

# Vhf-Uhf DIGEST

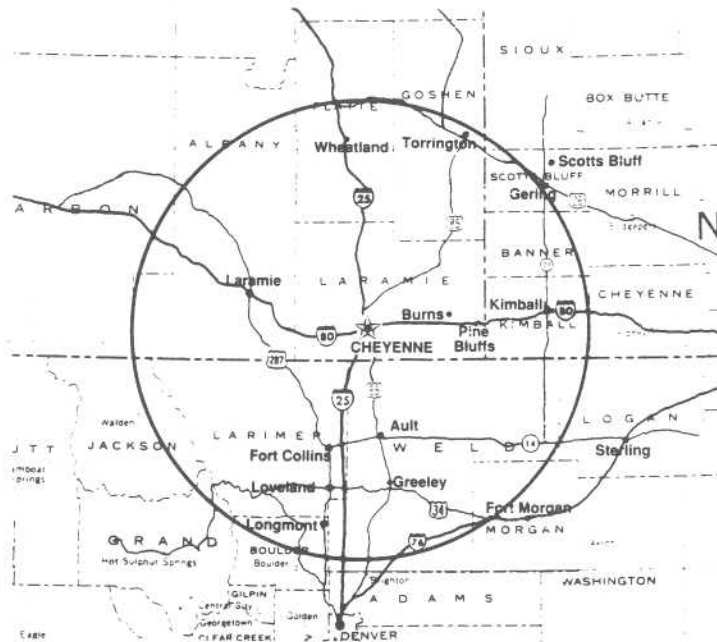
The Official Publication of the Worldwide TV-FM DX Association

FEBRUARY 1997

## COVERAGE



**K-MUS 102**  
The Best Country  
CHEYENNE • WYOMING



- K-MUS coverage map
- 50 microvolt per meter coverage contour (34 dbu)
- one inch = approximately 40 miles

Tower Co-ordinates No. Lat 41 07' 01"  
We. Lon 104 40' 07"



WORLDWIDE TV-FM DX ASSOCIATION  
P O BOX 17333 - ASHEVILLE, NC 28816 - U.S.A.

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.

**ANNUAL DUES:** \$24/year: U.S. addresses  
\$26/year\* to Canada  
\$38/year\* for airmail service to all other  
U.S. funds) countries. (\*Payable in U.S. funds)



first class mail

11/97  
BILL NOLLMAN  
35 NYE RD  
GLASTONBURY CT 06033

## WORLDWIDE TV-FM DX ASSOCIATION SERVING THE VHF-UHF DX ENTHUSIAST

THE VHF-UHF DIGEST IS THE OFFICIAL PUBLICATION OF THE WORLDWIDE TV-FM DX ASSOCIATION, DEDICATED TO THE OBSERVATION AND STUDY OF THE PROPAGATION OF LONG DISTANCE TELEVISION AND FM BROADCAST SIGNALS AT VHF AND UHF. W.T.F.D.A. IS GOVERNED BY A BOARD OF DIRECTORS: TOM BRYANT, GREG CONIGLIO, BRUCE HALL, DAVE JANOWIAK, AND BILL THOMPSON.

COMPTROLLER: DAVE JANOWIAK      EDITOR/PUBLISHER: BILL THOMPSON  
FM NEWS: GREG CONIGLIO      CONVENTION CO-ORDINATOR: TOM BRYANT  
TV NEWS: DOUG SMITH      PSB: BILL HEPBURN      SATELLITES: GEORGE JENSEN  
LAYOUT: BILL THOMPSON      COVER DESIGN: HARRY HAYES      PHOTOS: JEFF KRUSZKA  
EDITORIAL STAFF: TOM BRYANT, DANNY BUNTIN, GREG CONIGLIO, VICTOR FRANK,  
GEORGE W. JENSEN, JEFF KRUSZKA, TIM MCVEY, WILLIS MONK, FRED NORDQUIST,  
MATT SITTEL, DOUG SMITH, STEVEN SPRACHMAN, THOMAS J. YINGLING, JR.

### FROM THE STAFF:

**PEACHY!** Our 1997 convention in the 'Peach State' is beginning to take shape. As to dates, August 1, 2 and 3 are tentative but will likely become official soon. Host John Broomall is in the process of firming up details. Before making a final announcement, he would like to hear from WTFDA members regarding their preference of a meeting site in or near Atlanta, or in the North Georgia mountains near Cohutta. Any other suggestions, ideas, or questions are also invited. Please direct your comments to him at 715 Wood Terrace Court; Doraville, GA; 30340 (fax 770-840-7707). At present John does not have an e-mail address (he says his computer is 'possessed'). *Note: Convention coordinator Tom Bryant is giving John a hand with this informal poll, and some of you have already responded to an e-mail note on the topic. You may contact Tom at 102037.452@compuserve.com.*

**LOOSE ENDS:** During 1996 several proposals to improve and streamline the WTFDA were successfully implemented. Meanwhile, a few projects have gone adrift or fallen through the cracks. Jump-starting these programs is a high priority for 1997. Among areas to be activated are the cross-promotion arrangements with the major AM DX clubs; and a study to determine why our membership is dropping. An effort to get former members back on the club roster is being considered.

## WTFDA Mailbox

Worldwide TV-FM DX Association  
PO Box 17333  
Asheville, NC 28816-7333

February, 1997 Edited by: Matthew C. Sittel. E-mail: 76255.2171@Compuserve.com

### February, 1997 Renewal\$ Due:

Marty Barvinchak, James A. Brown, Jr., John D. Buehler, Dan Cashin, Steven Cornell, Dan Dankert, Bill Dulmage, Nathaniel Ely, Harry J. Hayes, William R. Hepburn, William Higgs, Malcolm P. Hunt, Clay Jackson, Frank Merrill, Russell Miller, Joe Perge, John Zeis.

### New members! Welcome!

Robbie Laird, Woods Hole, MA

\* Lenny Goldberg, Ashland, OR

Danny Buntin says that WAFR doesn't have a "message from the heart". In my opinion, Rev. Donald Wildmon is one of the heroes of the Christian faith, often single-handedly fighting the profanity and immorality that characterize TV (and sometimes radio) today. I subscribe to the American Family Association newsletter, and use Lifeline as my long-distance carrier, which donates 10% of my bill to the AFA. WAFR is a mainstream Christian station, carrying such popular programs as "Focus on the Family". While TV Guide and Time might attack WAFR, I don't believe that the VUD should become a political or anti-Christian gossip sheet. If WAFR is cramping your DXing style, that's one thing, but please leave your hatred against the so-called "religious right" out of it. On the other hand, the "Family Radio" network and TBN television are hotbeds of false teaching that deserve to be criticized, albeit without hatred, please.

Next Buntin attacks pirate radio as further infringing on his right to DX. What would be wrong with having hundreds or even thousands of new stations to try and ID? Local or semi-local LPFM's could be nulled if necessary. I, for one, am ready to queue up at a moment's notice with my \$6,000, if low power FM becomes legal. The music I enjoy is not on the radio at all (50's and 60's doo-wop, R&B, gospel, rockabilly, mainstream jazz, and klezmer), at least not around these parts.

The thing that is hurting DX around here is translators. This is a hilly area, and so every broadcaster thinks they need a high-powered translator in every town. One station has 50 of them, effectively rendering the educational band useless. They all gang up their translators around their primary signal and make whole sections of the FM band unusable for DX.

What can we do about all this? We can buy more sophisticated equipment, we can move to the west coast of Vancouver Island, or we can dust off the old stamp or coin collection. But let's not find scapegoats to blame for the challenges of our hobby.

Mike Sanburn sends word of the 1997 IRCA Convention, to be held July 25-27, 1997 at the Holiday Inn Bristol Plaza in Costa Mesa, CA. Registration fee is \$35, and you can contact Mike for more information at PO Box 1256, Bellflower, CA 90707, or call Mike evenings at (310) 614-1444.

Also, if you'd like a sample copy of IRCA's publication, DX Monitor, send one first-class postage stamp to IRCA HQ, PO Box 1831, Perris, CA 92572. Thanks to Mike for this information!

That's all for this month. Until next time.....73s Matt.

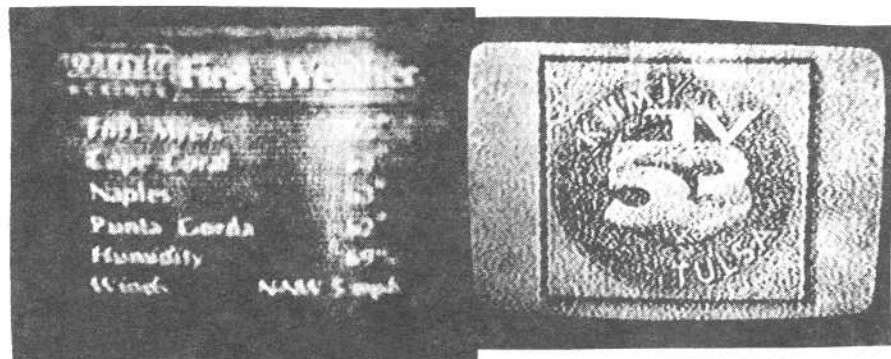
# PHOTO-NEWS

Jeff Kruszka, Editor  
5024 S. Braxton Ave.  
Baton Rouge, LA 70817

February 1997

Photos this month from yours truly:

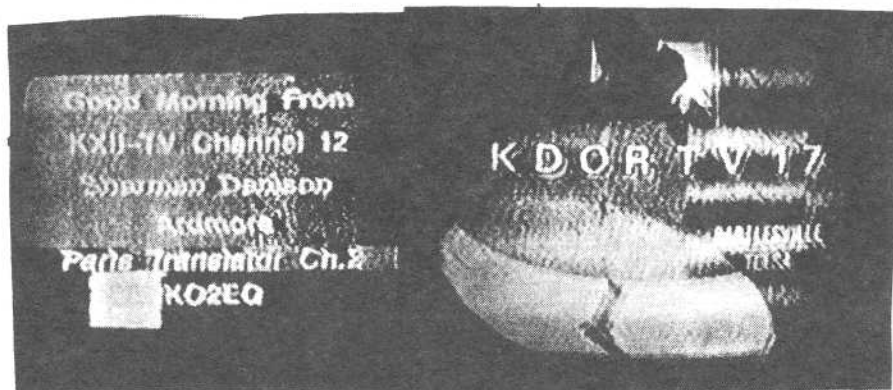
Equipment: 1992 Zenith "Sentry 2" 13" color TV, Channel Master 4228A screened 8-bay w/RDX Labs UA-900 preamp for UHF, Channel Master 1114 Crossfire w/RDX Labs UA-702 preamp for VHF, both @20 ft. AGL. DX videotaped w/Sony Handycam model CCD-TR91.



WINK-11 Ft. Myers, FL  
625 mi Tr seen 10/20/96  
@2216 CST

caught while local K11TT blinking  
on and off for 5 sec each

KWMJ-53 Tulsa, OK  
480 mi Tr seen 8/4/96  
@0700 CDT



KXII-12 Ardmore, OK  
430 mi Tr seen 8/4/96  
@0617 CDT

KDOR-17 Bartlesville, OK  
515 mi Tr seen 8/4/96  
@0800 CDT



EDITED FOR THE 'VHF/UHF DIGEST' BY TOM BRYANT,  
849 TODD PREIS DR., NASHVILLE, TENNESSEE, 37221

Several readers have requested another reprint of a bulletin from the WTFDA's predecessor, The American Ionospheric Propagation Association. Pardon the poor reproduction, but keep in mind that the original copies from a mimeograph machine didn't look all that great in the first place. Read on for news of 40+ years ago.

AMERICAN IONOSPHERIC PROPAGATION ASS'N  
Volume 3, Number 8

Aug. 6, 1956

FCC News.....  
New TV Grants:

WMAZ-TV Ch.2	Springfield, Ill.	100Kw.	Visual-Aural	Compiled by Art Collins
Ch.2	St. Paul, Minn.	50Kw.	50Kw.	Applications:
Ch.4	New Orleans, La.	100Kw.	50Kw.	13 Bureha, Cal.
WRAL-TV Ch.5	Raleigh, N.C.	100Kw.	50Kw.	3 Salem, Ore.
WIRL-TV Ch.8	Peoria, Ill.	315Kw.	158Kw.	9 Aberdeen, S.D.
Ch.8	Kalispell, Mont.			10 Vail Mills, N.Y.
Ch.8	Milliston, N.D.			32 New Orleans, La.
Ch.10	Corpus Christi, Tex.	212Kw.	106Kw.	Call Letters Assigned
Ch.14	Oxford, Ohio.			2 KOTI-(TV) Klamath Falls
Ch.40	Baton Rouge, La.			from KFUI-TV.
Ch.58	Greenfield, Mass.	18.2Kw.	9.77Kw.	5 WRAL-TV Raleigh, N.C.

Ch. Shift  
KOLF-TV Butte, Mont. to 4 from 6

New TV's on in past month.  
WESH-TV ch.2 Daytona Beach, Fla.  
WISC-TV ch.3 Madison, Wis.  
CFCL-TV ch.6 Timmins, Ont. Canada.  
WTVV ch.9 Dupelo, Miss.  
CFGY-TV ch.13 Charlottetown, P.E.I.  
WTRI ch.35 Albany, N.Y.

KDIX-TV ch.2 on about Oct. 1st. CBS-TV  
(KDIX-TV is in Dickinson, N.D.)  
WQIT-TV ch.7 Miami, Fla. testing as of  
now and plans July 29th start.  
KUAN-TV ch.8 Agana Guam. start 8/5/56.  
WELP-TV ch.18 Elmira, N.Y. start 9/15/56  
WAIN-TV ch.40 Anderson, S.C. ABC-TV 7/15/  
WHTF-TV ch.3 Wilmington, N.C. Cancelled  
their CP & call deleted.

Aug TV-DX Test. Arranged by Art Collins.

CJCB-TV Ch.4 Sydney, Nova Scotia. Will be on Sunday morning Aug. 26th.  
starting at 3:00 to 4:00 A.M. EST. Test pattern and 400 cps. tone.  
Will be running 180 Kw. in a S.W. direction of Sydney.  
Mail reports to R.J. Norton, P. Chief Engineer. (Try for them)

Art Collins 68 Amber Street Buffalo 20, N.Y.

New Members... Addresses:

Bernard K. Rauch 502 East Kansas Ave. Peoria, Illinois	John B. Clark 300 5th St. Rock Island, Ill.	Charles Rayner Jr. P.O. Box 450 Marianna, Arkansas
James Howarth 84 Mower St. Worcester 2, Mass.	Frank Greene 504 W. Second St. Roswell, New Mexico	Ed Hepp 4512 N.E. 37th Ave. Portland 11, Oregon
Ghislain Girard 248 Couture Str. Arvida, Quebec-Can.	Ivon Harris 10 N. Hillside Ave. Chatham, New Jersey	Carlo Mowington Box 427 Swoitzer Rd. Uniontown, Ohio
Bill Eckborg R.R. #2 Walnut, Illinois	Wayne Blanton Box 23 High Falls, New Mex. Rono, Nevada	Russell R. Cain 930 Evans Ave. Gallipolis, Ohio

Larry W. Vohorn  
1120 Allison Avenue  
Speedway 24, Indiana

Charles F. Hill  
827 4th Avenue  
Gallipolis, Ohio



Many of the items listed in this column are taken from the publication:  
**M Street Journal - P.O. Box 1479 - Madison, TN 37116-1479**  
 PHONE (615) 865-1525 FAX (615) 865-2598

### KEY:

& satellite programming  
 AF: new freq. allocation **accepted** for filing for a new FM license  
 CC: **call change/new** calls assigned  
 CL: **city of license** change granted  
 CO: new xmttr **co-ordinates**  
 CX: a CP has expired, and is cancelled  
 C1,C2, etc: change in class status  
 DA: **directional antenna**  
 DE: calls **deleted**, license returned to FCC  
 FC: **station format change**

GA: **granted amendment** to table of FM allocations  
 GE: station was **granted extension** of a CP  
 GX: **granted** replacement of expired CP  
 LC: filed for license to cover (for new str.)  
 MC: **multiple-city** legal ID  
 NC: **no change** yet, on a reported pending grant/change.  
 ND: **non-directional**  
 NO: station is **not** on the air  
 NS: a **new station** granted a license  
 OSA: one-step application  
 NW: **new station** signs on the air  
 PA: **proposed amendment** to change table of allocations  
 PC>: a **power change** (increase)

PC<: a **power change** (decrease)  
 PG>: **power change granted** (increase)  
 PG<: **power change granted** (decrease)  
 QC: **frequency change** for this station  
 QG: **frequency change granted**  
 RA: **station returns** to the air  
 RE: **station requests extension** of a CP  
 RX: **station requests** re-instatement of an expired CP  
 SG: **slogan change** or update  
 SI: **station is silent**  
 XA: **dismissed amendment** to the table of FM allocations  
 XC: **station changes** xmttr site  
 XG: **station granted** a transmitter (xmttr) site change



### UNITED STATES

#### ALABAMA:

Bay Minette: WAVH106.5 CL to Daphne, AL granted  
 Birmingham: WZRR99.5 NC to 100 kW, 1014' class C, GX  
 Birmingham: WYSF 94.5 CC (ex WMXQ), "Soft Rock"  
 Brantley: WDHT104.3 NO-GE  
 Butler: WQGL 93.5 NC to 32 kW, 610 ft, C2, GE  
 Eva: WRJL 99.9 NW, southern gospel  
 Florence: WQLT107.3 CX CP for C1, 93 kW, 1017'  
 Jackson: WHOD 94.5 PG> 30 kW, 640 ft, DA  
 XG: 31-28-59 / 87-47-27  
 Thomaston: \*\*\* 97.7 GA: add class A  
 Troy: W242AF96.3 NS-27w: WKKXN 95.9

#### ALASKA:

Barrow: KBRW 91.9 LC  
 Houston: KADX 94.3 OSA to 94.7 - C2, 50 kW, 371 ft, XG: 61-29-03 / 149-45-52  
 Juneau: KAMT 100.7 NO-RE  
 Ketchikan: KGTW106.7 FC to country  
 Valdez: \*\*\* 93.3 PA to add class A

#### ARIZONA:

Holbrook: K212EM90.3 NS-250w: WAFR 88.3 MS  
 Prescott: KPUB 89.3 CC (NS)  
 Wilcox: \*\*\* 92.5 GA to add class C3  
 Wilcox: KWXC 98.3 GA: to 104.9 - C3  
 Yuma: \*NS 91.9 25 kW, 213 ft.

#### ARKANSAS:

Bald Knob: KKSJ 107.1 PC> 19 kW, 305 ft, C3  
 DeWitt: KDEW 96.7 QG to 97.3, C2, 50 kW 272 ft, XG: 34-25-52 / 91-26-08  
 Forrest City: KARH 88.1 12.5 kW, 279 ft (AFA) CC (NS)  
 Jonesboro: KAOG 90.5 LC  
 Noke: KMZX 106.3 NC to 50 kW, 492 ft, C2, RE

#### ARKANSAS:

Malvern: KISI 101.5 FC to Jones oldies (&)  
 Mena: \*\*\* 105.3 GA for class C3  
 Pangburn: \*\*\* 99.1 PA for class A  
 Wilson: KAFW103.7 NO-RE

#### CALIFORNIA:

Avalon: KRCI 92.7 PG> 6 kW  
 Bakersfield: KTQX 90.1 PC< 570w, 3621 ft, class B  
 XC: 35-27-11 / 118-35-25  
 Bakersfield: KSMJ 96.5 CC (ex KHIS), FC to smooth jazz  
 Bakersfield: KCWR107.1 CC (ex KTIE), adds Real Country (&)  
 Calexico: KQVO 97.7 PG> 6 kW, 305 ft.  
 Central Vly: KNNN 99.3 NC to 4.2 kW, 1545', C2, GE  
 Coalinga: KNGS100.1 NO-RX  
 Dunnigan: KLNA 105.5 RA w/ Spanish contemporary  
 E. Porterville: KOJJ100.5 NC to 2.1 kW, 1101', B1, RE  
 Escondido: KOWF 92.1 FC to classical (&) (S. Diego)  
 Fairfield: \*NS 91.5 75w, 649 ft.  
 Fairmead: \*NS 91.1 15 kW, 256 ft.  
 Felton: KHIP 93.7 NO-RE  
 Ferndale: KAJK 99.1 QC from 99.3, now C1  
 PC> 6 kW, 1715', XC: 40-30-03 / 124-17-08  
 Fresno: KVSF 101.1 CC (ex KRBT), "Star 101"  
 Greenfield: KSEA 107.9 NO-GE  
 Indio: KCRY89.3 PG> 3 kW, class B1  
 Lindsay: KZPO 103.3 NO-GE  
 Livingston: \*NS 89.1 5.8 kW (v), 233 ft.  
 Los Angeles: KIBB100.3 PC> 15 kW, 1125 ft, DA  
 XC: 34-07-08 / 118-23-20  
 Madera: KMMM107.3 OSA to class B1, QG to 107.1, PG> 9.9 kW, 515 ft, XG  
 Morro Bay: KWWW 99.7 NC to 265w(cir), 1532 ft. DA, XC, RE

**KQLH** **ME!**

## FM NEWS

### California:

Orland: KRQR106.7 FC to modern rock (Chico)  
 Paso Robles: K295AG 106.9 NS-40w(v): KFRB 91.3  
 Paso Robles: KDDB92.5 NC to 4.8 kW (cir), 1486', RE  
 Quincy: KSPY 100.3 NW, variety (ranging from country, to jazz, among others)  
 San Luis Obispo: KZOZ 93.3 NC to 23 kW, (cir), 1548 ft., XC, RE  
 San Mateo: KCSM 91.1 PC< 11.5 kW (cir), 371 ft  
 Santa Ana: KWIZ 96.7 FC to romantica (Anaheim)  
 Santa Rosa: K238AF95.5 NS-250w(v), DA: KRAZ (?)  
 Santa Ynez: KAGA105.9 NO-RE  
 Selma: K211DA90.1 NS-120w(v): KMRO 90.3  
 Stockton: KJQN 89.5 CC (ex KSJC)  
 Thousand Oaks: KNJO 92.7 PG> 1.7 kW, 630 ft.

**KZOZ 93.3**  
*The Central Coast Classic*

### COLORADO:

Estes Park: KEZZ 102.1 CC (NS)  
 Montrose: KKXX 94.1 PC> 100 kW, 1883 ft.  
 Salida: \*\*\* 93.7 PA for class C3  
 Vail: KPRE 89.9 inc. to 351 ft.  
**CONNECTICUT:**  
 E. Lyme: WXZR 98.7 FC to Jones adult alter. (&)  
 Pawcatuck: WKCD107.7 FC to Jones smooth jazz (&)

### DISTRICT OF COLUMBIA:

Washington: WETA90.9 PG> 15 kW, 538 ft.

### FLORIDA:

Arcadia: WWRZ 98.3 NC to 50 kW, 459 ft, C2  
 XC: 27-28-47 / 81-47-58  
 Belle Glade: WBGF 93.5 FC to Jones country (&)  
 DeFuniak Sp: WAKJ91.3 NO-GX, LC  
 Gainesville: W216AY91.1 NS-10w(v): WPCS 89.5  
 Graceville: WYDA101.7 LC  
 Holly Hill: WANX 88.1 NO-RE  
 Homestead: WXDJ 95.7 NC to 40 kW, 548 ft, DA, C2  
 CL of N. Miami, XC, RE  
 Key Largo: WZMQ103.9 QG to 106.3, 430 ft  
 LaBelle: WKZY 92.5 PG> 8 kW, 161 ft, C3  
 XG: 26-44-23 / 81-27-44  
 Lehigh Acres: WCKT 107.1 PC> 28.5 kW, 649 ft.  
 Marathon: WKTS 97.7 OSA for 456 ft, XG: 24-40-01 / 81-25-00  
 Mexico Bch: WSHF 99.3 FC to modern rock (&)  
 Naples: \*NS 88.1 16 kW (v), 151 ft.  
 Nocatees: \*\*\* 105.3 GA: add class A  
 Port St. Joe: WEBZ93.5 CC (ex WEBZ), FC to standards // WDIZ 590 Panama City  
 Punta Gorda: WIKX92.9 PG> 100 kW, 476 ft, C1  
 XG: 26-53-49 / 82-14-22  
 Sarasota: WSMR 89.1 adds SKY cont. Christian (&) CC (ex WAYG)  
 Springfield: WYOO101.3 FC to talk, adds Stan Major  
 Tampa: WUKS100.7 CC (ex WUSA) "Kiss 100.7" NC to 1210 ft, class C, GE  
 Tice: WAAD 93.7 NO-GE  
 Watertown: WQLC102.1 adds Hot Country (&)

## FEBRUARY 1997

### GEORGIA:

Ashburn: WFFM105.7 FC to adult alternative (&)  
 Atlanta: WZGC 92.9 drops Greaseman mornings  
 Bainbridge: \*\*\* 101.9 PA: add class A  
 Bolingbroke: WDBS102.1 SI, this station came on the air without permission from the FCC  
 Clayton: WRBN104.1 CC (ex WQXJ)  
 Coosa: WSRM 95.3 NO-CX-DE, RX  
 Cordele: WKKN 98.3 reported SI  
 Dahlonega: WKHC104.3 NW, Real Country (&)  
 Dahlonega: WNGU 89.5 CC (NS)  
 Dalton: WYU104.5 PG> 6 kW  
 Gibson: \*NS 94.3 AF  
 Glennville: WKIG 106.3 PC> 6 kW  
 Griffin: W290AG105.9 NS-27: WYFK89.5 Columbus  
 Harlem: WCHZ 95.1 FC to 70's oldies (&) (Augusta)  
 Reidsville: WRBX104.1 PG< 2.4 kW, 364 ft.  
 Ringgold: WMPZ 93.7 FC to urban gold (&)  
 Savannah: WZAT 102.1 dec. to 1305 ft.  
 XG: 32-03-32 / 81-17-57

Statenville: \*NS 97.5 6 kW, 328 ft.  
 Sylvester: WRXZ106.1 FC to adult alt // WFFM 105.7  
 Toccoa: WSTE106.1 CC (ex WLET), FC to country also adds After MidNite  
 Valdosta: WYZK 96.7 NC to 50 kW, 492 ft, C2, RE adds Moby

### HAWAII:

Lihue: \*NS 88.9 60 kW, 364 ft.

### IDAHO:

McCall: \*NS 98.3 AF  
 Moscow: \*\*\* 103.3 PA to add class A  
 Pocatello: KMG1 102.5 FC to rock "Rock 102"  
 St. Maries: \*\*\* 92.1 PA for class A  
 Sun Valley: KECH 95.3 OSA to class C1, 5.9 kW, 2152'  
 Wallace: \*NS 100.7 AF  
 Wallace: \*NS 97.5 AF

### ILLINOIS:

Ava: WXAN103.9 PC> 2.9 kW  
 Carlyle: WCXO 96.7 NO-RE  
 Carthage: WZBN 92.1 reported SI  
 Chicago: WMBI 90.1 NC to 100 kW (cir), 443', GE  
 Crest Hill: WCCQ 98.3 PG> 3.6 kW, 426 ft, XG: 41-26-32 / 88-12-15  
 Gibson City: WGCY106.3 PC> 6 kW, 321 ft.  
 Mt. Vernon: WAPO 90.5 LC  
 Oregon: WOXM106.1 NO-GE  
 Pekin: WCIC 91.5 PG> 50 kW, (cir), 331', DA  
 Pittsfield: \*NS 91.7 AF (Illinois Bible Inst.)  
 St. Joseph: WGNJ 89.3 NO-GE  
 Watseka: WGFA 94.1 PG> 50 kW, 364 ft  
 XG: 40-47-37 / 87-45-17

### INDIANA:

Bremen: WHPZ 96.9 CC (ex WYEZ), FC to contemporary Christian (South Bend), "The Pulse"  
 Charlestown: WLVX104.3 CC (NS)  
 Connersville: WIFE100.3 XC: 39-38-15 / 85-05-45  
 Corydon: WFSR107.7 NC to 31 kW, DA, class B, RX  
 Crawfordsville: \*NS 91.3 2.2 kW (v), 194 ft.  
 Crown Pt: WXR103.9 CC (ex WZCO)  
 Evansville: \*NS 107.5 2,350w, 518 ft, DA  
 Indianapolis: WHHH96.3 PC> 3.3 kW, 285 ft.  
 Jeffersonville: WQMF95.7 FC to classic rock (Louisville)

**FM NEWS**

**Indiana:**

Madison: \*\*\* 101.1 PA to add class A  
 Mishwaka: W300AL 107.9 NS-4w: WQKO 91.9 Howe  
 Seymour: WJLR 91.5 CC (ex WKLO)

**IOWA:**

Atlantic: KXKT 103.7 PG> 100 kW(h), 1014ft  
 XG: 41-18-40 / 96-01-37, CL to Glenwood, IA  
 Belle Plaine: KXPW95.5 NO-RX  
 Bettendorf: KORB 93.5 PG> 6 kW  
 Burlington: KKMI 93.5 PG> 6 kW  
 Charles City: KCHA95.9 FC to Jones a/c (&)  
 Madrid: \*NS 96.1 2.5 kW, 515 ft, DA  
 Marshalltown: K218CE 91.5 NS-100w(v): KAWZ 89.9 ID  
 New Hampton: KCZE 95.1 adds Jones a/c (&)  
 Osage: KCZY 103.7 adds Jones a/c (&)  
 Osceola: KJJC 106.9 FC to sports, "The Jock"  
 Red Oak: KCSI 95.3 NC to 20.5 kW, 364 ft, C3, RE  
 Waukon: KNEI 103.5 QC from 103.9, PC> 9.3 kW  
 574 ft, XC: 43-18-28 / 91-27-18

**KANSAS:**

Horton: KAIR 93.7 adds CD Country (&)  
 Salina: \*NS 88.5 46 kW, 394 ft, DA (A.F.A.)  
 Wichita: KZZD 90.7 CC (ex KIBN)



**KENTUCKY:**

Benton: WAAJ 89.7 LC  
 Brodhead: \*\*\* 101.9 PA to add class A  
 Elkhorn City: WPKE 103.1 NC to 320w, 1397', DA, RE  
 Frankfort: W202AZ 88.3 NS-19w: WYFG 89.3 SC  
 Greenville: WKYA105.5 CC (ex WWHK), FC to  
 Jones Country (&)  
 Hartford: WKHB106.3 adds CD Country  
 Mt. Vernon: WXJJ 102.9 NO-CX-DE  
 Paducah: WGCF 89.3 NW, religion  
 Russellville: WJZC 101.1 CC (ex WJCE), "Jazz"  
 Stanford: \*\*\* 101.9 PA to add class A  
 Whitley City: WHAY105.9 GA: to 98.3 - A

**LOUISIANA:**

Abbeville: KROF 105.1 SG "105-1 The Gator"  
 Alexandria: KOUZ 89.9 NO-RE  
 Alexandria: KFAD 93.9 SG "Magic 93.9"  
 Basile: KSIG 102.1 OSA to C1, 100 kW< 981 ft,  
 XG: 30-05-13 / 92-22-54  
 Baton Rouge: WYNK101.5 drops "Wink" slogan except  
 for occasionally  
 Baton Rouge: WJFM 88.5 PG> 30 kW (cir), class C2  
 Boyce: KBCE 102.3 SG "102 Jamz"  
 Coushatta: KSBH 94.9 SG "94.9 The River"  
 Donaldsonville: KKAY 104.9 FC to oldies (&)  
 SG "Bayouland Oldies 104.9"  
 Dry Prong: KVDP 89.1 PC> 4.5 kW  
 Erath: KPEL 107.7 NC to 107.9, 100 kW, RE  
 Franklinton: KAKA 98.9 LC  
 Homer: KZXB 106.7 NO-GE  
 Jonesville: \*NS 105.1 AF  
 Kentwood: WEMX 94.1 FC to urban (Baton Rouge)  
 Lake Charles: KZWA 105.3 SG "Vibe 105"  
 Natchitoches: KORI 104.7 SG "StarCountry 104.7 KORI"

**FEBRUARY 1997**

**Louisiana:**

Maurice: KFXZ 106.3 SG "Z106"  
 Minden: KASO 95.3 FC to a/c, PA: to class C2,  
 95.7, from 95.7 - A  
 Monroe: KYFL 89.5 PC> 25 kW, 377 ft, C2  
 XC: 32-33-08 / 92-08-33  
 Natchitoches: KZBL 95.9 PA: to 100.7 - A  
 Rayne: KCRL 106.7 SG "TrueCountry 106.7 KCRL"  
 Washington: KNEK104.7 SG "104 Jamz" or "Power 104"

**MAINE:**

Pittsfield: WJXC 99.5 CC (ex WPBC)  
 Winslow: WWA95.3 5.4 kW, 348 ft (Light of Life)  
 CC (NS)

**MARYLAND:**

Lexington Park: WMDM 97.7 adds WW1 country (&)

**MASSACHUSETTS:**

Boston: WKLB 96.9 PC> 22.5 kW, 735 ft  
 XC: 42-18-27 / 71-13-27  
 Great Barrington: WAMQ 105.1 PG< 730w, 918 ft, DA  
 XG: 42-09-36 / 73-28-48  
 Lowell: WOAZ 99.5 PG> 26 kW, 666 ft,  
 XG: 42-39-14 / 71-13-02  
 Northampton: WEIB106.3 NO-RE

**MICHIGAN:**

Baraga: \*NS 104.3 AF  
 Beulah: WBVE 92.1 NO-GE  
 Detroit: WWWW 106.7 adds After MidNite  
 Flint: WDZZ 92.7 adds Tom Joyner  
 L'Anse: WCUP106.1 NO-GE  
 Leroy Twp: WLGH 88.1 CC (NS)  
 Muskegon: WSHZ107.9 PG< 15 kW, 420 ft,  
 XG: 43-16-38 / 86-20-05

Newberry: WNBV 93.7 FC to adult contemporary  
 Oscoda: WCMV 95.7 CC (NS)  
 Pentwater: WMOM103.1 CC (NS)  
 Traverse City: WNMC 90.9 QC to 90.7, 600 w  
 538 ft, XG: 44-46-36 / 85-41-02  
 Whitehall: WKBZ 95.3 FC to urban "Power 95.3"

**MINNESOTA:**

Mankato: \*\*\* 94.1 PA to add class A  
 Pipestone: KISD 98.7 NC to 1014 ft, class C, RX  
 Tracy: KARL 105.1 PC> 45 kW, 502 ft, C2

**MISSISSIPPI:**

Brooksville: WAJV 98.9 adds southern gospel (&)  
 Clarksdale: WAID 106.5 PG> 50 kW  
 Clarksdale: WWUN101.7 NC to 101.5, C3, 25 kW,  
 328 ft, XC, GE  
 Long Bch: WJZD 94.5 inc. to 321 ft.  
 Natchez: W220BN91.9 NS-13w: WYFG 89.3 SC  
 New Albany: WWKZ 103.5 dec. to 587 ft, C1  
 XG: 34-51-44 / 89-52-42, CL: Como, MS  
 Oxford: WQLJ 93.7 NC to 13 kW, 456', GX

**MISSOURI:**

Campbell: \*NS 107.5 AF  
 DeSoto: KDJR 100.1 PG> 4.8 kW, 371 ft, DA  
 Ironton: KYLS 92.7 NC to 92.9, 770w, RX  
 Joplin: KIXQ 102.5 CC (ex KJKT), FC to  
 country "Kicks 102.5"  
 Kennett: \*NS 89.9 1 kW, 164 ft (AFA)  
 Kirksville: KHGN 90.7 CC (NS)  
 Lebanon: KJEL 103.7 CC (ex KIRK)  
 Malta Bend: KRLL 97.5 NO-RE  
 Marble Hill: \*NS 97.3 6 kW, 328 ft.

**FM NEWS**

**Missouri:**

Sikeston: KBXB 97.9 OSA to C2, 50 kW, 469 ft.  
 Springfield: KAKU 90.1 PG> 4 kW, 489 ft, class C3  
 Waynesville: KJPW102.3 PG> 2650w, 492 ft.  
 Webb City: KJMK 93.9 CC (ex KIXQ), FC to a/c  
 SG "Magic 93.9" (Joplin)

**MONTANA:**

Bozeman: KGLT 91.9 PG> 68 kW, 715 ft, C1  
 XG: 45-40-24 / 110-52-04  
 Butte: KMBR 95.5 FC to classic rock CC (ex  
 KQUY)  
 Great Falls: KGPR 89.9 PG< 9.5 kW, 295 ft  
 XG: 47-32-23 / 111-17-06  
 Missoula: KBGA 89.9 LC  
 Sidney: KATH 95.1 NW, classicrock (&) (Williston)

**NEBRASKA:**

Blair: KMRV 97.3 NO-RE  
 Scottsbluff: K208CK89.5 NS-170w: WYFG 89.3 SC  
 S. Sioux City: KSFT107.1 PG< 1550w, 328 ft,  
 XG: 42-31-11 / 96-27-02

**NEVADA:**

Carson City: K286AG 105.1 NS-150w(v), DA: KODS  
 103.7 CA  
 Elko: KLKO 93.5 NC to 93.7 - C2, 4.5 kW, GE  
 Ely: KELY 101.7 FC to Jones a/c (&)  
 Ely: KDSS 92.7 CX CP for 3 kW, C3  
 Fallon: KRNG101.3 NO-GE  
 Las Vegas: KOMP 92.3 PC< 25 kW, 3687 ft.  
 Las Vegas: KXPT 97.1 PC< 25 kW, 3674 ft.  
 XC: 35-58-02 / 115-30-06

Laughlin: KADD 93.5 NO-GE  
 N. Las Vegas: KJUL104.3 dec. to 3700 ft.  
 Reno: KZSR 92.9 RA with talk (&)

**NEW HAMPSHIRE:**

Manchester: WLMW90.7 NO-RE  
 Miltonborough: WSCY 106.9 PC< 130w, 2096 ft.  
 Peterborough: W270AH 101.9 NS-50w (DA): WZID 95.7

**NEW JERSEY:**

E. Orange: WFMU 91.1 NC to 1.5 kW, 492 ft, DA, GE  
 Freehold Twp: WRLJ 89.7 NW, classichits/WCNJ89.3  
 Trenton: WUNJ 88.1 PC> 110w(v), 689 ft.

**NEW MEXICO:**

Cloudcroft: \*\*\* 97.9 PA to add class C1  
 Clovis: KSMX 107.5 FC to WW1 Adult Rock (&)  
 Espanola: KYBR 92.9 FC to CD Country (&)  
 Gallup: KXXI 93.7 CC (ex KQNM) (Maybe this  
 is reversed, I think they were already KXXI? - gc)  
 Lordsburg: \*\*\* 103.7 GA: add class C3  
 Lordsburg: \*\*\* 105.7 GA: add class C3  
 Red River: \*NS 90.1 115 w, -1417 ft.

**NEW YORK:**

Clifton Park: WDCD96.7 PC> 4.7 kW  
 Copenhagen: WWLF 106.7 FC to classicrock (&) (Watr.)  
 DeWitt: WIII-1 99.9 NS-260w: WIII Cortland  
 Geneva: WEOS 89.7 NC to 4 kW, 312 ft, DA, RE  
 Hudson Fls: WENU101.7 FC to AC // WNYQ 105.7,  
 should switch to a new format by February  
 Newburgh: W293AE 106.5 NS-55:  
 WRWD 107.3 Highland  
 New York: WNEW102.7 FC to classic rock  
 Lockport: \*\*\* 92.1 PA: to add class A  
 New York: WDBZ105.1 CC (ex WMXV), "The Buzz"  
 Olivebridge: WFSO88.3 LC

**FEBRUARY 1997**



**New York:**

Queensbury: WNYQ 105.7 PG< 2450w, 1036 ft.  
 NW, adult contemporary "Wink"  
 Rome: WODZ 96.1 PG< 6.8 kW, 633 ft  
 XG: 43-08-39 / 75-10-45  
 Rotterdam: WTRY 98.3 CC (ex WYSR), FC to  
 oldies // WTRY 980  
 Watertown: WFGY 97.5 CC (ex WCIZ), FC to country  
 "Froggy"  
 Watertown: WCIZ 93.5 CC (ex WTNV) FC to rock  
 Watertown: W211AR90.1 NS-15w: WYFG 89.3 SC

**NORTH CAROLINA:**

Ahoskie: W220BM 91.9 NS-80w: WAFR 88.3 MS  
 Asheboro: WMMO 89.5 NO-GE  
 Aurora: \*\*\* 104.5 GA: add class A  
 Fayetteville: \*NS 91.1 AF  
 Franklin: W265AZ100.9 NS-10w: WRAF 90.9 GA  
 Hatteras: \*NS 94.5 AF  
 Highlands: W269AY101.7 NS-10w: WFQS 91.3  
 Nashville: WZAX 99.7 CC (NS)  
 Ocracoke: \*\*\* 104.7 XA for class C3  
 Old Fort: WMXF104.3 CC (ex WDLF), "Mix 104"  
 Pinetops: WEQQ 95.5 NW, hot AC // WEQR 102.3  
 CC (ex WWRT)  
 Raleigh: WCPE 89.7 NC to 1187 ft, GE  
 Rose Hill: WBSY104.7 XA for C2, CL: Trenton, NC  
 Snow Hill: WAGO 88.7 NO-GE  
 Thomasville: WEAM98.3 CC (ex WFAZ)

**NORTH DAKOTA:**

Carrington: KYNU 98.3 CC (ex KANG)  
 Grand Forks: KNOX94.7 FC to Real Country (&)

**OHIO:**

Akron: WAPS 91.3 adds DA  
 Athens: WXTQ105.5 NC to 6 kW, 305', RE  
 Athens: WKJW 95.9 CC (NS)  
 Cirdeville: WAZU107.1 CC (ex WAHC), FC to  
 rock "Big Wazoo" (Columbus)  
 Columbus: WBZX 99.7 adds Howard Stern  
 Marysville: WHQK105.7 CC (ex WAKS), FC to  
 country "Kicks 105.7" (Columbus)  
 St. Mary's: WLWZ 103.3 PG> 6 kW  
 Swanton: WJUC107.3 NO-GE, CC (NS)  
 Sylvania: WMMM 105.5 FC to adult contemporary  
 Upper Arlington: WZAZ 98.9 CC (ex WLLD), FC to  
 modern rock (Columbus)

**OKLAHOMA:**

Ada: \*NS 91.3 AF (AFA)  
 Alva: \*\*\* 103.5 GA: add class C1  
 (this replaces a grant to add a 104.7 - C1 here)  
 Bartlesville: KYFM100.1 GA: from class A to C1  
 Crescent: K203CF 88.5 NS-250w(v): WPCS 89.5 FL  
 Dickson: \*\*\* 103.5 PA for class C3  
 Elk City: KXOO 94.3 FC to contemp. Christian  
 Holdenville: KCOMA106.5 OSA to class C3, 25 kW, 325'  
 XG: 34-53-03 / 96-22-35, reported Sl  
 Kingfisher: \*\*\* 105.3 PA: add class A  
 Ponca City: KIXR 100.1 GA: to 104.7 - A  
 Woodward: \*NS 95.9 AF

**FM NEWS**

**OREGON:**

Astoria: \*NS 89.7 200w, 1027 ft.  
 Cannon Bch: K272DS 102.3 NS-32w: KCMS 105.3 WA  
 Canyon City: KJUDY 94.5 NW, country  
 Grants Pass: K201DI88.1 NS-23w(v): KDOV 91.7  
 L.Oswego: KKJZ 106.7 NC to 100 kW, 997 ft.  
 class C, XC: 45-27-13 / 122-32-45  
 Myrtle Point: KAHY 94.1 LC  
 Reedsport: \*NS 89.1 1 kW, 400 ft (A.F.A.)  
 Seaside: KCYS 98.1 CC (NS), NW, CD Country (&  
 Winchester: \*NS 89.3 1.6 kW, 620 ft.

**PENNSYLVANIA:**

Altoona: WFGY 98.1 decreases to 94.1 ft.  
 XC: 40-34-01 / 78-26-32  
 Ephrata: WRTL 90.7 NO-CX-DE  
 Harrisburg: WRBT 94.9 CC (ex WYMJ), FC  
 to country "Bob"  
 McConnellsburg: WIYQ 103.7 CC (NS)  
 Martinsburg: WJSM92.7 PG> 640w, 964 ft.  
 Philadelphia: WFLN95.7 PG< 17 kW, 850 ft  
 XG: 40-02-30 / 75-14-24

**RHODEISLAND:**

Narragansett Pier: WPJB 102.7 PC<1950w, 226ft.  
 Providence: WBRU 95.5 NC to 50 kW, 492 ft, DA, RE

**SOUTH CAROLINA:**

Andrews: WGTN100.7 PG> 25 kW, DA, C3  
 Bluffton: WIJY 106.9 CC (ex WLOW), FC to  
 smooth jazz (Hilton Head)  
 Hampton: WBHC103.1 PA: to 92.1 - A  
 Hilton Head Is: WLOW 107.9 CC (ex WIJY), FC  
 to WW1 Standards (&  
 Kingstree: WWKT 98.3 FC to ABC urban gold (&  
 (and adds black gospel M-F 9am to noon)  
 Ladson: WRLQ106.3 NO-GX  
 Loris: WVCO 94.9 stunting with "all Macarena"  
 so a new format coming soon (Myrtle Beach)

Parris Island: WOCW92.1 PA: to 103.1 - C3  
 Richburg: \*NS 90.3 220w, 469 ft.  
 Socastee: WMYB 99.5 FC to soft AC "The Beach"

**SOUTH DAKOTA:**

Sturgis: KRCS 93.1 FC to CHR (Rapid City)

**TENNESSEE:**

Colonial Hts: WLJQ105.9 GA: to 95.9 - C2  
 Columbia: WAYM 88.7 PG> 16.5 kW, 492 ft, DA  
 Cookeville: WHTS 91.7 NW, //WPLN 90.3  
 Crossville: WSWJ102.5 CC (ex WOWF), FC to  
 country (&  
 Dyer: WLSQ 94.3 adds adult alter. (&  
 Elizabethton: WAEZ99.3 FC to CHR "Electric 99-3"  
 Ellendale: W270AI101.9 NS-80w: KMZN (?)  
 Henderson: WHHM107.7 Osa to C3, 25 kW, 308 ft.  
 Hohenwald: \*NS 90.7 AF (AFA)  
 Humboldt: WLSZ 105.3 adds adult alter. (&) (Jackson)  
 Jefferson City: WEZG 99.3 FC to CHR "Electric 99-3"  
 //WAEZ 99.3 TN (Knoxville)  
 Kingsport: WCQR 88.3 NO-GE  
 Morristown: WMXK 95.9 GA: to 94.1 - A  
 Tazewell: WCTU 94.1 GA: to 105.9 - A

**TEXAS:**

Amarillo: KPVY 100.9 NO-GE  
 Arlington: KDFX 94.9 CC (ex KEWS), FC to religion  
 Austin: K259AJ 99.7 NS-50w: KYFS 90.9

**FEBRUARY 1997**

**Texas:**

Brackettsville: \*\*\* 94.7 GA for class A  
 Caldwell: KLTR 95.1 NO-GE, CC (ex KHEN)  
 Centerville: KAJG 103.1 NO-GE  
 Cleveland: KOND 97.1 FC coming soon (Houston)  
 Denver City: \*NS 97.5 AF  
 Dilley: \*NS 98.9 50 kW, 269 ft.  
 Franklin: KZTR 101.9 CC (ex KLTR)  
 Greenville: KIKT 93.5 PG> 9.1 kW  
 Haltom City: KKZN 93.3 CC (ex KNBR) "The Zone"  
 Huntsville: KCEY 99.7 NO-GE  
 Jasper: KJAS 107.3 NW, adult leaning top 40  
 Lamesa: KIOL 104.7 CC (ex KMMX)  
 Lampassas: KJFK 98.9 CC (ex KUTZ), FC to  
 talk and sports (including Howard Stern)  
 Laredo: KZTQ 106.1 PG> 6 kW  
 Leakey: \*NS 104.3 AF  
 Leesville: \*NS 88.7 AF  
 Odessa: \*NS 89.5 AF (AFA)  
 Orange: KIOC 106.1 FC to new rock, "New Rock  
 106-1 K106"  
 Pearsall: \*NS 104.1 AF  
 Pleasanton: KBUC 98.3 adds Real Country (&  
 Refugio: KZTX 106.1 RA with adult alternative (&  
 QC from 106.3, PG> 25 kW, 328 ft.  
 Stanton: KKJW 105.9 37 kW, 400 ft., CC (NS)  
 Stephenville: K213CD 90.5 NS-250w: WAFR 88.3 MS  
 Tahoka: KMMX100.3 CC (ex KIOL)  
 Tyler: KTYL 93.1 PG> 82 kW  
 Uvalde: KYUF 104.9 OSA to class C3, 25 kW, 272'

**VERMONT:**

Burlington: WVPS107.9 NC to 50 kW, 2644 ft, RE  
 Hartford: WGLV104.3 PG> 5.6 kW, 495 ft.  
 Mariboro: WSSH101.5 PC< 2.6 kW, 344 ft.  
 Middlebury: WRMC 91.1 NC to 1.3 kW, 249 ft, GE  
 Montpelier: WGLY-1103.3 NS-9w

**VIRGINIA:**

Buena Vista: WREL96.7 NC to 10 kW, 492 ft, B1  
 XC: 37-46-37 / 79-12-18  
 Charlottesville: WTJU91.1 PG< 600w, 1066 ft.  
 XG: 37-58-55 / 78-29-03  
 Culpeper: \*NS 91.5 930w, 121 ft, (A.F.A.)  
 Marion: WZVA103.5 LC  
 Petersburg: WVST 91.3 NC to 2.2 kW (v), 167', GE  
 Spotsylvania: WYSK99.3 PG< 3 kW (air), drop DA  
 Waynesboro: W268AC 101.5 NS-13w: WYFJ 100.1  
 West Point: WPTG107.9 adds WW1 Hot Country (&  
 Winchester: WFQX-199.3 NS-13w(h), DA



**FM NEWS**

**WASHINGTON:**

Davenport: \*NS 97.3 4.8 kW, 321 ft  
 Dayton: KZZM 102.3 CC (NS)  
 Grandview: KARY 100.9 PG> 6.9 kW, C2, 1269 ft  
 XG: 46-29-12 / 120-00-12  
 Leavenworth: KLVH 101.1 NO-GE  
 Moses Lake: KLWS91.5 CC (NS)  
 Naches: KZTA 96.9 CC (ex KHHK), "La Zeta"  
 Omak: \*NS 90.1 3 kW, 2457 ft. (W.S.U.)  
 Pt. Angeles: \*NS 90.1 1.6 kW, 197 ft.  
 Yakima: KHHK 99.7 CC (ex KZTA) "Hawk"  
 Yakima: K229AD93.7 NS-50w: KZTA 96.9 Naches

**WEST VIRGINIA:**

Fisher: WQWV103.7 CC (ex WJBQ)  
 Huntington: WTCR103.3 adds After MidNite  
 Milton: WFXN106.3 CC (ex WZZW), "Fox"  
 White Sulphur Sps: \*NS 93.3 AF

**WISCONSIN:**

Algoma: \*\*\* 104.1 GA to add class A  
 Barron: \*\*\* 97.7 GA to add class A (when  
 WAQE moves from 97.7 to 99.1 - see below)  
 Birnamwood: WHET92.9 NO-CX-DE  
 Chetek: WVXD106.7 PG< 35 kW, 584 ft.  
 Forestville: \*\*\* 102.1 GA to add class A  
 Nekoosa: \*\*\* 105.5 GA to add class A  
 Portage: WBKY 95.9 NO-GE  
 Rice Lake: WAQE 97.7 GA: to 99.1 - C2,  
 CL: Barron, WI  
 Seymour: WECB104.3 NO-RE  
 Stevens Pt: WKQH104.9 PC> 21 kW, 358 ft, C3  
 XC: 44-50-13 / 89-45-57, CL: Marathon, WI  
 Tomah: WBQG 96.1 NC to 44 kW, 525 ft, C2  
 XC: 44-01-32 / 90-48-58  
 Whitewater: WKCH106.5 NO-GE

**WYOMING:**

Casper: KYOD 104.7 185w, 1774 ft., CC (NS)  
 Cheyenne: \*\*\* 93.7 PA to add class A  
 Cheyenne: KOLZ 100.7 CC (ex KKAZ), "Colt 100.7"  
 Chugwater: \*\*\* 99.5 PA to add class A  
 Evanston: KOTB 106.3 OSA to 106.1, C3, 380 w.  
 Gillette: \*\*\* 97.7 PA to add class A  
 Laramie: \*\*\* 98.7 PA to add class A  
 Pine Bluffs: \*NS 105.3 29.5 kW, 233 ft.

**U.S. TERRITORIES:**

**PUERTO RICO:**

Mayaguez: \*NS 88.3 2 kW, 1004 ft, DA (Univ. P.R.)  
 San Juan: WKAQ104.7 inc. to 1220 ft.  
 Yauco: WIOB-2 97.5 3.8 kW

**VIRGINISLANDS:**

Christiansted: \*NS104.9 6 kW, 699 ft.  
 Christiansted: WAVI93.5 PC< 9.6 kW, 807 ft, B1  
 XC: 17-43-53 / 64-41-17

**FEBRUARY 1997**

- Bill Dvorak writes to let us know that WOLX 94.9 Baraboo-Madison, WI was off the air from 12/31/96 to 1/2/97 because of a tower collapse. Their tower, built in 1948, and located on Baraboo Bluff in Sauk Co. (30 mi. NNW of Madison) fell because of ice accumulation. No one was hurt, and by Jan. 2nd, a temporary 60-foot tower was erected at the same location as the fallen 648 footer, severely restricting its coverage, but still getting into Madison well enough. Bill was fortunate to log several stations in WOLX's absence, including WOFM, KMCH, and WKXX on 94.7, WDKB and WAAG on 94.9, and WIIL and WZZT on 95.1.
- Doug Smith sends an article on some California pirates he saw in a ham bulletin. In Santa Maria, a station on 88.9 is playing continuous music, apparently from a CD changer. It is only on weekends, and has been operating for the past six months. It can be heard for miles around the Santa Maria area. In Grover Beach, another FM pirate, "Excellent Radio", is quite popular, even having a storefront location, giving out bumper stickers, and advertising on an LPTV!
- Saul Chemos sends more information about the 101.3 signal heard recently testing in the Toronto area. It is indeed around 100 watts power, and is affiliated with CHIN 1540, the AM station to CHIN 100.7. CHIN-AM gets plenty of interference in Metro Toronto from clear channel stations WPTR Albany, NY, and KXEL Waterloo, IA, and was looking into the possibility of an FM booster. This testing is very preliminary at this point.



WANTED: WATC-tv, channel 57, Atlanta, is interviewing candidates to fill a position as UHF transmitter engineer. Contact John Broomall at 770-300-9828 for more information.



# TV NEWS

February 1997

Douglas E. Smith W9WI  
1385 Old Clarksville Pike  
Pleasant View, TN 37146-8098  
72777.3143@compuserve.com

\*: Non-commercial station  
nc: No Change  
+/-: Channel offsets (plus,  
z/n: minus, zero, and none)  
TA: Tamapulias (Mexican state)

## APPLICATIONS FOR NEW STATIONS

St	Ch	ERP	HAAT	City; applicant	
AL	22-	2820	315	Tuskegee; T. Associates	32-03-36N/ 85-57-02W
NY	*57-	1550	300	Waverly; WSKG-46 (PBS)	42-02-40N/ 76-35-50W

Applications denied, dismissed, etc:

St	Ch	ERP	HAAT	City; applicant	
AZ	58z	3.48	-24	Sierra Vista; J.E. Powley	31-26-29N/110-16-13W

## CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS

St	Ch	ERP	HAAT	Call/ City; applicant	
AB	17z	31.6	134	Lethbridge	49-46-47N/112-52-14W
				CJIL-TV (religious)	
BN	3z			Tijuana; XHGC-5? (see text)	
MI	60-	17.0		Pinconning; wireless cable	
MI	68z	17.0		Pinconning; wireless cable	
MT	50n	10.0		Kalispell	48-30-22N/114-20-49W
ON	51+	715	300	London; CHCH (CHCH-TV-2)	42-50-27N/ 81-51-30W
ON	32+	5	116	North Bay; (CHCH-TV-6)	46-18-10N/ 79-24-40W
ON	11-	25	190	Ottawa; (CHCH-TV-1)	45-13-01N/ 75-33-51W
ON	3z	17.4	152	Pembroke; CBC (CBOT-6)	46-02-40N/ 77-28-06W
ON	38-	5	113	Sault Ste. Marie; (CHCH-4)	46-35-50N/ 84-16-53W
ON	41+	19.2	172	Sudbury; (CHCH-TV-3)	46-25-29N/ 81-00-54W
ON	11-	1500?	142	Timmins; (CHCH-TV-7)	48-28-12N/ 81-17-50W
QU	62z	11	219	Montreal (CJNT-TV)	45-30-18N/ 73-35-30W

Obviously, the power for CHCH-TV-7 Timmins is a typo. I suspect it should be 150KW. These are old news, but my first opportunity to print technical information on them and provide official callsigns. The Tijuana station is a (pretty solid) rumor on the Internet. Channel 3z is allocated to Tijuana for full-power operation.

## APPLICATIONS TO CHANGE EXISTING STATIONS

St	Ch	ERP	HAAT	Call	City	
FL	32z	nc	332	WWWB	Lakeland	27-50-15N/ 81-56-53W
NY	31-	5000	nc	WBIS	New York	40-42-43N/ 74-00-49W
PR	68z	457	nc	WVSN	Humacao	18-16-44N/ 65-51-12W
TX	42-	5000	394	KEYE	Austin	30-19-10N/ 97-48-06W
TX	19-	5000	472	KLBS	Nacogdoches	31-54-16N/ 95-05-07W

## APPLICATIONS TO CHANGE CONSTRUCTION PERMITS

St	Ch	ERP	HAAT	Call	City	
NV	10-	3.09	564	KENV	Elko	40-41-53N/115-54-13W
WI	52z	5000	314	WVRS	Mayville	43-16-25N/ 88-23-57W

TV News

February 1997

## CHANGES GRANTED TO EXISTING STATIONS

St	Ch	ERP	HAAT	Call	City	
AL	40-	5000	600	WJSU	Anniston	33-36-24N/ 86-25-03W
FL	27+	2700	518	WTXL	Tallahassee	30-40-06N/ 83-58-06W
IN	52-	21.17		W52CV	Nappanee	41-24-43N/ 86-01-51W
					From W12BK, South Bend.	
LA	23-	24.3		K23ER	Hammond	30-32-26N/ 90-29-07W
					From W39AT, Baton Rouge.	
ME	8z	120	350	WAGM	Presque Isle	46-33-04N/ 67-48-35W
OK	62+	2680	240	KMNZ	Okla. City	35-34-24N/ 97-29-08W
PA	32-	16.0		WBPA-LP	Pittsburgh	
					From ch. 29.	
SD	5+	nc	313	KDLT	Mitchell	43-45-28N/ 98-24-39W
TX	28z	2102	220	KYLE	Bryan	30-41-19N/ 96-25-36W
TX	66n	7.9		K66FT	Friona	34-39-15N/102-43-45W
					From K65BT.	
WI	27+	5000	455	WKOW	Madison	43-03-21N/ 89-32-06W
WV	59-	1923	568	WVSX	Lewisburg	37-46-24N/ 80-42-19W

## CHANGES GRANTED TO CONSTRUCTION PERMITS

St	Ch	ERP	HAAT	Call	City	
CA	23z	1.03		K23EQ	Ventura	34-20-57N/119-20-07W
					From K08LJ, Santa Barbara.	
CO	32-	100.5		K32EO	Colorado Springs	38-44-40N/104-51-42W
					From K18EM, Pueblo.	
FL	61+	8.5		W61DD	Miami	25-46-20N/ 80-11-20W
					From W27BS.	
MI	17+	20.5		W17CC	Interlochen	44-38-07N/ 85-45-53W
					From W50BL, Traverse City.	
PA	49z	21.3		W49BV	Indiana	40-37-38N/ 79-12-49W
					From W30BI, Meadville.	
PR	34z	nc	848	WRUA	Fajardo	18-18-36N/ 65-47-41W
TX	53+	8.08		K53FR	Plainview	34-13-05N/101-42-02W
					From K47EP.	

## TECHNICAL CHANGES ON THE AIR

CA	63-	K63EC	Planada; move from K55BZ, increase power, and move.
MA	54z	W54CN	Boston; major power decrease, move from ch. 33, move tower about 70km SW. (from the Gloucester area)
MI	45-	WGKU	Vanderbilt
MN	29z	K29CT	Worthington; move from ch. 20. (to be displaced by KSMN-20)
NE	22n	K22FF	Newport; move from ch. 24. (displaced by KLLKE-24)
NV	56n	K56GB	Wadsworth; move from K63DN Reno.
NY	43+	WNYS	Syracuse; major power increase.
NY	68-	WSYT	Syracuse; minor tower height decrease. (10 ft.)
WI	26+	WGBA	Green Bay; double power & minor tower height decrease. (4 meters)
WI	58z	WDJT	Milwaukee; major power & tower height increases & move about 7km north.
WV	33+	WPBY	Huntington

## NEW STATIONS ON THE AIR

W66CN	66+	Jasper, AL	6.7KW	33-50-42N/ 87-18-26W
		Translator of WTJP-60 Gadsden. (TBN)		
K58FA	58z	Little Rock, AR	200 watts	34-47-56N/ 92-29-44W
K48FC	48,	K50DZ 50, K52EU 52, K54EQ 54, K56FT 56		
		Fort Apache I.R., AZ		
K36EL	36+	Bakersfield, CA	29KW	35-26-20N/118-44-23W
		Translator of KGMC-43 Clovis/Fresno, WB.		
K47EH	47+	Eureka, CA	14.6KW	40-43-36N/123-58-26W
		TBN.		

## NEW STATIONS ON THE AIR (contd.)

K04IZ	4n, K05EG 5n	Wawona, CA	7 watts	37-31-08N/119-35-59W
I suspect these two are translators of Fresno or Sacramento stations.				
K30EJ	30+	Crested Butte, CO	160 watts	38-48-37N/106-54-30W
W09CF	9+	Jacksonville, FL	320 watts	30-16-53N/ 81-34-15W
W25BF	25-	Miami, FL	7.1KW	25-46-20N/ 80-11-20W
W46BQ	46+	New Port Richey, FL	10.3KW	28-19-27N/ 82-41-56W
Translator of WWWB-32 Lakeland, WB				
W21BK	21-	Tallahassee, FL	29.5KW	30-29-35N/ 84-17-01W
K44EC	44n	Coeur d'Alene, ID	11KW	47-43-54N/116-43-37W
Translator of KSPS-7 Spokane (PBS)				
K43ER	43-	Independence, KS	19.3KW	37-09-58N/ 95-33-45W
Translator of KDOR-17 Bartlesville, OK. (TBN)				
K53FA	53+	Alexandria, LA	812 watts	31-16-04N/ 92-26-24W
K17DX	17+	Natchitoches, LA	3.3KW	31-47-12N/ 93-12-18W
K55BH	55z	Natchitoches, LA	1KW	31-47-56N/ 93-28-54W
KSMN	*20z	Worthington, MN	2400KW/332m	43-53-52N/ 95-56-50W
Satellite of KWCM-10 Appleton. (PBS/TLC)				
K28FB	28n	Bozeman, MT	10KW	45-40-24N/110-52-04W
W59CR	59+	Durham, NC	11.7KW	35-56-35N/ 78-48-29W
W19CA	19-	Lumberton, NC	17.4KW	34-53-05N/ 79-04-31W
Translator of WSEF-26 (Fox), Wilmington NC.				
K52ES	52+	Norfolk, NE	900 watts	42-01-52N/ 97-21-28W
TBN.				
WFME	66z	W. Milford, NJ	24KW/217m	41-07-14N/ 74-12-03W
K44EI	44	Mescalero, NM		
K16DX	16n	Gage, OK	984 watts	36-26-03N/ 99-46-22W
K58EY	58+	Muskogee, OK	10KW	35-42-37N/ 95-15-00W
TBN.				
KGLB	44-	Okmulgee, OK	5000KW/277m	35-50-02N/ 96-07-28W
CBLT-TV-1	16+	Barrie, ON	180KW/281m	44-21-05N/ 79-41-55W
CBLT-TV-2	8+	Huntsville, ON	43KW/190m	45-24-38N/ 79-15-22W
CBLT-TV-3	18z	Parry Sound, ON	?KW/63m	45-23-24N/ 80-02-21W
K15DS	15-	Newport, OR	10.4KW	44-45-23N/124-02-49W
Translator of KPDX-49 (Fox).				
W49BV	49z	Indiana, PA	21.3KW	40-37-38N/ 79-12-49W
Recent call change from W30BI.				
W65CG	65n	Pittsburgh, PA	130 watts	40-24-42N/ 79-55-54W
TBN.				
XH??	54z	Reynosa, TA		25-52-45N/ 97-31-09W
Satellite of XHGC-5 Mexico City.				
XHNAT	45z	Nuevo Laredo, TA		27-29-48N/ 99-30-01W
Satellite of XEQ-9 Mexico City.				
KINZ	68z	Arlington, TX	5000KW/360m	32-35-24N/ 96-58-21W
Intv/Worship.				
K67FY	67-	Austin, TX	8.91KW	30-19-20N/ 97-48-03W
K12ON	12z	Bryan, TX	93 watts	30-39-02N/ 96-20-57W
K23EJ	23n	Garfield Co., UT	1.31KW	38-32-10N/112-04-19W
K27CE	27n	Garfield Co., UT	3.16KW	38-32-10N/112-04-19W
K62EY	62	Hanksville, UT		
K18ET	18n	Orderville, UT	68 watts	37-16-35N/112-37-35W
K16DS	16	St. George, UT		
W18BS	18z	Hampton, VA	20.3KW	37-05-07N/ 76-25-37W
TBN.				
W25AZ	25+	Staunton, VA	10.2KW	38-26-52N/ 78-43-53W
(Public Notices also say W25CC but this is the call in the database)				
WFFF	44+	Burlington, VT	1450KW/840m	44-31-32N/ 72-48-54W
WYOW	34z	Eagle River, WI	2570KW/127m	45-46-30N/ 89-14-55W
Semi-satellite of WAOW-9 Wausau; also some educational prgrs. (ABC/Fox/edu)				

The Ontario stations are old news, but I don't think I've had technical info on them before.

## CALL CHANGES

K06MJ	Flagstaff, AZ:	KZZA-LP
K21DS	Chico, CA:	KZVU-LP
KFCB-42	Concord, CA:	KTNC
K67GZ	Rainbow Valley, CA:	KFMG-LP
KTTY-69	San Diego, CA:	KSWB
W19AQ	Palm Beach, FL:	WINQ-LP
KOBN-26	Honolulu, HI:	KAAH
new-20	Iowa City, IA:	KWKB
WRAP-LP	Boston, MA:	W54CN
W28AC	Charlotte, NC:	WGTV-LP
new-7	Winnemucca, NV:	KWNV
K19EA	Oklahoma City, OK:	KKCC-LP
K25FF	Tulsa, OK:	KLOT-LP
WENU-36	Charleston, SC:	WMMP
K43FD	Houston, TX:	KHLM-LP
K12OT	Logan, UT:	KVWB-LP

The W54CN change is not a typo. This is the first station I'm aware of to go from a "regular" callsign back to a number/letter call.

## PROGRAMMING CHANGES

KNEB-4	Ketchikan, AK:	satellite of KTNL-13 Juneau?
K08KF	DeQueen, AR:	to religion.
KAJB-54	Calipatria, CA:	to Univision. (not yet on the air)
KFWU-8	Fort Bragg, CA:	Satellite of KTNC-42 Concord.
		(country music videos & religion)
K23CZ	Ukiah, CA:	to relay KPWB-31. (WB)
K05HE	Glenwood Springs, CO:	to relay KTVD-20. (UPN)
K13QZ	Grand Valley, CO:	to relay KTVD-20. (UPN)
K05GY	New Castle, CO:	to relay KTVD-20. (UPN)
K08IV	Pinewood, CO:	to relay KTVD-20. (UPN)
K30BS	Red Cliff, CO:	to tourist-information programming.
K66BQ	Rullison, CO:	to relay KTVD-20. (UPN)
K47AC	Silt, CO:	to relay KTVD-20. (UPN)
WTIG-LP 2	Naples, FL:	to TBN.
W46BQ	Port Richey, FL:	to translate WWWB-32 Lakeland. (WB)
W56CN	Venice, FL:	to translate WWWB-32 Lakeland. (WB)
KMCI-38	Lawrence, KS:	from HSC to "Family Greats" independent.
WKYU-24	Bowling Green, KY:	carries some All News Channel.
K67GL	Bunkie, LA:	relays WNTZ-48 Natchez, MS. (Fox)
K61GO	Hicks, LA:	relays WNTZ-48 Natchez, MS. (Fox)
K52EV	Leesville, LA:	relays WNTZ-48 Natchez, MS. (Fox)
K57HD	New Orleans, LA:	from TBN to tourist information?
W30BF	Bangor, ME:	Sold by Maine ETV to Davis Communications, owners of one of the applicants for channel 23 at Waterville.
KYFC-50	Kansas City, MO:	from religion to Intv/Worship.
K17CA	Carson City, NV:	relays KPXI-11 Reno. (Fox)
KINC-15	Las Vegas, NV:	to Univision.
WJDE-LP 24	Nashville, TN:	from HSS to Video Catalog Ch. (VCC)
WRMX-LP 12	Nashville, TN:	from HSS to Video Catalog Ch. (VCC)
KFDM-6	Beaumont, TX:	CBS/UPN.
K22EH	Longview, TX:	UPN, LMA by KFXK-51.
K30CS	Lufkin, TX:	"KFXL", semi-satellite of KFXK-51. (Fox)
K48DP	Tyler, TX:	UPN, LMA by KFXK-51.
WJCB-49	Norfolk, VA:	Sold by its religious owners.
K33EJ	Walla Walla, WA:	to 3 Angels.
WVTV-18	Milwaukee, WI:	to become a WB affiliate.

I suspect most of the Colorado stations above have always relayed KTVD-20. They used to be owned by the local governments, but have now been sold to KTVD.

## STATIONS DELETED

St	Ch	Call	City
IA	35z	K35DR	Sioux City



Thanks to John Lentz, Fernando Garcia, Dennis Smith, and Chip Kelley for some of the information above.

The KDLT-5 change is a major move of 85km (over 50 miles) essentially straight west. My understanding is this will only be built if the owners' application for a full-power station on channel 46 at Sioux Falls is granted. (that grant is likely, as channel 36 is also open at Sioux Falls, and right now KDLT is the only applicant for channel 46) I'm told KDLT intends to try to serve Pierre - which may be a challenge with adjacent channel KPLO-6 already operating in that area! (then again, WBKP-5 is claiming Marquette, Michigan, home of WLUC-6, as part of its coverage area. The selectivity of modern TVs is much better than it was a few years ago.)

A slightly modified form of the Grand Alliance HDTV standard has been adopted by the FCC. HDTV will be adopted essentially as proposed, but the FCC will not set a mandatory standard for the scanning resolution or interlace method. Broadcasters had wanted a mandatory interlaced standard, while computer companies wanted a mandatory non-interlaced standard. Interlace allows the transmission of more detail in a limited bandwidth, but it's harder to build studio equipment for. Computer firms wanted to be able to be able to use their monitors and software routines to display HDTV television pictures without having to support interlace.

## FORUM

### Bill Draeb, Kewaunee, WI:

On Jan. 3, Bill saw WYOW-34 on its first day on the air. He ran across a story about the station on WAOW-9's newscast. It's to be mostly a satellite of WAOW, but with some separate educational programming. The station is owned by "Northwoods Educational Television Associates". This is an interesting situation; it almost looks like educational TV for a very rural part of northern Wisconsin is being financed by lease of extra airtime to a commercial broadcaster! WYOW does hold a commercial license. Bill says another reason for WYOW's debut is to extend the coverage of WAOW's secondary Fox affiliation into areas not yet receiving Fox programming. The WYOW tower is at Sugar Camp, roughly midway between Eagle River and Rhinelander.

WJUE-43 Battle Creek is reaching Kewaunee regularly, but weaker than WOTV-41. A check of coordinates shows WJUE is about 40km east of WOTV; it probably considers itself a Lansing station. Bill is also seeing two unID scrambled stations on channels 43 and 51 from the west-northwest. They're probably the Erhard, MN wireless cable system (K43CS, K51DC) though Grand Forks, ND is another possibility.

WGBA-26 has completed its 5000KW upgrade. The station said it spent \$1.2million on the upgrade. (I suspect some of that went to studio equipment) Bill writes "The difference here is that they slop over more channels than they used to." Finally, Bill checked out the new WSCO-14 site on Hwy. 32 in Krakow; no construction activity was noted.

### Chris Cuomo, Verona PA:

Chris called shortly before deadline to report three new LPTV signals in the Pittsburgh area:

Channel 32: Home shopping, selling mostly jewelry. My best guess is WBPA-LP Pittsburgh, which as you see above was just issued a CP to move from channel 29. But Chris is still seeing this station on channel 29. I suppose it's remotely possible 32 is, in fact, WBPA-LP, and the channel 29 signal is recently-granted W29AV Pittsburgh. Another remote possibility is W32AX Altoona.

Channel 35: Network 1. (formerly Main Street TV) Probably W35AZ Johnstown. This station was originally authorized to Pittsburgh but was granted a change in location before it was built. I would guess they may have been testing under their old Pittsburgh CP before moving the transmitter to Johnstown. Another remote possibility is W35AW Uniontown, which has a CP for 102KW. (an awful lot of power for a LPTV)

Channel 59: All-News Channel most of the time, with some local events and ads for New Castle, and ID as "WBGN". This is a repeater of W66BQ Freedom, PA.

### Chris Cuomo, Verona PA: (contd.)

Channel 61: Parallel to channel 32, but much stronger. This is W61CC Pittsburgh, formerly authorized to Uniontown. It's now on the WQED-13/WQEX-16 tower.

Channel 65: The TBN on channel 65 (W65CG) is now on the air.

### Fernando Garcia, Cd. Guadalupe, NL, Mexico:

With the new year, Fernando has two new locals to deal with. XHNAT-45 Nuevo Laredo is a relay of Televisa's XEQ-9 network. He says its signal is much stronger than KLDO-27 and XHFTX-57. This station (and I presume all other XEQ relays?) operate from noon to midnight only.

The other new one is on channel 54 in the Reynosa/Matamoros area. (channel 54 is allocated to Matamoros) It's a 24-hour relay of the XHGC-5 network. No calls have been seen on this station.

Some unIDs on Fernando's list include a channel 25 from the direction of Lubbock with programming parallel to TBN affiliates KPTB-16 and KMLM-42; (my bet is on K25EG Balco, Oklahoma, in the panhandle near Guymon) a religious station on 15 with Abilene in; (Fernando asks if K15EK Abilene is on; I don't know. K15DJ Lawton, OK is a 3 Angels station, and is on the air with 74KW.) an OETA (Okla. Educational) translator on channel 50; (my guess is K50AL Elk City, though its primary is supposed to be KOKH-25) and a Shepherd's Chapel from the north on channel 56, with Tulsa in. (K56EY Elk City, K56FK Alva, or K56FS Ardmore?)

### Chip Kelley, Dallas TX:

Chip took a road trip. In the Baton Rouge phone book, he noted KANC-LP ch. 21 listed as "WTNC, the News Channel". He couldn't see the station itself. Their co-owned KBTR-LP Baton Rouge does something similar, calling itself "UPN19, WBTR". (I have to wonder, why bother applying for a four-letter call if you're going to use a different one?!) Also noted in Baton Rouge was KTTE-LP ch. 11 with VCC home shopping. (they're also a WB affiliate) KLFT-LP ch. 21 Lafayette was seen with The Box music videos.

He also took a ride past the KFXK-51 studios on the I-20 frontage road in Longview, Texas. The studios now have three logos: Fox 51/KFXK, Fox 30/KFXL (K30CS Lufkin), and UPN22/48. (K22EH Longview & K48DP Tyler) K48DP used to be a WB affiliate with the "fake calls" KTLN; presumably there is no longer a WB affiliate in this area. KFXK used to be a dual Fox/UPN affiliate; it's now all Fox.

### Dennis Smith, Santa Barbara CA:

First, Dennis corrects me on my comments about his market being one of the places with a WB affiliate but no Fox. KCOY-12 is in fact a secondary Fox affiliate, though the only Fox programs he's seeing are football.

Also seen by Dennis is new K14JP Modesto. It's America 1, with some local commercials for Turlock. And, while in Turlock, he saw a TBN on channel 27 at similar strength to their K28EM Mariposa. I don't have a good answer for that, except maybe K27EU Roseville? That's a long way away though. It could possibly be K28EM with a defective or missing lower-sideband filter. I have heard of other DXers seeing stations on both their own channel and the next lower channel (WTJR-16, seen on channel 15, for one example) and this would be a logical explanation. However, in this situation there'd be no audio.

73 Doug

# WESTERN TV-DX

February 1997

William Eckberg, 1032 Sterling Rd., Dixon, IL 61021

October 1996	CDT/CST
04 tr 0400 KASN 38 AR	537
0405 KLRT 16 AR	503
0410 WUXP 30 TN	408
1040 KHOG 29 AR	463
1040 KHBS 40 AR	513
11 tr 2225 KHOG 29 AR	463
12 tr 2225 KSAX 42 MN	404
13 tr 0400 KSAX 42 MN	404
14 tr 0320 WJUE 43 MI Battle Creek	219
27 tr 2155 KSAX 42 MN	404
2200 KDSD 16 SD	509
28 tr 1845 KSAX 42 MN	404

November 1996	CST
10 tr 0200 KSAX 42 MN	404
21 Es 1725 WLBZ 2 ME	1030
1730 WCAX 3 VT	821
1800 WFSB 3 CT	842
1900 WKTV 2 NY	714
22 tr 0230 KSAX 42 MN	404
23 tr 0215 KASN 38 AR	537
0220 KLRT 16 AR	503
0358 WMAW 14 MS	645
0400 WMPN 29 MS	651
0410 WDBD 40 MS	651

I saw rare November Es on the 21st to the east. Early indications were present at 1600. It went through channel 4.

The 23rd saw brief strong tropo into Arkansas. Pine Bluff 38 and Little Rock 16 were snowfree. The weather map showed a front beginning in northern IL passing through AR and turning into central TX. DX was along a narrow area across its straight leading edge. I was fortunate to be briefly at its northern end. As it passed here, AR DX disappeared and I saw three MS stations briefly. They were weaker. The throat of the duct had passed me and my antennas began looking partially across it. Then all DX abruptly ended. Of course, this is all theory. I failed to check for DX in the early evening. I doubt if this type of tropo was present even three hours earlier. Opening was very frequency sensitive, covering only the lower UHF and upper VHF spectrum. There were many unidentified stations.

Also of interest-Chicago 2 and Springfield MO 10 have their calls on their sync bars. Moline 18 has their ID on the screen almost continuously in the early AM during programming. Poplar Bluff, MO 15, Pine Bluff and Little Rock were seen with C/B and ID throughout the early AM.

Victor Frank  
12450 Skyline Blvd.  
Woodside, CA 94062-4541  
email frank@sneezy.srl.com  
(415)851-7031

Corrections to my last report: KCWB is the official call of the new Kansas City 29. K61GC in Wichita is not carrying any programming from Oklahoma City 52. I recall them having a religious show: This was brought to my attention by two members. My official source of info at the nearby library failed me again.

Dave Pomeroy, 2321 SE Libra Ct., Topeka, KS 66605-3505

September 1996	CDT
09 tr PM WFTC 29 MN Minneapolis	
KVBM 45 MN Minneapolis	
KSMQ 15 MN Austin	
KUHF 14 KS Lawrence (ex K14HY)	
KMEG 14 IA Sioux City (over KUHF)	
10 tr 0530 K32AF 32 MN St. James KSTP-5	
WACY 32 WI Appleton	
WVTV 18 WI Milwaukee	
WQRF 39 IL Rockford	
KSBI 52 OK Oklahoma City	
KXOC 54 OK Edmond (LPTV)	
unID 65 South, "The Box"	
K68EH 68 OK Ponca City	
KOCB 34 OK Oklahoma City	
K71BO 71 KS Herington KAKE-10	
WXOW 19 WI LaCrosse	
WHLA 31 WI LaCrosse	
KTVC 48 IA Cedar Rapids	
unID 20 translator for KSTP-5	
K56AF 56 IA Clarinda KMTV-3	
K64AH 64 IA Clarinda KDIN-11	
KXLT 47 MN Rochester	
K46AA 46 MN Godahl KTCA-2	
KMEG 14 IA Sioux City	
K54AC 54 MN Godahl WCCO-4	

December 1996	CST
07 Es 1900 WPBT 2 FL Miami	
WEDU 3 FL Tampa	
13 tr 0600 WMAV 18 MS Oxford	
WICS 20 IL Springfield	
unID 56 Bloomberg News SE	
WBMG 42 AL Birmingham	
WAAY 31 AL Huntsville	
WZDX 54 AL Huntsville	
KSBI 23 MO Cape Girardeau	
WPTY 24 TN Memphis	
KDNL 30 MO St Louis very strong	
WCFT 33 AL Tuscaloosa	
WABM 68 AL Birmingham	
WBUY 40 MS Holly Springs	

The opening on the 13th was unusual as I seldom have tropo to the southeast.

## Western TV DX

Danny Oglethorpe, P.O. Box 6688, Shreveport, LA 71136-6688

November 1996	UTC
19 tr 2300 KTBC 7 TX	277
20 tr 1630 KWTW 9 OK	303
KETA 13 OK	303
KOCO 5 OK	303
1655 KTUL 8 OK	288
1805 KF0R 4 OK	303
1835 KOKH 25 OK	303
2010 KTBO 14 OK	303
2300 KOOD 9 KS KSKW/KOOD ID	546
2310 KJRH 2 OK	288
21 tr 0035 XERV 9 TA	513
Es 0045 unIDs 2,4 Mexico	
0215 XHBS 4 SI/SO ID 0236	
tr 0350 KVUE 24 TX Local off	277
1310 KMOL 4 TX	347
KENS 5 TX	347
KLRN 9 TX	347
1320 KEDT 16 TX	385
1357 XHAB 7 TA XERV still in	503
1410 XHFOX 17 TA	513
1420 KAVU 25 TX	314
1440 KVEO 23 TX	502
1655 KGNS 8 TX	481
1820 KTBC 7 TX	277
2030 KVUE 24 TX Local still off	277
2040 KXAN 36 TX	277
22 tr 0045 KAFT 13 AR Snowfree	254
0105 KOLR 10 MO "Color 10"	335
0145 KTUL 8 OK	288
0155 KWTW 9 OK	303
0402 KDEB 27 MO	335
0418 KOZK 21 MO	335
0625 KOKH 25 OK	303
0630 KOCO 5 OK	303
1330 WLOX 13 MS	319
1358 WMAH 19 MS	319
WPMI 15 AL	355
1400 WMPV 21 AL	355
1410 WXXV 25 MS	309
23 tr 0010 KTXT 5 TX o/u KXAS	476
0020 KFDA 10 TX "NX Channel 10"	501
0025 KCBF 11 TX	476
KLBK 13 TX	476
0040 KAMC 28 TX	476
0159 KRBC 9 TX	348
0225 WHBQ 13 TN	285
0230 KAIT 8 AR	295
0240 KETC 9 MO Auction	475
0315 WTVA 9 MS	319
0430 Lubbock 11,13 still in weakly	
KRCG 13 MO	435
0500 KDNL 30 MO	475
24 Es 2100 KDKA 2 PA	945
29 Es 0012 unIDs 2 North	
0115 WESHT 2 FL NBC; SE	939
0117 WFOR 4 FL	939
0125 WPBT 2 FL	
WPTV 5 FL	
0155 Cuba 2,4,5 Baseball	
0240 unIDs 2,4 Spanish	
0245 KNAZ 2 AZ	

KASAI 2 NM	
0310 unIDs 2,4 XEW, XHGC-5, others	
30 tr 0930 KEMV 6 AR AETN bars	257
December 1996	UTC
01 tr 0345 WMAH 19 MS	319
0350 WMAV 18 MS	279

Pat Dyer, WASIYX, 5315 Silvertip Drive, San Antonio, TX 78228-2744

Equipment:  
Emerson 1987 model 872 VCR used as the tuner ahead of a 9" B&W Keebsafer CCTV monitor. Archer V-100 and 8-bay bow-tie UHF array at 20' AGL with rotor.

October 1996	UTC
16 Es 0158 KOTA 3 SD Rapid City	1039
23 Es 1832 XHBC 3 BCN Mexicali	1022
1858 KEYT 3 CA Santa Barbara	1295

November 1996	UTC
05 Es 2315 WBTV 3 NC Charlotte	1090
2326 WSB 2 GA Atlanta	886
21 tr 0505 KLAX 31 LA Alexandria	387
0510 WVLA 33 LA Baton Rouge	441
0605 KNOE 8 LA Monroe	430
0605 KETC 56 TX Jacksonville	264
24 Es 1424 WJBK 2 MI Detroit	1238
2012 WDTN 2 OH Dayton	1076
29 Es 0143 KGAN 2 IA Cedar Rapids	960
0143 WISC 3 WI Madison	1062

December 1996	UTC
02 Es 0101 XHIXG 2 GR Ixtapa	835
06 tr 1223 WAFB 9 LA Baton Rouge	446
08 Es 0028 KMTV 3 NE Omaha	829
09 Es 2132 XHI 2 CI Torreón	700
10 Es 0005 XHBC 3 BCN Mexicali	1022
0107 KVBC 3 NV Las Vegas	1052
1900 WCBD 2 SC Charleston	1139
11 Es 2135 XHP 3 PU Puebla	715
2152 XHAP 2 GU Acapulco	870
2227 XHHHN 2 ?	?
13 Es 0059 WCBD 2 SC Charleston	1139
14 Es 0028 WEDU 3 FL Tampa	994
16 Es 0123 XHBC 3 BCN Mexicali	1022
0235 KCBS 2 CA Los Angeles	1186
20 Es 1353 WSAV 3 GA Savannah	1040
1429 WCBD 2 SC Charleston	1139
1457 KGAN 2 IA Cedar Rapids	960
1654 KVBC 3 NV Las Vegas	1052
1729 XHBC 3 BCN Mexicali	1022
24 Es 0200 KVBC 3 NV Las Vegas	1052
28 tr 0015 KLRT 16 AR Little Rock	512

January 1997	UTC
03 Es 1800 KGAN 2 IA Cedar Rapids	960

Many unID Mexican Azteca Net via Es during December. (They have the net ID in the VBI.) Otherwise just much waiting for "random" superimposed IDs in various corners of the screen!

Strange after 35 years seeing Ch. 2 from Charleston SC now NBC instead of ABC (back to the days of

**Western TV DX** (Pat Dyer's report concludes)

WUSN)-almost 350 loggings of them over that span (with most of those since 1972).

Jeff Kruszka, 5024 S. Braxton Ave., Baton Rouge, LA 70817

November 1996		CST
20 tr	2116 XHABT 7 TA SS	
	2157 KEDT 16 TX	425
22 tr	2113 KLRT 16 AR ad for UPN 381?	305
	2134 KPOM 24 AR "NBC 24" Note 1	400
	2205 KATV 7 AR solid!	305

December 1996		CST
03 tr	0718 WFCT1 66	550
	WBHS 50 FL	325
04 tr	2201 WFBI 50 TN ID	210
	2213 KLTS 24 LA LPB to NW Note 1	210
09 tr	2053 S. Texas UHF's in	
13 tr	2102 WNGM 34 GA ID	515
	WATL 36 GA Seinfeld	
14 tr	0930 WNGM 34 GA	515
	0935 WFTX 36 FL	620
	WBSV 62 FL	575
	0944 WHSG 63 GA	490
	1014 WTBS 17 GA "TBJ" ID	455
	1023 WKCF 18 FL "WB 18"	575

Note 1-KLPB off the air for several weeks due to a blown transmitter (lightning damage?). This is one of only a couple of ways I could have ID'ed this station (KLTS). In New Orleans, I got lucky one morning when KLTS signed on before KLPB, and I could tell the difference due to the difference in signal strength. But I have not gotten enough openings from Shreveport here in Baton Rouge to witness the same.

No E-skip this December. Happy New Year!

Dennis P. Smith, 3703 Dixon St., Santa Barbara, CA 93105-2419 (805)687-7803

This report is for December 1996. In addition here some 1996 DX notes from occasional (though infrequent) days in Wasco, near Bakersfield.

In Santa Barbara, south-coast tropo to San Diego/Tijuana (175-200 miles) was fair-good during periods of quiet stability and inversion layering between storms on December 2-3, 19-20, and 24 through morning of 26.

In Wasco (my old original DXing town), my present antenna is only a UHF 4-bay bow-tie/reflector at approx. 16 feet above ground, attached to a recently-

purchased used Teknika TVC-22 TV tuner with small Sears B&W TV. With this, HPTVs are consistent to 100 miles, with some variation to 150 mi., and occasional weak tropo to Sacramento transmitters at approx. 215 mi. Some LPTVs are consistent to 100 mi., depending on ERP and xmtr QTH. A new LPTV since summer 1996 is K28EM (TBN) Mariposa, poor-fair (poss. consistent) at approx. 145 mi., when local KBAK-29 is off for the night, first seen July 13. On Sept 7, with tropo up slightly, K63EC Planada (KMPH-26 xtr) was seen, very poor but in-sync visual (approx. 145 mi.) And, on Oct. 10, tropo was even better, allowing new K14JP (A1 network) Modesto/Turlock to be seen (approx. 175 mi.), poor but steady visual and aural, and not seen since then.

Fernando Garcia, Apartado 30, Suc B, Cd Guadalupe, NL, 67181 MEXICO 1800' ASL, No re-logs in the same month, only tropo over 500 miles.

**Equipment:**

Sony KV-27EXR15, Screened CM 7'dish 85', RG11, UA900 amp. Sony KV-13TR27, CM 1110 30', CM 8 bay UHF array 60' with R. Shack amp.

December 1996		CST
5	0630 XHWDI 46 CU 100 XEW-2	
	0645 KETK 56 TX 533 "East TX Chevy dealer, NBC"	
	0700 KFXX 51 TX 557 FOX	
	unid 47 "TBN, suspect of KWHB"	
	1900 KADN 15 LA 586 FOX	
	WLAE 32 LA 694 Calls on screen blm right	
	WNOL 38 LA 694 WB38	
	WGNO 26 LA 694 ABC26 //KAVU-25	
	WCCL 49 LA 688 HSN	
	2045 WUPL 54 LA 705 UPN	
	2115 K69HD 69 LA 586 "WB, ""KLAFF""	
	K46CR 46 LA 645 VJN	
	K46DG 46 LA 587 //K69HD	
	2130 WPAN 53 FL 869 ""Blab""	
	WMPV 21 AL 842 TBN //KLUJ-44	
	2200 WDBD 40 MS 754 Watson Ford adv.	
	KLAX 31 LA 618 "Action News, 31 Blue"	
	KLPA 25 LA 619 LPB	
	2215 WMAU 17 MS 697 MS educ	
	2230 K65FV 65 LA 572 INSP	
	K59DC 59 LA 688 TBN	
	2245 KLFT-LP 21 LA 592 VJN	
	2300 WHBR 33 FL 838 "ID, Rel."	
	WMAW 14 MS 807 //WMAU-17	
6	0230 W36AC 36 MS 710 TBN	
	K51EC 51 LA 532 TBN	
	K52EV 52 LA 574 "WNTZ-48, FOX"	
	W KASN 38 AR 772 "Bars, big 38 UPN"	
	0245 K61GO 61 LA 581 "WNTZ-48, FOX"	
	W58BO 58 MS 670 TBN	
	K27EF 27 LA 689 TBN	
	K67GL 67 LA 614 "WNTZ-48, FOX"	

**Western TV DX** (F. Garcia's report continues)

0300	K47DW 47 LA 611 "WNTZ-48, FOX"	
	W45AA 45 MS 739 MS educ	
	WGIO 43 AL 987 "APT, SAP dif. MAIN"	
	K39BJ 39 LA 618 WX on audio	
	WFXL 31 GA 1066 "FOX 31, Garfield"	
0315	unid 33 "HSS, u/strong WFLA"	
	K49DE 49 LA 596 TBN	
	W52BF 52 AL 818 HSS	
	0515 WJSP 28 GA 1057 "strong, GPTV in blue"	
	0530 WAFB 9 LA 638 "strong, area News"	
	WAKA 8 AL 927 "White 8, ph 271-2516"	
0545	WGBC 30 MS 834 Prayer line (601) area code	
	WXXV 25 MS 764 starts 6:30 Garfield	
	WMDN 24 MS 834 "Bars, slogan: "24 and you"	
	0615 WCFI 33 AL 924 AL's ABC 33-4	
	0700 WAIQ 26 AL 959 "APT, SAP dif. MAIN"	
7	0130 KYHP 29 LA 530 "strong, Baywatch"	
	0545 KLPB 24 LA 567 "Test pattern, LPB"	
	WLPB 27 LA 638 "Test pattern, LPB"	
	0600 WVLA 33 LA 633 "ID, celebrating 25 years"	
	0615 K56DR 56 LA 633 TBN	
	0700 WUJE 8 LA 693 FOX	
	0730 WHNO 20 LA 688 "ID, Pel Playhouse"	
9	0615 WELQ 42 AL 825 "APT, SAP dif. MAIN"	
	0700 KLT 18 LA 548 "LPB, Barney"	
	1915 WGM 44 LA 633 "FOX, Cat Country 100.7"	
	WNTZ 48 MS 670 FOX 48	
	1930 KARD 14 LA 659 FOX	
	K30EM 30 LA 644 "ph. (504), Fishing pr."	
	2130 KFWD 52 TX 522 TMD //KLDO-27	
	KDIX 58 TX 518 TBN	
	WAPT 16 MS 754 "ID, First Jackson TV on web"	
	2145 WMPN 29 MS 747 //WMAU-17	
	2200 WPMI 15 AL 838 Springdale Mall adv.	
	W6AV 46 MS 783 TBN	
	2230 KMSS 33 LA 615 FOX	
10	0115 W47BP 47 MS 766 MS educ	
	WIIQ 41 AL 877 SAP dif MAIN	
	WHLT 22 MS 775 cci lo local	
	WMC 45 AL 965 TBN (334) 277 4545	
	0130 WFCG 35 FL 892 Psychic pay adv.	
	0200 W43BF 43 MS 891 Big Calls	
	WABM 68 AL 966	
	0230 WHOA 32 AL 928 "ABC32 Community calendar, The Simpsons"	
	WBMG 42 AL 969 "Calls, CBS42 on screen"	
	0245 WTTD 21 AL 969 Homewood advs.	
	0515 WHSG 63 GA 1119 "TBN, //WTJP-60"	
	W51BY 51 AL 970 TBN	
	WATL 36 GA 1104 WB36	
	WGNX 46 GA 1104 "Area news, 37-F8"	
0530	WSWS 66 AL 1023 "ID, Disney cartoons"	
	WGNM 64 GA First Business	
	WDHN 18 AL 982 ABC //WAPT-16	
	WCOV 20 AL AG Day	
	WUPA 69 GA 1100 "UPN 69, 69 in blue"	
	WAXC-LP 64 AL 995 "Calls, Alexander city AL"	

0545	WFSG 56 FL 929 SAP dif MAIN	
	WXTX 54 GA 1037 u/WUPL	
	WJTC 44 FL 842 ID Bars	
0600	WAAY 31 AL 1028 31 Live News	
	WAF 48 AL 1027 "Calls, news"	
	WBHS 50 FL 1116 HSN	
	WPBA 30 GA 1103 PH (404) 815 303	
0615	WPGA 58 GA 1115 Good Morning America EST	
	W47BS 47 AL 996 "advs, 47 on screen blm right"	
0630	WLTV 38 GA 1036 "Today EST, 33-F8"	
	WTBS 17 GA 1101 "Calls, Flipstones"	
0645	WFBI 50 TN 904 HSN	
0730	WDSI 61 TN 1105 "FOX 61 Kids club, Garfield"	
0800	WSFA 12 AL 955 "Today, 36-F8"	
	WFLI 53 TN 1110 u/local	
	K55HA 55 LA 596 "KLAFF"	
	W67CI 67 GA 1106 foreign language	
	WXA 11 GA 1103	
0815	WTOK 11 MS 834 ABC	
0825	WLOX 13 MS 762 "Good Morning MS, 55-F8"	
0830	WTJP 60 AL 998 "Full ID, translators 51,66,67"	
2000	WJSU 40 AL 1025 ABC //KLAX-31	
11	0400 WCCB 18 NC 1332 HSS	
	WTXL 27 FL 1031 "World News Now, ABC"	
	WTV 40 FL 1030 NBC	
	WTAT 24 SC 1331 FOX	
	WCNC 36 NC 1313 "NBC Nightside, "NBC 6" First Business	
	WAGT 26 GA 1225 "Black screen, 26 blm right"	
0415	WPGX 28 FL 952 Calls bottom right	
0430	WNTV 29 SC 1237 Dale and lime on bottom	
	WRDC 28 NC 1457 "Test pattern Big 28, UPN"	
	WRAC 50 NC 1444 "WB50, "Gordon"	
0445	WJWJ 16 SC 1272 SC ETV	
	WFAY 62 NC 1409 "FOX62, Dual ID 30-62"	
0500	unid 55 This Morning Business	
	WYES 12 LA 693 Bars	
	WKFT 40 NC 1430 conls. calls up right	
0515	WJZY 46 NC 1314 "Calls in black, WB, (704) adv"	
	WJW 58 NC 1342 "UNC-TV time, SAP dif. Main"	
0530	WTVI 42 NC 1335 "Blue calls, 42 yellow, SAP"	
	WFTV 55 NC 1314 "WB55, Mask Rider"	
	WAXN 64 NC 1333 "Shepherds Chapel, advs."	
0600	WTTA 38 FL 1116 "Calls on audio, u/o WNOL"	
	KDFI 27 TX 518 "hol tv 27, First Business"	
	KHSX 49 TX 518 HSN	
	KXTX 39 TX 518	
0630	WUNU 31 NC 1408 "Adult Moth, SAP dif Main"	
14	0530 KDAF 33 TX 518	
	0715 KINZ 68 TX 518 Worship	
	0745 KMPX 29 TX 537 "TV 29" bottom right"	
22	0300 KSBI 52 OK 692 "52 up left, small calls"	
	KTBO 14 OK 705 TBN (405) 848 14	
	K26DL 26 TX 577 TBN	
0315	K21DC 21 OK 615 //KSBI-52	



## Western TV DX *(Fernando Garcia's report concludes)*

0330	unid	56	"n-nw, HSS"
‡	KJTL	18 TX 598	PRO LONG pay adv
	K27AZ	27 OK 628	TBN
0745	KWMJ	53 OK 766	
1015	K36AB	36 OK 631	PBS
‡	KOCB	34 OK 704	"UPN Kids, loc out"
	KJTV	34 TX 552	adv. west Texas
1130	K150JI	15 OK	
24	2315	‡ WMAH	19 MS 770 PBS//KMBH-6
	2330	WABW	14 GA 1048 "PBS, GPV"
27	0615	KTLC	43 OK 706 Educ
		KWHB	47 OK 765 Ref. ID at 7 AM
		KOKH	25 OK 703 Bananas in Pijamas
1900		KLRT	16 AR 782 FOX //XHFTX-57
		KVTH	26 AR 739 "VIN, Family Showcase"
		KSHV	45 LA 616
		KTXA	21 TX 518 SAP some MAIN
		KLDT	55 TX 544 Shop at Home
28	0215	K35BO	35 TX 579 America on TV
		K30DJ	30 TX 597
	0245	‡ K24AD	24 TX 579 "WCY-25, KERA-13"
	0300	KDOR	17 OK 795 TBN
			"unid ch 67 VJN, north"
	0645	K59FX	59 TX 485 Albany FOX //K54D1
	0830	K56BQ	56 OK 607 OETA
		‡ unid ch 54 (strong)	McAllen-Brownsville heading
1100	KTFO	41 OK 766	PROLONG pay adv.

This is my best month of December, the North Carolina UHF's came again to northeast Mexico on Dec. 11.

Thanks to David Austin, Doug Smith and Chip Kelley (via Doug) for help this month for ID of some of my catches.

This year began warmer than usual, helping for tropo DX in January. On Jan. 3 I got up to Topeka-Kansas City UHF's. This will be in my next report. I wish you all a great year for DX. 73 Fernando

## Two Element Arrays With Broadband Nulls

Continuing the exposition which we began in the December issue. Nulling arrays are usually used for receiving, not transmitting. This is because their efficiency may be low. In the low VHF band, absolute gain is usually less important than directivity. What we want to maximize is the desired signal to interference ratio. Never mind that the interference might be a TV station 30 miles away, if what you're after is a station on the channel 1000 miles away, then the former is interference, something that you'd like to do away with without pulling their plug. This month we will limit ourselves to 2-element cancelling arrays. The geometry is illustrated in Figure 1. For simplicity, elements #1 and #2 are assumed to be identical,

say for purposes of this article, omni-directional vertically-polarized dipoles separated by a distance  $s$ .

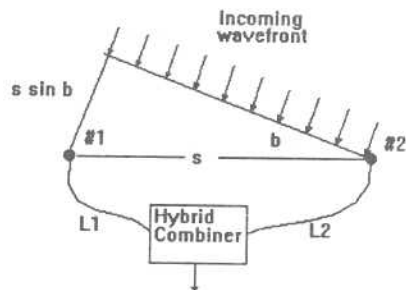


Fig. 1. Plan view of two element array & wavefront

For an wave incoming at angle  $b$ , the delay of the signal at element #1 compared to #2 is  $s \sin b$ . A wideband null is created in the combined antenna pattern when the cable delay difference  $(L2-L1) = s \sin b$  and the hybrid is a subtractive combiner. Instead, the phase may be inverted at the element (by transposing the feedline) and a common additive combiner may be used.

In the general case, a broadband null is produced for constant  $b$ , the locus of which is a cone centered on the axis between elements. The simplest case is an Adcock array, where  $L1=L2$  and a null is produced for  $b=0^\circ$  (and  $180^\circ$ ). This configuration has the advantage of producing the null at a constant azimuth for all elevation angles. Figure 2 shows the relative pattern for a 2-element Adcock array for a spacing of 0.3 wavelength.

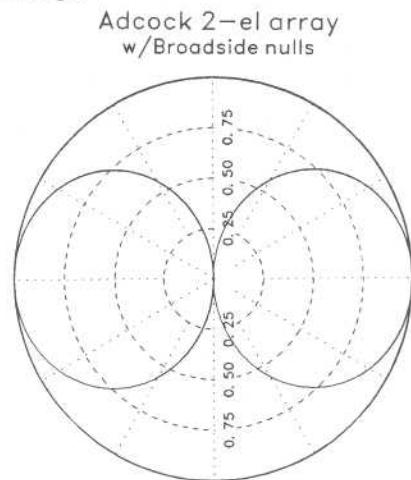


Fig. 2 Voltage Pattern of 2-element Adcock array

## Western TV DX *concludes*

A pattern with a single null may be obtained when the feedlines differ in electrical length by the spacing  $s$ . This pattern is plotted in Figure 3.

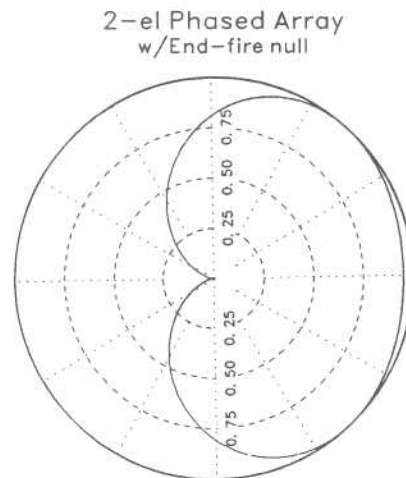


Fig. 3 Voltage Pattern of 2-el unidirectional array

In order that the voltages from the elements at the hybrid be equal, each element must see an identical load impedance. If the feedlines are not of equal length, they must be terminated in their characteristic impedance. A hybrid combiner fills this function, just make sure to use a 70 ohm combiner with 70 ohm cable, etc. Note that the elements are not necessarily matched to the feedlines, they just see the same load. If the cables are the same length then they don't have to be terminated perfectly.

Note that this pattern is a cardioid with a single null, at one azimuth and at  $0^\circ$  elevation. The cable lengths could be cut to produce a null in a cone  $10^\circ$  away from the axis between array elements. Then, at  $0^\circ$  elevation angle, nulls would be at  $80^\circ$  and  $100^\circ$  azimuth and at  $10^\circ$  elevation angle and  $90^\circ$  azimuth. The cable lengths can also be switched to provide a null in the opposite direction. Due to coupling between the elements, it is difficult to get a null greater than 20-30 dB with this (unidirectional) type of array, and so we will not consider it further.

The patterns of Figure 2 and 3 are voltage patterns. 0.5 is equal to 6 dB down, 0.25 is equal to 12 dB down. We are more interested in the behaviour of the nulls beyond -20 dB. Figure 4 shows a plot of the 2-element Adcock antenna in dB relative to the maximum in the vicinity of one of the nulls for three values of element spacing, 0.1, 0.3, and 0.5 wavelengths.

(The solid line is for 0.1 wavelength spacing). The width of a 40 dB null is only  $\pm 1^\circ$ . As it is difficult to get pointing accuracy this great (and for other reasons) in practice we may have to trim amplitude and line length (or use more elements) to do better.

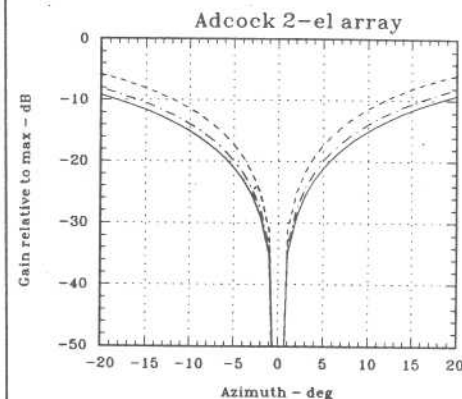


Fig. 4. dB plot of Adcock array in vicinity of null.

We have not gone into construction details of the Adcock-type 2-element array. Its elements are usually vertically-polarized. The element polarization adds some rejection of local stations and those propagated by tropo vs those propagated by ionospheric modes. Since most low-band VHF TV stations are primarily horizontally-polarized, pickup by the feedline connecting the elements to the combiner can be a problem. One version of the Adcock uses open wire feedline between the elements with a transposition. The Adcock does not require a hybrid as the lines are of equal length, but care must be taken to balance out the voltages induced in the feedlines. Another version of the Adcock places the feedlines inside a shield (Fig. 5).

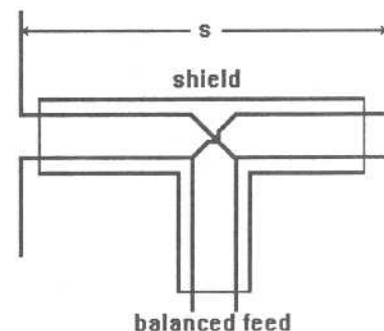


Fig. 5 Side view of shielded Adcock array

# EASTERN TVDX

WILLIS MONK - WB5KHD P.O. BOX 1452 COLLEGE DALE, TN 37315

Hello to one and all. It's time once again for another episode of Eastern TVDX. (Read this and imagine a organ playing a funeral dirge in the background as in the days of old radio soapoperas) Today as our column opens we see Ye Olde Editor hard at work, with beads of perspiration falling from his brow and a worried look on his face hoping to be able to bet the dead line set upon him by the evil taskmaster. Trying to decipher the hand writing of the many reports that are sent in each month, he becomes weak with discouragement. However he continues to slave over a hot computer and battling against the evil that lurks within it's circuits. But, never fear, Ye Olde Editor is filled with dedication,loyalty and faithfull to the task as he rises to the thanklessness of the job.

Will He be able to overcome the hardships forced upon him by the evil taskmaster? Will he survive the evil of the computer? Only time can know the truth. But let us pause for this word from our spencers.....

## ROY BARSTOW

B ox 2488 Teaticket, Mass 02536

This is a conuation of Roy's report from the January issue....

### SEPTEMBER 96

5	Tr	2100	WHSN-24	MD
			WBOC-16	MD
			WMPT-22	MD
			WCPB-28	MD
			WNUV-54	MD
			WBFF-45	MD
2130			20,26,32	DC
			WBAL-11	MD
			WJZ-13	MD
			WUSA-9	DC
			W42??	PA
			W42AJ	DC
2200			WTMW-14	VA
			WMDT-47	MD
			W48AW	DC
2230			WNVC-56	VA

### Roy's report continued.....

			WTKK-66	VA
		2250	WFPT-62	VA
		2300	WHAG-31	MD
			WLFY-15	PA
		2315	WTF-33	PA
			W46BL	PA
		2315	WLVT-39	PA
		2345	W42AC	VA
			WHTM-27	PA
6	Tr	0100	WMPB-67	MD
		0200	W14BN	VA
			VIDEO STATION 2	
		0245	WHAG-25	MD
		0320	WGPT-36	MD
	Tr	0340	WGAL-8	PA
		0415	WPMT-43	PA
		0445	WHP-21	PA
17	Es	1245	WCBD-2	SC
		1300	WSAV-3	GA
		1915	KTVO-3	MO

### OCTOBER 1996

1	Tr	1915	WHYY-12	DE
			WCAU-10	PA
		1925	WVEC-13	VA
		2000	WVTR-20	NY
		2015	WOCD-55	NY
		2100	WRLH-35	VA
			WMTW-14	VA

(Roy please check you log-I thought that WMTW was channel 8 in Poland Springs,Me.)

			WUNP-36	NC
		2300	WRMY-47	NC
		2305	WRDC-28	NC
			W36BK	VA
		2310	WVIR-29	VA
		2315	WTVD-37	????
			WTVD-11	NC
		2320	WWBT-12	VA
		2330	WTKR-3	VA
2	Tr	0005	WBCD-50	DC
			WFPT-62	MD
		0055	WEKW-52	NH
			W15BK	NH
		0225	WWPB-31	MD
		0230	WAVY-10	VA
6	Tr	2300	WENY-36	NY

			WETM-18	NY
7	Tr	0030	WPDE-15	SC
			WRDC-28	NC
		0040	WLNV-31	NC
		0045	WKFT-40	NC
		0055	WNCN-17	NC
		0056	WFL-22	NC
		0110	WTAT-24	SC
		0202	WWPB-31	MD
			WGPT-36	MD
			WRLH-35	VA

### 7 SEPTEMBER 1996, cont....

	Tr	0210	WSFX-26	NC
		0230	WXLV-45	NC
		0245	WJPR-21	VA
			WVFT-27	VA
		0300	WCNC-36	NC
			WTVI-42	NC
			WJZY-46	NC
	Tr	0310	WKBS-47	PA
		0320	WSET-13	VA
		0410	WOLO-25	SC
		0420	WTWB-19	PA
7	Tr	0440	WCCB-18	NC
		0500	WLTX-19	SC
		0525	WRLK-35	SC
		0550	WBRA-15	VA
		0615	WUNE-17	NC
		0655	WSET-13	VA
		0700	WVIR-29	VA
8	Tr	0030	WEKW-52	NH
			W69AD	VT
			WRNN-62	NY
		0100	WMGC-34	NY
			WENY-36	NY
		0145	CKCW-2	NB
		0150	CBCT-13	PEI
		0155	W24BB	PA
		0200	WETM-18	NY
		0215	CH. 21 SHOPPING	

### SPREE-WEST???

		0230	W65BX-WDMR MA	
		0245	38, 56	PA
			/// TEST-LOCAL QUALITY	
		0253	WPGH-53	PA
		0300	W19???	PA
		0310	WOIO-19	OH
		0315	WKBN-27	OH
		0320	W14AH	NY
		0345	WYTV-33	OH
			WHTM-27	PA
		0410	WSEE-35	PA
		0415	WJET-24	PA
		0430	WNEO-45	OH
			WGGN-52	OH
		0450	WILF-53	PA
		0510	WHIZ-18	OH

0550 WUPW-36 OH

### ROY'S COMMENTS:

The Es this season was one of the best in many years. Eric Voytko sums it up best when he says "it was raining Es" in July. With all the storms, we in the east were loaded with Es, while out in the west with dry weather they didnt fare as well.

Tropos took a vacation in september but came back in october. On the morning of 7 Oct, with tropical strom Josephine in florida, DX was in along the coast to s.c. but did not stay on the coast for long. Inland stuff started coming in and best DX into NC for many years. Florida UHF is nice to pick-up but to tell you the truth I would rather be seeing some inland DX. On the morning of the 8th with the remnants of Josephine around VA another opening to the west was in. The best ever DX to Ohio.

Ohio was coming in at a good level but nothing west of WUPW-36. There was a front located northeast to southwest along the N.W. section of Ohio. This wall I could not penetrate. This was DXers heaven for two nights.

### JEFF WOLF

14302 Astrodome Drive, Silver Springs, MD 20906

### AUGUST 1996

31	Tr	0500	WXTV-41	NY
----	----	------	---------	----

### SEPTEMBER 1996

5	Tr	2230	Zero and 20khz CCI over	
			WGAL-8	PA
10	Tr	0915	WPDE-15	SC
			Unid-24	
			Unid-31	NC(1)

### OCTOBER 1996

2	Tr	0902	zero CCI over WWBT-12	
7	Tr	0532	WBRE-28	PA
			zero CCI on	
			ch.13,16,25,35	
		0542	WTAJ-10	PA(2)

### DECEMBER 1996

19	Es	1657	MUF TO CH. 4	
		1659	WPBT-2	FL
		1707	WESH-2	FL

(1) Sesame Street zero beat to WWPB-31 MD  
(2) ID "Storm Tracker 10" Mention of State College Local news.

**DAVE NIEMAN**

Ho Sta Geh Rd., Rock City, NY 14749

## DECEMBER 1996

22	Tr	0829	WTAP-15	WV
		0834	W41AA	WV
		0900	WFWA-39	IN
			WANE-15	IN
		0921	WPTO-14	OH
		0930	WFTE-58	IN
		0940	WLKY-32	KY
		0941	WOSU-34	OH
		0945	WKMR-38	KY
		0953	WDRB-41	KY
		0955	WCET-48	OH
		1011	WSTR-64	OH
Tr		1014	WTTE-28	OH
		1030	W39AZ	WV
		1037	WKOI-43	IN
		1045	W51BI	OH

**DOUG SMITH**

1385 Old Clarksville Rd, Pleasant View, Tn 37146

## NOVEMBER 1996

18	Tr	2336	WCFT-33	AL
			WBMG-42	AL
			WTTO-21	AL
19	Tr	0706	WIIQ-41	AL
			unID-63	weak religious
			Miss ETV on 14/18/23	
19	Tr	0718	WLOV-27	MS
		0725	WJTV-12	MS
			WAPT-TV	MS
		0749	WGNX-46	GA
			WUPA-69	GA
			WJSP-28	GA
		0819	WHS-63	GA

## DECEMBER 1996

6	Es	1700	MUF TO CH 4	
8	Es	1900	unID 2,3 MEXICO	
10	Tr	0852	WLBT-3	MS
			WTVA-9	MS
			WVTM-13	AL
			WAPT-16	MS
			WMAU-17t	MS
			WLOV-27	MS
			WMPN-29	MS
			WIIQ-41	AL
			WBMG-42	AL
			WTTO-21	AL
			WCFT-33	AL
			WJSU-40	AL

## Doug,s report cont.....

(WNAL-44 NOT SEEN,OFF??)

			WBIQ-10	AL
		0916	WHS-63	GA

**WILLIS MONK**

Box 1452 Collegedale, Tn

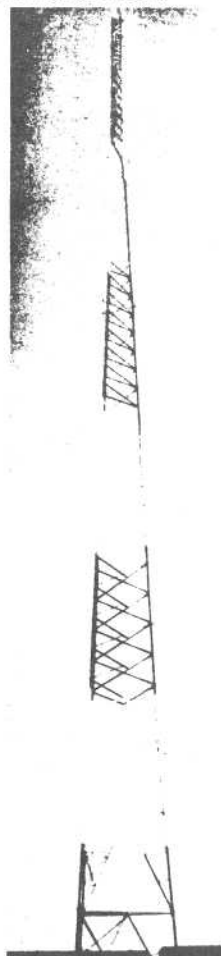
## JANUARY 1997

2	Tr	2330	KATV-7	AR
			WLOS-13	NC
		0000	WREG-3	TN

COVERING THE LOCAL CH 3

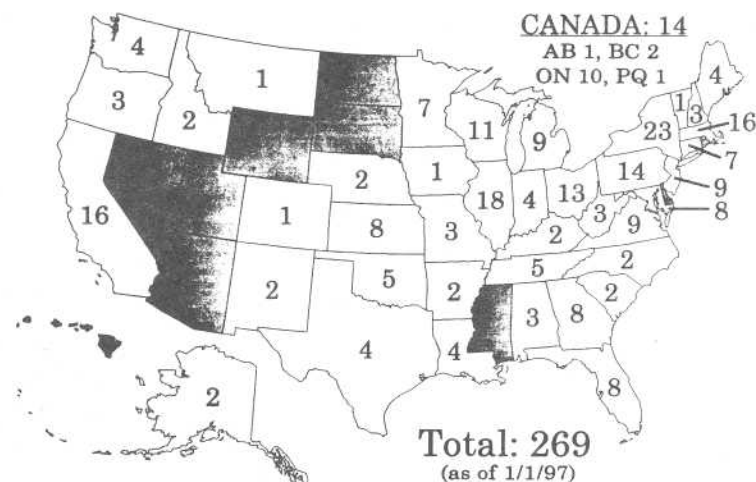
			KTVE-10	AR
			WAFF-4	SC

KATV-7 WAS CARRING THE SUGAR BOWL WITH S-9 SIGNAL ALMOST BETTER THAN THE LOCAL ABC STATION..



## SUPPORT YOUR CLUB! HELP SPREAD THE WORD ABOUT TV-FM DX'ING AND THE WTFDA!

### Geographic Distribution of WTFDA Membership

**OTHER FOREIGN: 6**

Germany 1, Italy 1, Japan 1, Mexico 1, Netherlands 1, Spain 1



**WORLDWIDE TV-FM DX ASSOCIATION**  
SERVING THE VHF-UHF DX ENTHUSIAST