#### The Worldwide TV-FM DX Association

Serving the VHF-UHF Enthusiast



## **VHF-UHF DIGEST**

**E-ZINE VERSION** 

#### **JANUARY 2002**

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 broadcasting signals at VHF and UHF. The WTFDA is governed by a board of directors: TOM BRYANT, GREG CONIGLIO, BRUCE HALL, DAVE JANOWIAK AND MIKE BUGAJ.

#### **CHECK THIS LIST!**

In order to keep your VUD arriving at your home without interruption, look for your name on this list. Your membership ends on the last day of the month shown. Renew *early!* 

#### **January**

Danny Buntin Scott Hood
Keith Smith Peter Oprisko
Burton Zacks Jeff Schultz
Winston Smith Ken Onyschuk
Wally Dickson Gary Olson
Brian Farnsworth John Broomall
Doug McAbee Dave Allen

Paul Mitschler

#### <u>February</u>

Frank Merril John Zeis
Jeff Wolf Dan Cashin
Steven Cornell Dan Dankert
Nathaniel Ely Paul Hansen
Harry Hayes James Nahirniak
Ray Leko Clay Autery

Morris Sorensen

Also check the expiration dates on your mailing labels. If the date is highlighted yours is very close.

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30-50 Scanner F2 News
Satellite News-George Jensen
Southern FM DX-John Zondlo
Mid-Latitude Spe Review-Mike Hawk
Renewal Form & Editors' Addresses

This month we note the return of Photo News. We've come up with a way to include Photo News in the eVUD without blowing the file size of the eVUD out of the water. As a result, one or two of the photos might not appear as "good" (and that is a *relative* term) as they would appear in the VUD, but for the most part most of the photos are acceptable. At least in this issue, the eVUD is a complete mirror of the paper VUD. Also don't forget to check out the first three pages of Mike Hawk's E skip article!

Please note that every attempt is made to include every column appearing in the paper VUD, however that is not always possible

## **IRCA Mexican Log, 7th Edition**

The IRCA MEXICAN LOG lists all AM stations in Mexico by frequency, including call letters, state, city, day/night power, slogans, schedule in UTC/GMT, formats, networks and notes. The call letter index gives call, frequency, city and state. The city index (listed by state, then city) includes frequency, call and day/night power. The log has been completely updated from the 2000 edition and carefully cross-checked by several IRCA members. This is an indispensable reference for anyone who hears Mexican radio stations. Size is 8 1/2" x 11" and three hole punched for easy binding. Prices: IRCA/NRC/WTFDA members - \$9.00 (US/Canada/Mexico/sea mail).

To order from the IRCA Bookstore, send the correct amount (in US funds payable to Phil Bytheway) to: IRCA BOOKSTORE, 9705 MARY NW, SEATTLE WA 98117-2334.

The log is published every year in September. Updates and corrections go to Chris Knight, 1018 Pacific Ct., Ft. Lupton CO 80621 USA or by email at swrad@juno.com.



# The Mailbox

P.O. Box 501, Somersville, CT USA 06072 MIKE BUGAJ MBUGAJ@SNET.NET

#### **JANUARY 2002**

Welcome back everyone. The year 2001 is now in the can and we're off to the races in 2002. Last year was a good year for the club but we did have some changes. Bill Thompson retired as VUD publisher, Paul Swearingen took over for four months and then a rookie started in August, finished the year and started another.

The WTFDA list quietly celebrated it's second anniversary in August and would have gone completely un-noticed except for the fact that **Ryan Grabow** remembered and mentioned it to the rest of us. The WTFDA list has roughly about 130 subscribers with 99% of them being WTFDA members and the rest being people checking out the club. To those of us with a computer, the Topica list is one of the best perks we have as club members, if not the best.

Club membership is doing well. As of December first we had about 19 members who hadn't renewed for another year but on the flip side we had 24 people join. As of December 10 we have 278 members. Of these, 16 are from Canada and one each from Mexico, Italy, Germany, New Zealand, Cuba, Japan and Australia. We have ten online associate members. We have three overseas members and one US member receiving the VUD from the internet exclusively.

What's in store for 2002? Well, a new updated WTFDA TV Station Guide is in the planning stages and may be available in print form sometime before skip season starts. We plan on aggressively looking for new members on the internet since the internet is the place where we are clearly visible through our WTFDA ANARC website and our great member websites like John Zondlo's FMDXWEB, Doug Smith's TV website and Ryan Grabow's popular E skip logo website. All in all there must be at least 25 members with websites and they all mention the WTFDA.

**Tim McVey** has reported that the ANARC has moved member club sites over to a new and improved server and he now

can add information almost immediately. They have also given us more space on their server and we will be figuring out ways to use that space to our advantage.

When certain other clubs are having internal and external problems, we are not. The future is bright for the WTFDA and 2002 should be another great year for us, thanks to all of you!

#### **MEMBERS ABD MORE**

This month we welcome in two new WTFDAers. Robert Coomler lives in Cloverdale, CA about 100 miles north of San Francisco and he is going to give Dxing a try. Peter Baskind lives in Germantown, TN and was in the club doing TV Dxing during the 80s. Peter uses TV Es to help him with propagation and skip info on the ham bands. Robert, if I remember correctly, is also a ham.

**Steven Wiseblood** rejoins after being away for some months. Steve is back in Santa Maria, CA again for a few months before returning to TX and I'm happy to see him back with us once more.

Recent renewals came in the mail from David Wurl(WI), Tom Bryant(TN), James Roggentine(CA), Luke Steele(MO), Chester Jaffee(CA), Matt Sittel(NE), Dave Pomeroy(KS), Jim Thomas(CO), Rick Shaftan(NJ) and Gil Morgan(MO). Associate memberships also renewed by Kevin Redding and Mituhiro Hukunaga for another year. Thank you all for hanging around and may 2002 be a great year for everyone!

#### 110 AND 150khz CERAMIC FILTERS

Back on October 11, **Steve Solomon** posted this: "I recently went on line and searched for "10.7MHZ ceramic filters", looking for a source for Muratas. Well, I didn't find them, but I came across two other suppliers, one in Taiwan and the other in Tustin, CA. (continued next page)

They were nice enough to send me a few samples so I could test them. When they arrived both types looked similar to Muratas and one even said "similar to Murata" in their documentation.

So the test began. I received two 150khz and two 110khz filters from the CA company (SNR Inc.) and 35 110khz filters from the Token Company in Taiwan.

TOKEN Taiwan: I put five 110khz in the Yamaha T-85. I mixed and matched from socket to socket and put other wider filters in the first few slots. RESULTS: I think they act a tiny bit wider than Murata 110khz but they are all exact with little or no variation whatsoever. They are all also nicely centered. Good filters. They are way better than Tokos and comparable but a tiny wider than Muratas.

**SNR CA**: Tested with 3 Tokens in the first three slots and the two SNRs in the narrow two slots. Immediately started receiving higher gain and tighter selectivity using 103.1 as a reference. With local WPXC directly in the antenna path at six miles, no splatter at all on 103.11 (fine tuned) and "103.1 the Point" in Vermont in solid. Locals and semi-locals are all perfect with no super narrow audio distortion. Great filters".

Steve even went one more step and bulk ordered a few hundred of the SNR 150s and 110khz filters. I myself bought fifty 150s and fifty 110s to play with. I tried them and compared them against the comparable Murata filters that I had installed in my Sony ST-5130 and my opinion is that these SNR filters are the equivalent of the Murata as far as loss and the steepness of their selectivity curves; in other words the same thing. As far as I know there have been NO negative reports from people using these filters. All reports I've heard are that these SNR filters are as good as, or better than the Murata filters.

Steve may consider another bulk order. If you are interested and are online just send an email to Steve at <a href="max-emailto-steve">mcv@makkayradio.com</a> and get ordering information from Steve. He may also put you in contact with one of the people who bought in bulk from him and maybe you can buy a few from one of those folks. And Steve, thanks for taking on this task!

#### RHOMBIC ROMANCE

A while back Bob Cooper sent us two articles on building rhombic TV antennas. Bob wrote: "this may or may not be fodder for the reference website. A couple of years back there was a flurry of interest in

rhombics for TV(DX) and I supplied some copies of the enclosed CATJ materials to a couple of people in our group. The Buchan piece was done by him and sold through small classified advertisements in Radio TV News and Radio Electronics. I bought a copy at the time and actually found it recently in its original yellow binder cover. For me it was at the time (age 13) like opening a door through which I passed and never looked back. Buchan died in 1993 (he was living in Minneapolis at the time) or so and his estate sold out some bound copies of Radio TV News and Radio Electronics and strangely enough I was one of the buyers and they sit on my book shelf today here in New Zealand.

I immediately built several rhombics (in Ithica, NY) for TV from Buchan instructions and used these for TV Dxing until my family moved to California in 1953. There in Lafayette, CA I immediately built another one which is the antenna I was using for the Brazilian Es(or who-knows-what-mode) reception. The CATJ material is probably the very best all in one spot analysis of rhombics(for TV) ever done, but by 1976 very few people needed one or cared."

For those who want more rhombic information, the 1951 article by Richard J. Buchan can be found on the internet at the Memorabilia site at (members.fortunecity. com/wtfdamem) and I've converted Bob's 19 page article on building rhombic antennas into an Adobe .pdf file which any WTFDA member can have sent to them as an email attachment This file is 2.5mb in size. Sorry, but I can only honor email requests. We will try to find a good home for this file for future use by WTFDA members.

#### **DON'T PHONE MY HUSBAND**

You say your wife hates your Dxing? Then maybe you can relate to this. This email was sent to the Skywaves(UK) list in the middle of a heavy tropo opening in early December. I think some of these fellows were spending too much time on the phones talking about tropo because the next morning this post appeared on the Skywaves list (this has not been edited):

"if any dick head phones my husband up again after ten oclock at night and before 8 oclock in the morning I will not be responsible for my actions. Ps hope u all have a nice Christmas and all your radios blow up."

Don't tangle with this lady! CU next month.

# TV News- January 2002

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http://www.w9wi.com

#### Abbreviations:

AF	Applied for (a new station)	PC	Power (or tower height) change on
CA	Class A status request/grant		the air
CC	Call change	PG	Power (or tower height) change
CL	City-of-license change		granted
DE	Station deleted	PR	Power (or tower height) change
FC	Programming (format) change		requested
GA	Granted amendment to the table of	QC	Channel change on the air
	allocations	QG	Channel change granted
LC	License to cover (for changes or	QR	Channel change requested
	new station)	SI	Off the air ("silent")
NO	Not on the air	XC	Transmitter site change on the air
NS	New station granted permit	XG	Transmitter site change granted
NW	New station on the air	XR	Transmitter
PA	Proposed amendment to the table of		
	allocations		

News: Alaska: Fairbanks	<b>2 KATN</b> 13 K13XD	PG>26.7kw/129m, 64-54-42/147-46-38 PG>3kw, fm. no ofst to	Tucson Verde Valley	34 KTAZ-LP 21 K21GD	QG from ch. 25, 9.9kw QG from K61BG, 1.22kw
zero Juneau Kenai Kodiak Nome	5 KATH-LP 6 K06MF 5 K05KW 6 new	CC from K05JR PG>1.44kw NS, 3kw, 57-47-41/ 152-23-28 (KYES-5, UPN) dismissed	California: Bakersfield Bakersfield Campbell	8 K08MM 31 KABE-LP 8 K08NB	LC dismissed from ch. 9 QG from ch. 39, 60kw NS, 3kw, 41-29-00/120-32-51
Alabama: Decatur Florence Huntsville	66 W22BF <b>20 WYLE-DT</b> <b>19 WHNT-TV</b>	LC from ch. 22, 10.8kw XG 34-36-40/87-44-14 LC for	Crescent City Eureka Fort Bragg Fresno	36 K36GG 46 K46GM 39 new 44 new <b>9 KFSN-DT</b>	NS, 3.8kw, 38-50-37/122-56-45 QG from K39EO dismissed (2) dismissed (2) NW, 8.7kw/614m
Tuscaloosa	23 WLDM	PG>1290kw/531m NW, 890kw/266m, 33-03-15/87-32-57, UPN//WABM-68	Lakeport Lancaster Long Beach Los Angeles	15 K60FP 26 K26GN <b>61 KSCI-DT</b> <b>58 KLCS</b>	LC, 0.93kw QG from K54DN, 4.6kw LC 256kw/950m, 34-13-36/118-03-59 PG>2570kw/901m
Arkansas: Batesville	57 K57IP	QG from ch. 44, 49.9kw, 35-02-35/95-57-11 near McAlester, OK	Merced  National City	<b>5 KNSO-DT</b> 23 K61GH	QG from ch. 38; PG 12.9kw/532m, 37-04-18/119-25-53 QR dismissed, Mexican objection (XETV-DT)
El Dorado	51 K46DT	QR from ch. 46, 150kw, 34-22-12/92-10-08 near Pine Bluff	Palm Springs Red Bluff	66 K66BM 49 K49GJ	PC>10kw NS 0.81kw, 40-12-49/122-07-02
Fort Smith Little Rock Little Rock Mountain Hom		QC from ch. 27, 7.5kw PC 18.3kw <b>PG&lt; 449m</b> QG from K43CJ, 10.2kw	Redding Redding <b>San Diego</b>	45 K34DF 50 K50GP <b>30 KPBS-DT</b>	QR from ch. 34, 36kw QC from K65DJ, 45.7kw <b>NW, 350kw/567m,</b> <b>32-41-53/116-56-03</b>
Pine Bluff Pine Bluff Sheridan	<b>38 KASN 39 KASN-DT</b> 47 KWBF-LP	<b>PG&lt;590m PG&lt;590m</b> QR from ch. 5, 104.6kw, 34-30-27/92-32-48	San Diego Sanger	63 K63EN <b>59 KFRE-TV</b>	PG>9.8kw, 32-35-42/116-50-39 PR>5000kw/1460m(?), 37-04-37/119-26-01
Arizona: Camp Verde Ganado	19 K19FC 9 K09XH	QG from K18DD, 3.28kw LC; FC to KOB-4	Simi Valley Santa Barbara	33 KSMV-LP 51 KBAB-LP	QC from ch. 44, 12.5kw, 34-13-36/118-03-57 QR from ch. 38, 3.57kw, 34-27-58/119-40-37
Globe Holbrook	16 K16FB  11 KPHZ	NS, 10kw, 33-22-51/ 110-45-25 NW 1.6kw/54m, 34-55-05/ 110-08-25	Aspen	8 K08ND 14 new	NS, 0.258kw, 40-16-52/103-05-55 dismissed
Phoenix Phoenix Tacna	<b>39 KDTP</b> 48 KDRX-LP 40 K40GN	LC for NW, 1070kw/491m, 33-20-01/112-03-45 QC from ch. 64, 15kw NS, 50kw, 33-43-36/113-44-47 (KYMA-11, NBC)	Bayfield  Broomfield  Cortez	50 K50FS  12 KBDI-TV  14 K14JS	QC from ch. 63, 1.2kw, 37-11-03/107-29-07 <b>PG&lt;226kw/742m</b> PG>0.92kw, 37-21-01/108-08-01, also K18DR

Cortez	22 K22CU	PG<0.92kw, 37-21-01/108-08-01	Valdosta	43 WVAG-DT	NS, 50kw/253m
Denver Haxtun	33 KMAS-LP 31 K31FZ	PG<0.65kw QG from K47DE, 0.89kw, also K33GM, K35GO	<u>Hawaii:</u> Honolulu	44 KWBN	LC 55kw/632m,
Holyoke <b>Colorado:</b>	15 K15FD	QC from ch. 63, 3.46kw	Hawaii:	77 KWDK	21-19-49/157-45-24
Holyoke	17 K17EU	QC from ch. 65, 3.46kw	Kauai	47 new	dismissed
Holyoke	19 K19EG	QC from ch. 67, 3.46kw	Kauai	49 new	dismissed
Holyoke	21 K21FF	QC from ch. 61, 3.46kw	Lihue	47 new	dismissed (2)
Idalia	16 K16EK	QC from ch. 46, 0.59kw, 39-43-50/102-28-56	Lihue	49 new	dismissed
Idalia	18 K18FO	QC from ch. 48, 0.59kw, 39-43-50/102-28-56	<u>lowa:</u> Burlington	26 KGWB-TV	PG>2500kw/425m
		ame power & TL	0.1	44.1/005.1.0	rescinded
Peetz	16 K16EJ	QC from ch. 17, 0.76kw, 40-53-31/103-13-45	Cedar Rapids Emmettsburg	44 KCDE-LP 45 new	QG from ch. 67, 29kw dismissed
Peetz	18 K18FN	QC from ch. 19	ldaha.		
Peetz	20 K20FS	QC from ch. 21	<u>ldaho:</u>	00 1/0000	00 frama als 00 446 41
Peetz	26 K26FM	QC from ch. 54	Boise	30 K30GS	QG from ch. 68, 116.4kw,
Peetz	28 K28FW	QC from ch. 56			42-43-48/114-24-52 near
Peetz	30 K30FO	QC from ch. 58	ъ.	04.1/04.50	Twin Falls
Redstone	14 new	dismissed	Boise	31 K31FD	LC dismissed
Rulison	26 K26FK	QC from ch. 66	Caldwell	10 KNIN-DT	PG<818m
Sargents	6 K06NG	NS, <5w,			
		38-23-26/106-24-39	<u>Illinois:</u>		
Wray	44 K44FM	QC from ch. 56, 0.56kw	Champaign	46 WBXC-CA	PG>15kw
Yuma	32 K32AB	PC>2.69kw, also K34AC,	Chicago	3 WBBM-DT	PR>3.7kw/448m
		K36AC, K38AD, K40CG	Chicago	19 WMAQ-DT	NW, 350kw/508m
			Chicago	23 WFBT-CA	PC>19.6kw
Connecticut:			Chicago	45 WSNS-DT	NW, 467kw/472m
Hartford	46 WUVN-DT	PG>217kw/269m,	Quincy	40 K40GO	QG from ch. 63, 40kw,
		41-46-30/72-48-04			42-29-56/92-15-51 in
Florida:					Waterloo, Iowa (thus K
	h11 WESH-DT	NW 60kw/515m,			callsign is correct!)
		28-36-35/81-03-35	Quincy	48 W48CU	QG from W34CD or
Jacksonville	30 WAWS	PR>4000kw/307m,	~y		W65CZ, 140.7kw near
		30-16-51/81-34-12			Hoopeston
Key West	31 W31AB	PR>4kw,	Salem	29 W29CI	LC from ch. 28 dismissed
24-33-18/81-48		, , , , , , , , , , , , , , , , , , , ,	Springfield	8 W08DP	QC from ch. 65, 0.14kw,
Key West	44 W44AC	PR>3.9kw,	Gpg	o oo z .	39-49-44/89-35-44
110) 11001		24-33-18/81-48-07			00 10 1 1/00 00 11
Lake City	15 W.IXF-I P		Indiana:		
Lake City	15 WJXE-LP	QR from ch. 15, 50kw,	Indiana: Evansville	59 WEHT-DT	NW 59kw/301m
Lake City	15 WJXE-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near	Evansville	59 WEHT-DT	NW, 59kw/301m
·		QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville	Evansville Indianapolis	9 WISH-DT	NW, 19.5kw/284m
Lakeland	19 WMOR-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m	Evansville		<b>NW, 19.5kw/284m</b> QC from ch. 53, 40kw,
<b>Lakeland</b> Mayo	<b>19 WMOR-DT</b> 9 W09CN	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville	Evansville Indianapolis Indianapolis	<b>9 WISH-DT</b> 65 WDNI-LP	<b>NW, 19.5kw/284m</b> QC from ch. 53, 40kw, 39-49-29/86-09-23
<b>Lakeland</b> Mayo 30-02-45/83-05	<b>19 WMOR-DT</b> 9 W09CN 5-43	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville <b>PR&gt;458m</b> NS, 3kw,	Evansville Indianapolis	9 WISH-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw,
Lakeland Mayo 30-02-45/83-05 Melbourne	<b>19 WMOR-DT</b> 9 W09CN 5-43 62 W62CC	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura?	Evansville Indianapolis Indianapolis Kokomo	9 WISH-DT 65 WDNI-LP 50 WKGK-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57
Lakeland Mayo 30-02-45/83-05 Melbourne Miami	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura? NW 1000kw/309m	Evansville Indianapolis Indianapolis	<b>9 WISH-DT</b> 65 WDNI-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura? NW 1000kw/309m LC 1000kw/298m	Evansville Indianapolis Indianapolis Kokomo Salem	9 WISH-DT 65 WDNI-LP 50 WKGK-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m	Evansville Indianapolis Indianapolis Kokomo Salem Kansas:	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw,	Evansville Indianapolis Indianapolis Kokomo Salem Kansas: Dodge City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw, FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m	Evansville Indianapolis Indianapolis Kokomo Salem Kansas: Dodge City Dodge City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m dismissed dismissed (2)
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near	Evansville Indianapolis Indianapolis Kokomo Salem Kansas: Dodge City Dodge City Dodge City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m dismissed dismissed (2) dismissed (2)
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound	Evansville Indianapolis Indianapolis Kokomo Salem Kansas: Dodge City Dodge City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m dismissed dismissed (2) dismissed (2) NS, 0.5kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed	Evansville Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m,	Evansville Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw	Evansville Indianapolis Indianapolis Indianapolis Solem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky:	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville Bowling Greei	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Palm Beach Hobe Palm Beach Panama City Panama City Pensacola Port St. Lucie Tampa	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville Bowling Green Corbin	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville Bowling Green Corbin	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Georgia:	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo  Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington Owenton	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38 PR<313m,	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo  Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington Owenton  Louisiana:	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Georgia: Atlanta	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP  61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38 PR<313m, 33-48-26/84-20-22	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo  Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington Owenton	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Georgia:	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m,	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo  Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington Owenton  Louisiana:	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Tampa Georgia: Atlanta Bainbridge	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP  61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB  36 WATL 49 WTLH	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin Lexington Owenton Louisiana: Alexandria	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 144 WKON-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Georgia: Atlanta	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP  61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21 PG>650kw/403m,	Evansville Indianapolis Indianapolis Indianapolis Indianapolis Kokomo  Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin  Lexington Owenton  Louisiana:	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE 38 new 41 new 43 new 7 K07XH 41 new 13 KOAM-DT 7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Tampa Georgia: Atlanta Bainbridge	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP  61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB  36 WATL 49 WTLH	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia Garden City Pittsburg  Kentucky: Beattyville Bowling Greet Corbin Lexington Owenton Louisiana: Alexandria  Baton Rouge	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT  19 K55GT  30 WLFT-LP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw, 30-23-04/91-03-27
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Tampa Georgia: Atlanta Bainbridge	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP  61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB  36 WATL 49 WTLH	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21 PG>650kw/403m,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Green Corbin  Lexington Owenton  Louisiana: Alexandria  Baton Rouge  Baton Rouge	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT  19 K55GT  30 WLFT-LP 41 K41HD	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw, 30-23-04/91-03-27 QG from K65FP, 50kw
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Tampa Georgia: Atlanta Bainbridge Brunswick Ringgold	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB 36 WATL 49 WTLH 24 WPXC-DT 28 WRNG-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21 PG>650kw/403m, 30-49-17/81-44-13 QR from ch. 63, 78.1kw, 34-57-07/85-22-58	Evansville Indianapolis Indianas:  Evansoria Indianapolis  Evansoria Indianas  Evansoria Indianas	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT  19 K55GT  30 WLFT-LP 41 K41HD 65 K65FP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw, 30-23-04/91-03-27 QG from K65FP, 50kw QG to ch. 38 dismissed
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe  Palm Beach Panama City Pensacola Port St. Lucie Tampa  Tampa  Tampa  Georgia: Atlanta  Bainbridge  Brunswick	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT  54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB  36 WATL 49 WTLH 24 WPXC-DT	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21 PG>650kw/403m, 30-49-17/81-44-13 QR from ch. 63, 78.1kw,	Evansville Indianapolis Indianapolis Indianapolis Kokomo Salem  Kansas: Dodge City Dodge City Dodge City Emporia  Garden City Pittsburg  Kentucky: Beattyville Bowling Green Corbin  Lexington Owenton  Louisiana: Alexandria  Baton Rouge  Baton Rouge	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT  19 K55GT  30 WLFT-LP 41 K41HD 65 K65FP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw, 30-23-04/91-03-27 QG from K65FP, 50kw QG to ch. 38 dismissed NS, 25kw,
Lakeland Mayo 30-02-45/83-05 Melbourne Miami Miami Miami Palm Beach Hobe Palm Beach Panama City Pensacola Port St. Lucie Tampa Tampa Tampa Georgia: Atlanta Bainbridge Brunswick Ringgold	19 WMOR-DT 9 W09CN 5-43 62 W62CC 18 WPBT-DT 22 WFOR-DT 32 WBFS-DT 43 WINQ-LP 61 WFGC 9 WPGX-DT 54 W54CU 12 WBQP-LP 35 W35BS 30 WTAM-LP 56 W56EB 36 WATL 49 WTLH 24 WPXC-DT 28 WRNG-LP	QR from ch. 15, 50kw, 29-32-05/82-19-12 near Gainesville PR>458m NS, 3kw,  FC to Telefutura? NW 1000kw/309m LC 1000kw/298m PG<517kw/283m PR>53.22kw, 27-01-32/80-10-43 near  Sound PG<4000kw dismissed QG from ch. 29, 130kw/264m, 30-13-45/85-23-20 QG from ch. 68, 22.3kw PG>2.89kw QG from ch. 58, 26.8kw, 27-07-14/80-23-59 QR from ch. 6, 144.6kw, 27-49-10/82-15-39 QG from ch. 68, 83kw, 27-49-11/82-15-38  PR<313m, 33-48-26/84-20-22 PC>5000kw/597m, 30-40-51/83-58-21 PG>650kw/403m, 30-49-17/81-44-13 QR from ch. 63, 78.1kw, 34-57-07/85-22-58	Evansville Indianapolis Indianas:  Evansoria Indianapolis  Evansoria Indianas  Evansoria Indianas	9 WISH-DT 65 WDNI-LP 50 WKGK-LP 58 WFTE  38 new 41 new 43 new 7 K07XH  41 new 13 KOAM-DT  7 WLJC-DT 140 WNKY 48 WVTN-LP 42 WKLE-DT 44 WKON-DT  19 K55GT  30 WLFT-LP 41 K41HD 65 K65FP	NW, 19.5kw/284m QC from ch. 53, 40kw, 39-49-29/86-09-23 QG from ch. 48, 8kw, 40-26-58/86-04-57 PG>5000kw/390m  dismissed dismissed (2) dismissed (2) NS, 0.5kw, 38-24-08/96-09-45 dismissed QR from ch. 30, 4.2kw/340m  PR<27kw PG>1640kw NW, 10.1kw, 36-58-21/84-07-28 NW, 48kw/252m NW, 49.7kw/214m  QR from ch. 55, 150kw, 29-58-23/93-59-22 near Orange, Texas QR from ch. 52, 50kw, 30-23-04/91-03-27 QG from K65FP, 50kw QG to ch. 38 dismissed

			Sedalia	6 KMOS-TV	LC for backup xmtr., 100kw/235m, 38-44-47/93-16-30 (using
Massachusett Boston	<u>s:</u> 3 WCEA-LP	QR from ch. 19 (?)	Springfield	3 KYTV	old main as backup) PG<611m
<u>Maine:</u> Biddeford	45 WMEA-DT	PG<50kw/231m,	Missouri: St. Louis St. Louis	33 K33GU <b>39 KETC-DT</b>	QG from K18BT, 10kw <b>PG&lt;125kw</b>
Portland	15 WLOB-LP	<b>43-25-00/70-48-17</b> PR<6.5kw, 43-41-48/70-21-46	Mississippi: Columbia	45 W45AA	PC>14.2kw
Michigan: Alpena	57 WCML-DT	PG<200kw/393m	Natchez	48 WNTZ	PR>5000kw/549m, 31-52-33/90-54-35 near
Cheboygan Cheboygan Houghton	26 new 32 new 51 new	dismissed dismissed dismissed	Natchez	49 WNTZ-DT	Port Gibson; FC to Fox PR<790kw/549m, 31-52-33/90-54-35
Houghton Lake	e 44 W18CB	QR from ch. 18, 100kw, 43-41-10/85-34-59, Big	Starkville	32 new	dismissed (2)
Ishpeming	10 WBUP	Rapids PG>412m	Montana: Billings	11 KULR-DT	PG>6.08kw/191m
Kalamazoo	26 W26BX	QC from ch. 24, 5.3kw	Billings	38 new	dismissed (2)
Ludington	31 W48BY	QR from ch. 48, 37.2kw,	Bozeman	11 K11UJ	QC from ch. 2
-		43-21-44/88-53-45 near Watertown, Wisconsin (too	Butte	24 KBTZ	PR<346kw/585m, 46-00-24/112-26-30
Ludinaton	EC W24D7	close to WVCY-30?)	Glasgow	27 new	dismissed
Ludington	56 W34BZ	QR from ch. 34, 30kw, 43-21-44/88-53-45, see	Great Falls Great Falls	21 new <b>26 KLMN</b>	dismissed (2) PR<355kw/65m
above		43-21-44/00-33-43, 366	Great Falls	49 new	dismissed
Marquette	51 new	dismissed	Great Falls	50 new	dismissed
Mount Pleasan		NW, 0.24kw,	Havre	9 KBBJ	NW, 9kw/397m,
		43-41-56/84-46-11			48-20-32/109-43-41
Pinconning	52 W52CU	NW, 0.25kw,			(KTVH-12, NBC)
D. L.	40 M/JDT J D	43-42-02/83-59-17	Kalispell	35 KMMF-LP	CC from KEXI-LP
Republic Sault Ste. Mari	43 WUPT-LP	CC from W43BY	Miles City	27 new	dismissed
Sault Ste. Man	e20 W56DI	QR from ch. 56, 150kw, 47-06-06/88-34-11, in the	North Carolina	·	
		Keweenaw Peninsula	Buxton	<u></u> 28 new	dismissed
Sault Ste. Mari	e 25 W 48BZ	QR from ch. 48, 60kw,	Buxton	48 new	dismissed
		46-30-59/87-29-07, near	Charlotte	38 W62BV	QC from ch. 62
		Marquette	Columbia	20 WUND-DT	NW, 543kw/489m
Sault Ste. Mari	e 28 W50CA	QR from ch. 50, 50kw,	Concord	44 WUNG-DT	NW, 150kw/404m
		45-35-27/84-37-09, near	Jacksonville Jacksonville	18 WUNM-DT 19 WUNM-TV	NS, 65kw/561m PG<2400kw
Sault Ste. Mari	e 32 W58CO	Cheboygan QR from ch. 58, 150kw, 46-26-28/90-11-27, near	Lexington	20 WTWB-TV	PG>5000kw/553m, 35-52-02/79-49-26
		Ironwood	New Bern	48 WCTI-DT	NW, 161kw/542m
Sault Ste. Mari	e 42 W52CB	QR from ch. 52, 100kw,	Rocky Mount	57 WOFF-LP	CC from WHIG-LP
_		45-46-56/87-06-04, near Escanaba	Wilmington	29 WUNJ-DT	PG>700kw/297m, 34-19-16/78-13-43
Traverse City	19 W36BZ	QR from ch. 36, 150kw,	North Dakata		
		44-14-56/85-18-48, near Cadillac	North Dakota: Bismarck	8 K08NC	NS, 3kw,
Traverse City	23 W48CC	QR from ch. 48, 100kw,	District	01100110	46-50-01/100-52-19
riavolos ony	20 11 1000	43-41-10/85-34-59, Big			10 00 0 1, 100 02 10
		Rapids	Nebraska:		
Traverse City	48 W23BL	QR from ch. 23, 49kw,	Bassett	20 K20GX	NS, 116.4kw,
		44-03-51/88-31-43, near			42-20-05/99-29-02, also
		Oshkosh, Wisconsin	Columbus	32 K32FS	K28HF & K49GI. QG from K52EX, 49.6kw,
Minnesota:			Columbus	32 N321 O	40-13-11/95-39-56, near
Duluth	25 new dismiss	sed			Tarkio, Mo.
Duluth	40 new	dismissed	Columbus	34 K34FX	QG from K21ES, 116.4kw,
Duluth	43 WDIO-DT	PG<900kw/394m			42-10-21/103-13-59,
Minneapolis	4 WCCO-TV	PC>452m			between Scottsbluff and
Minneapolis Minneapolis	21 WFTC-DT 32 WCCO-DT	NW, 1000kw/352m NW, 1000kw/433m	Columbus	38 K38GX	Alliance QG from K40FH, 101.6kw,
Minneapolis	35 KARE-DT	NW, 1000kw/435m	Columbus	30 N30GA	41-12-13/100-44-00, North
St. Paul	5 KSTP-TV	PC>451m			Platte
Willmar	6 K06NF	NS, 1kw,	Columbus	38 K38GZ	QG from K23EU, 116.4kw,
45-11-52/94-57	7-00				42-10-21/103-13-59,
					between Scottsbluff and
Missouri:	17 K17DL	DC> 20 Flow	Columbus	40 K40GJ	Alliance
Branson	II NIIUL	PC>20.5kw, 36-44-52/93-16-37	Columbus	40 N40GJ	QG from K33EM, 116.4kw, 42-10-21/103-13-59,
Kansas City	7 KMBC-DT	NS, 85kw/357m			between Scottsbluff and
Kansas City	31 KCWE-DT	PR<200kw/358m			Alliance
Columbus	42 K65GE	QG from ch. 65, 116.4kw,			41-12-13/100-44-00
		42-10-21/103-13-59	Columbus	46 K46GJ	QG from K55HX, 116.4kw,
Columbus	45 K45GS	QG from K59FT, 101.6kw,			

		41-25-53/99-50-18, Broken Bow	Glens Falls <b>New York</b> Syracuse	47 W14AZ <b>2 WCBS-TV</b> 38 W38CY	QC from ch. 14, 20.2kw <b>PC&gt;45kw</b> QG from ch. 59; 8.5kw,
<u>Nebraska:</u> Columbus	47 K47HI	QG from K54EU, 116.4kw, 42-20-05/99-29-03, near			42-56-45/76-06-16
Columbus	50 K28EN	Ansley QG from ch. 50, 130.6kw, 40-38-56/98-23-02,	Ohio: Columbus	28 WTTE	PR<1440kw/267m, 39-56-14/83-01-16
Hastings Falls City Gothenburg	46 K46FG 28 K28GC	QC from ch. 24, 16.6kw QC from ch. 27, 11.3kw	Findlay  Oklahoma:	54 WFND-LP	QR from ch. 47, 31.2kw
<b>Hastings</b> Lincoln Mullen	<b>5 KHAS-TV</b> 27 K27GX 33 K33GT	PG>371.8m dismissed QG from K31DU, 15.3kw NS, 12kw,	Altus Enid	42 K42FL 32 KXOK-LP	NS, 0.94kw, 34-38-21/99-21-19 CC from K32DZ
Mullen	39 K39FZ	41-59-11/101-02-28 NS, 12kw, 41-59-11/101-02-28	Lawton Lawton Muskogee	25 new 49 K27AZ 25 K25GJ	dismissed (2) QC from ch. 27, 26.4kw QC from ch. 58, 10.6kw
Norfolk	5 K05KV 42-03-07/97-29	NS, 3kw,	Oklahoma City		QC from ch. 22, 41.6kw, 35-23-14/97-29-57
	00 0.700		Oklahoma City	y 50 KOPX-DT	PR>2690kw/480m
New Jersey: Atlantic City	62 WWSI	NW, 5000kw/304m, 39-36-15/74-22-01	Stillwater Tahlequah <b>Tulsa</b>	31 KWEM-LP 52 K45ER <b>42 KTFO-DT</b>	XR 36-03-37/97-08-31 QC from ch. 45, 3.1kw <b>PG&gt;900kw/381m</b> ,
Vineland	65 WUVP	PR>4070kw/396m, 40-02-30/75-14-11			36-01-36/95-40-44
Vineland	66 WUVP-DT	PR>500kw/396m, 40-02-30/75-14-11	Oregon: Canyonville	32 K32ET	LC for QC from ch. 38 dismissed
New Mexico: Alamogordo	32 K32FC	FC to KOB-4, NBC	Corvallis Grants Pass	52 K52HM <b>30 KBLN</b>	QG from ch. 26, 13.4kw NW, 9.77kw/654m,
Alamogordo Albuquerque power	53 K53BM <b>35 KNME-DT</b>	PG<1.87kw NW, temporary low	John Day	2 K02PK	<b>42-22-56/123-16-29 (relig.)</b> NW, <5w, 44-26-02/118-57-27 (3Abn)
<b>Albuquerque</b> Albuquerque	<b>45 KASY-DT</b> 48 KTFA-LP	QR from ch. 51 CC from KTFN-LP	La Grande <b>La Grande</b>	2 K02PJ <b>13 KTVR</b>	QC from K07WD, 30w <b>PG&gt;100kw/780m</b>
Albuquerque	50 KASY-TV	PC<1399kw/1287m, 35-12-48/106-27-00	Portland Salem	<b>40 KOIN-DT</b> 57 KBPD-LP	<b>NW, 1000kw/523m</b> QC from ch. 30, 12kw,
Caballo	43 K43HC	NS, 1.17, 32-58-03/107-13-35 (KRWG-22, PBS)			44-58-58/123-08-43; CC from K57IF
Datil Des Moines	48 K48HL 48 K48HJ	QC from K68EG, 1.22kw NS, 1.3kw, 36-42-19/103-52-38	Pennsylvania: Dillsburg	35 W35BT	QG from W40AF, 40-18-19/77-00-28
Dulce	22 K22GE	(KASA-2, Fox) NS, 0.99kw, 36-59-00/106-58-12	Lancaster Philadelphia	58 WGAL-DT 7 WPTV-LP	<b>NW, 907kw/393m</b> PR>1.5kw, 39-57-08/75-10-01
Farmington Gallup	40 K40FI 23 K23FE	(KASA-2, Fox) QG from ch. 60, 1.06kw QC from ch. 63, 1.04kw,	Sayre	9 W09CO	QG from W52CE, 3kw, 41-26-09/75-43-46
Pie Town	31 K31FX	35-36-16/108-40-49 NS, 2.4kw,	South Carolina Columbia	<u>a:</u> 48 WACH-DT	PR<600kw/464m,
Roy	31 K31FY	34-17-00/107-54-44 NS, 1.22kw,	Sumter	63 WQHB	34-06-58/80-45-51 PR<1312kw/374m
		35-55-33/104-24-47 (KASA-2, Fox)	South Dakota:		LC
Nevada:			Rapid City	15 K27DB <b>2 KOTA-DT</b>	NS, 7.1kw/185m
Beowawe	28 K28HE	NS, 0.17kw, 40-37-15/116-41-17	Rapid City	21 KNBN	NW, 100kw/199m, 44-05-33/103-14-53 (NBC)
Elko	47 K47HP	NS, 0.3kw, 40-49-16/115-42-04	Rapid City Sioux Falls	44 KNBN-LP 26 KCPO-LP	QR from ch. 27, 27kw QC from ch. 7, 7.57kw,
Ely	24 K24FO	QG from K65AC, 0.4kw, 39-09-40/114-36-51	Sioux Falls	46 KDLT-TV	43-32-03/96-44-21 LC, 4000kw/589m,
Ely	26 K26GO	QG from K67AL, 0.8kw, 39-09-40/114-36-51			43-30-17/96-33-22
Lovelock	14 K14KQ	NS, 0.99kw, 40-11-01/118-28-47	Tennessee: Acton	49 W49BK	PG<14.1kw,
(PBS?) Murray Canyor <b>Reno</b>	50 K50GZ 9 KOLO-DT	QG from K56AC, 3.55kw QR from ch. 23,	Clarksville	49 WCKV-LP	34-59-41/88-31-17 NW, 15.9kw, 36-26-01/87-25-24
Stateline	38 K38FW	<b>15.6kw/893m</b> NS, 12kw,	Jackson	26 W26CJ	QG from ch. 66, 129.5kw, 36-29-35/87-14-53,
Stateline	59 K59GM	38-57-35/119-56-24 NS, 1.1kw, 38-56-47/119-57-55	Knoxville Knoxville	6 WATE-TV 26 WATE-DT	Clarksville PR>548m PR>930kw/529m
New York: Binghamton	20 WBGH-CA	QC from ch. 8, 0.16kw	Nashville Tazewell	56 WTVF-DT 48 new	NW, 405kw/405m FC to CTN religion

Texas: Pullman 17 KWSU-DT PG<2.5kw	
Albany 59 KIDV-LP CC from K59FX	
Amarillo 9 KFDA-DT PG>62kw	
Amarillo 33 KCPN-LP QC from ch. 65, 41.1kw  Amarillo 43 KTXD-LP PR>67.1kw Washington:	
Amarillo 43 KTXD-LP PR>67.1kw <u>Washington:</u> Puyallup 54 K69FL QC from ch	n 60
Texas: Spokane 8 KSPS-DT QG from c	
Amarillo 47 KAMT-LP QR from ch. 31, 50kw, 21.6kw/558	•
35-18-55/101-50-03	
Brady 13 K13XR QG from K02GM, 30w, Wisconsin:	
31-12-09/99-33-05 Antigo 46 WTPX-DT LC 50kw/2	
Corpus Christi 41 KCRP-CA FC to Telefutura 45-03-33/8	
College Station 48 K48HK QG from K47ED, 2kw Crandon 4 WBIJ PR<1.7kw/ Corsicana 28 KNAV-LP QG from ch. 30, 3.6kw Madison 21 WHA-TV PG<870kw	
Cuero 40 K40GQ NS, 30kw, Mayville 52 WWRS-TV PC>5000kv	
29-01-49/97-18-48 <b>Milwaukee 25 WCGV-DT PG&lt;625kw</b>	
(religious) 43-05-44/8	•
Dallas 57 K57IG QC from K31FA, 100kw, Milwaukee 41 WMLW-LP CC from W	
	h. 65, 28.1kw,
	2-24-54, near
Lubbock 9 KCBD-DT QG from ch. 43, Rochester, 15kw/232m	winn.
Matador 42 K42ES QC from ch. 66, 0.11kw, Wyoming:	
33-58-54/100-54-48 Buffalo 11 K11UT NS, 70w,	
Midland 40 K40FJ LC from ch. 31 dismissed 44-20-18/1	06-45-02
Odessa 30 KPXK NW, 350kw/212m, (KCWC-4,	
	13UC, 10.1kw
Quanah 43 K43HD NS, 0.75kw, Cheyenne 45 KKRR-LP CC from K4 34-12-41/99-44-05 Laramie 41 new dismissed	
34-12-41/99-44-05 Laramie 41 new dismissed San Antonio 7 KJLF-LP PG>3kw Sheridan 38 new dismissed	
San Antonio 8 KLRN-DT NS, 8.3kw/259m,	(2)
29-19-38/98-21-17 <u>U.S. Possessions:</u>	
San Antonio 17 KNIC-CA FC to Telefutura (note: coordinates in the next two locations a	are <u>east</u>
San Antonio 23 KHCE PR>2032kw/333m, longitude)	
29-17-15/98-15-22 <u>Guam:</u>	
Snyder 44 K44FG QC from ch. 67, 80w Agana 22 K22GD NS 0.97kw Texarkana 41 K41EQ LC from ch. 52 dismissed 13-29-17/1	
Victoria 17 K17FS NS, 50kw, Northern Mariana Islands: (Saipan)	44-49-50
28-50-39/97-06-15 Garapan 7 K07XG NS, 0.78kw	٧,
Wichita Falls 40 new dismissed 15-11-06/1	45-44-30
Puerto Rico:	
Utah: Aquadilla 30 new dismissed	(Aguadilla)
Fremont 17 K17FQ LC, 10w, Barrio Mora 36 new dismissed 38-25-58/111-37-57 Ponce 25 WQTO-DT PR>310m,	
38-25-58/111-37-57 Ponce 25 WQTO-DT PR>310m, Logan 12 KUTH NW, 275kw/659m, 18-04-48/6	6-44-56
41-47-06/112-13-55 Quebradillas 48 W48CS QG from W	
Manti 29 K30AH QC from ch. 30, 0.46kw,	
39-19-23/111-46-23 <u>Canada:</u>	
Manti 31 K32AJ QC from ch. 32, 0.46kw, British Columbia:	
39-19-23/111-46-23 Campbell River 3 CBUT-8 PG>10w	
Ogden 56 K64CJ QC from ch. 64, 23kw Port Alice 10 CBUT-17 PG>10w Salt Lake City 50 KEJT-LP QG from ch. 48, 8.6kw	
Manitoba:	
Virginia: Winnipeg 35 new AF 20kw, re	elig.
Chesapeake 5 WJGN-CA CC from W05CH	J
Norfolk 45 WNLO-LP PR>120kw, Ontario:	
36-49-14/76-30-41 Kitchener 39 new CTV app w	
<b>Roanoke 38 WPXR PG&gt;623m,</b> Toronto 52 new CTV app w 37-11-37/80-09-25	าเมนเสพก
31-11-31/00-03-23	
Washington:	
Moses Lake 49 K49GM PG from ch. 39, 2.5kw	

TV NEWS Forum & Other Stuff is continued on page 12.

January And February Is WINTER E-SKIP Season! KEEP CHECKING CHANNEL 2 ... every day!



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KEY TO

ABBREVIATIONS:

£: satellite programming

New frequency allocation accepted for filing for a new

FM license AFA: American Family Association

CC: call letter change city of license CL:

change

CX: a construction permit has been canceled

C1,C2,etc: a change in to that FM status

license class DA:

directional antenna station has been DE:

deleted

FC: format change GA: granted amend granted amendment to

the table of FM

allocations

GE: granted extension of

construction permit

GX: granted replacement of expired permit LC: license to cover filed (means station is

ready to come on air) MC: multiple-city legal

ID

NC: no change yet on a

reported change/permit

non-directional

antenna

not on the air

NS: new station granted new station signs on OSA: one-step application

granted for change proposed amendment to PA: change FM table of

allocation PC: power change on the

air ("> "<" for ( ">" for increase, decrease, when

known)

Ital. Calls: LPFM station

PG: power change granted ( ">" for increase, "<" for decrease, when known)

OC: frequency change

occurred

QG: frequency change

granted

RA: silent station returns to station requests **extension** on permit station requests replacement

expired permit SG: slogan change or

update

SI: station is silent dismissed amendment XA:

FM allocations to XC: transmitter site change occurred XG: transmitter site change granted

#### UNITED STATES

#### ALABAMA:

Fairbanks: KAKQ 101.1 PC> 32 kW, 571', XC: 64-54-55 / 137-38-52

Millbrook: WMCZ 97.1 dec. to 702 ft. WMXC 99.9 Christmas music Phenix City: WGSY 100.1 Christmas

Sylacauga: WTRB 98.3 CC (ex WAWV) "B 98.3"

ALASKA:

Houston: KQEZ 92.1 Christmas (Anchorage)

ARIZONA:

Arizona City: KOMR 106.5 FC romantica // KEDJ,

CC (ex KBZR) "Amor"

89.5 FC to news/talk/jazz // Drake: **KJZA** 

KJZZ, CC (ex KRTE)

KEDJ 103.9 FC to modern rock, CC (ex Gilbert:

KPTY "Edge 103.9"

KMMR 100.3 FC to romantica // KEDJ, Globe:

"Amor" (Phoenix)

99.9 Christmas **KESZ** Phoenix:

Sun City: KOVA 106.3 FC to romantica, "Amor"

Wickenberg: KSSL 105.3 FC to regional

Mexican //KHOT-FM

ARKANSAS:

104.1 PG> 28.5 kW, 469', XG: Hatfield: KILX 34-32-42 / 94-18-21

CALIFORNIA:

Carlsbad: KMSX 95.7 FC to oldies "Kool 95.7"

Delano: KKDJ 105.3 Christmas

KOQO 101.9 inc. to 1959', XC: 37-4-22 Fresno:

/ 119-25-53

Lompoc: KWSZ 105.1 PG 420w, 1217', XG: 34-

41-28 / 120-15-58

Merced: KBKY 94.1 LC San Diego: KJQY 94.1 Christmas

San Diego: KYXY 96.5 PC 26.5 kW, 686', XC:

32-50-17 / 117-14-57

90.5 PC> 1.5 kW, 472', DA San Jose: KSJS

Thousand Oaks: KMLT 92.7 PG 3 kW, 463', XG:

34-12-5 / 118-49-50

KEFC 100.5 NW, "E-Free 100.5" Turlock: (LPFM), religion from Evangelical Free

Church

#### COLORADO:

Glenwood Sps: \*NS 88.1 650w, 2602' La Junta: KFVR 106.5 CC (ex KKIK)

Salida: **KSBV** 93.7 PG 250w, 2756', XG: 38-

26-48 / 106-0-36

Widefield: KKLI 106.3 Christmas

DELAWARE:

Selbyville: WOCM 98.1 inc. to 469'

DISTRICT OF COLUMBIA:

Washington: WASH 97.1 adds JRN Dave til

Dawn, Christmas

FLORIDA:

Fernandina Bch: WXGV 105.3 FC to hot AC "Mix

105"

Kissimmee: \*NS 95.5 55w, 138 ft. Marco Is: WGUF 98.9 FC to classic hits Miami Beach: WLVE 93.9 Christmas Mt. Dora: WMGF 107.7 Christmas

St. Augustine Bch: WYGV 105.5 FC to hot AC //

WXGV "mix 105"

Titusville: WPIO 89.3 PG> 8 kW, 335 ft.

GEORGIA:

Athens: WBTS 95.5 PC 74 kW, 1115 ft,

XC: 34-7-32 / 83-51-32

WPCH 94.9 Christmas Atlanta:

WSLE 102.3 PG> 9 kW, 1145', C2, Cairo:

XG: 30-40-6 / 83-58-6

WJZY 96.5 Christmas (may FC to

smooth jazz afterwards) (Macon)

Pearson: WPNG 101.9 C3, 12.9 kW, 459', DA

Thomasville: WLTY 107.1 Christmas

WTCQ 97.7 PC 4.3 kW, 387 ft, XC:

32-13-12 / 82-26-7

\*NS 89.7 1 kW, 322 ft. Yates:

IDAHO:

KXLT 107.9 Christmas Eagle: Lewiston: KATW 101.5 FC to hot AC Sandpoint: KIBR 102.5 PC> 6 kW

ILLINOIS:

Anna: WKIB 96.5 SI (to return soon)

Chicago: WLIT 93.9 Christmas WYCH 106.3 CC (ex WSQR) Genoa:

Pana: WMKR 94.3 PC 5.6 kW, 341', XC: 39-

27-8 / 89-17-10

WQCY 103.9 PG 1.8 kW, 436', XG: 39-

56-30 / 91-35-3

Taylorville: WTIM 97.3 PC 4.6 kW, 374', XC: 39-

27-8 / 89-17-10

INDIANA:

Crown Pt: WXRD 103.9 reported SI

Ladoga: \*NS 89.1 50 kW

88.9 1.5 kW, 285 ft. Linton: \*NS

Lowell: WZVN 107.1 reported SI

Mitchell: WMBL 88.1 LC

New Albany: WLSY 94.7 PC> 3.3 kW, 394'

Noblesville: WGRL 93.9 Christmas "The Christmas Channel" (Indianapolis), PG

3250w, 453'

Oolitic: \*NS 88.9 8 kW, 328 ft.

IOWA:

Belle Plaine: KZAT 95.5 adds ABC oldies (&)

Cedar Rapids: WMT 96.5 Christmas

KBOB 104.9 FC to classic cntry KSMA 98.7 PG> 25 kW, 328', C3, DeWitt:

Osage:

XG: 43-21-43 / 93-2-53

St. Ansgar: KJCY 95.5 PC> 6 kW, 328', XC: 43-

21-52 / 92-51-4, CC (ex KHAM)

KANSAS:

Kansas City: KUDL 98.1 Christmas

Wichita: KRBB 97.9 Christmas

Wichita: KKRD 107.3 dec to 843', XC: 37-46-40

/ 97-30-37

KENTUCKY:

Bardstown: WOKH 96.7 QG to 107.3, 6 kW, 328 ft, CL: Lebanon Junction, KY, XG: 37-43-44 /

85-49-21.2

Prestonsburg: WXKZ 105.5 FC to oldies

LOUISIANA:

Donaldsonville: KNXX 104.9 FC to modern rock

"X 104.9" (Baton Rouge)

Shreveport: KVKI 96.5 Christmas

MAINE:

Camden: WMEP 90.5 LC

MICHIGAN:

Grand Rapids: WOOD 105.7 Christmas "Star

105.7"

Marquette: WFXD103.3 inc. to 938', XG: 46-36-14

/87-37-15

Negaunee: WKQS 101.9 inc. to 1007', XG: 46-

28-42 / 87-37-21

Tawas City: WHST 106.1 RA with cont. Christian

and religion

Walker: WTRV 100.5 Christmas

MINNESOTA:

KQQL 107.9 Christmas Anoka:

Brainerd: WJJY 106.7 inc. 558', XC: 46-26-34 /

94-22-55

Hibbing: KADU 90.1 SI

MISSISSIPPI:

WRKG 95.3 FC to JRN classic rock Drew: (&), CC ex WOHT "The Classic Rock Station"

Grenada: WOHT 92.3 CC (ex WGRG)

MISSOURI:

Bismarck: \*NS 99.5 17.5 kW, 400 ft.

93.9 FC to talk "Eagle 93.9" Fayette: KSSZ

Hannibal: KGRC 92.9 FC to soft AC

Jefferson City: KLIK 104.1 CC (ex KJCQ) "Click

104"

Kansas City: KSRC 102.1 Christmas

KBHI 107.1 PC 3.7 kW, 420 ft.\

Moberly: **KBKC** 90.1 LC

Otterville: KCVK 107.7 CC (ex KOTT), "Spirit

FM"

MONTANA:

Billings: KBEX 105.1 Christmas Livingston: KPKX 97.5 inc. to 774', XG: 45-40-24

/ 110-52-4

NEBRASKA:

Kearney: KRNY 102.3 PC> 79 kW, 1086', C1,

XC: 40-36-8 / 98-50-21

KBBK 107.3 dec. to 551 ft. Lincoln: Omaha: KVSS 88.9 PC> 500w

NEVADA:

KDSS 92.7 PG> 14 kW, C2 Henderson: KMZQ 100.5 Christmas

Las Vegas: KSNE 106.5 Christmas

NEW HAMPSHIRE:

New London: WNTK 99.7 PC> 1450w, DA Wallcole: WCFR 96.3 CC (ex WLLC)

Woodstock: WMXR 93.9 FC to WW1 classic hits

// WVRR (Hanover/Lebanon)

<u>NEW JERSEY:</u>

Atlantic City: WAYV 95.1 PC< 47.4 kW Ocean City: WTKU 98.3 FC to oldies Trenton: WNJO 94.5 FC to classic hits

NEW MEXICO:

Albuquerque: KCHQ 101.3 CC (ex KRQS) "The

Horizon"

Santa Fe: KRQS 105.1 CC (ex KCHQ) "The

Horizon"

Tatum: KTUM 107.1 class C1, 919 ft.

**NEW YORK:** 

Buffalo: WTSS 102.5 Christmas

Kingston: WBPM 94.3 FC to JRN oldies (&)

Lake Luzerne: WBAR 94.7 PG 940w, 830', DA

WMXW 103.3 Christmas

NORTH CAROLINA:

Belhaven: WQSL 101.1 CC (ex WANJ) FC to

dance "The Beat" (New Bern) Burlington: WRSN 93.9 Christmas Charlotte: WSSS 104.7 Christmas Hendersonville: WMYI 102.5 Christmas WLYT 102.9 Christmas Hickory:

NORTH DAKOTA:

Bismarck: KSSS 101.5 FC to classic rock

OHIO:

Bainbridge: WKHR 91.5 PC 750w, 463 ft,

XC: 41-27-49 / 81-17-38 Cincinnati: WVMX 94.1 Christmas Delta: WRWK 106.5 FC coming soon (Toledo), modern rock "The Zone"

Delphos: WBIE 91.5 LC Hamilton: WGRR 103.5 Christmas

Kettering: WLQT 99.9 FC to Christmas

95.7 XC: 40-13-3 / 84-17-37 WDPT Pleasant City: WBIK 92.1 dec. to 169', XC: 40-1-37 / 81-33-9

Springfield: WDHT102.9 CC (ex WING) "Hot

102.9"

Toledo: WRVF 101.5 Christmas

OKLAHOMA:

Ardmore: KACO 98.5 PG 14.5 kW, 328 ft, XG:

34-10-4 / 96-58-36

Coalgate: KKFC 105.5 RA with ABC clas. cntry

OREGON:

KTWS 98.3 FC to classic rock Bend: Scappoose: KFIS 104.1 PC< 1650w, 1266', XC: 45-29-20 / 122-41-40

PENNSYLVANIA:

WQHZ 102.3 CC (ex WLKK) "Z102" Erie:

Fairview: WRPL 93.9 NW, rock (Erie)

Mill Hall: WOJZ 98.7 CC (ex WLTS), FC to JRN smooth jazz (&) (State College)

Pen Argyl: WWPJ 89.5 NW, classical // WWFM

Pittsburgh: WJJJ 104.7 Christmas

Smethport: WQRM 106.3 PG 1030w, 788' State College: WLTS 94.5 CC (ex WFGI), FC to

soft AC

SOUTH CAROLINA:

Spartansburg: WSPA 98.9 Christmas

TENNESSEE:

Elizabethton: WPJO 99.3 Christmas

Maynardsville: WOEZ 88.3 CC (ex WASJ) "Easy

88"

Memphis: WRVR 104.5 Christmas

TEXAS:

KEYJ 107.9 inc. to 886', XC: 32-16-35 Abilene:

/ 99-35-38

89.1 PC> 13.5 kW, C3, 400' Amarillo: KXLV

XC: 35-15-39 / 101-52-52

Atlanta: KNRB 100.1 FC to religion Austin: KKMJ 95.5 Christmas

Cameron: KHTZ 105.1 LC

95.9 dec. to 171 ft. Dalhart: KXIT KDMX 102.9 Christmas Flower Mound: KMEO 96.7 Christmas Highland Park: KVIL 103.7 Christmas

KTXC 104.7 FC to regional Mexican Lamesa:

Lamesa: KBKN 91.3 LC

Odessa: KBMM 89.5 PG> 8 kW, 535 ft, class

C1, XG: 31-40-35 / 102-21-32 Palacios: KROY 99.7 CC (ex KKOS)

Pearsall: KMMG 104.1 LC Pittsburg: KDVE 103.1 CC (ex KXAL) "The

Lonesome Dove"

Robstown: KMIQ 105.1 QG to 104.9, C2, 31 kW,

482', XG: 27-56-8 / 97-56-19

Rosenberg: KPTY 104.9 CC (ex KOVA) "House Party"

KXAL 100.3 CC (ex KDVE), FC to Tatum: adult standers (Tyler)

93.9 QC from 93.7, PC> 25 Uvalde: KBNU kW, now class C3

KWTX 97.5 dec. to 1480', XC: 31-20-Waco: 15 / 97-18-37

UTAH:

Centerville: KCPX 105.7 FC to adult alternative

KCFM 99.1 LC Levan:

KCSL 103.9 CC (ex KFVR), SI Nephi: Tremonton: KENT 104.9 CC (ex KNFL) "K 105 The KAR Cruisin' Classics"

**VERMONT:** 

Burlington: WVPS 107.9 PC 49 kW

WMNV 104.1 PG 4.3 kW, 200 ft. Rupert: WCVT 101.7 PG> 500w, DA, C3, Stowe:

XG: 44-25-14 / 72-49-42

WDEV 96.1 PC 400w, 2277' Warren:

VIRGINIA:

Bowling Green: WWUZ 96.9 PC> 2950w Broadway: WBHB 96.1 CC (ex WLTK), "Oldies

96.1"

Clarksville: WICE 98.3 PC 17.5 kW, 390', DA,

XC: 36-29-45 / 78-33-16 WPIN

91.5 PC< 85w, ND Exmore: WEXM 106.1 PC> 30 kW, class B, 266' Lynchburg: WZZU 97.9 FC to oldies "The River" New Market: WLTK 103.3 CC (ex WBHB) "Lite

Powhatan: WBBT 107.3 PG 6 kW, 328 ft, XG: 37-26-20 / 77-51-8

Virginia Beach: WWHV 102.1 inc. to 328 ft, DA, XG: 36-45-7 / 76-8-57

<u>WASHINGTON:</u>

KZML 95.9 CC (ex KGER), FC to regional Mexican // KZTA (Wenatchee)

Raymond: KFMY 97.7 FC to classic hits, PC> 44 kW, 1322', DA, C1, XC: 46-54-5 / 123-

Wilson Creek: KWLN 103.3 CC (ex KXXA), FC to Spanish CHR (Wenatchee), "La Nueva"

WEST VIRGINIA:

New Martinsville: WETZ 103.9 PC 2.5 kW, 502' XC: 39-39-10 / 80-54-47

**WISCONSIN**:

Milwaukee: WRIT 95.7 XC: 43-5-24 / 87-54-55

Milwaukee: WLTQ 97.3 Christmas Mukwonago: WFZH 105.3 NW, Christmas "the Fish" (Milwaukee)

Nekoosa: WDVM 93.9 CC (ex WZRK) Sauk City: WMLI 96.3 Christmas

Trempaleau: WFBZ 105.5 FC to ESPN sports // WKBH (La Crosse)

Wauwatosa: WXSS 103.7 inc. to 843', XC: 43-5-48 / 87-54-1

#### WYOMING:

Casper: KMGW 97.3 OSA for 96.7, C2, 2850w

Laramie: KHAT 96.7 CC (ex KKRR)
Midwest: KRVK 107.9 QC from 107.7
Pine Bluffs: KREO 105.3 CC ex KASX, FC to

classic rock "The Big Dog"

Thermopolis: KDNO 101.7 PC 16250w, 1902'



**CANADA** 

#### ALBERTA:

Calgary: CJAY 92.1 PG< 44 kW, 160m

#### BRITISH COLUMBIA:

Hope: CBUE 101.7 PG< 105w

Vancouver: CHQM 103.5 PG< 53 kW, 618m

Vernon: CICF 105.5 QG to 105.7

#### MANITOBA

Winnipeg: \*NS 99.1 100 kW app, jazz, 100 kW,

classic hits also applied for

Winnipeg: \*NS 90.5 201w. Red River College

(application)

Winnipeg: \*NS 100.7 1.3 kW for EZ listening Winnipeg: \*NS 106.3 200w app: Blues / jazz /

dance music

Winnipeg: \*NS 107.1 918w app: religion

(reinstatement of CFEQ?)

#### ONTARIO:

Brantford: \*NS 99.5 on testing, to be religion

Campbellford: CKOL 93.7 noted on air Kingston: CFMK 96.3 PG< 14 kW Kingston: CIKR 105.7 PG> 24 kW

#### QUEBEC:

Les Mechins: \*NS 104.1 49w app // CHRM 105.3

Rimouski: CJBR 89.1 PG> 19.4 kW

#### SASKATCHEWAN:

Dafoe: \*NS 100.3 100 kW app // Melfort 105.1 Denare Bch: CJLR 91.9 250w // CJLR 89.9 Melfort: \*NS 105.1 100 kW, to be ac/rock Regina CJME 1300 QG to 94.5, 100 kW (a/c) Washesiu L: \*NS 106.3 7.1 kW // Melfort 105.1



**MEXICO** 

#### CHIHUAHUA:

Cd. Juarez: XHTO 104.3 FC to CHR

- Saul Chernos writes with some comments on my December column. Regarding the move of 102.9 Morristown, NY to 96.7, he wonders about that, with 96.7 Canton so nearby. A check of the FCC database on www.radiostation.com does show both as 96,7, so that's a good question! A distance check shows the two transmitter locations, for WVNC, and for the proposed Morristown site, is only 39 miles.
- Doug Smith writes to mention that CKDX 88.5 Newmarket, ON (Toronto) applied to exceed the limit of 50% hits (In Canada the CRTC does not allow stations to feature more than half "hit songs"). Seems the station was having problems finding sufficient "non-hit" disco music. They'll have to keep trying: their application was denied.

### TV News-January 2002

#### Forum and other Stuff (continued from page 8)

The FCC Public Notice indicated new station WTPX-46 Antigo, Wisconsin signed on as a digital station, not analog. If true, it would be the first digital-only station to hold a regular (non-experimental) license. WTPX is one of those stations that's too new to get a second channel. They hold both analog and digital permits for channel 46, and may choose which format to sign on with.

In Ontario, two new-station applications have been withdrawn. However, several other applications for the same channels are still on file and being considered.

Note several long-haul moves by LPTVs. The grand prize probably goes to four Columbus, Nebraska stations which are moving all the way across the state, to the Scottsbluff area. Two Michigan stations are headed to Wisconsin. Note also three new VHF stations on the air - KUTH-12, KBBJ-9, KPHZ-11. In that part of the country, they aren't going to appear in many DX reports...

I'm going to keep it short this month, thanks to the holidays I'm out of time.



Jeff Kruszka, Editor 5024 S. Braxton Ave. Baton Rouge, LA 70817 jkruszka@bellsouth.net

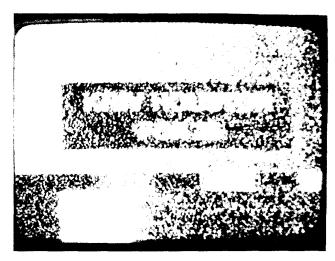
#### January 2002 - Happy New Year!

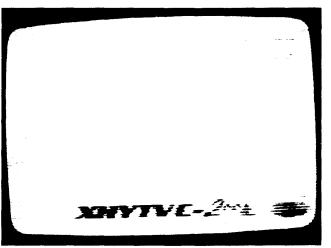
This month we have a bunch of photos from long time contributor Bill Eckberg of Dixon, IL. I've gotten a lot more photos in the last month, so bear with me and I'll try to catch up here shortly.

#### **Equipment:**

VHF 1997 Orion color TV with CM 1110 @41'. Belden 300 ohm leadin wIRDX Labs UA-60 balun. UHF 1990 Zenith AC-DC 9" color TV w/C.M. screened 7' dish @52' and RDX Labs UA-903 preamp.

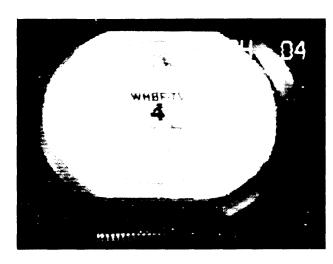
Jerrold RG1 I cable. Rohn 48' crankup tower.

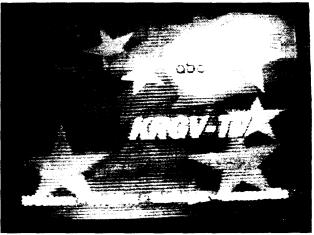




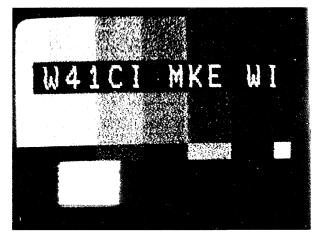
KRIV-26 Houston, TX 893 mi Tr seen 5/8/00 @0450 CDT

XHY-2 Merida, YU 1408 mi Es seen 6/7/00 @1800 CDT "XHY-TV C(anal)-2"





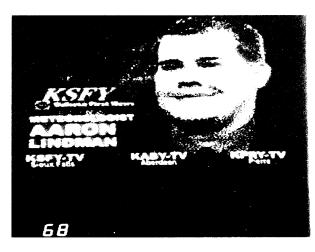
WHBF-4 Rock Island, IL 61 mi Gw seen 7/1/00 @1810 CDT "50th anniversary slide" KRGV-5 Weslaco, TX 1189 mi Es seen 7/6/00 @1215 CDT

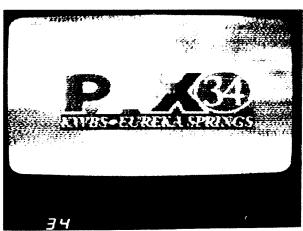




W41CI-41 Milwaukee, WI 118 mi Tr seen 7/13/00 @0225 CDT "new LPTV on air"

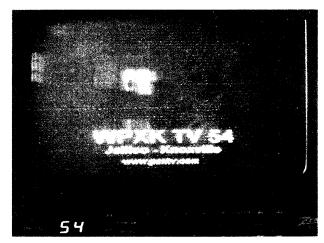
WBZ-4 Boston, MA 918 mi Es seen 8/4/00 @1900 CDT

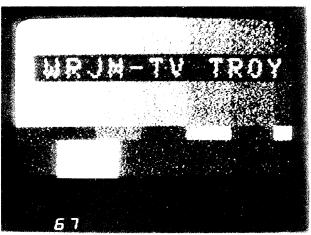




K68BM-68 Lowry, SD 571 mi Tr seen 8/29/00 @2315 CDT "xltr of KPRY-4"

KWBS-34 Eureka Spgs., AR 429 mi Tr seen 9/5/00 @0630 CDT





WPXK-54 Jellico, TN 451 mi Tr seen 10/29/00 @0900 CT

WRJM-67 Troy, AL 708 mi Tr seen 11/11/00 @0545 CT

And back when I was still getting tropo (certainly not this year!), I photographed a few stations, including some Es, too.

#### My equipment:

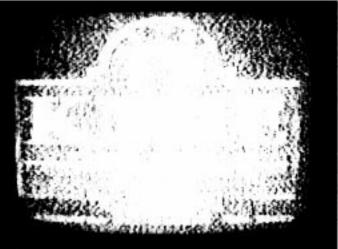
1992 Zenith "Sentry 2" 13" color TV, Channel Master 4228A screened 8-bay w/CM Spartan 3 #0071 preamp and RG-11 1 coax for UHF, Channel Master 1114 Crossfire w/CM #0040 preamp, MFC trap for 88.5 MHz, and RG-6 for VHF, both @20 ft. AGL.



What the @#\$%? Is this a foreign country? No, just XH FOX with either a screwup or else their bid to get a VHF channel.

XHFOX-17 Reynosa, TA 535 mi Tr seen 9/4/00 @0200 CDT "local quality!"





KENS-5 San Antonio, TX 445 mi Tr seen 7/22/00 @0242 CDT

KNME-5 Albuquerque, NM 955 mi Es seen 8/3/00



WCSC-5 Charleston, SC 680 mi Es seen 7/5/00 @1730 CDT

## Western TV DX

VICTOR FRANK 12450 SKYLINE BLVD. WOODSIDE, CA 94062-4554 frank@horizon.sri.com



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

Nov. 9	<u>tr</u>	
1900	WFYI-20 WHMB-40 WXIN-59	
	Indianapolis, IN	507
	WIPX-63 Bloomington, IN	509
	WGEM-10 Quincy, IL	239
	KHQA-7 Hannibal, MO	239
(not ve	ery far, but I haven't seen either for a wh	ile)
1925	WRTV-DT 25 Indianapolis, IN	507
1930	WKEF-22 Dayton, OH	609
2045	KXFA-28 Cedar Rapids, IA	
2130	KLJB-18 Davenport, IA	
2300	WLKY-32 Louisville, KY	
2310	WSTR-64 Cincinnati, OH	596
Nov. 1	<u>0 tr</u>	
2400	KNLC-24 St. Louis, MO	
	UNID-44 Evansville, IN?	
0700	KMOV-DT 56 KSDK-DT 35	
	St. Louis, MO	
0800	KDNL-DT 31* St. Louis, MO	278

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

<u>Se</u>	otei	<u>mber 2(</u>	<u>)01</u> CI	DΤ				
1	tr	0530	KSAX	42	MN			404
2	tr	0015	KSAX	42	MN			404
		0035	KXNE	19	NE			402
		0100	KHNE	29	NE			464
		0105	KWCV	33	KS			498
4	tr	2200	KWCV	33	KS			498
		2210	KAKE	10	KS			498
		2220	KCWH	12	KS			512
5	tr	0120	KSAS	24	KS			498
		0400	KSAX	42	MN			404
<u>No</u>	ven	nber 20	<u>01</u> CST	-				
10	tr	0330	WCFT	33	AL			593
12	tr	0300	WFIQ	36	AL			483
			WCFT	33	AL			593
		0310	WLMT	30	ΤN			451
		0415	WPTY	24	ΤN			451
		0425	WAAY	31	AL			503
		0430	WZDX	54	AL			503
			WJKT	16	ΤN			419
		0455	<u>WKDH</u>	45	MS	Hous	ston	<u>536</u>
		0500	WAFF	48	AL			503
		0930	WPXX	50	ΤN			451
17	tr	0115	WOAC	67	ОН			417
18	ms	0405	CKCK		SA			918
19	ms	0210	CKCK	2	SA			918
20		0215	CKCK		SA			918
	No		r 12 saw					
AL.		Memph	is and .	Jack	son,	ΤN	stations	were

snowfree. Nashville stations were strangely absent.

I received Spanish again at 0510 on ch. 28 briefly. After checking with a St. Louis dxer, I discovered the signal was definitely W28AI in Salem, IL. My 1072 mile logging in January of KORO-28, during a LA opening was undoubtedly Salem also. After nearly 50 years in the hobby, a dxer can still be badly mistaken on occasion. Some religious oriented stations carry Spanish programming.

During the last great meteor shower til 2099 at 0400 on November 18, I saw one meteor outside in five minutes. TV reception was more productive. Chs 2-6 filled with hash similar to auroral activity. The unique TP of CKCK-2 was seen several times upwards of 30 seconds pulsating, weak, and often with an image displaced two inches from the main signal on a 13 inch TV. The next morning I saw the same TP for a full minute. The pix was snowfree on occasion this time. Can Es be induced by an avalanche of meteors? Several pix were taken.

**Dennis Park Smith,** 3605 San Remo Drive, Santa Barbara, CA 93105-2523 (805)687-7803

This report is for November 2001. Tropo conditions along the southern-California coast between Santa Barbara and San Diego/Tijuana as monitored on TV-FM (up to 250mi/320km) held up fairly well until late in the month, when gradual cooling and stormy weather finally finished off any stable air layers and putting tropo signals into nonexistence for the time being.

Nov 1-5 am: Very poor (Nov 4 light rain) Nov 5 eve: Fair (Layering returned; fog) Nov 6-7: Poor Nov 8-9: Fair Nov 10 am: Poor & deteriorating (cooling) Nov 10 eve: Very poor (rain) Nov 11: None Nov 12: Almost none (Rain) Nov 13-14: None Nov 15-16: Poor Nov 17-18: Fair Nov 19-21: Between fair & poor Nov 22-30: None (Nov 22 windy) (Nov 24 rain, colder) (Nov 29 rain) Best of DX and Happy Holidays to all. Dennis

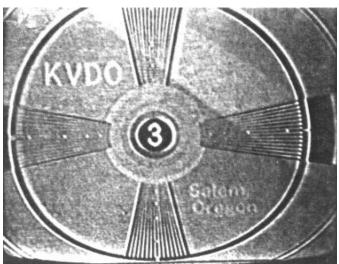


# PORTLAND ON PARADE

(From the collection of Robert J. Williams of Twin Falls, ID. He's the WTFDAer who creates those fantastic hand-drawn circular test patterns. It was my pleasure to meet him last July at the WTFDA convention in Boise.)



KATU was a latecomer, signing on in 1962. The call letters were assigned minus the customary –TV suffix. The ABC affiliate was co-owned with the KOMO group of Seattle.



Here's a *very* rare photo. Salem, in the Portland market, had a low-v allocation; but KVDO was plagued with financial and reception problems. After a short time on the air, the station went dark. Later, the city of license was changed to Bend and the station was reborn as non-commercial KOAB-TV.



Mount Hood provides a majestic backdrop for this KOIN-TV ID slide. Channel 6 was second on the air in "The City of Roses" and was co-owned with the *Oregonian* (newspaper). The CBS affiliate began telecasting October 15, 1953.



The Bullitt family, owners of the KING stations in Seattle, established Portland's fourth television station in late 1956. KGW-TV signed on as an NBC affiliate. Portland is one of the few large markets where the three major networks remain with the same affiliate stations that originally carried them.



KPTV was the call sign for the first commercial UHF operation in the United States. With a September 20, 1952 startup, channel 27 was also Portland's first station...but not many people saw it. Viewers were poorly-equipped to receive the UHF signal, and after a five year struggle KPTV merged with the original channel 12 (KLOR-TV) which had started up in 1955. On May 1, 1957, channel 27 ceased operation and at the same time the KPTV calls were moved to channel 12. Storer Broadcasting started the station. Chris Craft Corporation was among other early owners.

# Eastern TV-DX

Matthew C. Sittel 15013 Eureux Circle Bellevue, NE 68123 mcsittel@home.com

January 2002

February 2002columndeadlineJan. 12

Eastern TV-DX is for reporters from the following states: AL, CT, DE, FL, GA, IN, KY, MA, MD, ME, MI, NC, NH, NJ, NY, OH, PA, RI, SC, TN, VA, VT and WV, plus Washington, DC. Also for reporters from the following Canadian provinces: NB, NF, NS, ON, PEI and PQ. Foreign reports are also welcome!

Happy New Year! I wonder as I type this if it will feel like winter yet. Only a couple of snow flurries here in Nebraska so far. There are quite a few reports this time, so maybe the DX doesn't know it's winter yet either...

#### John Vervoort, 217-79 Street, Brooklyn, NY 11209-3607

Equipment: 19" Sharp TV and standard-sized Channel Master outdoor antenna atop a 6-story building.

12/4 tr (early evening)		
WTNH-8 CT New Haven	85	WTXF-29 PA Philadelphia 83
WCAU-10 PA Philadelphia	83	WVIT-30 CT New Britain 116
WPHL-17 PA Philadelphia	83	WNJT-52 NJ Trenton 51
WUVN-18 CT Hartford	129	unIDs-53,54
WTXX-20 CT Waterbury	99	WPSG-57 PA Philadelphia 83
WNJS-23 NJ Camden	83	WCTX-59 CT New Haven 85
WLWC-28 MA New Bedford	216	WACI-62 NJ Atlantic City 114
"UPN 28"		WUVP-65 NJ Vineland 117

My reception of WLWC-28 was a big surprise. This was the only station I received from the Providence, RI-New Bedford, MA market. The WTFDA Station Guide lists this station as having a <u>directional</u> transmitter with <u>elliptical</u> polarity and 5000kW ERP video, 229 meters. This set-up is interesting as well as the orientation of the beam tile. I had a color signal for about an hour.

#### Rick Shaftan, Sparta, NJ

shaftan@ptd.net

11/13 tr	0715 WEAO-49 OH Akron, PBS 364
1742 W19AR-19 PA Clarks Summit 63	0819 CKCO3-42 ON Sarnia 402
// WYOU-22	"CKCO-TV" promos
11/18 tr	0830 unID-29+ probably Sarnia
0653 <u>W51??-51</u> PA Williamsport 121	0902 <u>WXYZ-7</u> MI Detroit 454
religion // 24 xltr, no Clarks	0956 $\overline{\text{WJBK-2}}$ MI Detroit, Fox News 452
Summit which has vet to be heard	

#### Jim Ayers, Norcross, GA

jimayers@raider.net

12/2 tr

0515 WLDM-23 AL Tuscaloosa 201

(WLDM is) new to air, listed in some places as // WABM-68, but at this hour, at least, running America's Store while 68 aired a test pattern. Continuous calls lower left!

#### Doug Smith, Pleasant View, TN

w9wi@w9wi.com

#### http://www.w9wi.com

Equipment: Radio Shack 19" TV, "large" RS VHF antenna, "100-mile" corner reflector, both at 15'. WTTK and WTVF-DT logged with same UHF antenna but Hauppauge WinTV-D tuner card in homemade K6-2/450 PC. Milwaukee DTVs logged with Hauppauge card & K6-2 but indoor rabbit ears.

10/23 GW (Menomonee Falls, WI)				
WMVS-DT-8 WI Milwaukee			WKEF-22 OH Dayton	276
11			WRGT-45 OH Dayton	276
four channels of PBS		0030	WLIO-35 OH Lima, local ad	339
WTMJ-DT-28 WI Milwaukee				
11			WKRC-12 OH Cincinnati	
// analog ch. 4 <1>			WFFT-55t IN Fort Wayne, Fox55	340
11/6 GW			(or Springfield, IL but	
~0900 WTVF-DT-56 TN Nashville			not open that way)	
19			WCLJ-42 IN Bloomington	213
// analog ch. 5 <2>			unID-57 TBN probably Florence	ce,AL
11/9 tr		0604	K62EG-62 MO St. Louis	230
0852 WCFT-33 AL Tuscaloosa	223		"KEFN 62" over church service	ce
"ABC 33/40"			WMAW-14 MS Meridian, MS ETV	315
WJSU-40 AL Anniston	201		WMPN-29 MS Jackson, //14,18	344
WLOV-27 MS West Point, bug	212		W35AH-35 TN Jackson,	110
WKDH-45 MS Houston, local wx	212		WCFT-33 AL Tuscaloosa	223
WMAV-18 MS Oxford, MS ETV			WKEF-22 OH Dayton	276
207			Promo includes WRGT-45	
WGCL-46 GA Atlanta, ID "bug"	237		WRGT-45 OH Dayton	276
WHSG-63 GA Monroe, TBN	253	11/12	tr	
WUPA-69 GA Atlanta	237	0743	WICS-20 IL Springfield	267
0903 WATC-57t GA Atlanta			WCIU-26 IL Chicago, "U TV"	379
0920 KASN-38 AR Pine Bluff	318		KSPR-33 MO Springfield, SPR	328
Little Rock ad			WCLJ-42 IN Bloomington	213
WTTO-21 AL Homewood	202		KVTJ-48 AR Jonesboro	199
ID w/WDBB-17			"VTN", Arkansas logo	
11/10 tr			WIPX-63 IN Bloomington	213
0000 WYIN-56 IN Gary, ID bars			WXIN-59 IN Indianapolis	245
342			<del>-</del>	MS?
WTTK-29 IN Kokomo, WB4 promo	276		WHSL-46 IL East St. Louis	231
WDKY-56 KY Danville <3>	163		WEHS-60 IL Aurora, //WHSL	379
WXIN-59 IN Indianapolis	245		WGBO-66t IL Joliet	380
"Fox 59"			Weak CCI vs. WJFB	
WSTR-64 OH Cincinnati, bug	238		WRSP-55 IL Springfield	267
. 3	ı			

#### Notes:

- 1. My first DTV reception, made at my parents' home about 11 miles west of the transmitters.
- 2. First DTV in the log from home. Main virtual channel (56-2) is parallel to analog channel 5. They also carry "Newschannel 5+", parallel to cable channel 50, on 56-3.
- 3. I'm told WTF-DT is 24/7 so WYIN and WDKY were logged through the local DTV.

#### Bob Seybold, 1865 W. Main Rd., Silver Creek, NY 14136

Not a lot of DX since early September, but I do have a little to report. Did solve some of my unIDs from the Sept. 1-7 openings. Here are some of them: WIWB-14 Suring, WI, KJMH-28 Burlington, IA (Bob, I'm not sure if you mean KJMH-26 or KFXA-28 Cedar Rapids, IA-mcs), WHPN-57 Janesville, WI, WYOW-34 Eagle River, WI, WQOW-18 Eau Claire, WI, WWRS-52 Mayville, WI, WPXB-60 Merrimack, NH, WUPV-65 Ashland, VA, WMBC-63 Newton, NJ, W60AI-60 NYC.

As for any DX since early September:

Oct. 1 late into morning of Oct. 2: Ft. Wayne U's, Angola, IN 63, Canadians to north and northwest in strong, Toledo-Bowling Green, OH in strong. Only other DX was some trops scatter into central NY and PA.

Did see a little E-skip on channels 2 and 3 at end of October but no IDs, also a little trops into Ft. Wayne and Angola, IN and some Michigan tropo.

In midst of opening here starting Nov. 17 into morning of 18<sup>th</sup> and still good at 1100 as I write this. Evening of 17<sup>th</sup> brought Angola, IN 63, Ft. Wayne U's and strong signals out of Toledo and Detroit. Then in morning of 18<sup>th</sup> observed Battle Creek, MI U's, Scranton, PA U's, Philly 57, Muskegon, MI 54, Lima-Bowling Green, OH 27/35/44, also 46 South Bend, IN, Kalamazoo, MI U's, weak Milwaukee, 14 Suring, WI, Cadillac, MI 33, Wingham, ON 45, Canadians on 18,20,21,34,55,67 not normally seen, Flint, MI 66, Saginaw, MI 49, Lansing, MI U's. In general most V's and U's seen all had signals up. Weather has been good for this time of year.

After sealing my report in envelope I left for a while and upon returning I found E-skip coming in about 1230 on the 18<sup>th</sup> so more to report. KATC-3 Lafayette, LA, also CBS on 5 (Mobile, AL?-mcs), and skip on 2, 4 and 6 also but no IDs. Very tough for E-skip also as all low channels were heavy loaded with trops and strong signals. Trops still continuing with Canadians getting super strong with several U's having double Canadians. Will wait till morning of 19<sup>th</sup> before closing this time. That's it for now. Bob Seybold.

11/15 tr	WITF-33 PA Harrisburg
1730 W24BI-24 VA Virginia Beach	WLYH-15 PA Lancaster
WYDO-14 NC Greenville 562	WBFF-45 MD Baltimore
WHRO-15 VA Hampton	1908 WRAZ-50 NC Raleigh
W35BH-35 VA Virginia Beach	WOLF-56 PA Hazleton
W45BG-45 VA Virginia Beach	WTVE-51 PA Reading
1800 WEPX-38 NC Greenville	WUNM-19 NC Jacksonville
W63AM-63 VA Craddockville	WUPV-65 VA Ashland
W65CP-65 VA Chesapeake	WNCN-17 NC Goldsboro
W60CV-60 NC Greenville, from 54	WEPX-38 NC Greenville
W19BX-19 VA Williamsburg	2358 WUNP-36 NC Roanoke Rapids
WPXU-35 NC Jacksonville	<u>11/19 tr</u>
W18BS-18 VA Hampton	0030 WUNJ-39 NC Wilmington
2300 W56CS-56 VA Portsmouth	660
11/18 MS	0135 WQPX-64 PA Scranton
11/18 MS 0504 unID-12 card "Soul Train" ant. W.	0135 WQPX-64 PA Scranton 2000 Bangor, ME area
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville 1600 WVEC-13 VA Hampton	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg 2100 W66BZ-66 VA Suffolk
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville 1600 WVEC-13 VA Hampton 15/27/33/43/49 eastern VA	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg 2100 W66BZ-66 VA Suffolk 11/25 tr
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville 1600 WVEC-13 VA Hampton 15/27/33/43/49 eastern VA WNEP-16 PA Scranton	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg 2100 W66BZ-66 VA Suffolk  11/25 tr 0015 W15BK-15 NH Hanover
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville 1600 WVEC-13 VA Hampton 15/27/33/43/49 eastern VA WNEP-16 PA Scranton WYOU-22 PA Scranton	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg 2100 W66BZ-66 VA Suffolk 11/25 tr 0015 W15BK-15 NH Hanover W33AK-33 NH Nashua
11/18 MS 0504 unID-12 card "Soul Train" ant. W. 0526 unID-12 alert test logo L/R weak 11/18 tr 0530 WWBT-12 VA Richmond WNCT-9 NC Greenville 1600 WVEC-13 VA Hampton 15/27/33/43/49 eastern VA WNEP-16 PA Scranton	0135 WQPX-64 PA Scranton 2000 Bangor, ME area 2020 CBHFT5-46 NS Middleton W45BG-45 VA Virginia Beach W35BH-35 VA Virginia Beach WJHJ-19 VA Williamsburg 2100 W66BZ-66 VA Suffolk  11/25 tr 0015 W15BK-15 NH Hanover

For MS local ch.12 off-air on 11/18, but TR too strong to use antenna on tower. I used the cut ch. 11-13 antenna on the house to a WNW direction. This worked okay, and after 12 RI back on the air, I went to ch. 13 and had 3 hits but too weak. Went outside and counted 20 meteors in 10 minutes. Most were weak magnitude 3-4. Two were magnitude 0. A nice show. Last time I watched a good meteor shower was back around 1960, the August Perseids. Nowadays the Perseids are petering out. For the past month have been also using a ch. 11-13 cut antenna w/amp at 14', this aimed to a more or less clear horizon to my SW. No hits after 20 tapes reviewed. So it seems for hi-band MS work, a higher antenna needed.

12/3	tr			WPPX-61 DE	Wilmington	310
0830	WNCN-17 NC Goldsboro	592		WWBT-12 VA	Richmond	463
	WRAZ-50 NC Raleigh	590		WFXI-8 NC I	Morehead City	570
	WNCT-9 NC Greenville	562		WNCT-9 NC (	Greenville	562
0900	WFXI-8 NC Morehead City	570		W18BB-18NC	Elizabeth City	490
1500	WVBT-43 VA Virginia Beach	450		WBOC-16 MD	Salisbury	341
	WHRO-15 VA Hampton	457		WCPB-28 MD	Salisbury	345
	WTVD-11 NC Durham	591		WMDT-47 MD	Salisbury	345
	WRAZ-50 NC Raleigh	590		W65CP-65VA	Chesapeake	460
1630	WVEC-13 VA Hampton	455		W66BZ-66VA	Suffolk	460
2315	WNCN-17 NC Goldsboro	592		W31BG-31VA	Yorktown	440
	WEPX-38 NC Greenville	562		W39BW-39VA	Newport News	450
	WPXU-35 NC Jacksonville	577		WEPX-38 NC	Greenville	562
	WUNP-36 NC Roanoke Rapids	533		WPSG-57 PA	Philadelphia	265
	WUNU-31 NC Lumberton	650	2000	WEDY-65 CT	New Haven	185
	WUNJ-39 NC Wilmington	660		rare, 8kW		
	WLFL-22 NC Raleigh	591	12/5	tr		
2358	WKFT-40 NC Fayetteville	616	0130	WYDO-14 NC	Greenville	562
12/4	tr			WNCN-17 NC	Goldsboro	592
0030	W18BS-18VA Hampton	450		WRLH-35 VA	Richmond	463
	W31BG-31VA Yorktown	452		WMPT-22 MD	Annapolis	363
	WRPX-47 NC Rocky Mount	565		WUNP-36 NC	Roanoke Rapids	533
	W24BI-24VA Virginia Beach	450		WUNM-19 NC	Jacksonville	577
0100	WPDE-15 SC Florence	688		W41AC-41	VA Onancock	420
	WBTW-13 SC Florence	687		W44AD-44	VA Onancock	420
0730	WNLO-45 VA Virginia Beach	450		W60AL-60	VA Onancock	420
0810	WUNJ-39 NC Wilmington	660	0225	W63AM-63	VA Craddockville	410
1745	WAVY-10 VA Portsmouth	450		WRAY-30 NC	Wilson	575
	WJHJ-19 VA Williamsburg	462		WLFL-22 NC	Raleigh, lcl qual5	91
	$W26C?-26$ ?? $\frac{3}{4}$ CB, tone			WITN-7 NC	Washington	565
	W19BX-19VA Williamsburg	462		WCTI-12 NC		577
	WPXU-35 NC Jacksonville	577		WTVD-11 NC	Durham	591
	W60AL-60VA Onancock	420	0410	W60BR-60VA	Virginia Beach	450

	WVAN-9t GA Savannah			WYDO-14 NC	Greenville	562
	WRAZ-50 NC Raleigh	590		W18BS-18VA	Hampton	450
	W34AX-34NC Henderson	575		W24BI-24VA	Virginia Beach	450
	At U/R on screen 595.770 on	ICOM		W19BX-19VA	Williamsburg	462
0540	WUPV-65 VA Ashland			WPXU-35 NC	Jacksonville	577
1120	WSFX-26 NC Wilmington	660		WEPX-38 NC	Greenville	562
	WUNJ-39 NC Wilmington	660	2200	W63CW-63NC	Goldsboro, TBN	592
1128	WUNM-19 NC Jacksonville	577		from ch. 59	9	
1830	W52AB-52VA Craddockville	410	12/6	tr		
	WNCN-17 NC Goldsboro	592	1100	WUNJ-39 NC	Wilmington	660
	W18BB-18NC Elizabeth City	490		WSFX-26 NC	Wilmington	660
	23/40/48/50/52/53/63 New Jer	sey	2000	W39BW-39VA	Newport News	450
	WPXV-49 VA Norfolk	450		W35BH-35VA	Virginia Beach	450
	W56CS-56 VA Portsmouth	450				

A correction: the antenna used to catch 2Es YNTC-2 Managua, Nicaragua, was a Winegard CC-3123 10 element cut for ch. 2-3 at 14' high, fixed to southwest with Titan II amp.

Last year I used 3 fixed antennas to tape Es, with 2 to 3 VCRs. The system above plus a fixed B/T 2-6 aimed south without amp and a fixed stagger stack of cut ch. 2-3 antennas without amp aimed SE all around 12' high. One does not need high antennas to catch distant Es.

I have since taken down the stagger stack ch. 2-3 antennas, and got a new B/T 2-6 antenna. The other antennas being mostly used for taping Es while I am at work. This new Blonder-Tongue low band I now have up on a tripod on top of the house. It has a rotator so I call it the "Rover". This antenna on the south side of the house will be used while I am at home to check out conditions to my southeast to southwest for any 2Es stations. Also this new antenna will fill a need to pick up Es to my northeast at a lower height than the antennas on my tower. I like the B/T low band antennas for it is not a long antenna, yet it has good pick up ability. Also it can be rearmounted to the south side of my house. One could even mount it onto a tree!! Gee, I am running out of space on my house and I do have trees around.

That's all for this month... seen any good TV DX? Why not share it with everyone? YOUR report would be a nice addition to the regular reporters feature above. Take a moment and share the DX! 73s Matt.

#### METEOR SHOWER GUIDE

Meteors are constantly entering the earth's atmosphere...every hour of the day and every day of the year. Here is a list of upcoming meteor showers we can look forward to in the near future. Happy MS Dxing!

SHOWER NAME	DATES	PEAK DATES
Gamma Velids	January 1-17	January 5-8
January Draconids	January 10-24	January 13-16
Eta Craterids	January 11-22	January 16-17
January Bootids	January 9-18	January 16-187
Delata Cancrids	Dec14-Feb 14	January 17
Alpha Hydrids	January 15-30	January 20-21
Eta Carinids	January 14-27	January 21-22
Canes Venaticids	January 13-30	Jamuary 25-26
Alpha Leonids	`January 13-February 13	January 24-31
Capricornids-Sagittariids(days)	January 13-Februaru 28	January 30-February 3



Only One Club covers TV and FM DXing
In North America and that's <u>US!</u>
TV - FM - WEATHER RADIO - 30-50 F2
The Worldwide TV- FM DX Association

"Tough to Beat"







John Ebeling 9209 Vincent Ave So. Bloomington, MN Equipment: Pioneer TX-9500 tuner w/modified IF's & Stereo Probe 9 antenna. About 25 feet AGL.

#### November 18, 2001 MS

0330 WSIX 97.9 Nashville TN

"....the big 98 WSIX.... 691 miles

0510 WZQQ 97.7 Hyden

741 "...ZQQ in...."

0530 KWGB 97.7 Colby KS

"....in Colby..." 546 That's it. The tape was running most of the nighthad a hell of a lot of listening to do afterwards to pick out the ID's.

#### December 12, 2001 MS

Waco 0115 WACO 99.9 TX "Texas country WACO 100"... 916 miles

A "W" call in a "K" state....another oddity.

WRNX 100.9

93.9

ID

ID

Amherst

**Turners Falls** 

MA

MA

**KEITH MCGINNIS** 387 SHIRLEY ST **WINTHROP MA** Equipment: Modified Yamaha T-85 with narrow filters installed— APS 9 at 20 feet AGL

ON denotes overnite RDS catch all other times are EST

#### October 9, 2001 MS

ON WHSA WI November 23, 2001 Tropo 89.9 Brule

RDS catch 68F8

November 16, 2001 MS

0300~

0400~

0340 WDAV 89.9 Davidson NC November 24, 2001 Tropo

2155

RDS catch 5CA9

Sturgeon Bay

WRSI 2054

November 18, 2001 WXXK 100.5 2145 Lebanon NH

Local adverts CBSM 89.5 Sault Ste Marie ON

RDS catch CB34

MIKE BUGAJ 69 Sherman Road Enfield, CT 06082 Equipment: Carver TX-11 modified with a 110khz filter, Probe 9 @ ~30ft agl.

#### December 3, 2001 TR

WLTM

"Magic"

99.7

Coastal tropo with many NC Fmers. 2125 WYFI-99.7, WRSF-105.7 and WOLC-102.5; 2126 WWSO-92.9 with soul mx (423mi), 2152 WWOC-94.5 Hatteras "Water Country 94.5; 2220 WIKS-101.9 Kinston Kiss-102; 2247 101.1 Bellhaven (92-3 and 101.1 the Beat); 2250 WLGP-100.3 Harkers Island; 2250 WXNR-99.5 "99X" and 2255 WNHW-97.1 Hatteras w/Classic Hits Country. Heard a few nice MS bursts on 102.5 on 12/12 and 12/13 after 9:00pm EST but no lds.



The year 2001 F2 season is here. Here is a rundown of what your fellow WTFDA members are hearing on their TVs, receivers and scanners. All information is from posts on the WTFDA list.

#### **Nov 19**

1430Z Encountered YU1LR(Yugoslavia). At 1500Z VO1ZA(NF), EI5FK(Ireland) and OX3VHF (Greenland). Also loud (S8) R1 video buzz. –Doug Smith (TN)

#### **Nov 19**

ISOMVE(Sardinia) on cw and FY5KE (Fr Guiana) on SSB. Also 9HIXT Malta. Country total at 76 –Jeff Kadet (IL)

#### **Nov 23**

48.240 and 48.250mhz video buzz very strong at 1000 EST – Mike Bugaj (CT)

#### **Nov 23**

Had some video buzz earlier now the whole band from 31-42 is hot with F2. Heard mentions of Fresno Ca on 35.x and some French mixed in there on 35.x as well. Chips are in –Michael Temme-Soifer. (NJ)

Nov 23 This afternoon I heard a harmonic of Radio Marti on 43.35mhz in AM mode. 43.35 is the highest freq that I've heard SW harmonics on –Bill Hepburn (ON)

<u>Dec 1</u> Signals from the UK up to S8. Many are saying this is the best F2 season since 1979 –JK

Dec 2 Video buzz again on 48.240/250 –MB

<u>Dec 6</u> Worked MU0FAL on Guernsey for country #81 –JK

**<u>Dec 9</u>** I have E2 buzz up to "3 bars" strength on the R100. No hints of video to speak of –WRH

<u>Dec 9</u> Friday and Saturday we had the best openings to Alaska yet. AL7QH who was running 5 watts and a longwire –JK

#### **Dec 12**

0847 CST heard DK2PH Germany. I managed my first ever voice two-way contacts with

Europe on 50mhz and more contacts with Europe than on any single day before. Also had plenty of E2 and R1 video carriers, countries assumed:

48239.5 Germany

48242.1 Portugal

48244.8 ?

48247.3 Germany

48250.1 Spain (is the xmtr still on?)

48252.6 Norway

48255.1 ?

48260.4 Germany

48260.8 ?

48261.0 ?

48263.0 ?

49739.6 Hungary or Czech Rep.

49744.8 Hungary

49749.9 ?

#### Dec 12

Rcvd a QSL today from WP4N Puerto Rico for reception via F2 on 50.1 on Nov 19 – Morris Sorensen(MB)

#### **Dec 12**

We had another 6m opening to Japan tonight! It started at 2220z and lasted until around 2310z. I worked 7 stations on cw. December 12, 2001 is going to go down into the history books as an unusually good day for DX from these parts. How much longer will these incredible conditions continue? –JK

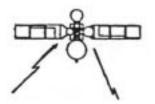
#### **Dec 13**

Got up at 8 am, nothing doing on 50mhz. About 8:45 S51D1 Slovenia calling cq and loud. Go looking for more signals and there's a weak 9A (Croatia)...by 8:52 the band is completely dead. -DS

#### <u>Dec 16</u>

Video buzz on 48.250 again –MB Jeff Kadet reports F2 to Europe again on 50mhz and just another routine opening...yawn!

# **Satellite News**



George W. Jensen 4604 Anntana Ave. Baltimore, MD 21206-4220 SCISATMAN@AOL.COM

#### **HAPPY NEW YEAR 2002**

First some changes that concern satellites covered so far.

#### **SATCOM C4**

100 - Starz West/101 - Starz East/103 - Plex East/104 - Starz Cinema West

#### **GALAXY 1**

The occasional Shop-At-Home on transponders 9 and 14 sharing with ESPNs Alternatives have not been noted in months.

And now to a continuation of the reviews.

GALAXY 5 - 125 wEST - March 10, 1992 - 10 years - 24 16 watt transponders - FORMAT - Odds - Horizontal/evens - vertical polarity. 1 - Disney Channel – East VC2/2 - vacant/3 - Trinity/4 - Sci-Fi VC2/5 - CNN VC2/6 - WTBS Superstation - Atlanta VC2/7 - WGN Superstation – Chicago VC2/8 - HBO - West VC2/9 - ESPN VC2/10 - Infomercials/11 - ABC Family Channel - East VC2/12 - Discovery Channel - West VC2/13 - CNBC - VC2/14 - ESPN 2 VC2/15 - HBO - East VC2/16 - Cinemax - West VC2/17 - TNT - Turner Network Television VC2/18 - TNN - The National Network - East VC2/19 - USA - East VC2/20 - BET - Black Entertainment Television VC2/ MPEG Feeds for BET at 4551V/6000/21 - Lifetime East VC2/22 - CNN Headline News VC2/23 - A&E Arts and Entertainment - East VC2/24 - Showtime - East VC2 AUDIO SUNCARRIERS - 3 - tRINITY rADIO 5.58/5.76 5 - CNN Radio News at 7.56 /6 - Brother Stairs at 6.44 , World Radio Network at 6.20 and another at 6.80 / 7 - WCPE Raleigh (Wake Forest) at 5.58 and 6.12 / WFMT - Chicago at 6.30 and 6.48 / Yesterday USA Superstation at 6.80 / 17 - CNN En Espanol at 7.56 / Soul Music 106 FM at 5.56 and 5.76 / 22 - CNN News Radio at 6.2

GALAXY 10 at 123 West - March 2000 - 12 years - C and Ku Band - 24 16 watt C Band transponders and 24 Ku Band transponders C Band first - Transponder 4 - Feeds/ 5 - Showtime Digicipher Feeds/ 7TVN or Pay-Per-View Digicipher feeds/ 9 - TVN Pay-Per-View Digicipher Feeds/ 11 - Toon Disney Digicipher Feeds/ 12 - TVN Pay-Per-View Digicipher Feeds/ 13 - TVN Pay-Per-View Digicipher Feeds/ 14 - Showtime Digicipher Feeds/ 15 - Showtime - West VC2/ 16 - TV Land VC2/ 17 -Nickelodeon - West VC2/ 18 - The Movie Channel - West VC2/ 19 - MTV - West VC2/ 21 - ESPN VC2/ 22 - Feeds/ 23 - A&E West VC2/ 24 - Outdoor Channel/ 101 - Showtime West/ 102 -Showtime 2 West/ 103 - Showtime 3 West/ 104 - Showtime Extreme West/ 105 - Showtime Beyond West/ 110 - Flix West/ 111 The Movie Channel - West/ 112 - The Movie Channel 2 - West/ 117 -The Sundance Channel - West/ 120 - Showtime HDTV Test - West/ 125 - Showtime Next West/ 126 - Showtime Family West/ 127- Showtime Women West/ 301 through 334 - Pay-Per-View (TVN) -NOTE THAT PREVIEW CHANNELS AT 300 and 335 are deleted. / 780 - Guthy-Renker Infomercials 1/ 781 - Guth-Renker Infomercials 3/ 783 - Guthy-Renker Infomercials 4/ 820 through 864 - DMX Music Channels at the moment. - rumor has it that Music Choice may be returning here at some time tin the future. MPEG 2 On the KuBand - transponder 15 - 11990V2386 - University of Southern California Distance Learning. Transponder 13 - 11960V/27688 - the following: KBS Satellite Channel (Korea), SBS Seoul Korea, YTN, WOW Sat, ISC, and on audio only - Radio Korea. Analog feeds may be found on other transponders from time to time.

That's all for this month - see you in 30. 73's George



# John 4009 Dri Yukon, Jpzondl Dead

John Zondlo 4009 Driftwood Circle Yukon, OK 73099 Jpzondlo@aol.com Deadline: 10th

For Dxers in AL, AZ, AR, CA, CO, DE, DC, FL, GA, HI, KS, KY, LA, MD, MS, MO, NV, NM, NC, OK, SC, TN, TX, UT, VA, WV, Cuba & Mexico

January 2002

Doug Smith - W9WI 1385 Old Clarksville Pike Pleasant View, TN 37146-8098 w9wi@w9wi.com/CST
www.w9wi.com

Technics ST-G50 tuner, big Radio Shack VHF-TV antenna at 15'

11/9 Tr			
0845 WZZK	104.7	AL	Birmingham, calls 202
0900 <u>WAWI</u>	89.7	TN	Lawrenceburg, legal ID, AFR 79
0900 WRAX	107.7	AL	Birmingham, local ads 202
0915 KSYG	103.7	AR	Little Rock, local talk 322
<u>11/10 Tr</u>			
0026 unID	98.3	??	??, "98.3 FM The Beat"
0122 unID	101.3	??	??, "Z 101-3"
0952 WECO	101.3	TN	Wartburg, call ID & local
ads			
<u>11/12 Tr</u>			
0806 WTTS	92.3	IN	Bloomington 213
11/18 Ms			
0405 CBMt	93.5	QU	Montreal, c
0453 <u>CBCL</u>	93.5	ON	
			only R1 on 93.5 545
0522 unID	94.9	??	??, FF CHR, likely CIMF
11/18 Gw			
0406 <u>WMMG</u>	93.5	KY	3,
			Country 93" 120

CBCL was heard several more times on the morning of 11/19. I need to stake out 93.5 more often, though I fear all I'm ever going to ID is CBCL!



Radio Shack DX-398 with stock whip antenna, GE Superadio III with stock whip antenna, (+) Onkyo TX-1500 MK II with cheap FM dipole antenna

ı				
	1911 KVLU 11/18 Tr	91.3	TX	Beaumont, "91.3 KVLU"
	1846 KYKS	105.1	TX	Lufkin, "Kicks 105.1"
	1848 KMAT	105.1	ΤX	Seadrift, "This is the KHCB
				Radio Network, also
				Broadcasting on 105.1
				KMAT Seadrift"
	1902 KOVA	104.9	TX	Rosenberg, "100.7 and
				the new 104.9 House Party"
	<u>11/22 Tr</u>			the new 104.5 House Farty
		00.4	ι Λ	Lake Charles "IVIV7 Viels
	1805 KYKZ	96.1	LA	Lake Charles, "KYKZ Kicks
	4040 1/10)/	00.0	<b>T</b> \/	96"
	1813 KIOX	96.9	TX	El Campo, ID
	1851 KQXY	94.1	ΤX	Beaumont, "Continuous Hit
				Music 94.1"
	1902 KYKR	95.1	ΤX	Beaumont, "Kicker 95.1"
	11/23 Tr			
	0014 KAYD	97.5	TX	Beaumont, "97.5 and 101.7
				KAYD"
	0032 KPLX	99.5	TX	Dallas, "99.5 The Wolf"
	0032 KI EX	99.5	TX	San Antonio, "Kiss 99.5"
	0043 KISS 0058 KSHN		TX	
	NILCY OCON	99.9	IV	Liberty, "Shine All-Nine is
			,	KSHN 99.9"
	0103 WACO	99.9	TX	Waco, "Texas' number one
				country, WACO 100"
	0117 KUST	99.7	ΤX	Huntsville, "Country radio's
				biggest variety is on 103.7
				and 99.7 K-Star Country"
	11/24 Tr			,
	1619 KPVU	91.3	TX	Prairie View, "The Uncle
	1010 <u>14 70</u>	0110	.,,	Moe radio show right here
				on KPVU 91.3"
	11/20 Tr			011 KF VO 91.3
	11/30 Tr	00.5	ι Λ	Lake Charles "Varing
	1920 KHLA	99.5	LA	Lake Charles, "You're
				listening to Bob & Sheri on
				LA 99"
	2018 KIOX	96.9	ΤX	El Campo, "96.9X-97
				El Campo-Bay City"
	<u>12/1 Tr</u>			
	1542 KNCT	91.3	TX	Killeen-Copperas Cove,
				"KNCT FMSimply
				Beautiful 91.3"
	1558 K216CJ	Q1 1	ΤX	Galveston, "You're tuned to
				translator K216CH 91.1 FM
	Galvesto		113 13	translator N210Cr191.11 W
		лгіЛ		
	12/2 Tr	00.0	<b>T</b> \/	0
	1559 KAXF	88.3	IX	Conroe, "We are American
	•	or the w	nole	Family, 88.3 KAXF Conroe"
	<u>12/6 Tr</u>			
	1719 KEZB	105.3	ΤX	
				Brenham, "94.1 & 105.3
				KEZB"
	12/7 Tr			
	0742 KKYS	104.7	TX	Bryan, "Mix 104.7, your
			.,,	Clear Channel
	0000 KDOV	00.7	TV	Communications station

2338 KROY

99.7

TX

99.7"

Palacios, ID at 2339, '

Escuchamos...desde Bay

City, Texas...Radio Luz

2350 KMKS	102.5	TX	Bay City, promo, ad for El Campo Cycle, "KMKS
2354 KTCX	102.5	TX	your regional news voice" Beaumont, "Magic 102.5, home of Tom Joyner in the morning"
12/8 Tr			
0337 KTJM 12/13 Tr	98.5	TX	Port Arthur, "La Raza"
	00.0	<b>T</b> \(\alpha\)	D   '' '' 01 00
0745 <u>KYYK</u>	98.3	ΙX	Palestine, "Lone Star 98
			morning show" and "Lone Star 98"
0749 KULM	98.3	ΤX	Columbus, "Texas
Country	30.3	17	Columbus, Texas
			98.3 KULM," local ad
2336 KJOJ	103.3	ΤX	Freeport, //KTJM
12/14 Tr	.00.0	.,,	1100port, //1110tt
0001 KRTX	100.7	TV	Winnie, "KRTX
	100.7	1 ^	Willing, KKIA
100.7KLTO			
			104.9House Party"
1835 KAMX	94.7	ΤX	Luling, local ad, "Mix
94.7"			-
2107 KMKS	102.5	TX	Bay City, "Hot country
			102.5the all new Texas
			hot country 102.5"
2114 KXGJ	101.7	ΤX	
21141000	101.7	17	101.7 FM"
			101.7 1 101



Radio Shack DX-440 modified, rabbit ears

Here are the results of a bandscan from the Holiday Inn, Tarboro NC, 10/20-22: Total: 136 from NNW side, 105 from SSW, 96 from car only. States: NC 98, VA 30, SC 5, MD 2, unID 1. Worst frequency: 91.1 (none), best 95.9 and 100.3 (3 each). I was a little disappointed with the total.

I was a little disappointed with the total.

Despite slightly above average temps, I did not get much outside of NC and VA.



11/8 Tr 2350 WOCQ	103.9	MD	Berlin, promo mentioning Salisbury, "OC-104"
11/9 Tr 0000 WZXL radio	100.7	NJ	Wildwood, "ZXL," CNN
			nx



Akai AT-VO4 (w/150 kHz IF filters), Stereo Probe 9 antenna, Conrad RDS Manager, all new

,			.9,
7/20 Es			
1623 WFSY	98.5	FL	Panama City, local spots,
1023 WI 31	30.5	' -	RDS "Sunny"
1631 WBVD	95.1	FL	Melbourne, o/semi-local
1031 11010	95.1	1 L	KQCV, traffic rpt
1740 WBSN	89.1	LA	New Orleans, extremely
1740 WD3N	09.1	LA	short skip, "Lifesongs"
1755 WMJY	93.7	MS	Biloxi, local spots
1803 WVMQ	107.9	FL	Key West, SS
8/6 Es	107.9	ΓL	Rey West, 33
0/0 LS 1146 WLPT	88.3	GA	Jesup, RDS "WLPT"
1223 WGNP	90.7	GA	Albany, "Masterful 90.7"
1230 WAZO	98.3	NC	Long Beach, "Channel Z"
1250 WAZO 1253 WHIF	91.3	FL	Palatka, prayer requests
8/11 Ms	91.5	' -	raiatka, prayer requests
2314 KQSD	91.9	SD	Lowry, RDS "KQSD"
8/17 Es	31.3	OD	Lowry, NDS NQSD
2259 KAPC	91.3	МТ	Butte, MT Public Radio ID
2300 KUWG	90.9	WY	•
2306 KCVI	101.5	ID	Blackfoot, "Idaho's rock
2000 110 11	101.5	טו	station"
8/22 Es			Station
1711 WCQR	88.3	TN	Kingsport, jingle, CCM
1715 WTFM	98.5	TN	Kingsport, calls
1723 WKJS	104.7	VA	Crewe, "Kiss FM"
1723 WAFX	106.9	VA	Suffolk, concert spot
1733 WAGO	88.7	NC	Snow Hill, southern g
1757 WYND	92.3	NC	Nags Head, local spots
1948 WBMZ	103.7	GA	Metter, "The Boomer"
8/23 Es			,
2129 WJNR	101.5	MI	Iron Mountain, high school
			football
2135 WJKL	101.5	ON	Kirkland Lake, "K-Lake"
2141 WDQV	88.5	MI	Mackinaw City, "Dove FM"
8/24 Es			••
1211 KRWG	90.7	NM	Las Cruces, c, time check
1925 WRVO	89.9	NY	
	30.0		Mind"
			· · · · · · · · · · · · · · · · · · ·

# Happy New Year from Southern FM DX!

#### Mid-Latitude Sporadic-E – A Review

Michael Hawk - Novemeber 12, 2001

#### INTRODUCTION

#### **Purpose**

Over the years, many observations, theories, and discussions have taken place surrounding the sporadic-E (E-skip) phenomenon. This article was originally written in response to a brief review of the basics of sporadic-E that I wrote for the April 1993 VUD. Unfortunately, other obligations prevented this article from being completed to my satisfaction until now. Although a large amount of material exists on the subject, I have not found one concise source of theories, correlations, and facts. And many of the subjects overview papers oversimplify or misrepresent some of these theories.

It is the purpose of this paper to provide a review of sporadic-E knowledge from a DX'ers perspective, while simultaneously bridging in observations from academia.

It is important to keep in mind that the ideas conveyed herein are theories, hypotheses, and observations. The fact remains that the catalyst for sporadic E is unknown and the behavior of mid-latitude sporadic E is unpredictable. When you start to believe that correlations and observations are fact, sporadic E will surprise you with an inexplicable result.

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#### 1.0 BACKGROUND

#### 1.1 Ionosphere Overview

The ionosphere is the region of the Earth's atmosphere containing free electrons and atoms, and associated ions produced by the sun's ultraviolet radiation (<100 nm wavelength). The ionosphere is known to influence radio wave propagation of frequencies up to around 300 MHz, and is located in the lower portion of the thermosphere, beginning at about 80 km altitude.2

The ionosphere is known to consist of several distinct regions of ionization. Altitude, consistency, and ion type differentiate these regions. The first discovered subregion was named the E layer (E for Electric Layer). At later dates, additional layers were discovered at lower (D region) and higher (F region) altitudes.

<sup>2</sup> One mile = one kilometer X .62

<sup>&</sup>lt;sup>1</sup> One nm =  $10^{-9}$  meters

The D region is primarily known for its absorption of radiowaves at low frequencies. It quickly dissipates at night, allowing distant AM radio reception to occur.

The F region is the primary refractor/reflector of HF (shortwave) frequencies. Its "reflectivity" displays a direct relation to solar activity. During years of peak solar activity, the F region will have a much higher ionization density, allowing for higher frequencies and sharper angles of waves to be reflected. TV DX'ers and 6 Meter ham operators look forward to solar cycle peaks, as those years are when the F region can bring distant DX up to 50 or 60 MHz.

The E region of the ionosphere is located about 90 to 160 km in altitude. The height can vary a little, and, along with electron [ionization] density, depends on solar zenith angle and solar activity. During daylight hours, electron density (a measure of the ionization level) can reach 10<sup>5</sup> electrons/cm<sup>3</sup>. At night, when the supply of x-rays from the sun is cut off, ionization levels drop to 10<sup>3</sup> e/cm<sup>3</sup>. These ionization densities are expected under normal conditions, absent of sporadic-E.

#### 1.2 Sporadic-E Definition

Within the E region, very thin regions of extremely dense ionization can form. These regions can apparently be caused by several mechanisms, and have a wide variety of characteristics. Because of this, one single definition cannot be completely accurate. According to the Space Environmental Services Center, "sporadic E (Es) is transient, localized patches of relatively high electron density in the E region of the ionosphere which significantly affect radio wave propagation. Sporadic E can occur during daytime or nighttime, and it varies markedly with latitude. Es can be associated with thunderstorms, meteor showers, solar activity, and geomagnetic activity."

There are several problems with this definition, but it seems to be the best "official" definition available. This definition provides no insight into the diurnal characteristics of Es. The definition lends too much credence towards the thunderstorm and meteor shower correlations. The relationship with thunderstorms has been highly controversial in amateur circles, but most academia studies have ruled out such possibilities. The relation to meteor showers is still highly studies, as some indirect correlations have been observed. Both of these possible Es mechanisms are discussed in more depth later in this paper.

A much more precise definition of Es was found in a book titled "Worldwide Occurrence of Sporadic E", written by Ernest K. Smith, PhD, 1957.<sup>3</sup> Sporadic E was defined as "a comparatively strong and protracted transmission (several minutes to several hours) "returned" from the E region of the ionosphere by some mechanism other than the normal reflection process from the daytime E layer."

Through the use of careful and generic wording, this definition fits almost any type of Es currently known.

The careful wording of Dr. Smith's definition is important, because there are a wide variety of sporadic-E types. In the temperate latitudes alone, through the use of ionosondes (data displayed in ionogram format), four have been identified.<sup>4</sup> See figure 1. An ionogram shows the altitude at which different frequency waves are reflected back to the originating point.

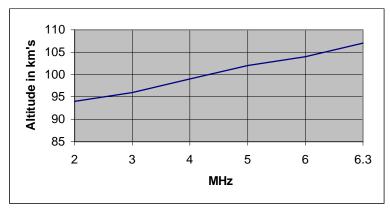


Figure 1 Sample Ionogram

National Bureau of Standards Publication. A few copies are available through rare bookstores for \$20-\$80. May 2001 check of Amazon.com revealed 2 copies available through independent dealers.

<sup>&</sup>lt;sup>4</sup> An ionogram is a plot of the group path height of reflection of ionospherically returned (echoed) radio waves as a function of frequency. Figure 1 is an example. Vertically incident measure the date for this graph.

An ion is an atom or group of atoms having an electric charge. This results when a neutral atom of group of atoms loses or gains one or more electrons. For this reason, either ion density, or more commonly electron density, can be used for ionospheric "strength" calculations. The most common E region ions are  $O^{2+}$ ,  $O^+$ , and  $NO^+$ , as well as some metallic ions.

The reason an atom or group of atoms may lose an electron is primarily through the well-documented impact of solar radiation. Throughout the day, the level of production of ions exceeds the level at which the ions recombine with electrons. At night, the production of ions ceases with the setting of the sun, and the slow process of recombination gradually lowers the electron density. Additionally, recombination rates are inverse to altitude. This can be demonstrated by the fact that the D region diminishes quickly at sunset, minimizing absorption of low frequencies (< 8 MHz). If it weren't for this fact, long range propagation on the AM broadcast band wouldn't occur until well after sunset. At the "higher" regions, enough electrons continue to persist throughout the night, allowing refraction in the E and F regions to continue all night.

As previously mentioned, normal ionization levels in the E region during the day are around  $10^5$  e/cm³. Note that Es can have ionization levels twice the normal amount. This high density accounts for the high maximum useable (refractable) frequencies (MUF) that occur with Es. There are several formulas which, through the use of electron density, approximate the critical frequencies⁵ (f₀Es), MUF¹s, and other parameters. Many are highly inaccurate extrapolations from other propagation types.

Although ionization levels are quite high when Es occurs, the highest levels are generally confined to very small patches, commonly referred to as clouds. The shape of the clouds is likely ragged, and not true circles or ellipses. Additionally, clouds have been shown to have concave undersides in many instances, with tilts up to 10°. For simplified calculations, however, they are often thought of as pure circles or ellipses, with axis parallel to the horizontal plane. In cases such as these, the diameter of the cloud could be to several hundred km. The vertical thickness of these clouds is usually quite small – no more than a few km thick. The thickness of clouds has been measured by rocket flights through ionized areas.

During large/intense Es outbreaks, elevated ionization can be very widespread. In these conditions, the concepts of Es "clouds" is tough to identify at lower frequencies. Embedded in this "sheet" of elevated ionization density are small patches of very high ionization. At higher frequencies, these very dense areas can be identified, and the "cloud" concept holds.

#### 2.2 Distances Propagated and MUF

Through the use of simple geometry, it can be figured that the theoretical maximum distance for a transmitted signal to be propagated after only one encounter with the Es region ("single hop" propagation) is 2100 km. This appears to be very accurate for the HF bands (< 30 MHz), but many transmissions exceeding 2350 km have been observed in the VHF bands. This is likely due to much improved "groundwave" and tropospheric characteristics, which add distance to the theoretical maximum on both sides of the typical model. Figure 2 shows average distances received on FM broadcast and TV broadcast frequencies. The average FM distance is likely longer because of the simple relationship between electron density and critical angle of propagation. In other words, it is "easier" for the atmosphere to produce shorter distance propagation in the lower frequency low-band VHF range.

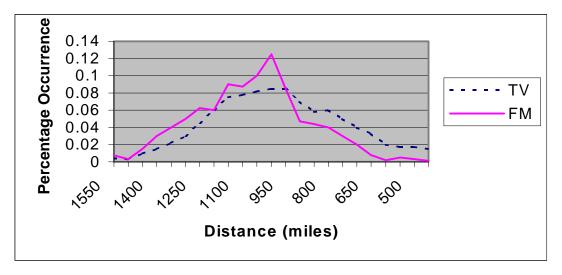


Figure 2 Distance propagated at FM and low band VHF TV frequencies, collected from VUD reports

 $<sup>^5</sup>$  Critical Frequency ( $f_o$ ) is the highest frequency that reflects/echoes a vertically transmitted radio wave back to the transmission point. A relatively low critical frequency can result in a "high" MUF, given that the waves related to the MUF are encountering the ionization at a high angle (no perpendicular as is required for critical frequency measurements).

<sup>&</sup>lt;sup>6</sup> Many believe a gradual bending of the wave occurs, as the density of the media changes, rather than mirror-like reflection. Although this is not pure refraction either, refraction is the generally accepted term.

# 

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