAVE NIKMAN - 12284 NICE ROAD - AKRON, NY 14001-9529

Equip.: Carver TX-11 tuner, Heathkit audio amp., Channel Master Stereo Probe 9 32' above ground turned by a Alliance HD-73 rotor, RG-11 75 ohm coax used. New to log are underlined.

DECEMBER 1990

15 troposcatter

1005 WRIJ 106.9 PA Masontown, ID//WAIJ & WLIC, g\$ 236

28 troposcatter

1600 WRVL 88.3 VA Lynchburg, ID between wx & nx, g\$ 394

DECEMBER 1990

29 troposcatter

0910 WAFX 106.9 VA Suffolk, "106.9 The Fox". op\$ 442

30 troposcatter

1405 WAFX 106.9 MD Hagerstown, ID, "magic 106.9" (NFL Wash. & Buff.) 231

Every year the wife asks "what do you want for Christmas" and every year I answer "a new radio". Does anyone want to trade; I have a tie, some underwear and 4 pair of sox? no super hot new radio. All kidding aside, I do hope everyone had the best of holidays. Let me be the first to thank Greg Coniglio for doing a super job as NORTHERN FM column editor. One of the VUDs many unsung heroes present and past. May our support and praise be your reward! Dave

REPORT TO THE VUD !!!!

NORTHERN FM DX

FEBRUARY 1991

dBRUCE HALL c/o 141 KING GEORGE ROAD - BRANTFORD, ONTARIO N3R 5K7

Equipment: JVC JRS201 receiver (mod w/ 3 150 filters), Magnum Dynalab 205 signal sleuth, stereo probe 9 fed with RG6 at 50 feet AGL, Crown Rotor, distances are in km.

NOVEMBER 1990 DX

| | | |
|---|------|--|
| 23 Tr | | |
| 0733 WLMJ 103.9 PA Kane, k, Quik Stop ad | 212 | |
| 24 Tr | | |
| 0811 WLDR 101.9 MI Traverse City, Sunny 102, m | 469 | |
| 27 Tr | | |
| 0815 WKSZ 100.3 PA Media, Kiss 100, r, traffic | 525 | |
| 0826 WHITZ 100.3 NJ Newark, Z100, r, NY ads | 529 | |
| 0916 WBCH 100.1 MI Hastings, m, "It's important for you to know that you're listening to WBCH" | 414 | |
| 28 MS | | |
| 0620 WLZW 98.7 NY Utica, Lite 98.7 rm, ads | 414 | |
| 0800 WAGH 98.3 AL Ft.Mitchell, s, MAGIC 98.3 State radio WAGH-FM, State no. 26 heard. | 1297 | |
| 29 Tr | | |
| 0756 WLVO 96.3 OH Columbus, QFM 96, rp thru CFMX with traffic, weather, local ad | 423 | |

DECEMBER 1990 DX

| | | |
|---|-----|--|
| 1 TrMS | | |
| 0641 WLTV 94.3 NY Elmira, 94 Rock, r, stations adress for \$49 ticket pkge for Billy Joel in Buffalo | 313 | |
| 0714 WFCB 94.3 OH Chillicothe, B94, r | 483 | |
| 3 MS | | |
| 0659 CBVE 104.7 PQ Quebec, tm, CBC EE news | 819 | |
| 4 TrMS | | |
| 0800 CFNJ 99.1 PQ Gabriel de Brandon, FM Quatre Vingt dix neuf, r, calls in French | 667 | |
| 0950 WRKZ 106.7 PA Hershey, Z-107, k, remote | 437 | |
| 5 Tr.GW | | |
| 0650 WTNJ 105.9 WV Mount Hope/Beckley, Country Hits 106, local listeners birthdays | 437 | |
| 0731 WWMJ 104.7 MD Hagerstown, b, WWMJ News446 | | |
| 0800 WBCD 107.5 ON Penetanguishene, CBC tm on MOrning followed by news | 184 | |
| 7 Tr | | |
| 0806 WKXA 100.5 OH Findlay, KX100, rm, nonID | 368 | |
| 9 Tr.MS | | |
| 0902 WBYR 98.9 OH Van Wert, The Bear, oldies | 442 | |
| 0938 WCMZ 98.3 MI Sault Ste Marie // 91.7 Alpena | 515 | |

NOVEMBER 10 MS

| | |
|--|------|
| 0637 CBAL 98.3 NB Moncton, CBC French, | 1281 |
| 12 Gemenid MS | |
| 0650 WJAT 98.3 GA Swainsboro, r, local ad ment | 1196 |
| 0655 WJBE 98.3 PA Millifinburg, B98, k, calls | 383 |
| 2110 WKNN 99.1 MS Pascagoula, K99, k 27th state heard, 18th catch on 99.1 | 1605 |
| 13 Gemenid MS | |
| 0616 WDLT 98.3 AL Chickacaw, 98 Light, m Stereo! | 1565 |
| 2105 WGOL 98.3 VA Lynchburgm r, wx, calls | 658 |
| 2120 WGSY 98.3 MI South Haven, Cosy 98, m, cls | 501 |
| 2121 CBW 98.3 MB Winnipeg, CBC, c "Andrew Davis conducting the choir at the Toronto Symphony" | 1518 |
| 2121 WZRO 98.3 IL Farmer City, Z98, k, "a short ride away, just west of Decatur on Rte 51" | 773 |
| 2122 WBOG 98.3 NC Mufreesboro, G98, s, call, wx | 791 |
| 2146 WCFE 98.3 WV Ripley, Great 98, k lcl ad | 497 |
| 2146 WCNA 98.3 SC Clearwater, Cosy 98, b, State #28 heard | 1081 |
| 2200 WLCO 98.3 VA Clarksville, Easy 98.3, r folo by xmtr site and calls (Sign off likely) | 745 |
| 2244 WJMR 98.3 OH Frederickton, rm Beatles mx, | 382 |
| 2353 WGCQ 98.3 GA Jesup, COAST, oldies, 42 deg in Jesup, 0342, Coast 98.3 in again | 1297 |
| 14 Gemenid MS | |
| 0228 WWKI 98.3 SC Kingstree, Magic 98, sj, non ID | 1058 |
| 0312 WHAI 98.3 MA Greenfield rk, calls | 635 |
| 0630 WRTQ 98.3 FL Goulds, Radio el Sol, calls Farthest DX by MS | 1978 |
| 0711 WLGJ 98.3 OH Logan, rk, WLGJ news 400th catch since April 4, 1990 | 437 |
| 0734 WPKQ 98.3 OH Bellefontaine, r, calls | 428 |
| 0801 WXB 98.3 IN Plainfield, g, Love 98, 28th catch on 98.3 prev record 18 catches on 99.1 | 644 |
| 18 Tr | |
| 0641 WYCL 107.5 PA Boyertown, Mix 107.5, call toll free at 1-800-926-WYCL | 492 |

After logging AL on 98.3 I stayed on 983 since MS was popping up if probe was pointed SSW plus the available 100 or more stations on 98.3. Gemenid SHower peaked approx 2200 12/12 with as many as 15 bursts per minute, most strong and short. Glad to reach goal of 400 loggings before year ended. 73 db

PAUL MOUNT - BOX 126 - LINCROFT, NEW JERSEY 07738

Equipment: Onkyo T9090, Mk II, Archer amp, rabbit ears

NOVEMBER 27, 1990 Tropo

| |
|---|
| 1820 WKLL 94.9 PA Harrisburg, accu wx, Cool 94.9, into "Wipeout", new for call change |
| 1835 WAAF 107.3 MA Worcester, Celtics contest |
| 1838 WHCN 105.9 CT Hartford, thru WNWK, Lion BKB promo., 106 HCN |
| 1839 WQSR 105.7 MD Catonsville, "Baltimore's Own" |
| 1839 WMRV 105.7 NY Endicott, ID during talk |
| 1840 WRSF 105.7 NC Columbia, spot ment. Elizabeth City 877-0988 |

Thanks for Rich Shaftan for the tip. He seemed to be doing better with most Boston's in, making up for what he missed on June 17. It was neat that all 3 on 105.7 happened to be in stop sets at same time. No great surprise though, while there are no rules, generally you'll find contemporary stations breaking around :38 and :50 and I think every city has at least one CHR that does its only weather forecast at :45, out of spots into music (Buffalo's Majic 102.5 does do that, Kiss 98.5 at about :35-gc). Tried to get an ID for new 93.7 AC in Hartford but unsure. Nothing great this evening, just nice to have in November.

Around the dials update: CHEQ 101.1 Smiths Falls, Ontario (near Ottawa) has dropped ac for country. They now call themselves "Q-Country". WDKB 94.9 DeKalb, IL is on the air.

RALPH STROBEL - 106 E. DAVIDSON STREET - MUNCIE, INDIANA 47303

Equipment: McIntosh MR-78 FM Tuner - Stereo Probe 9 Antenna 37 feet above ground

| October 1990 | | 30 MS (November) | |
|---------------------------------------|---|------------------|---|
| 2 tr (GDP) | | ???? unID | 91.1 GA Savannah/Tifton? 609 |
| 2358 WJBT | 105.1 IL Shelbyville- ex-104.9 Mattoon-Decatur, o\$ | 160 | December 1990 |
| 8 MS | | 3 MS | |
| 0337 WNOR | 98.7 VA Norfolk | 551 | 0100 WYAV |
| 9 MS | | 5 MS | 104.1 SC Conway 560 |
| 0509 unID | 91.1 GA Savannah/Tifton? | 609 | 0121 WKGR |
| ???? KCCM | 91.1 MN Moorhead, Previous Es | 732 | 98.7 FL Fort Pierce 926 |
| 13 tr | | 9 MS | |
| 0600 CKNK | 101.7 ON Wingham, r\$ | 330 | 0500 unID |
| 0610 CIXK | 106.5 ON Owen Sound, r\$, "K-106.5" Canadian nx/wx | 380 | 91.1 GA Savannah/Tifton? 609 |
| 14 tr | | 9 tr | |
| 0300 WEPG | 91.1 SC Gaffney, g\$ | 410 | 2132 WJBT |
| 18 MS | | 13 MS | 105.9 IL Mahomet-Champaign-150 "The Heat" Urbana, r\$ |
| 0025 WNOR | 98.7 VA Norfolk | 551 | 10 MS |
| 23 tr | | ???? WCIE | 91.1 FL Lakeland 861 |
| 0200 WKIO | 106.7 KY Berea, k\$ | 202 | 13 MS |
| 23 GW | | ???? unID | 91.1 GA Savannah/Tifton? 609 |
| 0157 WQFX | 105.1 IN Roanoke, pr\$, (now "conducting programming tests," t mono) | 45 | ???? unID |
| 28 MS (EST) | | 551 | 91.1 GA Savannah/Tifton? 609 |
| 0458 WKGR | 98.7 FL Fort Pierce | 926 | ???? unID |
| 29 tr | | 202 | 91.1 GA Savannah/Tifton? 609 |
| 0202 WDKB | 94.9 IL DeKalb, r\$, "B-95" | 213 | ???? WSVH |
| (WQFX 94.9 OH Fairfield, off air) | | | 91.1 GA Savannah 609 |
| November 1990 | | | ???? WABR |
| 11 MS | | | 91.1 GA Tifton 612 |
| 0612 WKGR | 98.7 FL Fort Pierce | 926 | 14 MS |
| 23 tr | | | 0600 WNOO |
| 0200 WYBZ | 107.3 OH Crooksville, o\$ | 178 | 89.9 LA New Orleans, Previous Es 754 |
| (o/WBZ 107.3 IN Greensburg) | | | ???? unID |
| 0800 WKVK | 97.1 OH Coal Grove, ads | 187 | 89.9 ?? ? 777 |
| (o/WENS 97.1 IN Shelbyville-Indy) | | | ???? WNOO |
| 0827 WYEQ | 102.1 OH Marietta, r, ads | 210 | 89.9 LA New Orleans 754 |
| (o/WINT 102.1 OH Lima) | | | 15 tr |
| 26 GW | | | 0232 WAPQ |
| 2010 WQME | 98.7 IN Anderson, g\$, Equipment testing | 22 | 98.7 OH Crestline- "The Apple" Mansfield, rp\$ 150 |
| 27 MS | | | 17 MS |
| ???? KQWB | 98.7 MN Moorhead | 732 | 0720 KSMU |
| 28 MS | | | 91.1 MO Springfield, Previous tr 472 |
| 0152 WKGR | 98.7 FL Fort Pierce | 926 | 18 MS |
| 29 MS | | | ???? WMAW |
| 0354 WNOR | 98.7 VA Norfolk | 551 | 88.1 MS Meridian, Previous Es 570 |
| 29 GW | | | 19 MS |
| 0600 WQME | 98.7 IN Anderson, gr\$, first day of broadcast (on air 6 a.m. to midnight - good!!) | 22 | 0840 WMAW |
| 30 MS | | | 88.1 MS Meridian 570 |
| ???? KTSB | 91.1 SD Reliance-Pierre | 780 | 20 MS |
| ???? unID | 91.1 GA Savannah/Tifton? | 609 | 0659 KTSB |
| (??? = was asleep, and found on tape) | | | 91.1 SD Reliance-Pierre 780 |
| | | | 22 MS |
| | | | ???? KNTU |
| | | | 88.1 TX Denton, Previous Es 809 |
| | | | 23 tr |
| | | | 0354 WZOO |
| | | | 102.5 OH Edgewood, wx, ID 265 (WHDH 102.5 IN NewCastle, off air) |
| | | | 29 MS |
| | | | ???? KNTU |
| | | | 88.1 TX Denton 809 |
| | | | 30 MS |
| | | | ???? WJIS |
| | | | 88.1 FL Bradenton 892 |
| | | | January 1991 |
| | | | 1 tr |
| | | | 1500 WUEZ |
| | | | 103.5 IL Christopher- "EZ-103.5" Herrin-Marion, b\$ 248 |
| | | | 2351 WSWZ |
| | | | 103.5 OH Lancaster, o\$ 160 (o/WGRH 103.5 OH Hamilton-Cinci) |

Meteor Scatter Results:

| | | |
|-----------|---|---|
| 0/ 8 WNOR | "...Laura Marple from Hampton identified that sound..." | list of some happenings around the KCCM listening area... |
| 0/ 9 unID | "...Peach State Public Radio..." | 0/18 WNOR "...99 WNOR. Now you can..." |
| KCCM | "...and it's time now for a | 0/28 WKGR "...WKGR Fort..." |

- Continued -

M/11 WKGR man and woman talking: "...David, we've been dating for what? Fourteen wonderful years. Yeah, I think it's about time we talked about commitment. Aw, here we go again. I'm sorry, uh...in a zone here of some kind. I'm back, love of my life. Why is it we only talk about marriage when you're on your car phone? Well? On your way to the keys, huh? You know, if I didn't know better, I'd think you wanted to get disconnected. What? Bell South Mobility is expanding its calling area to include Key Largo and the rest of the Florida Keys by next February. Polly, I wanta ask you something. Yes, dear? You mean you can hear every word I say now? Yes, I do. Sorry hon, I gotta run. I'll give ya a ring next week. Oh, honey, a ring! No, a call. I'll give you a call next week. Oh! To find out how you can get crystal clear reception from Jupiter all the way to Key Largo, call Bell South Mobility at 1-800-225-8751. Hey, what's the deal with this reception? It'll be beautiful. We'll have it catered with a string quartet..." (Edited 90 sec. burst)

| | | |
|-----------|--|--|
| N/27 KQWB | "...twenty-two years of rockin' night at six right here on Peach State Public Radio..." | |
| N/28 WKGR | "...KGR..." | |
| N/29 WNOR | "...NOR..." | |
| N/30 KTSB | "...out of state corporation from...South Dakota if..." | |
| unID | "...in part by Phyllis and Norman Abramson of Macon..." | |
| unID | "...made possible in part by a grant from Savannah Foods and Industries, Inc., makers of Dixie Crystal Sugar..." | |
| D/ 3 WYAV | "...Conway-Florence..." | |
| D/ 5 WKGR | "...at 98.7 KGR..." | |
| D/ 9 unID | "...WABR...College - 91.7 WWET Valdosta State College, Valdosta..." | |
| D/10 WCIE | "...National Bank, the Tampa International Airport, Marriott Corridor, and that's in Tampa, of course, Admiral Drive, East Admiral Drive..." | |
| D/13 unID | "...from the Peach State Network..." | |
| unID | "...S Waycross...WABR Tifton Abraham Bal..." | |
| unID | "...We'll have details on these stories and more coming up in the Georgia news at 8:06..." | |
| unID | "...LaGrange, Columbus and South Georgia..." | |
| WSVE | "...the American Radio Company and all its marvelous adequacy Saturday (All DX on tape)" | |

Letters were sent to WYAV Conway, SC and WSVH Savannah, GA. The station manager at WYAV said, "Yes, that's us - WYAV Conway-Florence-Myrtle Beach." The manager of WSVH said, "The fact that you did hear an underwriting announcement from Savannah Foods, I feel certain that on the day in question, the signal you heard was indeed that of WSVH Savannah." I've heard at least a dozen mentions of Peach State Public Radio or other GA information on 91.1, but how can I tell if it was Savannah or Tifton? As far as I can tell, both WSVH and WABR must simulcast most of the time. However, I did hear three legal IDs mentioning WABR Tifton, and certainly both stations are capable of getting out by MS. Therefore, I have taken the liberty to count both. Can anyone help?

1990 was a good FM year for me. 173 new stations were found. Also note that two new stations were heard on January 1, 1991. This brings my total to 1900 FM signals heard in all. I hope to log 2000 by the end of 1991.

Meteor scatter was average during the Geminid showers in December. Note that many "off-shower" dates do produce good meteor scatter and IDs at times. There is no way of predicting which days will be good or bad. However, the August and December meteor showers seem to be best. Let's hope 1991 will also be a good year. 73-Ralph

Bill Nienajadly PO Box 2999 Clifton NJ 07015-2999 QTH: Ackerman Ave Clifton

Equipment; A radio, antenna and some wire

December bought crap as far as Im concerned, Instead of E-skip and meteor scatter it was tropes to New England and out to Lancaster PA. The meteor scatter was poor compared to last December and I did not observe ANY E-skip, though some did see ES to TV. Temps reached 68 degrees a few days ago, one would think it was April! Anyway here is my DX (its poor!)

Dec 1990

12 MS 0215 WDJX 99.7 KY Louisville "JX more music stationJack Andrews back..." 646

13 GW 0601(WYXR) 104.5 PA Philadelphia "Star 104.5"strict" ex WSNI -82

0645 WXPX 88.5 PA Philly,Freq. change ex 88.9 -82

Hope everyone else had better luck than I did...Hi!

Goodbxing! Bill

JEFF FALCONER - BOX 63 - CLINTON, ONTARIO NOM 110

Equipment: Magnum Dynalab FT-101A with Probe 9 at 27 feet with rotor

NOVEMBER 1990 DX**17 Trs**

1010 WAAQ 102.3 MI Big Rapids, ID in CKDK 205

1024 WGRY 101.1 MI Roscommon, k\$, Nor.

Michigan's tru country, WRIF nulled 166

1027 WJNR 101.5 MI Iron Mtn. Home Shopping 352

17 MS

1056 CHIQ 94.3 MB Winnipeg, r\$, strong burst

about minute and a half long, Winnipeg

light rock choice, Q-94 862

1244 CBW 98.3 MB Winnipeg, \$ CbC Stereo

Winnipeg" 862

28 Es

1656 WAYI 88.7 FL Ft. Myers, r\$ o/CIMX, good

on TV, only short while on FM 1158

DECEMBER 1990 DX**4 MS**

0034 KBJU 103.7 LA Lake Charles, "Bayou 104

will be glving away", prev Es 1107

Nothing too note worthy this time. A very short Es opening on FM on Nov 28 and a few new loggings via MS during the Geminids shower. Around 1400 on Dec 13 I had Es here with MUF of channel 4, hoping for a repeat of last years opening on Dec. 15. WGOR 92.1 St.Johns Mich. is now using Mix 92.1 for its nonID. It had been "The Ape".

JERRY MONROE KC2UT - 3135 FALLS ROAD - MARCELLUS, NEW YORK 13108

Equipment: JVC tuner, 10 element FM (Radio Shack), 35' misc. preamps, traps, filters (Rotor now OK)

CAR: Archer radio now has 2 150 khz filters

DECEMBER 1990**11 Tr**

2355 WPHB 105.9 PA Phillipsburg, sign off, back at 6AM

Classic Country, fair reception

2357 CKLA 106.1 ON Guelph, big band show, back into

Lite Favourites at Midnight

12 Tr

0010 WAEB 104.1 PA Allentown, Laser 104, Lehigh Vly

0028 WMXW 103.3 NY Vestal, Mix 103.3,EZ classics

0038 WHTZ 100.3 NJ Newark, Z100 Rockin, in and out

0049 CJEZ 97.3 ON Toronto, in Ithaca null, tough

0105 WDSL 93.7 PA Dallas, Interstate Radio Network

Pointed south, PA noted

0230 WSTW 93.7 DE Wilmington, now heard regularly

good indicator for tropes in that direction

JVC tuner has two 110 khz filters in it with 40 db adjacent channel selectivity. Also put in two 130 khz filters in Car radio. Note: make sure with digitally tuned radios that you replace 10.7 Mhz filter with 10.7s, not 10.67 or 10.73s. Big improvement with both-some local 10.8 Mhz image of 102.9 and 92.1 locals mixing. Narrow filters roll it out! Lots of meteor burst noted on 88.9 Mhz, local college stations off air. Received "91" FM Atlas for Xmas, how did I ever DX without it! Good work Bruce. This warm them cold weather makes for good DX, but I would rather enjoy snowy "ski" conditions. Tentative DX-pedition planned for Tampa, Florida in late January, interested?

73, Greg

Go Bills, Jerry

SOUTHERN FM DXDanny Buntin
1312 N. Skyline
Stillwater, OK 74075

FEBRUARY 1991

DEADLINE: 14th

SOUTHERN FM DX IS FOR REPORTERS FROM: AL, AR, AZ, CA, CO, DE, FL, GA, HI, KS, KY, LA, MD, MO, MS, NC, NM, NV, OK, SC, TN, TX, UT and also DC. Happy DXing in '91!

DXERS FIND LUCK WITH DECEMBER'S GEMINIDS WHILE ONE HAULS IN TROP FROM 895 MI.

Doug Allen, w2crs, P. O. Box 5646, Woodland Park, CO 80866

Equip.: Pioneer TX 9800(IF modified) & stacked Stereo Probe 9's at 25'

(Stations under 400 miles not reported unless new or remarkable!)

12/2 tr s

2041 KNID 96.9 OK Enid, ID 465

2058 KEYN 103.7 KS Wichita, ID 417

(KNID & Wichita stations can be heard daily

and won't be repeated this month.)

12/3 ms & tr s

0722 WGGZ 98.1 LA Baton Rouge, ID, on

3 sec. burst off back on ant.!

0906 KABL 98.1 CA San Francisco, many

bursts, occ. IDs

0944 KGUC 98.3 CO Gunnison, faded up

several mins.--best ever!

1141 KBUL 98.1 NV Carson City, "all over NV"

1145 KREC 98.1 UT Brian Head, NIL hrd in

several hours.

1238 KSJE 90.9 NM Farmington, NPR,c, "KSJE,

your classical beacon". 11th NM.

1327 KQNM 93.7 NM Gallup, wx & ID, a

most wanted 12 NV.

12/4 ms & tr s

0744 KTYR 98.1 AR Osceola, "oldies FM RTYR

Osceola"

0805 WZOK 97.5 IL Rockford "97-ZOK", 2 sec.

burst

0816 KAYQT 97.7 MO Warsaw, "...Warsaw your

children..."

1005 KIQX 101.3 CO Durango, ID, up 5

mins., CO #108

1009 KRSJ 100.5 CO Durango, wx, ID

1030 KRZT 98.7 CO Cortez, k,to P. Harvey

12/5 ms

0822 KIRKT 103.7 MO Lebanon, "in the

Lebanon area you may contact 532-" HELP!

12/6 ms

0659 KTCZ 97.1 MN Minneapolis hrd?

"Rocket KTCZ", new nonID?

0746 WMGNT 98.1 WI Madison several mentions

of Janesville

0920 KIFM 98.1 CA San Diego, loc.sports

1000 ???? 98.1 ? "the new KICKS 98.1 soft

and..."

1300 KRIC 98.1 UT Brian Head, NIL hrd. in

several hours

1304 KWQCT 98.1 MI Saginaw, ment of Tawas Cty

12/7 ms

0752 WCOZ 96.9 KY Paris "the new cozy 96.9,"

ad, 1111 mi.

0830 WRSA 96.9 AL Decatur, Huntsville ad

1046 mi.

0841 WDDJ 96.9 KY Paducah, "here in Paducah"

see 12/13

0945 WWJO 98.1 MN St. Cloud "98 Country"

12/8 ms

0816 KOOL 94.5 AZ Phoenix, "COOL FM"

12/9 tr

0650-0730 Good enhancement out to 400 mi.

east; e.g. KYEZ full Q

12/9 ms

0740 CBUF 97.7 BC Vancouver, FF, local ad

12/11 tr s -o/Pikes Peak using experimental 6

el. ant. at 3', azimuth 190 degrees,

elevation 20 degrees

0858 KANW 89.1 NM Albuquerque, previously

from Pikes Peak

0810 KNYNT 95.7 NM Santa Fe, k

1506 KRST 92.3 NM Albuquerque, "Crest Country"

1657 KIDI 103.3 NM Albuquerque, SS

1659 KZRR 94.1 NM Albuquerque, ads & 94 Rock"

NM #13

1900 KUNM 89.9 NM Albuquerque, ID, NM #14

2048 XHRLT 98.1 NL Monterrey, SS, this a

5 sec. burst

12/12 ms ex KNNS

0610 KPMY 96.9 MI Grand Rapids, ads 1037

0701 WLRW 94.5 IL Champaign, local news

0730 KCUAT 94.9 AB Edmonton, "Alberta

agricultural update"

0752 KIOK 94.9 WA Richland, ads, "OK-95"

1910 KDCY 97.7 TX Coltulla, SS

cont...

Now Cowboy Fans Can Hear Play-by-Play From Miles Away.

Hear the entire schedule on KSPI AM or FM beginning with Georgia vs OSU at LSU in Baton Rouge, Feb. 9.

Our new tower provides more power so OSU Baseball Fans as far away as Norman, Yukon, Enid and Pawhuska can tune in to Bill Platt and Rex Holt as they provide play-by-play coverage of every game ... home or away.

AM 780 **KSPI** FM 937
Stillwater, OK

SOUTHERN FM DX

12/13 ms
 0716 KSTP 94.5 MN St. Paul, promo 742
 0718 KKEZ 94.5 IA Ft. Dodge, ID 615
 0724 KQDY 94.5 ND Bismark, ad, new 568
 state on ms
 0737 KLLX 93.7 MN Minneapolis, "Classic 742
 Hits 93.7"
 0757 KKRL 93.7 IA Carroll, ID & wx 585
 0801 CBON-22t93.7 ON Geraldton, FF, no other 742
 possibilities?
 0817 WFCJ 93.7 OH Miamisburg, ID 1100
 0846 KIOK 94.9 WA Richland "OK95" 865
 0906 KSAN 94.9 CA San Francisco, "Bay area 942
 country favorite KSAN"
 0922 KFSD 94.9 ID Nampa, "more music 658
 KF-95"
 0926 KCMO 94.9 MO Kansas City, loc. wx 562
 1014 KIOK 94.9 WA Richland, 30 sec. burst!

Allen, cont.

12/13 ms
 1830 WPAD 96.9 KY Paducah, "97 FM WPAD" 881
 1849 WCOZ 96.9 KY Lexington, "new cozy 96.9 1111
 WCOZ"
 2310 KYSS 94.9 MT Missouls, ads 714
 12/14 ms
 1030 KING 98.1 WA Seattle "King FM" 1050
 12/16 ms
 0805 WRAY 98.1 IN Princeton, ID 960
 12/18 ms
 0749 WDFM 98.1 OH Alliance, ID, Freq. ms DX 1279
 record
 12/19 ms, grdwave
 0729 ? 95.5 "Go Rebels from Salt?Time?95"
 0746 KNEV 95.5 NV Reno, ad
 0815 KXL 95.5 OR Portland, road report
 2113 KPBI trans 103.9 CO Dillon? strong to WNW
 10/27 I had KBZE trans. in same direction!
 2210 KWNR 95.5 NV Henderson, ID

FEBRUARY 1991

Surprised to get 16 new ones this month! The Geminids shower was productive and peaked on the 13th for me. Also made seven 144 mhz contacts. I'm experimenting with a low antenna to reduce local signal strength. It's presently aimed south over the top of Pikes Peak (elevation about 20 degrees) and sometimes is better than the stacked Probes for bringing in NM tr s. I know several others use a low antenna for Es. Has anyone experimented with elevation for tr s or other modes? Regarding tr s, I am becoming suspicious that the classical tr s model (see p. 22-16 1989 ARRL Handbook) is a gross simplification and that most of the tr s I hear regularly from 400+ miles to the east is not simple tr s occurring from a 5-6 mile scattering volume height as depicted in ARRL Handbook. I speculate that it's more likely a more complex refraction and scattering occurring lower in the troposphere. Why else would I experience frequent good tr s across the continental divide to Grand Junction-Farmington-Gallup-Rock Springs up to 300 miles, but no 400 mile + tr s west that is so common to the east? On the other hand, I am able to work a couple of 400 mile Utah stations on 144 tr s regularly. Another problem with my proposed model is that there would be no 500 mile maximum limit to tr s which many have observed. So much for the propagation conundrums that fascinate me! Sure enjoyed VUD reports in 1990 and corresponding with many of you. Hope everyone has a good New Year including lots of DX. 73.

Keith D. Pugh, 227 Martin St., New Hope, AL 35760

Equip.: McIntosh MR78 tuner, Probe 9, RG-6 coax

11/28 tr

1914 WREB 88.3 LA New Orleans, ID 388

1918 WMFC 99.3 AL Monroeville 222

1921 WLTS 105.3 LA Slidell 360

1928 WNO 89.9 LA New Orleans

1933 WGNU 106.3 AL Brewton, k, ID 241

1946 WEZB 97.1 LA New Orleans, "B-97FM" ph #260-9797

12/1 gw

1100 WFFN 95.3 AL Cordova, k, ex 92.9 73

12/8 tr

1200 WMKZ 93.1 KY Monticello, k, \$, ID 180

12/9 gw/tr

2245 WJRX 107.9 TX E. Ridge, gr, \$, "RX-107 75

2302 WKYR 107.9 KY Burkesville, x98.5, ID 110

12/12 tr

0300 WNCI 101.3 IL Matton, k, ID 350

ms

03?? KFDI 101.3 KS Wichita, "Just by calling 436-1200 and entering category KFDI...KFDI country club hotline. And it's your 24 hr. info. source... The KFDI country club hotline from City Life and the Rangh Handler, KFDI."

09?? KDWB 101.3 MN Richfield, "KDWB, Richfield, Minneapolis-St. Paul"

gw(new/air)

1828 WJOR 101.5 TN St. Joseph, g, \$ 75

ms

2349 WJHT 99.9 PA Easton, "In Allentown..."

12/13 tr

36?? WPAY 104.1 OH Portsmouth 340

34

SOUTHERN FM DX

12/20 tr
 0003 KOOI 106.5 TX Jacksonville 520
 0026 KUCS 103.3 TX Nacogdoches, wx 530
 0030 KSCS 96.3 TX Ft. Worth, k, ID 620
 0031 KLUZ 95.9 AR Lake Village, ID, 310
 0039 KHFI 96.7 TX Austin, "K096.7", rs, ID, (ex-98.1)
 0051 KLBK 93.7 TX Austin, ID 710
 0055 KXIX 102.9 AR Sheridan, "KIX 103", k, \$

Pugh, cont.

12/20 tr
 0108 KKIX 103.9 AR Fayetteville, "KIX 104" 440
 0120 KNAN 106.1 LA Monroe, "Magic 106" 370
 0122 KPEZ 102.3 TX Austin, "Z-102"
 0133 KMGC 102.9 TX Dallas, "Magic 102" 602
 0143 KPTH 107.1 AR Marion, ads 230
 12/21 trs (WOCG Huntsville off)
 1500 WEPB 90.1 SC Greenville, ID 215
 12/28 ex gw
 1500 WNPB 102.9 AL Linden, s, \$ 175

FEBRUARY 1991

The normally annual Dec. Es was a no show for 1990. At least there was a very nice trop opening on Dec. 19 & 20 to fill in. KOYE Laredo was near my personal trop record. A far as distance, this is the best Dec. trop I've received, though most signals were quite weak.

Proposed Sporadic E skip Study

How frequently have you said to yourself or seen written in VUD, "why, why these same pests every opening." When TV or FM DXing most of us have probably noticed that certain stations (pests) show up all too often. I've noted many queries in VUD as to why this should be so. One reason is that the layer of ionization, whether for Es or ms, is most often around 50-60 miles in altitude. If you've been DXing very long, you've already ID'd most of the stations that will skip in when ionization takes place at that level. Less often, ionization takes place at higher or lower altitudes allowing for unusual skip distances (density of ionization also plays an important role as may other factors). For instance, the high velocity meteors of some showers may cause ionization at 70-75 miles allowing for 1400 mile plus reception.

Why your E skip pests are so often from the same geographic area is harder to explain. It is known that some areas experience more E skip than others. For instance, it is common year round near the equator. And Pat Dyer in San Antonio reports far more E skip than those at higher latitudes (possibly because he is a far better observer). There have been many attempts to explain sporadic E, the current favorite being wind shears that occur in the stratosphere. For several years a popular theory was that thunderstorm activity in the higher troposphere somehow induced sporadic E activity. Many still believe that tropospheric events may have some correlation with sporadic E.

If indeed, many of us receive pests from the same geographic area and not just the same approximate distance, and if this is a function of the location of sporadic E "cloud" formation and not the fortuitous location of certain stations relative to our location, then we DXers might make a contribution to understanding E "cloud" formation. What I am saying is that it is possible, though unlikely, I think, that there are certain "hot spots" where E "clouds" seem to form. It has been many times demonstrated on 144 MHz that by mapping paths, the E "cloud" formation is approximately half way between you and the received station. I want to use this path mapping technique for a different purpose-- to see if indeed your pests represent something unsporadic about sporadic E, namely, that "hot spots" occur regularly in certain geographic locations.

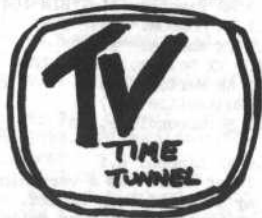
We can do this by making a graph of our pests and indicating the midpoint where the E "cloud" was. If many of us do this, and the paths are superimposed on a single map, we might find out that the midpoints of paths to our pest stations occur in specific geographic areas, "hot spots" for E "cloud" formation. If a consistent pattern of "hot spots" is observed and if we can rule out other factors (which will be a very difficult task) we will then be in a position to try to correlate meteorological, geographic, or other possible tropospheric or stratospheric events that influence E "cloud" formation.

I would be happy to provide a free grid map and instructions if you send me an SASE. Plot the paths of your E skip pests on the map and return it to me. I will superimpose all your individual maps on a single map which we will publish in VUD. If it appears there are "hot spots," we will attempt to get more specific information and rule out other factors! Here's something we as DXers can do to possibly further the understanding of E-skip propagation! There's not much DX happening on the bands right now, so you have plenty of time to take part in this study. It will only take a few minutes of your time. This study will have little value unless there are many contributors. Even if we don't find "hot spots," it will be a contribution to understanding E-skip propagation, another indication that it is, indeed, sporadic!

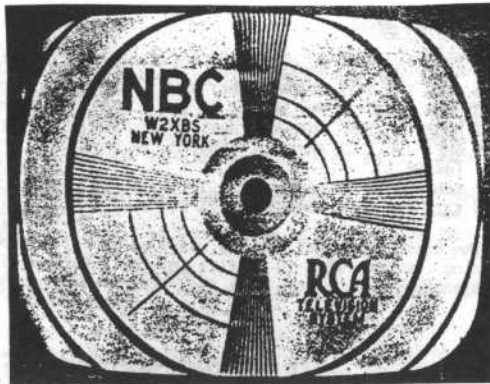
Doug Allen
 PO Box 5646
 Woodland Park CO 80866

35

" PATTERNS "



Edited by Tom Bryant
849 Todd Preis Drive
Nashville, TN 37221



[ABOVE]—Early test pattern of NBC/RCA experimental station W2XBS. This was likely used between 1928 and 1941.

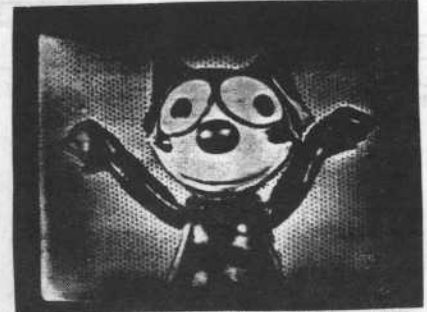
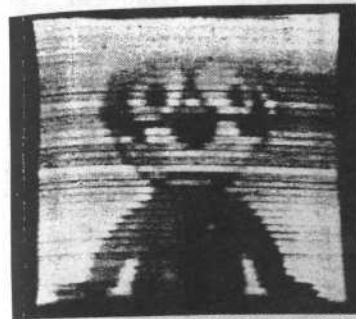
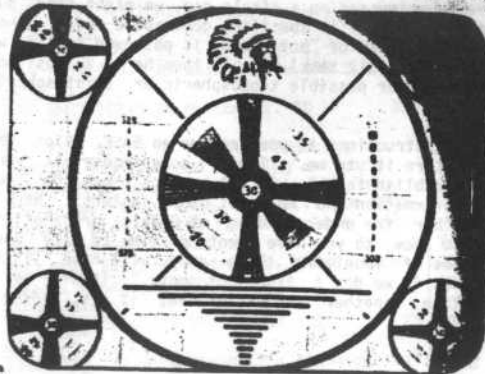


[ABOVE]—All test signals had two things in common; a circle to determine linearity and 'whiskers' to judge resolution. Some stations added call letters, city and channel. Others such as WPTZ in Philadelphia loaded their patterns with artwork.

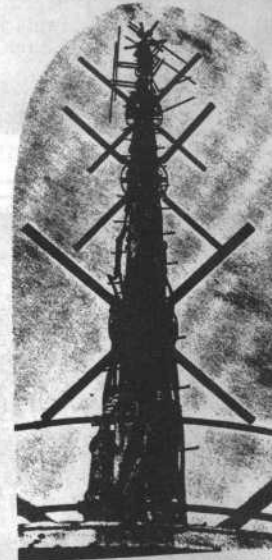
[BELOW]—This pattern was widely used in the U.S. and Canada. It was commonly known as the 'Indian Head'. Many stations modified it, replacing the Indian with their call letters. In this picture the right edge was purposely darkened to demonstrate an alignment problem.



"TIME TUNNEL" thanks Eric Voytko of McLean, VA for the loan of two books published in the mid-40's containing the illustrations featured this month in 'PATTERNS'. Many VUD readers don't remember anything other than color bars being used as test signals. Take it from a 38 year dx-veteran..it was a lot easier to ID stations with the old patterns than it is now. Many were quite distinctive, and virtually all had large, bold call letters that were easily identified under the worst of reception conditions.



FELIX THE CAT BECAME FAMOUS AS ONE OF THE FIRST IMAGES SEEN ON TV. THE LEFT PICTURE IS SCANNED ON 60 LINES; THE RIGHT ON 342 LINES.



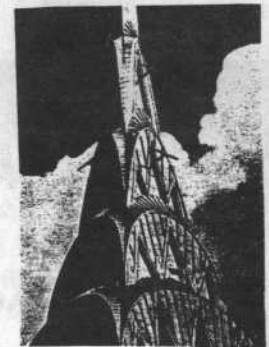
WNBT ANTENNA ATOP EMPIRE STATE BLDG.



MANY STATIONS USED PATTERNS SIMILAR TO THE TYPE SHOWN HERE WITH WPIX CALL.



THIS PATTERN RESEMBLED AN ARCHERY TARGET AND WAS USED BY WCBS-TV AND MANY OTHER CBS AFFILIATES.



WCBW 'SIDE-MOUNTS' ON CHRYSLER BLDG.

PHOTO NEWS

FEBRUARY 1991

Photos submitted to PHOTO-NEWS become the property of this column and will not be returned.

EDITED BY David J. Neman

SEND YOUR PHOTOS TO:

PHOTO-NEWS
12284 NICE ROAD
AKRON NEW YORK
14001-9529

Starting off is Jeff Kadet - Macomb, Illinois for equipment see December 1990 VHF-UHF DIGEST page 3.

K68BJ
Redwood Falls,
Minnesota
365 mile tropo
seen August 31 1990
at 0641 CDT



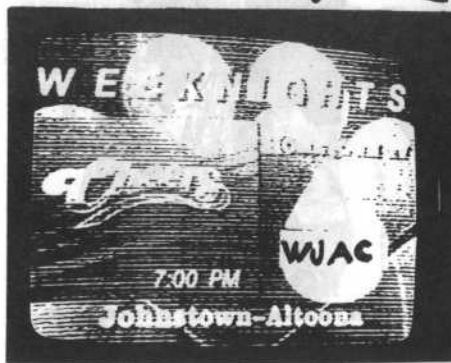
There will be more photos from Jeff in the next column.

Next our my DX photo from late last year. Equipment see January 1991 column.

CFKS-30
Sherbrooke, Quebec
350 mile tropo
seen October 30, 1990
at 0844 EST

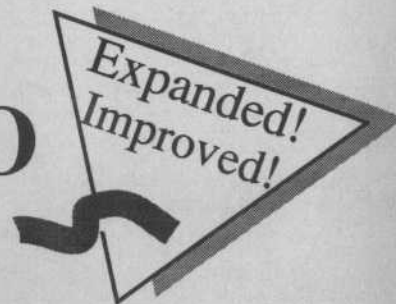
WJW-8
Cleveland, Ohio
198 mile tropo
seen November 22 1990
at 2100 EST

WJAC-6
Johnstown, Pennsylvania
181 mile tropo
seen November 22 1990
at 1830 EST



Till next time
DAVE

NRC FM RADIO LOG 1991 Edition



- * Over 300 pages
- * *Large* easy-to-read type
- * 3-hole punched
- * Popular 8 1/2" X 11" size

Columns include:

- Call Letters
- Location
- Antenna Height in feet
- Horizontal and Vertical Power
- Address
- Stereo Information
- Formats
- Networks
- Construction permit info

The Frequency section lists FM stations numerically for fast and complete station information.

The Call Letter section lists stations alphabetically so you can easily look up a station to determine frequency and station location.

The City/State section lists stations alphabetically by city for quick and easy reference.

Plenty of room is available for you to make your own personal notes.

Only
U.S. **\$19.95**
Canada \$20.95^{us}

Order Today!
NRC Publications
P.O. Box 164
Mannsville, NY 13661-0164
Credit card orders: (608) 423-4159