

THE WORLDWIDE TV-FM DX ASSOCIATION

Serving the UHF-VHF Enthusiast

THE VHF-UHF DIGEST IS THE OFFICIAL PUBLICATION OF THE WORLDWIDE TV-FM DX ASSOCIATION DEDICATED TO THE OBSERVATION AND STUDY OF THE PROPAGATION OF LONG DISTANCE TELEVISION AND FM BROADCASTING SIGNALS AT VHF AND UHF. WTFDA IS GOVERNED BY A BOARD OF DIRECTORS: DOUG SMITH, GREG CONIGLIO, BRUCE HALL, DAVE JANOWIAK AND MIKE BUGAJ.



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APRIL 2004



Finally! For those of you online with an email address, we now offer a quick, convenient and secure way to join or renew your membership in the WTFDA from our page at:

<http://fmdx.usclargo.com/join.html>

Dues are \$25 if paid to our Paypal account. But of course you can always renew by check or money order for the usual price of just \$24. Either way, it's still a bargain!

VUDS ON A CD!

Every VUD from Jan 1980 to December 1989 is on this disk. You'll need Adobe Reader to read them. Why have a box of old VUDs taking up space when you can have this. **It's yours for just \$8.00 per disk.** Send your check or money order for \$8.00 to WTFDA, P.O. 501, Somersville, CT 06072. Make it payable to Dave Janowiak.



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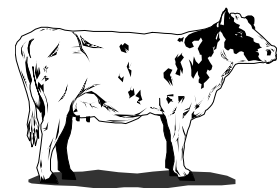
Ah YES! April! And if you look closely you'll find that FM News is back, this time edited by Adam Rivers, and it looks great!

Keith McGinnis is in the middle of a move, so FM North will return next month.

We have a recent membership list this month, so check it out for members near you.

And...the financial report. We're not doing badly at all. Good news. Enjoy this issue!

OMAHA 2004



The WTFDA Convention July 30, 31 and August 1, 2004

<http://www.amfmdx.net/WTFDA2004/>

Mike Hawk and Matt Sittel welcome you to Omaha for the 2004 WTFDA Convention. You'll be staying at the **Park Plaza Regency Lodge** with a central Omaha location near 108th and Pacific just off of I-680. Additionally, they have promised that we can assemble antennas on-site during the convention. You can reach the hotel at (402)397-8000. Please call the hotel for rates and tell them you're with the WTFDA. Be there!



The Mailbox

P.O. Box 501, Somersville, CT USA 06072
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APRIL 2004

"I am the eye in the sky, looking at you. I can read your minds." Famous words from a song a few years back, the title of which escapes me right now but nevertheless, I know what many of you are thinking. **YOU WANT SKIP!** Well, so do I. We've had a long dry spell over the winter and right now many of us are ready to throw a brick through the nearest CRT. Well, put that brick down! The worst is over. In just a few weeks we'll be seeing reports of E skip and possibly some tropo as we shake ourselves free of winter and spring weather patterns take over. Keep watching the weather maps and check out Bill's Hepburn's internet tropo maps daily.

MEMBERS AND MORE

Paypal yielded some surprises this month. We found a new membership from **Juan Gualda** who lives in Ft. Pierce, FL and a rejoin from fellow CT resident **John Kosinski** of Stamford. Welcome in Juan and welcome back John! Thanks for using Paypal!

We've got plenty of renewals this month. Now to take a deep breath and try to say all these names before I turn blue: **Gerard Hart (NY), Ryan Grabow (NY), Robert Fischer (AK), Harry Hayes (PA), John Broomall (GA), Nathaniel Ely (WI), David Cox (AL), Dave Nieman (NY), Barry Shinall (IA), Bill Draeb (WI), Dan Oetting (DE), Paul Crego (NY), David Legler (MN), Mike Reid (ON), Aaron Mitterling (IN), Joe Perge (OH), Andrew Mackenzie (NY), Gary Hickerson (OK), Allan Dunn (MA) and Glen Hale (KY).** Thank you everyone for hanging around and for your vote of confidence in the WTFDA.

VUDS OF THE 1980S ON CD

We have had enough CD orders at this time to reach the "break-even" point, which means that we have our expenses covered and any monies we receive after 3/14 will go into the club treasury.

If you have been in the WTFDA a short time and never got to see what the VUDs were like in past years, this is your chance. The 1980s contained some great technical articles, some great DX and some neat construction projects. See elsewhere in this

VUD for pricing and ordering information.

AND EVEN MORE PERKS!

Yes I know it's even harder to believe but look what we have for you! Thanks to **Jim Thomas** we are able to offer you official WTFDA window clings! Clings are the things your favorite Crazy Lube oil change place puts on the inside of your car windshield with the date of your next oil change. Stick it on and it sticks; peel it off and it's off.

The official WTFDA window cling consists of the WTFDA logo plus our website URL. It comes in red and yellow. Take one of these clings, peel off the backing and stick it on the inside of your car's rear window. Rub the air bubbles out and presto! The cling is on to stay and everyone who looks at it will know your car belongs to a WTFDA member. It also helps you find your car in a crowded parking lot if you are like me and forget where you put it.

We are offering these clings for the ridiculous low price of just **\$2.00 each**.

Stick one of these on your car and let everyone know you're a proud WTFDA member!

As usual, make your check or money order out to Dave Janowiak and send it to WTFDA, P.O. Box 501, Somersville, CT 06072.

Have more than one car? Buy one for each! Put one on the kitchen door! Stick one on your dog!

Want permanent decals instead? Permanent white decals are also available. You get two of these for \$2.00. These decals may take longer for you to receive as they will be made *as ordered*. Just remember, if you need to remove these permanent decals you'll need a putty knife and elbow grease.

If you order, please specify either removable clings or permanent decals. Don't make us guess!

AN INTERESTING LETTER

Here's a very recent letter received from veteran DXer **Bill Draeb(WI)** to prove that this isn't called the Mailbox for nothing. Bill writes, "I just renewed for another year. I've been a member since 1/68 (Jan 1968, the 2nd issue). I dragged my feet in joining and missed the

first issue but got one later on. I still have all of them.

Looking at past issues I would like to see something different on the covers besides coverage maps. Enclosed are copies of some of the covers drawn by Harry Hayes and Wanda Prus. They were always interesting to look at and get a charge out of. Perhaps someone could do some more of those if they are artistically inclined (Bill included some samples).

The new "WX-DX" column sounds promising. What I would like to see included, though, is an address for DXers to send their reports to other than an internet website or in addition to it. Right now I don't have a computer or the internet so reporting is made more difficult if I had something to report.

I haven't sent in any reports in a while, perhaps this year.

P.S. Does the WTFDA still have boxers for sale? I could use some to store my VUDs."

Wow. I have plenty to comment on here. Let's start with coverage maps.

Bill's question about CMs made me go back and check every VUD issue I've published. As of the April 2004 VUD, I've published 32 issues. And of those 32 issues, four of them had coverage maps on the cover and one of those was a NOAA map. That's 12% of them if my math is right. So, you folks have not been looking at a huge amount of CMs on the VUD covers.

My personal preference is to see photos on VUD covers, especially now that we have the ability to do them and have them look decent for a change. I thought Jeff Lehman's antenna photo a couple of issues back was fantastic! This month's cover is almost too cool for words.

Times are changing. Kodak is leaving the 35mm market. Many of us poor folk can afford digital cameras now. Take advantage of that! Keep a camera in your car and when you're out driving and see something interesting TAKE A PHOTO of it and either mail it or email it to me. Suggestions: a tower, a building, a station's news vehicle, an FM station's van. You name it. Your only limitation is your imagination! You can do what Jeff or Paul did, helping the club and becoming famous at the same time.

I do have other coverage maps to use but I'd rather put them inside the VUD somewhere unless they are really exceptional like the WBYO CM from last month.

As far as cartoons on the front cover, well I'd rather not go there. They served their purpose back in the 70s and 80s, but with the technology now available to us I think we can do better and present a more professional product. However, if there is anyone out there who's a decent cartoonist and wants to submit something to me, go right ahead. I'd like to see it.

Regarding WX-DX, I've emailed the column's editor about your request. We will see what we will see.

As far as VUD boxers, no we don't have them. I suppose if there were some demand for it the BoD could consider it. At the moment I don't see a demand. I use cardboard boxes myself. Crude, but they work.

So much is written about the internet and email and websites that some of you folks who aren't online might feel left out. Our goal here is to make sure that you off-liners are as informed as the on-liners. You folk are just as important to us as anyone else and will always be. Don't forget that.

Thanks for taking the time to write, Bill.

THE MAN FROM FT. PIERCE

Here's a note from our newest member, **Juan Gualda**. Juan writes: "A little about myself..married, no kids. I reside in Ft. Pierce, FL. I am the PD of WGNX-FM and WTTB-AM in Vero Beach, FL. I have DXed since I was about 10 years old. I joined the NRC when I was 12 years old and have been a member on and off since. I *really* have gotten into TV-FM DX in the past 15 or 20 years so I figured it made sense to join the WTFDA.

Besides DXing, my other hobbies are internet radio, watching Miami Hurricanes Sports and listening to Frank Sinatra. Oh, and I like to make beer (What a coincidence! I like to listen to Frank (Zappa) and I like to *drink* beer! Amazing! -mike)

My receiver is a Carver TX-11A for FM (not modified, but someday) and Win TV-D computer card and a GE TV for TV DX.

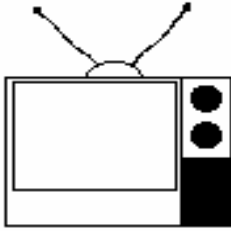
I am waiting for help putting my antenna up so I can TV DX again. By the way, thanks for the advice on the Win TV-D. I bought it new in the box for \$88 on eBay (good deal - mike). It works great except I am only using an indoor bowtie antenna now until I get my antenna on the roof replaced. I am very impressed with the Win TV-D. Thanks for the heads up." (You're welcome. Glad to help -m)

MORE IBOC IN BOSTON

Jeff Lehmann reports on 3/1 "More bad news from here in the Boston area. Within the past couple days 91.9 WUMB, 92.9 WBOS, and 96.9 have turned on the IBOC. These are in addition to 93.7 WQSX and 105.7 WROR that were already running it. Keith and I are getting ready to kiss FM DXing goodbye if this continues. It was nice while it lasted. (it should be an interesting summer -mike)

LAST BUT NOT LEASED

That just about does it for this month. Take care and see you all next month. -Mike



TV News

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April 2004

Abbreviations:

AF	Applied For (a new station)	PG	Power change granted
Aux	Auxiliary (backup) transmitter	PR	Power change requested
CC	Callsign change	QC	Channel (?frequency??) change on the air
CL	City-of-license change	QG	Channel change granted
DE	License/permit deleted	QR	Channel change requested
FC	Programming (?format??) change	RE	Reinstated (previously-dismissed app.)
FTP	Failure to Prosecute	ROA	Request of Applicant
GA	Granted amendment (to table of channel allotments)	SI	Off the air (?silent??)
LC	License to Cover	STA	Special Temporary Authority
NS	Permit granted for new station	XC	Transmitter site changed
NW	New station on the air	XG	Transmitter site change granted
PA	Proposed Amendment	XR	Transmitter site change requested
PC	Power (and/or tower height) change on the air		

News:

(full-power analog stations in **bold face**; LPTV and translators in regular type; full-power digital stations in **bold italics**)

Alabama:

Birmingham 27 WBUN-CA CC fm W27CM
 Hamilton 46 W46DF PC<10.2kw
Louisville 43 WGIQ PR<4180kw/262m
 Scottsboro 27 W27CV QG fm W64BJ, 11.1kw

Alaska:

Anchorage 6 KYES-DT PR<277m, 61-20-11/149-30-47
 Anchorage 8 K08NS AF dismissed
 Anchorage 21, NEW-LP AF dismissed
 40,
 42,
 49,
 69
 Homer 4 K04JH PR>3kw dismissed
 Hope 9 NEW-LP AF dismissed
 Ketchikan 17 K17GX NS 6.9kw
 Seward 40 K40HQ NS 150kw

Arizona:

Casas Adobes 20 K64BV QR from ch. 64, 10kw
 Concho 12 KWSJ-LP CC from K12PR
 Holbrook 38 K38IK NS 5kw
 Kingman 16 K16GB NS 100w
 Phoenix 44 KPHE-LP QG from ch. 19
 Pinta 58 NEW-LP AF dismissed
 Prescott 20 K20IA AF dismissed
 St. Johns 58 NEW-LP AF dismissed
 Tacna 45 NEW-LP AF dismissed

Arkansas:

Bentonville 26 K14IT QR from ch. 14, 150kw
El Dorado 43 KEJB NW 5000kw/530m, 33-04-41/92-13-41; UPN
Fayetteville 9 KAFT-DT QG fm ch. 45,

Fayetteville 36 KFFS-CA PR>150kw; PG
 Fayetteville 48 KEGW-LP QR from ch. 64, 150kw; CC from K64FO
 Hindsville 40 K59ES QR from ch. 59, 142kw
 Hot Springs 23 K23GT QG fm K44EV, 34.9kw
Little Rock 11 KTHV drops DA
Little Rock 44 KWBF-DT NS 1000kw/485m, 34-47-45/92-29-44
 Springdale 4 KJBW-CA CC fm K15DR; PR<2.1kw

California:

Bakersfield 36 KBFK-LP PC>150kw
 Bakersfield 41 NEW-LP AF dismissed
 Banning 67 K33HU QR from ch. 33, 9.97kw
 Caliente 43 NEW-LP AF dismissed
 Chico 28 KKPM-CA PR<129kw
 Cloverdale 17 NEW-LP AF dismissed (3Abn)
 Eureka 49 NEW-LP AF dismissed
 Glen Arbor 21 K21HA AF dismissed
 Indio 6 K06MB PR>3kw
 Inland Empire 45 KHTV-LP QC from ch. 48
 Los Angeles 63 KADY-1 NS 87kw; PR<50kw
 Los Angeles 67 KNLA-LP QC from ch. 68
 Maricopa 38 KNXT-LP QR from ch. 57, 150kw
 Martinez 49 K49HV NS 5kw
 National City 61 K61GH PR<70w
 Palermo 4 K51BP QR from ch. 51, 3kw
 Palm Desert 9 K55FI QR from ch. 55, 1.5kw
 Palm Springs 20 K20HZ NS 1.46kw
 Porterville 31 KVVG-LP PR<14kw; PG
 Ridgecrest 41 K41GO QC fm K63AH, 2.38kw
Sacramento 21 KMAX-DT PR>850kw/581m



Salinas	3	KMMD-CA	PG<90w; PC				1000kw/263
San Diego	36	KDTF-LP	NW 3.42kw	Inglis	47	WYKE-LP	PG<15kw
San Francisco	40	K40HO	QG from	Islamorada	48	W48DE	NS 20kw (WEYS-22)
			K52IQ, 35kw				AF dismissed
Temecula	12	K12PO	QC from	Key West	18	W18DE	NS 2kw
			K47FL, 1kw	Key West	19	W19CV	PC>3.9kw
				Key West	44	W44AC	QG from ch.
Colorado:				Lake City	15	WJXE-LP	66, 150kw
Basalt	33	K33HY	NS 2.1kw	Lake City	33	W33CI	QG x W39BZ, 150kw
Breckenrdge	26	K26GY	PC>360w				PR>150kw; PG
Breckenrdge	8,	NEW-LP	AF dismissed				QR from ch. 50, 75kw
	12						PR>150kw; CL from Oldsmar; PG
Buena Vista	9	K09XS	NW 20w				PG>3kw
Denver	41	KRMT	PR>2223kw	Miami	25	WIMP-CA	QC from
Denver	45	KHDT-LP	CC fm K45HH	Miami	49	W54BB	W59AJ, 49kw; CL from
Denver	51	KCEC-DT	NS 900kw/233, 39-43-58/ 105-14-08	New Port Richey	48	WZRA-CA	Matecumbe PR>3kw; PG
							PR>182kw/477 , drop DA
Durango	20	KRMU-DT	PG>46kw/130 m, 37-15-46/ 107-53-58	Orange Lake Orient City	8 15	W08DT W15CL	AF dismissed
							CC x W14CN
Durango	47	K47IT	NS 6kw (TBN)	Orlando	4	WFOL-LP	NS 40kw
Grand Junction	17	KRMJ-DT	PR<65kw/409 m, 39-03-58/ 108-44-43	Orlando	14	WRDQ-DT	NS 5kw
							CC from WSUX
Grand Junction	18	KRMJ	PR<105kw/409 39-03-58/ 108-44-43	Panama City	8	W08DX	NW 24kw/39m, 30-29-40/ 84-25-03
				Panama City	14	WDWY-LP	PG>150kw; CL from
Grand Junction	51	NEW-LP	AF dismissed	Panama City	15	W15CK	Bradenton; PC
Holyoke	29	NEW-LP	AF dismissed	Panama City	48	W48DG	QC from ch. 61, 75kw
Pagosa Springs	43	K43GT	QC from	Sebring	5	WOCX-CA	AF dismissed
Powderhorn	4	K04PW	K56DO, 440w	Tallahassee	24	WTLF-DT	
Red Cliff	28	K28HI	NS 18w				
			NW 20w; CL from Breckenridge & Dillon	Tampa	18	WSVT-LP	PG>150kw; CL from
Steamboat Springs	42	K42GM	AF dismissed	Tampa	46	WVEA-LP	QC from ch. 61, 75kw
Connecticut:				Williston	56	NEW-LP	AF dismissed
Bridgeport	42	WSAH-DT	NS 1000kw/ 164, 41-16-44/ 73-11-08 rescinded	Georgia:			
				Albany	41	W41CT	AF dismissed
Hartford	6	WRNT-LP	CC xWMLD-LP	Atlanta	10	WXIA-DT	PC>80kw
Hartford	38	WHCT-LP	PG>150kw	Atlanta	19	WGCL-DT	PR>170kw
Hartford	45	WEDH-DT	PR>465kw/505 41-42-13/ 72-49-57	Atlanta	20	WTBS-DT	PG>1000kw
				Atlanta	39	WSB-DT	PR>1000kw/ 301m, DA
Hartford	50	WRDM-LP	QG from ch. 44, 50kw	Blairsville	28	WDWW-LP	CC x W28CV
New Britain	35	WVIT-DT	PR 250kw/ 434	Columbus	19	NEW-LP	AF dismissed
New Haven	10	WTNH-DT	Granted DA	Cumming	28	W28CV	CL from Blairsville
Delaware:				Macon	50	W50DA	QG x W52CL
Georgetown	11	W11CY	AF dismissed	Savannah	32	WHDS-LP	FC; sold to WGGG-16
Georgetown	51	W51DQ	NS 1kw	Willacoochee	41	WWPD-LP	CC x W41CQ
Millsboro	7	W07DK	AF dismissed	Hawaii:			
Talleyville	53	W53CP	QG fm W55BT, 18.1kw	Hilo	34	K34HC	PR<11.2kw; PG
				Hilo	47	NEW-LP	AF dismissed
District of Columbia:				Honolulu	43	KWBN-DT	NS 1000kw/ 577, 21-23-45/ 158-05-58
Washington	49	W49CK	QG fm W63BP, 59.2kw; CL fm Annapolis,MD	Wailuku	48	K48IY	NS 5kw
				Idaho:			
Florida:				Boise	35	KUNS-LP	CC x K35GE
Bradenton	18	WSVT-LP	PC>150kw	Idaho Falls	28	K28II	AF dismissed
Fort Myers	6	WLZE-LP	QG from ch. 65, 3kw	Idaho Falls	69	K69IS	NS 5kw
Fort Walton Beach	50	WFGX-DT	QR fm ch. 25, 1000kw/221m, 30-23-46/ 86-59-13	Mackay	15	K15GL	QG from K17CY
				Pocatello	15	KPIF	NW 5000kw/327 42-51-50/ 112-31-10
Gainesville	36	WUFT-DT	NW	Pocatello	24	KUNP-LP	CC x K24EV
				Preston	21	K21HH	QG x K22DV

Preston	42	K42GN	NS 1.8kw	Alexandria	26	KLPA-DT	NW 76kw/413m
Soda Springs	30	NEW-LP	AF dismissed	Baton Rouge	48	K48IT	QG x K58GB, 12.9kw
Soda Springs	35	K35HD	NS 1.135kw				
Swan Valley	40	K40HN	NS 49kw	De Ridder	39	NEW-LP	AF dismissed
Twin Falls	53	K53IL	AF dismissed	Hammond	42	NEW-DT	NS 1000kw, 29-58-41/ 89-56-26
Illinois:							
Champaign	15	WICD	FC to ABC	Haynesville	69	K69HO	CL from El Dorado, AR
Chana	46	WBKM-LP	CC x W46DN				
Chicago	31	WFLD-DT	PR>690kw, drop DA; PG NW 150kw/ 474m (aux)	Lake Charles	7	KPLC	XC 30-23-46/ 93-00-03
Chicago	47	WTTW-DT	FC to NBC PR>100kw/176	Lake Charles	45	K45HY	NS 4kw
Decatur	17	WAND	FC to NBC	Lake Charles	69	K69IX	NS 50.61kw
Freeport	41	WIFR-DT	FC: Daystar	Monroe	7	KNOE-DT	NW 1kw/518m
Mt Vernon	13	WPXS	NS 2kw	Monroe	22	KMNO-LP	PC>18.2kw
Quincy	26	W26DA	AF dismissed	New Iberia	19	K19FR	QG x K49DE, 40.6kw
Rochelle	21	NEW-LP	CC x WGNW				
Rochelle	25	WMKB-LP	NS 300w; PR>150kw; PG; PR<25kw	New Iberia	8	W08DT	PR>3kw; CL from Orange Lake, FL
Rochelle	40	W40BW	PR<80kw;PG; then PG<50kw				
Rochelle	55	W55DF	PR>150kw	New Orleans	21	WHNO-DT	NW 17kw/254m
Rochelle	61	W61DT	PR>150kw	New Orleans	28	K28IL	QG x K59DG, 150kw
Rockford	16	WTVO-DT	NW 196kw/ 201	New Orleans	49	WPXL	PG>5000kw/28 8
Springfield	20	WICS	FC to ABC	Shreveport	31	K31HO	QG x K59GO, 50kw
Springfield	55	WRSP-TV	drops DA	Tullos	44	K44HN	NS 1kw (KEJB-43)
Indiana:							
Columbia	27	W27CT	PR>148kw	Maryland:			
Evansville	36	W36DF	QG fm W56DN, 13.5kw	Hagerstown	16	WJAL-DT	PA to Silver Spring denied
Evansville	41	WTSN-LP	QG from ch. 63, 13.2kw	Salisbury	23	NEW-LP	AF dismissed
Fairbanks	32	WKMF-LP	CC x W32CW	Massachusetts:			
Fort Wayne	43	W43CF	QC from ch. 66, 4.4kw	Boston	32	WBPX-DT	NS 300kw/ 292, 42-18-27/ 71-13-27
Gary	56	WYIN	PR>5000kw/46 8 41-52-44/ 87-38-08 dismissed	Pittsfield	4	WNYA-DT	AF 4.15kw/ 397, 42-37-31/ 74-00-38
Indianapolis	46	WTHR-DT	PG<265m	Springfield	11	WWLP-DT	PR>10kw
Terre Haute	34	W34DD	PR>100kw; PG	Springfield	34	WESA-LP	QG fm W12CL, CL from Granby CT, 45kw
Iowa:							
Cedar Rapids	52	KCRG-DT	PG<350kw	Michigan:			
Spencer	52	K52IZ	NS 2.8kw (KPTH-44)	Bay City	46	960710KZ	PR<1600kw/30 6 43-28-24/ 83-50-41
Storm Lake	40	K40CO	QC x K47FZ	Gladstone	51	W51DP	AF dismissed & reinstated
Storm Lake	57	K57JL	NS 20kw (KPTH-44)	Ironwood	32	W32CV	NW 15.9kw (KQDS-21)
Kansas:				Marquette	17	W17CS	PG<8.9kw
Chanute	40	K40HR	NS 8kw(TBN)	Muskegon	52	W52DB	QC x W58CU, 21.7kw; CL x Big Rapids
Dodge City	41	K41II	AF dismissed & reinstated	Sault Ste. Marie	8	WGTQ	PC<288m, DA
Emporia	54	K54JC	AF dismissed	Minnesota:			
Garden City	43	NEW-LP	AF dismissed	Albert Lea	56	NEW-LP	AF dismissed
Great Bend	27	K27HW	AF dismissed	Alexandria	44	K44GH	PG>1.2kw
Lawrence	38	KMCI	PC<326m, 38-58-42/ 94-21-02	Geneva	44	K44HE	NS 8kw (3Abn)
Pittsburg	33	K33HZ	NS 1.5kw (TBN)	Mankato	47	K47IV	NS 10kw; then dismissed; then reinstated...
Pittsburg	36	K36HB	NS 4kw	St. James	32	NEW-LP	AF dismissed
Topeka	55	K55JZ	QG x K21AP, 49.9kw	Willmar	34	K34HO	QG from K52GK
Wichita	5	KCTU-LP	QC from ch. 55, 3kw	Willmar	50	K50HZ	QG from K54GG
Kentucky:							
Jamestown	2, 11	NEW-LP	AF dismissed	Mississippi:			
Paducah	32	WPSD-DT	NW 906kw/ 492				
Louisiana:							
Alexandria	21	K21EL	PG>150kw				

Grenada	28	W28BP	PG>150kw	Sidney	52	K52IV	AF dismissed
Jackson	10	WBMS-CA	PR>3kw	Thedford	59	K59IF	AF dismissed
Marten	55	NEW-LP	AF dismissed	Valentine	31	K31HM	NS 20kw
Meridian	13	NEW-LP	AF dismissed	Whitman	52	NEW-LP	AF dismissed
Natchez	44	W44CE	FC; sold to KEJB-43	<u>Nevada:</u>			
Prairie	55,	NEW-LP	AF dismissed	Carson City	32	K57CV	QR from ch. 57, 15kw
	56			Las Vegas	2	KVBC-DT	NW 27.7kw/ 384
Starkville	24	W24CY	NS 2kw (TBN)	Las Vegas	13	KTNV	NS 67.6kw/ 568m (aux)
Starkville	32	W32DB	AF dismissed & reinstated	Las Vegas	23	K23GX	QG x K67GB, 87kw
Tupelo	24,	NEW-LP	AF dismissed	Nixon	56	K56IG	NS 18.7kw (KRXI-11)
	40			Pahrump	67	NEW-LP	AF dismissed
Tupelo	68	K68GQ	NS 15kw (TBN)	Verdi	30	K30HY	QG x K15CT, 800w
<u>Missouri:</u>				Winnemucca	5	K05LR	NS 3kw
Chillicothe	46	K46HP	AF dismissed & reinstated	<u>New Hampshire:</u>			
Columbia	11	KZOU-LP	CC x K11SN	Concord	17	W17CV	NS 5.6kw
Columbia	58	NEW-LP	AF dismissed	Concord	33	WPXG-DT	NW 100kw/ 344
Hannibal	23	K23GU	NS 1kw	Merrimack	60	WNEU	PC>5000kw
Jefferson	34	K34HP	NS 4kw	Nashua	13	WYCN-LP	PG>120w
Kirksville	48	K48IR	AF dismissed	<u>New Jersey:</u>			
Moberly	46	NEW-LP	AF dismissed	Newark	13	WNET	PR 123kw/ 405, 40-44-54/ 73-59-10
New	30	K30HT	NS 630w	Secaucus	9	WWOR-TV	AF 180kw/ 360, 40-44-54/ 73-59-10 (aux); PR 121kw/ 407m for main
Bloomfield				<u>New Mexico:</u>			
Osage Beach	49	NEW	GA	Albuquerque	38	K38IM	QG x K17DD, 45.4kw
Rolla	16	K16FE	PG<9.8kw	Black Lake	6	K06MS	PG>80w
Springfield	27	KDEB-TV	PC<4575kw/51 7 37-13-08/ 92-56-56	Buchanan	53,	NEW-LP	AF dismissed
St. Joseph	21	KTAJ-DT	PR>1000kw/31 7 dismissed	54			
St. Louis	16	K64DT	QR x ch. 64 but dismissed	Clovis	22	K22GZ	NS 10kw
St. Louis	40	K40FF	FC: Daystar	Clovis	31	NEW-LP	AF dismissed
<u>Montana:</u>				Crownpoint	44	K44GD	QC x K67FP
Arminton	58	NEW-LP	AF dismissed	Hobbs	45	K47CF	QR x ch. 47, 16.7kw
Big Sky	46	NEW-LP	AF dismissed & reinstated	Las Cruces	48	K46DH	QC x ch. 46, 150kw
Billings	7	NEW-LP	AF dismissed	Las Vegas	28	K28IR	NS 6.7kw
Billings	23	NEW-LP	AF dismissed	Lordsburg	36	K36GA	QC x K59CM
Billings	48	K48IQ	NS 7.08kw	Pensaco	18	K18HA	QG x ch. 6, 8kw
Bozeman	13	NEW-LP	AF dismissed	Reserve	34	K34HS	NS 908w (KRWG-22)
Bozeman	34	K34FI	PR>7.8kw; PG	Roswell	27	KRPV	PR<397kw/28 m, 33-21-44/ 104-31-25
Bozeman	36	K36HC	NS 1kw	Roswell	45	K45HX	NS 1kw
Bozeman	47	K47IW	NS 5kw	Sheep	52	NEW-LP	AF dismissed
Columbus	52	NEW-LP	AF dismissed	Springs	58	K58HX	NS 1kw
Fallon	56	NEW-LP	AF dismissed	Sheep	58	K58HX	NS 1kw
Great Falls	7	NEW-LP	AF dismissed	Springs	58	K58HX	NS 1kw
Great Falls	43	NEW-LP	NS 150kw petition to revoke	Socorro	46	K46HY	NS 2.23kw (KRWG-22)
Havre	7	NEW-LP	AF dismissed	Taos	30	K30HS	NS 16.6kw
Helena	34	K34HL	NS 1kw	<u>New York:</u>			
Kalispell	38	NEW-LP	AF dismissed	Albany	7	WXXA-DT	GA from ch. 4 over objections of WABC & WWNY
Lakeside	15	K56DJ	QR from ch. 56, 1.32kw; CL from Polson	Albany	26	WTEN-DT	PR<700kw
Lewistown	4	NEW-LP	AF dismissed	Bethel	20	W20CJ	AF dismissed
Polson	30	K06MQ	QR x ch 6, 250w; CL fm Finley Point				
Poplar	31	K31HX	NS 940w				
Sidney	52	K52JJ	NS 10w				
Van Morman	56	NEW-LP	AF dismissed				
<u>Nebraska:</u>							
Alliance	24	KTNE-DT	NW 287kw/ 440				
Bassett	30	K30HQ	AF dismissed				
Broken Bow	52	K52IW	AF dismissed				
Mullen	44	K44HP	NS 12kw				
North Platte	30	K30HV	NS 8kw (TBN)				
Scottsbluff	38,	NEW-LP	AF dismissed				
	40						

Binghamton	6	W06CC	NS 16w	Bridgeport	28	WVTX-CA	PR<37kw; CC
Cobleskill	41	W41CV	NS 900w				x WDBW-CA
Cobleskill	57	W57DS	NS 10kw	Cleveland	8	WJW	PC 236kw/ 333
Easton	15	WNYA-CA	PR>150kw	Cleveland	31	WJW-DT	NW 625kw/
Elmira	6	W06CD	NS 250w				317
Elmira	30	W30AA	FC; sold to	Dayton	2	WDTN	FC to NBC
			Clear Channel	Dayton	22	WKEF	FC to ABC
			(to WIVT	Dayton	50	WDTN-DT	PG>1000kw/32
			ABC?)				3
Endicott	53	W53CR	NS 690w	Toledo	19	WTVG-DT	PG>795kw;
Gouverneur	9	NEW-LP	AF dismissed				NW
			(Canadian	Oklahoma:			
			objection)	Ardmore	53	KCYH-LP	NW 3kw; CC
Ithaca	52	WNYI	NW 26kw/-94m				from K53IH
			42-25-47/	Ardmore	64	NEW-LP	AF dismissed
			76-29-49	Elk City	31	K31HJ	QG x K54CM,
New York	5	WNYW	PR 30kw/				9.98kw
			439m,	Lawton	25	K25IC	NS 250w
			40-44-54/	Muskogee	20	KWBT-DT	PA dismissed
			73-59-10; AF	Tulsa	45	KLOT-LP	QR from ch. 25,
			50kw/ 367m				25kw
			(aux)	Oregon:			
New York	7	WABC-TV	PR 123kw/	Ashland	63	KFBI-LP	PR>1.3kw; PG
			405,	Bend	51	NEW	GA
			40-44-54/	Eugene	28	KEPB-TV	PG>340kw/403
			73-59-10				44-00-07/
New York	11	WPIX	PR 123kw/				123-06-53
			405,	Lakeview	7	K07NR	PC>1.11kw
			40-44-54/	Madras/	30	K56BV	QR from ch. 56,
			73-59-10	Culver			2kw
New York	65	WNYX-LP	QG x ch. 23,	Madras/	32	K58BK	QR from ch. 58,
			10kw	Culver			2kw
Plattsbrgh	38	WCFE-DT	PR<60kw/	Madras/	38	K63CC	QR from ch. 63,
			737m	Culver			2kw
Port Jervis	26	W26DB	NS 100w (10w	Madras/	45	K69BI	QR from ch. 69,
	32	W32DC	on ch. 32);	Culver			1.7kw
	34	W34DI	PR>150kw on	Medford	18	K18GB	PR>12.6kw;
	42	W42CX	channels 42 &				PG
	46	W46DQ	59	Merlin	33	K33GJ	PR ?? (Public
	52	W52DW					Notice says
	55	W55DK					1492kw?)
	59	W59EA		Pendleton	16	KORX-CA	PG>84.8kw
Poughkeepsie	42	W42AE	PC>19.3kw	Portland	54	KPXG-LP	PR>105kw; PG
Rochester	36	WBXO-LP	QC from ch. 15,	Rainier	21	K21HG	NS 2.2kw
			16kw	Pennsylvania:			
Rochester	61	960228KF	AF dismissed	Bethlehem	9	WBPH-DT	NS 3.2kw/
			(WXXI-21)				284m
Troy	35	WNGN-LP	PG<38kw	Clearfield	3	WPSX-TV	PC 42.4kw/
Utica	27	WVVC-LP	CC x W27BJ				395
Utica	30	WUTR-DT	NW 50kw/	Erie	22	WFXP-DT	NS 850kw/ 276
			227m	Erie	35	WSEE-TV	PC>291m,
							42-02-16/
North Carolina:							80-03-44
Asheville	44	WJJV-LP	QG from ch.	Johnstown	34	WJAC-DT	PR>1000kw/38
			25, 95.9kw				6
Buxton	50	NEW-LP	AF 1kw	Mansfield	43	W43CJ	NS 1kw (TBN)
			reinstated	Mt. Pocono	20	NEW-LP	AF dismissed
Buxton	50	W50DC	AF dismissed	Phila.	67	WCAU-DT	NW 560kw/
Goldsboro	67	WHFL-LP	QG x ch. 56				377,
Hickory	14	WHKY-TV	PC>1285kw/40				40-02-30/
Manteo	59	K59ID	NS 10.8kw				75-14-11
Raleigh	41	WWIW-LP	QG from ch.	Pittsburgh	16	WQEX	granted
			66, 64kw				permission to
Raleigh	5	WRAL-TV	NW (aux,				drop DA
			facilities not	Pittsburgh	43	WPGH-DT	PG<303m
			listed)	Pittsburgh	47	W47VC	QG x W65CG,
Reidsville	39	WXIV-LP	QR from ch. 14,				11.3kw
			7kw	Pittsburgh	48	WPXI-DT	PR>1000kw
North Dakota:				York	47	WPMT-DT	NW 933kw/
Bismarck	28	NEW-LP	AF dismissed				385
Grand Forks	54	NEW-LP	AF dismissed	Rhode Island:			
Minot	15	KMCY-DT	NS 500kw/	Providence	21	WSBE-DT	PG>268m
			216; requests	South Carolina:			
			DA	Charleston	49	WITV-DT	NW 400kw/
Minot	40	NEW-LP	AF dismissed				521
Ohio:							

Murrells Inlet	11	WGSJ-CA	PG>3kw; CL x Myrtle Beach				PR>597m, DA dismissed
South Dakota:				Corpus Christi	13 KRIS-DT		AF
Edgemont	56	K56IN	NS 12.9kw	Corpus Christi	33	KCCG-LP	160kw/291m
Murdo	54	K54JB	AF dismissed	Corpus Christi	64	KYDF-LP	CC from K33HL
Phillip	52	NEW-LP	AF dismissed	Crockett	10,	NEW-LP	NW 1kw
Pierre	43	K43IP	NS 8kw		45		AF dismissed
Rapid City	15	KCLO-TV	adds DA	Decatur	30	KMPX-DT	PR>544m
Sioux Falls	23	KCSD-TV	PC>85m, 43-34-28/96-39-19	De Leon	38	NEW-LP	AF dismissed
				Denison	7	NEW-LP	AF dismissed
Watertown	42	K42FI	FC to KDLT-46 (NBC)	Denton	43	KDTN-DT	NW 1000kw/494m, 32-32-36/96-57-32
Tennessee:				El Paso	15	KFOX-DT	PG>604m
Gatlinburg	28	WDWZ-LP	CC x W28CS	El Paso	48	K48IK	QC from K46DH, 150kw
Hendersnville	51	WPGD-DT	PG>264kw/417, 36-16-03/86-47-44	Fort Davis	54	K54JD	AF dismissed
				Fort Worth	38	KVFW-LP	QC from ch. 65, 112.5kw
Holladay	62	W62CJ	CL from Jackson	Freer	53,	NEW-LP	AF dismissed
Jackson	22	W22BR	PG>150kw		58		
Knoxville	8	WVLT-TV	PC>510m, 35-59-44/83-57-23	Galveston	47	KTMD	PG>5000kw/597 29-34-15/95-30-37
				Galveston	48	KTMD-DT	PG<1000kw
Knoxville	26	WATE-DT	NW 930kw/529	George West	29	K29GH	NS 25kw
Memphis	15	W15CH	QG x W57CG, 116.2kw	Harlingen	34	KLUJ-DT	PR<200kw
Nashville	23	WNAB-DT	PR<367m; PG	Harper	17	NEW-LP	AF 7.5kw dismissed but reinstated
Nashville	34	WJNK-LP	PR>35.8kw; PG	Hunt	56	NEW-LP	AF dismissed
Nashville	42	W42CR	QC x W52CT, 25kw; FC to Telefutara	Jal	59	K59IE	AF dismissed
Nashville	46	WNPT-DT	NW 44.8kw/411	Junction	56	K56IF	AF dismissed
Nashville	48	W48DF	QG x W36AK, 19.9kw	Kerrville	15	KVHC-LP	NW 7.71kw
				Kress	41	K41CA	PG<930w
Texas:				Laredo	31	NEW-LP	NS rescinded
Abilene	38	K38IB	AF dismissed	Laredo	34	KLMV-LP	QR from ch. 68, 100w
Abilene	49	K49HT	NS 30.99kw, site closer to Stephenville	La Vernia	46	KQVE-LP	PR 55.35kw. CL to San Antonio dismissed, Mexican objection
Abilene	49	K49HW	NS 500w				
Abilene	5	KTXF-LP	CC x K05LO	Littlefield	29	K29GE	NS 870w
Alice	42	K42GL	NS 6.97kw	Lubbock	7	NEW-LP	AF dismissed
Alpine	54	NEW-LP	AF dismissed	Lubbock	44	K44HH	NS 5kw (TBN)
Amarillo	18,	NEW-LP	AF dismissed	Mason	34	NEW-LP	AF 2.5kw dismissed but reinstated
	38,			Mason	56	K56IE	AF dismissed
	45,			Matador	45	K45FE	QG from ch. 64
	52			Mullin	31	NEW-LP	AF 18kw dismissed but reinstated
Amarillo	46	K46HQ	NS 100w	Paris	13	K13YP	AF dismissed
Amherst	48	NEW-LP	AF dismissed	Paris	16	K16FY	NS 50kw
Austin	22	KLRU-DT	NW 700kw/358 (5 programs)	Randado	54	NEW-LP	AF dismissed
Beaumont	13	K13YO	AF dismissed	San Angelo	43	K43IQ	NS 980w
Big Spring	44	K44HS	NS 8.1kw (TBN)	San Angelo	45	K45HW	NS 980w
Brownfield	30	K30HR	NS 11kw	Smith Hill	13	K13YN	AF dismissed
Canyon	53	NEW-LP	AF dismissed	Somerville	30	K30HU	QG from K35DI, 50kw
Cedar Hill	56	KBFW-LP	QR x ch. 69, 112.5kw; CL x Gainesville				
Conroe	49	KPXB	PR>5000kw/589 29-34-15/95-30-37 dismissed	Texarkana	5,	NEW-LP	AF dismissed
					66		
Conroe	55	KTBU	PR>5000kw/553 30-13-53/95-07-26 reinstated;	Tulia	25	K25CP	PG<960w; CL from Kress
				Tyler	27	K20DL	QR from ch. 20, 18.5kw
				Uvalde	56	K56IO	NS 999w
				Victoria	39	K39HB	NS 9.89kw
				Victoria	49	K49IE	NS 1kw
				Wichita Falls	16	NEW-LP	AF dismissed

Wichita Falls	40	K40HZ	NS 1kw	Huntington	13	WOWK-TV	PC 114.8kw/414m,
Wichita Falls	5	NEW-LP	AF dismissed				38-30-21/82-12-33
Wickett	13	K13YT	NS 3kw	Huntington	34	WPBY-DT	NW 60.1kw/378
Wolfforth	22	KUPT	PR>142kw/256	Lewisburg	8	WVNS-DT	QG from ch. 48,
Utah:							3.68kw/577m
Brian Head	35	K35HG	NS 75w	Morgantown	33	WNPB-DT	NW 108kw/441
Bullfrog	15	K15GN	NS 600w (KUED-7)	Wisconsin:			
Cedar City	16	K16FZ	NS 3.79kw	Arpin	57	W57DR	NS 14kw (WFXS-55)
Cedar City	17	K17GS	NS rescinded	Coloma	48	W48DB	QC fm W64AU, 11.8kw
Delta	45	K45GE	QC fm K68BQ, 2.6kw	Eau Claire	23	K23HC	NS 1kw
Hanna	3	K03HM	NS 5.2w	Janesville	32	WBUW-DT	PG>387m, 43-03-03/89-29-13
Heber/Midway	39	NEW-LP	AF dismissed	Kenosha	40	WPXE-DT	NW 830kw/358, 43-05-44/87-54-17
Helper	31	K31HL	NS 1.73kw	Madison	15	WMTV	PR 891kw/415m
Henrieville	22	K22GP	NW 10w	Madison	19	WMTV-DT	PR>56kw/387m
Huntsville	43	K43IY	NS 6kw	River Falls	47	W47CW	QC fm W55AP, 1kw
Hurricane	21	K21GW	NS 340w (KUED-7)	Washington	18	W18CU	QC fm W55AO, 1.64kw; CL from Sister Bay NS 250w
Logan	68	K68GP	AF dismissed	Wausau	14	K14MB	
Mount Pleasant	22	K57HK	QC from ch. 57, 1.8kw	Wyoming:			
Park City	23	K23GP	PR>95kw; PG	Casper	13	KCWY	PC>10.25kw/534m
Price	3	KUTF-DT	NS 9.4kw/658m	Casper	24	NEW-LP	AF dismissed
Price	23	K23GW	NS 1.73kw	Cheyenne	13	K13YR	QC fm K08NK, 3kw
Roosevelt	45	K45GN	QC fm K06DY, 1.12kw	Cheyenne	40	K40HP	NS 10kw
Rural Summit	22	K22DM	PG>990w; already on	Cheyenne	44	K44HF	NS 9.1kw
County				Cheyenne	47	K47IU	NS 20kw
Salina	24	K24GK	NS 143w (KUWB-30)	Cheyenne	50	K50HX	NS 5kw
Samak	31	K31HH	NS 140w	Cody	43	K43IZ	NS 405w (KULR-8)
Santa Clara	48	NEW-LP	AF dismissed	Cody	52	NEW-LP	AF dismissed
Ticaboo	9	K09XT	NW 80w (KULC-9)	Gillette	19	NEW-LP	AF dismissed
Tooele	63	K20ER	QR from ch. 20, 1.13kw	Gillette	45	K45IB	NS 1kw
Vernal	33	NEW-LP	AF dismissed	Laramie	25	NEW-LP	AF dismissed
Vermont:				Laramie	48	K48IN	NS 50kw
Burlington	30	W30BL	PR>30kw	Rock Springs	41	K41IJ	NS 7kw
Burlington	39	WBVT-LP	PR<60kw	Teton Village	25	K04NR	QR from ch. 4, 300w but already dismissed
Hartford	31	WNNE	PC<1820kw/684	Torrington	52	NEW-LP	AF dismissed
Manchester	2	WVBK-CA	PR<5w; PG				
Monkton	19	W19BR	PR>60kw	Guam:			
St. Albans	49	W52CD	QR from ch. 52, 30kw	Tamuning	26	KTKB-LP	CC x K26HK
Virginia:							
Charlottesville	13	W13DD	AF dismissed	Puerto Rico:			
Charlottesville	19	860410KP	PR>326m, 37-59-03/78-28-52	Aguadilla	32	WELU	PG 7.1kw/317m
Hampton	51	W51DO	QC fm W21AQ, 50kw	Aguadilla	34	WELU-DT	PR<605m, 18-09-06/66-59-23
Norfolk	45	WNLO-CA	PC>139kw	Mayaguez	26	NEW-LP	AF dismissed
Richmond	57	WCVW	PR<50kw/293m	Ponce	14	WTIN	FC to relay WAPA-4
Washington:				Ycamuy	45	NEW-LP	AF dismissed
Longview	17	K17GV	NS 2.2kw				
Longview	28,	NEW-LP	AF 2.2kw dismissed but reinstated				
Longview	41	K41IP	NS 2.2kw				
Longview	44	K44HM	NS 2.2kw				
Ocean Park	51	K51HW	NS 10kw				
Pullman	46	K46HV	NS 22kw (TBN)				
Richland	36	KBWU-LP	QR from ch. 66, 50kw				
Seattle	39	KIRO-DT	PR>1000kw				
Seattle	40	K40HW	QR from K68DL dismissed				
West Virginia:							
Bluefield	12	NEW-LP	AF dismissed				



& reinstated

Canada:

Alberta:

Jasper 5 CBXT-4 PG<50w/
-55m, XG

Ontario:

Toronto

44 CJMT-DT AF
15kw/304m,
43-38-56/
79-22-55

Toronto

64 CFMT-DT AF
15kw/304m,
43-38-56/
79-22-55

Toronto

69 CJMT-TV QC from ch.
44

Quebec:

Montreal

17 CIVM-TV PG<889.5kw

Trois-

45 CIVC-TV PG<651.8kw

Rivieres

Thanks to Eric Bueneman, Jeff Kruszka, K.M. Richards, and Saul Chernos for information appearing elsewhere in this month's column.

My apologies for the extreme abbreviation this month. There was a lot of FCC activity, and the length of the column was getting out of hand. Hopefully the LPTV coordinates will be back next month, though I have a bad feeling the high levels of LPTV activity will continue for awhile.

I'm pretty sure "Ycamuy", Puerto Rico is a typo. There is a town of "Camuy" on the island, and I'm sure that's where this LPTV station plans to operate.

The five change requests in the New York City area (WNYW-5, WABC-7, WWOR-9, WPIX-11, and WNET-13) reflect the permanent moves of these stations to the Empire State

Building. They had been operating there under special temporary authority, since the 9/11 attacks.

KUTF-3 is already operating an analog facility on the same site and channel. Note two new channels added to the DTV assignment table, in Missouri and Oregon.

The KPLC-7 towers collapsed in March. The new tower was immediately adjacent to the old one, and when the old tower collapsed it took the new one with it. Luckily (amazingly!) nobody was hurt. The station has returned to the air temporarily from a short tower at the studio. Presumably the tower site change listed in this month's column is moot, if said tower no longer exists...

There's a fair amount of low-band 3,000-watt LPTV activity this month. A station in Kansas has moved from channel 55 to 5; one in Florida has received permission to move from 65 to 6; another on channel 4 in Florida has been granted a power increase from 40 watts to 3,000; and a permit has been issued for a new 3-kw station on channel 5 in Nevada. Additionally, a channel 51 station in California has requested a move to channel 4 with 3kw.

There's also a new DTV station on the air on channel 2 in Las Vegas; and new station WNYA-51 in western Massachusetts has applied for a 4kw DTV facility on channel 4.

We're approaching the E-skip season – and all of this new low-band activity will be Es-DX-able. Good luck!

(if I ever see the term "Es-DX-able" in print again, I'll never forgive myself<grin>!)

This Month's Cover

You must admit this one is a little different. It began with a renewal by Paul Mitschler, now living in Albuquerque. The renewal had a letter done in glossy photo paper with the image behind the print. Cool, I thought. Not only was the TV on the cover, it was also on the envelope.

A short time later an envelope arrived with a bunch of pictures. I picked one, scanned it and made it into a cover.

What you see is a 1939 B&W television. I have no idea how Paul got the WTFDA address to look as it does. It actually looks like it's on the CRT. Thanks Paul!



TELECUBANACAN
SANTA CLARA CITY, CUBA, CHANNEL 5
Thanks to Jesus Perez for this photo.



FM News
APRIL '04

Email: redsoxdxer417@hotmail.com

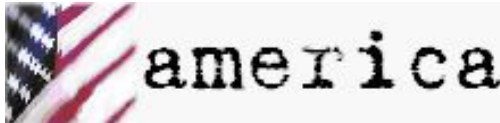


Adam Rivers
37 Carlton Ave.
Chicopee, MA 01020

ABBREVIATIONS:

AFA: American Family Association
CC: call letter change
CL: city of license change
CX: a construction permit has been cancelled
C1, C2, etc.: a change in status to that FM license class
DA: directional antenna
DE: station has been deleted
FC: format change
GA: 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 (ready to come on the air)
MC: multiple-city ID
NC: no change yet on a reported change or permit
ND: non directional antenna
NO: not on the air

NS: new station granted
NW: new station signs on
OSA: one step application granted for change
PA: proposed amendment change to FM allocation table
PC: power change on the air (> = increase, < = decrease)
PG: power change granted (> = increase, < = decrease)
QC: frequency changed occurred
QG: frequency change granted
RA: silent stations returns to the air
RE: station requests an extension on permit
RX: station requests replacement of expired permit
SC: slogan change or update
SI: station is silent
SOA: signed on air
XA: dismissed amendment to FM allocations
XC: transmitter site change occurred
XG: transmitter site change granted



ALABAMA:

Arab: WAFN-FM 92.7, PC>1.45kw
Dadeville: WZLM 100.3, OG from 97.3, 2.2kw/167m
Gardendale: WODL 97.3, PG>6.2kw/404m, 33-29-04/86-48-25; CL from Homewood
Goodwater: WSSY-FM 97.5, PG 5.1kw/108m, 33-01-42/85-59-23; CL from Talladega
Jemison: WEZZ-FM 97.7, PG>3.1kw/140m, 32-58-12/86-43-04; CL from Clanton
Muscle Shoals: WVNA-FM 105.5, PC 4.4kw/118m, 34-40-27/87-42-48
Pelham: WXMT-LP 105.5, calls for new station
Thomaston: WAYI 97.7, PG>3.7kw/129m, 32-26-33/87-46-04



ALASKA:

Anchorage: KASH-FM 107.5, PC>299m, 61-20-11/149-30-48
Kasilof: KWMD 90.7, QR from 90.5, 6kw-V/1m, 60-31-58/151-04-52
Kasilof: KWVK 88.9, QR from 89.5, 6kw-V/1m, 60-31-58/151-04-52

ARIZONA:

Bacavi: KBWV-LP 101.5, NW ?w/384m, 35-15-19/110-39-35
Bisbee: KBRP-LP 96.1, call for new station
Cottonwood: KZGL 95.9, PG>21kw/799m, 34-41-11/112-07-02
Green Valley: KTZR 97.1, CC from KWFM
Oro Valley: KCMT 102.1, PR>81m
Parker: KVEZ 99.3, CX, DE (off air over 12 months)
Tucson: KPTY-LP 100.3, calls for new station

ARKANSAS:

Heber Springs: KAWW 100.7, FC to AC "Diamond 100.7"
Jonesboro: KPHW-LP 97.9, calls for new station
Marianna: KAKJ 105.3, PR 6kw/100m, 34-47-20/90-47-08
Mena: KENA 102.1, PC 12.5kw/143m, 34-32-42/94-18-21
Mena: KRMN-LP 101.1, NW ?w/7m, 34-36-42/94-13-44
Pangburn: KSMD 99.1, FC to news-talk
Rogers: KDUA-LP 96.5, calls for new station

CALIFORNIA:

Cambria: KOTR 94.9, CC to KPYG, FC to AAA // KPIG 107.5 "The Pig"

Carlsbad: KOCL 95.7, CC to KUSS, FC to country "US95.7"
Chowchilla: KNT0 93.3, PR>4.6kw/114m, 36-59-14/120-12-21
Clovis: KZFO 92.1, flips to regional Mexican "Que Onda", CC to KOND
Cochalla: KPSH 90.9, SOA with religious
Essex: KWHY 98.9, PR>9kw/348m
Grass Valley: KCEE 103.3, PG>530w/336m
Hollister: KBTU 93.5, CC to KOTR
Laytonville: KJCU 89.9, NW 130w/110m, 39-26-35/123-43-58
Laytonville: KHKL 91.9, PG 110w/689m, 39-41-38/123-34-43
Lenwood: KHDR 96.9, PG>244m
Los Angeles: KXOL-FM 96.3, PG 27.5kw/204m, 34-09-50/118-11-46
Merced: KIBG 106.3, CC to KHPO, FC to classic rock "The Hippo"
Merced: KGDM-LP 107.5, calls for new station
Modesto: KEJC 93.9, FC to regional Mexican as "Que Buena", PR>3.95kw/123m, 37-39-00/121-01-24
Nevada City: KYRR-LP 93.3, PG 109m, 39-18-57/120-56-29
Palanda: KHTN 104.7, CL from Los Banos
Paradise: KRGR-LP 107.1, calls for new station
Placerville: KZSA 92.1, CC to KRLL
Roseville: KXOA 93.7, SC to "Howard 93.7" (yes, after Howard Stern), CC to KHWD



Salinas: KEBV 97.9, FC to oldies
San Diego (Tijuana): XHHCR 99.3 FC to oldies "Kool 99.3"
San Diego (Tijuana): XHMORE 98.9 FC to R&B "98.9 More FM"
San Francisco: KISQ 98.1, PC 75kw/310m
Shafter: KRFR 93.1, PC 4kw/123m, 35-28-21/119-01-40
Shafter: KQZO 89.5, calls for new station
Sonoma: KSVY 91.3, calls for new station
Yuba City: KXCL 103.9, RA with 80s oldies
Yucca Valley: KYOR 106.9, CC to KDGL, FC to classic hits "The Eagle"

COLORADO:

Aspen: KSPN 103.1, PR>2.7kw/547m, 39-27-14/106-55-21



Brighton: KAMV-LP 101.9, calls for new station
Canon City: KSTY 104.5, PR>25kw
Durango: KMZG-LP 96.1, calls for new station

Eagle: KEAE-LP 107.9, calls for new station

Eaton: KLCQ 88.9, SOA with K-Love contemporary Christian

Glenwood Springs: KKCH 92.7, PG>55.2kw

Granby: KRKM-FM1 106.3, NW 400w, 40-02-24/105-56-11

Grand Junction: KPRN 89.5, PG>20kw/402m

Greeley: KUNC-FM 91.5, PC 81kw/211m, 40-38-31/104-49-03

Gypsum: KLRY 91.3, SOA with K-Love cont. Christian

Longwood: KCDC 90.7, CC to KGUD "K-Good"

Meeker: KAYW 98.1, PR>379m, 40-11-45/107-56-00

Norwood: KRYD 104.9, PR>24kw/510m, 38-18-57/108-11-47

Parachute: KPCT-LP 106.7, NW ?w/-302m, 39-26-12/108-04-06

Rocky Ford: KJQY 95.5, PR>224m, 37-54-08/104-16-00

Timnath: KKHI-FM 105.5, PR>58kw/371m, 40-37-03/105-19-40

DELAWARE:

Milford: WXPZ 101.3, CC to WNCL, FC to oldies as "Kool 101.3"

FLORIDA:

Apopka: WPYO 95.3, FC to R&B "Power 95.3" (Orlando), PG>12kw/144m, 28-34-27/81-27-46; CL to Maitland

Brooksville: WRRR-LP 102.7, NW ?w/26m, 28-32-08/82-28-30

Callaway: WMXP 103.5, CC to WAKT-FM

Cocoa Beach: WFKS 104.1, PG<96kw

Dade City: WTMP 96.1, FC to rhythmic oldies "Jammin Oldies 96.1"

Gainesville: WERF-LP 95.7, PR<26.2m

Gracefill: WTOT 101.7, FC to talk "Lets Talk 101.7"

Immokalee: WCTI-LP 107.9, CC to WCIW-LP

Key Largo: WORZ-LP 104.3, calls for new station

Key West: WAVQ 88.3, PR>37kw-H/100kw-V/83m, 24-39-34/81-32-19

Lafayette: WEGT 99.9, PC 5.5kw/90m, 30-29-42/84-13-51

Live Oak: WMLO-LP 97.1, NW ?w/23m, 30-16-00/82-59-14

Madison: WXHT 102.7, PC>19kw/115m, 30-38-23/83-26-52

Merritt Island: WCPL-LP 95.5, calls for new station

Miami: WDNA 88.9, PR>6.28kw/349m, 25-32-24/80-28-07

Monticello: WFRF 105.7, RA simulcasting WFRF-AM, contemporary Christian

New Port Richey: WLPJ 91.5, PC 16.5kw/93m, 28-16-58/82-42-43

Ocala: WITG-LP 104.7, NW ?w/37m, 29-11-31/82-04-27

Orlando: WSHE 100.3, CC to WEBG, SC to "Big 100", PG>100kw

Panama City: WJTF 89.9, NW 100kw/32m, 30-10-05/85-40-30

Panama City: WLHR 107.9, PG<98.5kw, CC to WPFM-FM



Pensacola: WBG 98.7, FC to country "Cat Country", CC to WYCT

St. Augustine: WSOS-FM 94.1, PR 25kw/92m, 29-57-57/81-28-36

St. Catherine: WKFA 89.3, PR>90m, 28-32-23/82-04-48

St. Petersburg: WBBY 107.3, CC to WXGL, SC to "The Eagle"

Summerfield: WJRN-LP 95.9, calls for new station

Summerland Key: WPIK 102.5, FC to hot AC//WAVK

Tallahassee: WBZE 98.9, PC<99.2kw

Trenton: WDJY 101.7, CC to WDVH-FM

Wakulla County: WHTR-LP 96.9, calls for new station

Yankeetown: WXOF 96.3, FC to classic hits

GEORGIA:

Blackshear: WKUB 105.1, PG>50kw

Bowdoin (Atlanta): WMAX 105.3, FC to talk "Real Radio 105.3"



Buford: WLKQ 102.3, FC to classic hits
Dawson: WMRZ 98.1, PA from class A to C3
Elberton: WWRK 92.1, CC to WSGC-FM
Folkston: WOKF 92.5, FC to rhythmic oldies "Jammin Oldies 92-5", CC to WFJO (Jacksonville)
Glennville: WCGN 106.3, CC to WOAHH, FC to R&B
Meigs: WQLI 92.3, granted CL from Pelham
Pavo: WWWSG 90.5, CC to WNKL
Pinehurst: WQXZ 98.3, PA from Cordele
Quitman: WSTI-FM 105.3, PG>25kw/97m
Ringgold: WSGC 101.9, CC to WTUN
Valdosta: WWRO-FM 107.9, PC>50kw/82m
Valdosta: WWET 91.7, PG 430w-V/26m
Yates: WWBM 89.7, NW 1kw/98m, 33-27-47/84-53-35

HAWAII:

Keaau: KIH 105.1, CC to KBGX

IDAHO:

Driggs: KCHQ 102.1, RA with country "Go Country", PC>4kw-H/579m, 43-42-42/111-20-56
Idaho Falls: KPLV 105.5, CC to KTHK, FC to country "The Hawk"
Kamiah: KMEI-LP 97.3, PC>-79m, 46-12-46/115-59-19
Rigby: KKL 89.5, CC to KLRU
Rupert: KKMV 106.1, QR from 92.5, 25kw/761m, 42-20-06/113-36-15

ILLINOIS:

Chicago: WDRV 97.1, PR<8.3kw
Chicago: WNUA 95.5, NS 3.1kw/482m, 41-52-44/87-38-08 (aux)



Clinton: WHOW-FM 95.9, RA with AC
Eureka: WRVP 98.5, CC to WPIA
Glasford: WPPY 101.1, CC to WVLE-FM
Godfrey: WLCA 89.9, PR>1.5kw/120m, 38-56-57/90-11-47
Highland: WVIV-FM

103.1, PG 3.4kw/135m
Jerseyville: WMLL 104.1, CC to WRDA, FC to standards "Red @ 104.1"
Joliet: WLLI 96.7, FC to AC "Star 96.7", CC to WSSR
Lake Villa: WCLV-LP 101.5, CC to WLGS-LP
Marion: WDDD-FM 107.3, CL to Johnson City denied
Morris: WBEO 90.7, PG 1.45kw/143m, 41-17-09/88-25-49, signs on //WBEZ 91.5 Chicago
Morris: WYXX 103.1, FC to standards, CC to WCSJ-FM, PG>6kw
Pekin: WPIA 98.5, FC to Christian hits "Hope 98.5"
Round Lake Heights: WRLR-LP 101.5, calls for new station
Shelbyville: WHBW-LP 93.7, calls for new station
St. Joseph: WGNJ 89.3, PG 50kw/140m, 40-05-16/87-53-42
Streator: WYYS 106.1, PR>6kw
Urbana: WRFU-LP 104.5, calls for new station

INDIANA:

Brazil: WSDM-FM 92.7, GA from 97.7
Boonville: WYXY 107.1, FC to contemporary Christian
Charlestown (Louisville KY): WEGK 104.3, FC to classic country "Eagle 104.3"
Cloverdale: WSPM 89.1, FC to religious (Indianapolis)
Columbia City: WSHI 106.3, FC to soft AC "Sunny 106.3"
Evansville: WNIN-FM 88.3, PC 16kw/263m, 37-59-01/87-16-13
Evansville: WNIN-FM 88.3, NS 21.5kw/225m (aux)
Greencastle: WSPV 90.5, signs on with contemporary Christian, NW 15kw-V/133m, 39-41-19/86-42-03, CC to WIKL
Huntington: WXKE 102.9, FC to standards "The River" (Fort Wayne)
Jasper: WKJR 91.7, PR 2.6kw/84m, 38-25-23/86-49-47
Seymour: WQKC 93.7, NW 1.85kw/65m, 38-58-33/85-53-21 (aux)
South Bend: WUBS 89.7, PR>1.3kw/89m, 41-40-36/86-15-08
Spencer: WSKT 97.7, GA from 92.7

IOWA:

Adel: KIH8 88.9, PG<500w/63m, 41-36-09/94-02-55
Asbury: WJOD 103.3, PR<8.7kw/123m, 42-30-10/90-42-24
Boone: KBGG-FM 98.3, AF 28kw/114m, 41-49-51/93-43-53 (aux)
Council Bluffs (Omaha NE): KQKQ 98.5, shifts to Modern CHR with heavy emphasis on 90s hits, "Q98-5"
DeWitt: KGYS-LP 92.5, calls for new station
Emmetsburg: KEMB-LP 94.1, calls for new station
Fairfield: KLIK 95.9, FC to Hot AC "Hot 96 FM"
Madrid: KLRX 96.1, CC to KNWM
Osceola: KJJC 106.9, CC to KNWI
Pleasantville: KPBC-LP 94.1, calls for new station
Stuart: KKRF 107.9, PC<94.kw/150m, 41-27-43/94-29-19
Waterloo: KFMW 107.9, XC 42-24-02/91-50-36

KANSAS:

Dodge City: KVPC-LP 100.5, calls for new station
Enterprise: KBMP 90.5, PG 35kw/109m, 39-10-02/97-23-59



Medicine Lodge: KSNS 91.5, PC>48kw
Wichita: KEYN-FM 103.7, PC>98kw

KENTUCKY:

Bowling Green: WGGC 95.1, PA from Glasgow

Frankfort: WKYW 104.9, FC to country "Classic Country"
Georgetown: WRVG-FM 89.9, FC to contemporary Christian "K-Love", sold to K-Love network
Hopkinsville: WHOP-FM 98.7, PR>189m, 36-55-41/87-32-50
Lawrenceburg: WKYL 102.1, PC>6kw
Madisonville: WKTG 93.9, AF 5.5kw/100m, 37-21-31/87-29-45 (aux)
Somerset: WKII 102.3, CC to WHMJ
Valley Station: WRVI 105.9, AF 890w/141m, 38-07-09/85-56-20 (aux)
Williamsburg: WEZJ-FM 104.3, PC>6.2kw/200m

LOUISIANA:

Alexandria: KOUZ 89.9, CC to KLXA
Alexandria: KZMZ 96.9, FC to classic rock "96-9 Rocks"
Baker: WJNH 107.3, FC to classic country "Country Legends 107-3"
Benton: KSYR 92.1, FC to AC "Sunny 92.1"
Franklin: KFMV 105.5, PR>6kw/93m
Hammond: WBBE 103.3, NW 50kw/273m, 30-24-03/90-50-40 (aux)
Lake Arthur: KVEE 107.3, CC to KJMH
Monroe: KOUS-LP 96.3, PG>31m, 32-26-04/92-06-17
Oil City: KVMA-FM 107.9, PR<24.5kw/163m, 32-29-36/93-45-55; CL from Magnolia AR
Shreveport: KRUF 94.5, PG 100kw/508m, 32-39-57/93-55-58

MAINE:



Fairfield: WCTB 93.5, FC to classic hits "The River"
Rumford: WLOB 96.3, PG<36kw/443m, 44-15-06/70-25-24
Searsport: WFZX 101.7, simulcasting WNSX's new format

Winter Harbor: WNSX 97.7, FC to classic rock "The Fox"

MARYLAND:

Crisfield: WBEY 96.9, PR 1.4kw/113m, 38-01-45/75-45-05
Frederick: WYPF 88.1, now simulcasting WYPR 88.1
Ocean City: WEES-LP 107.9, NW ?w/75m, 38-24-59/75-03-24
Prince Frederick: WVSJ-LP 99.9, calls for new station

MASSACHUSETTS:

Amherst: WMUA 91.1, PC 450w/39m, 42-23-37/72-31-21
Boston: WERS 88.9, PR>5.3kw dismissed
Boston: WJMN 94.5, PC 9.2kw/353m
Easthampton: WBEC-FM 105.5, PA from Pittsfield
Fairhaven: WFHN 107.1, PC 5.4kw/105m, 41-38-25/70-55-03
Great Barrington: WBCR-LP 97.7, calls for new station
Nantucket: WNAN 91.1, PC>2.3kw/64m
S. Yarmouth: WOCN 103.9, PC>5.5kw/104m, 41-41-26/70-11-21



Westborough: WAAF 107.3, PR<3.8kw/243m, 42-23-02/71-29-37; CL from Worcester

MICHIGAN:

Bay City: WHNN 96.1, PR>451m, 43-33-11/83-41-28 dismissed
Benton Harbor: WVBH-LP 88.3, calls for new station
Carrollton: WTCF 100.5, CC to WXQL, FC to rhythmic oldies "Kool 100.5"
Cass City: WIDL 92.1, PR>17.5kw/119m, 43-39-59/83-04-29; CL from Caro
Charlevoix: WWCZ 90.9, CC to WTCK



Eagle: WJOM 88.5, PR>10kw-V/88m, 42-48-32/84-47-06
Good Hart: WJOG 91.3, PR 5.45kw-V/203m, 45-30-29/85-02-10
Grand Rapids: WOOD-FM 105.7, AF

99kw/177m, 42-44-14/85-37-16 (aux)
Manistique: WPIQ 99.9, NW 6kw/46m, 45-58-13/86-11-06
Mt. Pleasant: WQOS-LP 98.9, calls for new station
Newberry: WNBY-FM 93.7, PR>50kw/141m, 46-21-32/85-10-30
Norton Shores: WMBC-LP 100.9, NW ?w/38m, 43-09-52/86-17-30
Rogers Heights: WAQQ 88.1, calls for new station
Sault Ste. Marie: WYSS 99.5, PG>100kw/77m
Sault Ste. Marie: WSUE 101.3, PR<100kw/67m, 46-26-16/84-22-42

MINNESOTA:

Austin: KNSE 90.1, signs on //KNOW 91.1
Bemidji: KKBj-FM 103.7, PC>146m
Breckenridge: KLTA 105.1, flips to AC "FM 105.1" (Fargo ND)



Duluth: KDAL-FM 95.7, PG<221m, 46-47-15/92-07-21
Fergus Falls: KCMF 89.7, NW 2.7kw/66m, 46-19-12/96-05-32
Glenwood: KMGK 107.1, PR>25kw/100m, 45-44-39/95-08-05
Hibbing: WTBX 93.9, PR<162m, 47-22-24/93-00-48
Moorhead: KXBQ-LP 95.9, calls for new station
Park Rapids: KDKK 97.5, PR>194m, 46-55-51/95-00-27
Springfield: KNSG 94.7, FC to AC
St. Louis Park: KUOM-FM 106.5 and KDXL 106.5 (share-time), PG>77m, 44-56-46/93-19-27
Willmar: KKLW 90.9, signs on with K-Love cont. Christian

MISSISSIPPI:

Brookhaven: WBKN 92.1, PR 3.4kw/92m, 31-33-49/90-26-27
Collins: WKNZ 107.1, FC to modern AC "The Zone" (Hattiesburg)
Hattiesburg: WUSW 103.7, FC to rock "103.7 The Fox"
Jackson: WDBT 95.5, CC to WHLH
Jackson: WUSJ 96.3, PR>391m



Kosciusko: WJTA 91.7, FC to AFR
Okolona: WACR-FM 103.9, PR<120m, 34-12-18/88-41-49; CL from Columbus
Picayune: WKSJ 106.1, PR 28kw/201m, 30-31-17/90-01-12
Pickens: WYJS 105.9, FC to black gospel "Praise 105.9", CC to WOAD
West Point: WKBB 100.9, FC to news-talk, PG 10kw/157m, 33-40-43/88-48-18

MISSOURI:

Bowling Green: KPCR 94.1, CC to KPVR
Centralia: KSDC-LP 94.9, NW ?w/31m, 39-14-45/92-12-38
Cuba: KNLQ 91.9, NW 5kw/76m, 38-02-14/91-23-04, signs on with southern gospel
DeSoto: KDJR 100.1, PC<2kw/106m
Garden City: KFME-FM 105.1, NW 69kw/349m, 39-05-26/94-28-18



Houston: KUNQ 99.3, RA with classic country
 Ironton: KYLS-FM 95.9, PC<3.1kw/198m
 Monroe City: KWBZ 107.5, FC to classic hits, PC>10kw/100m
 Salem: KCVX 91.7, signs on with contemporary Christian, NW 40kw/64m, 37-36-16/91-32-46

MONTANA:

Belgrade: KSCY 96.7, CC to KISN
 Big Sky: KBZM 104.5, PG 5kw/1017m, 45-16-41/111-26-57
 Bozeman: KGLT 91.9, PC>12kw/261m, 45-57-25/111-22-11
 Great Falls: KEHT 100.3, CC to KLSK
 Great Falls: KGFC 88.9, PR 5.7kw/84m
 Plentywood: KZLP-LP 104.1, calls for new station
 Sidney: KGCX 93.1, PR>100kw/110m, 47-51-51/103-57-27

NEBRASKA:

Bennington: KRQC 93.3, FC to classic country "US 93-3"
 Cozad: KAMI 104.5, CC to KCVN
 Crete: KSLI 104.1, dropped "Kiss format", new format coming
 Grand Island: KXLJ 88.3, CC to KKLK
 Holdrege: KMTY 97.7, PC<77m, 40-26-26/99-23-59
 Imperial: KADL 102.9, PG 300w/68m, 40-30-45/101-38-39
 Omaha: KGBI-FM 100.7, PR>368m, 41-03-01/96-11-33
 Ord: KNLV-FM 103.9, PG>30kw/194m, 41-34-17/98-55-21
 Plattsmouth: KCTY 106.9, FC to 80s/90s hits "Retro 106.9" (Omaha)

NEVADA:

Carson City: KWNZ 97.3, CC to KZTO; FC to rock
 Fallon: KAVS-LP 93.9, calls for new station
 Garderville-Minden: KGVM 99.1, PR>25kw
 Moapa Valley: KBHQ 104.7, simulcasting KDOX 1280 Las Vegas
 Reno: KNHK 92.9, CC to KURK
 Sun Valley: KYWD 93.7, CC to KWNZ, FC to rhythmic CHR



NEW HAMPSHIRE:

Dublin: WFCB-LP 100.3, calls for new station
 Hillsboro: WTPL 107.7, PG>1.25kw/217m, 43-09-17/71-47-44
 Jackson: WEVJ 99.5, NW 4.7kw/52m, 44-10-30/71-10-07
 Lebanon: WVFA 90.5, signs on with religion
 Londonderry: WLLQ-LP 102.9, NW ?w/12m, 42-55-08/71-23-51

NEW JERSEY:

Bridgeton: WSNJ 107.7, signs off air, to reappear at 107.9
 Canton: WJKS 101.7, PR 800w/155m
 Eatontown: WHTG 106.3, PC 1.1kw/161m, 40-16-41/74-04-51
 Newark: WHTZ 100.3, NS 13.5kw/281m, 40-45-22/73-59-12 (aux)
 Union Township: WKNJ 90.3, PG>20w/48m, 40-41-35/74-15-44



NEW MEXICO:

Albuquerque: KFLO 91.5, PR<20kw/1232m
 Belen: KVLK 90.9, NW 10kw-V/49m, 34-23-44/107-00-42
 Cloudcroft: KNMB 96.7, AF 190w/22m, 33-23-06/105-39-41 (aux)
 Grants: KXXQ 100.7, signs on with country
 Grants: KDSK 92.7, PR 1kw/820m, 35-15-11/107-35-46
 Hobbs: KROZ-LP 105.9, calls for new station
 Mesquite: KELP-FM 89.3, NW 3kw/56m, 32-05-05/106-44-01
 Tatum: KTUM 107.1, signs on with classic rock //KIDX

NEW YORK:

Brighton: WZNE 94.1, AF 1kw/120m, 43-09-17/77-36-10 (aux)

Brockport: WMJQ 105.5, FC to K-Love contemporary Christian, PR>6kw/100m, 43-09-51/77-47-02
 Cape Vincent: WBDR 102.7, FC to country "Kix 102.7", targeting Kingston ON



Calverton-Roanoke: WXXP 105.3, CC to WDRE
 Clifton Park: WDCD 96.7, CC to WPTR
 Cortland: WDRX-LP 100.7, calls for new station
 Frankfort: WKLL 94.9, FC to standards, CC to WTLB-FM
 Garden City: WLIR 92.7, CC to WZAA, FC to Spanish //WCAA 105.9
 Hampton Bays: WBON 107.1, CC to WLIR, FC to modern rock "The Box"
 Jamestown: WMHU 101.9, CC to WHUG
 Kingston: WKHV-FM 103.9, calls for new station
 Lake Luzerne: WBAR 94.7, PR>940w/253m
 Lake Success: WKTU 103.5, NS 13.5kw/281m, 40-45-22/73-59-12 (aux)
 Malta: WNYQ 105.7, PG 4.8kw/112m, 42-52-44/73-51-47; CL from Queensbury, PA from A to B1
 Manilus: WAQX-FM 95.7, NW 20kw/44m, 43-00-25/76-05-38 (aux)
 New York: WWPR 105.1, WAXQ 104.3, WLTW 106.7, all NS 13.5kw/281m, 40-45-22/73-59-12 (auxiliary TX's)
 Oneonta: WJIH-LP 95.9, calls for new station
 Queensbury: WCQL 95.9, PG>380w/388m, 43-25-12/73-45-39; CL from Glens Falls



Ravena: WRCZ 94.5, PR>6kw/100m, 42-33-15/73-52-07
 Rochester: WRMM 101.3, WCMF 96.5, WPXY 97.9 all: AF 1kw/120m, 43-09-17/77-36-10 (auxiliary tx's)
 Rome: WRBY 102.5, FC to hot AC "Mix 102.5" (Utica), CC to WUMX
 Scotia: WKRD 93.7, CC to WEGQ, FC to classic country "The Eagle" (Albany)
 Smithtown: WMJC 94.3, shifts toward modern rock
 Syracuse: WLTI 105.9, NS 1.5kw/8m, 43-03-36/76-07-54 (aux)
 Webster: WDCZ 102.7, CC to WRCI (Rochester)
 Westhampton: WDRE 98.5, CC to WBON

NORTH CAROLINA:

Aurora: WFPF 104.5, PR 4.2kw/120m, 35-18-09/76-34-00
 Calabash: WYNA 104.9, FC to hot AC "Cool 104.9 and 100.7" //WGTN, PG>50kw/53m, 33-51-23/78-36-02
 Farmville: WGPM 94.3, CC to WWGL
 Harrisburg: WCHH 92.7, FC to urban AC "Q92-7", CC to WQNC, picks up Tom Joyner
 Hatteras: WYND 97.1, PC>59kw/170m
 Kinston: WZBR 97.7, CC to WWNF
 Marble: WPTP-LP 95.1, calls for new station
 Moyock: WBHH 92.1, FC to soft AC "Lite FM", CC to WCDG
 Old Fort: WKSF 99.9, granted CL from Asheville
 Oriental: WNBR 94.1, CC to WWEA
 Roanoke Rapids: WRTP-FM 90.1, PR>11kw/154m
 Rocky Mount: WSAY 98.5, CC to WDWG
 Topsail Beach: WWTB 103.9, is silent
 Washington: WCZI 98.3, FC to soft AC, CC to WMUM
 Williamston: WCBZ 103.7, CC to WRHD

NORTH DAKOTA:

Bismarck: KBFR 91.7, NW 780w/106m, 46-49-38/100-46-28
 Harwood: KDJZ 100.1, PR>40kw/100m, LIC modified to noncommercial
 Kindred: KFAB 92.7, PG 25kw/100m, 49-36-38/96-41-03

OHIO:

Ashville: WFCB 93.3, CC to WLZT, FC to soft AC "Lite"
 Athens: WEAK-LP 106.7, NW ?w/24m, 39-18-59/82-10-02
 Beavercreek: WXEG 103.9, NS 1.5kw/133m, 39-43-36/84-12-23 (aux)
 Bellefontaine: WPKO 98.3, PG>1.75kw
 Cadiz: WCDK 106.3, FC to classic rock "The River"
 Caledonia: WYNT 95.9, GA from Upper Sandusky
 Canton: WRQK-FM 106.9, XR 40-49-22/81-25-40
 Dayton: WGXN 98.1, deleted



East Liverpool: WOGF 104.3, PG>23.5kw
 Gahanna-Columbus: WCVO 104.9, SC to "The River"
 Georgetown: WAXZ 97.7, PR>6kw/100m, 38-46-50/83-51-55
 Greenville: WDJO 106.5, FC to smooth jazz, CC to WDSJ
 Huber Heights: WOXR-LP 97.1, CC to WSWO-LP
 Lima: WNHC-LP 104.1, calls for new station
 Miamisburg: WFCJ 93.7, NS 50kw/72m (aux)
 Oxford: WOXY 97.7, PR>5.4kw/100m, 39-30-44/84-38-09
 Shadyside: WEEL 95.7, FC to top 40 "Kiss", CC to WVKF
 Toledo: WKKO 99.9, XC 41-40-05/83-27-11
 Troy: WOKL 96.9, PG>5.9kw/98m, 39-56-49/84-11-29
 Union City: WTGR 97.5, FC to country "The Tiger"
 Zanesville: WJFZ-LP 104.1, calls for new station

OKLAHOMA:

Altus: KKVO 90.9, PR>4kw/250m, 34-58-39/99-24-35
 Enid: KZIX-LP 101.5, calls for new station
 Grandfield: KWKL 89.9, NW 11kw-V/152m, 34-16-19/98-25-30
 Healdton: KICM 97.7, PR 10kw/156m, 34-20-57/97-27-24
 Lahoma: KXLS 95.7, PR>29.4kw/131m, 36-32-13/98-00-39
 Seminole: KXTH 89.1, NW 2.3kw-V/118m, 35-12-53/96-44-26
 Tahlequah: KEOK 101.7, PG>25kw/87m

OREGON:

Astoria: KJAC 88.7, calls for new station
 Bend: KPOV-LP 106.7, calls for new station
 Brookings: KSEP-LP 99.9, calls for new station
 Burns: KBWR-LP 98.1, NW ?w/-21m, 43-35-18/119-03-21
 Canyonville: KPOL-LP 106.9, calls for new station
 Glide: KLBG-LP 92.3, calls for new station
 Harrisburg: KHRB-LP 92.3, NW ?w/2m, 44-16-21/123-10-15
 John Day: KSPL-LP 98.1, calls for new station
 Klamath Falls: KKLJ 88.9, PR>110w/667m, 42-04-06/121-58-13
 Medford: KLDZ 103.5, PR 100kw/146m, 42-17-13/123-00-15
 Molalla: KRKS 105.1, PC<21kw/470m, 45-31-21/122-44-45
 Monmouth: KSND 95.1, FC to AAA



Newport: KSHY-LP 94.3, NW ?w/36m, 44-39-10/124-03-09
 Oakridge: KMKR 88.5, calls for new station, NW 400w-H/-392m, 43-44-27/122-26-50
 Portland: KWJJ 99.5, SC to "The Wolf"
 Portland: KINK 101.9, AF 90kw/441m (aux)
 Portland: KRRC 97.9, QC from 104.1, 4m
 Portland: KUPL-FM 98.7, PC 11kw/362m (aux)
 Roseburg: KRBG 88.1, CC to KMPQ
 Roseburg: KLLF-LP 106.7, NW ?w/67m, 43-12-24/123-21-47
 Veneta: KEUG 105.5, RA with Hot AC "105-5 Bob FM"
 Welches: KZRI 90.3, PG 235w-V/531m 45-20-01/121-42-45

PENNSYLVANIA:

Bloomsburg: WFYY 106.5, SC to "Y106-5"
 Brookville: WWJL-LP 95.9, calls for new station
 Carbondale: WCWI 94.3, FC to standards//WNAK 730, CC to WNAK-FM
 Carlisle: WRKZ 102.3, FC to country "Red 102.3", CC to WCAT
 Erie: WMCE 88.5, PG>750w/152m, 42-05-25/79-56-37
 Fairview: WUSE 93.9, PC 6kw/91m, 42-01-36/80-07-18
 Freeland: WKRZ 98.5, CL granted from Wilkes-Barre



Harrisburg: WRVV 97.3, PG<15kw/260m
 Hershey: WCAT 106.7, FC to Top 40 "Cool Pop 106.7", CC to WCPP
 Hollidaysburg: WMAJ 104.9, FC to rock "Rocky 104.9", CC to WRKY
 Johnstown: WMTZ 96.5, NS 8.1kw/111m (aux)
 Linesville: WMVL 101.7, PG 1.4kw/169m
 Middletown: WZXM 88.7, calls for new station
 Philadelphia: WLDW 96.5, CC to WRDW; SC to "Wired 96.5"
 Philadelphia: WMMR 93.3, NS 18kw/252m (aux)
 Philadelphia: WXTU 92.5, PR 15kw/277m
 Pittsburgh: WJJJ 104.7, CC to WPGB

Scranton: WGGY 101.3, PC>365m
 Starview: WHBO 92.7, CC to WSJW; FC to smooth jazz
 Tuckhannock: WCWY 107.7, CC to WBZR, simulcasting WCOZ-103.9
 Tyrone: WGMR 101.1, shifts to Top 40 "The Revolution"

SOUTH CAROLINA:

Chester: WBT-FM 99.3, PC 7.7kw/182m, 34-47-30/81-16-06
 Columbia: WARQ 93.5, SC to "Rock 93.5"



Folly Beach: WYBB 98.1, FC to active rock '98X'
 Gaffney: WAGI-FM 105.3, PC>374m, 35-24-52/81-46-31
 Georgetown: WXJY 93.7, PC<96m, 33-16-05/79-17-49
 Greenwood: WHZK-LP 97.7, calls for new station
 Kiawah Isl. (Charleston): WCOO 105.5, FC to classic hits "The Bridge"
 Kingstree: WWKT 99.3, FC to R&B oldies "Old School 99.3" (Sumter)
 Murrells Inlet: WYEZ 94.5, PR 12kw/145m
 New Ellenton: WAJY 102.7, FC to contemporary Christian "Joy FM" (Augusta GA), PC>4.3kw/118m, 33-30-49/81-38-03
 North Myrtle Beach: WNMI-LP 98.7, NW ?w/29m, 33-52-32/78-37-09
 Summerton: WLJI 98.3, PR 2.45kw/159m, 33-47-06/80-21-50
 Sumter: WICI 94.7, FC to hot AC "Mix 94.7"
 Wedgefield: WIBZ 95.5, PG>4.6kw/114m

SOUTH DAKOTA:

Rapid City: KLGH 88.3, calls for new station

TENNESSEE:

Columbia: WAYM 88.7, PC15.5kw/243m, 35-55-20/86-42-46
 Crossville: WPBX 99.3, PR 6kw/55m
 Elizabethton: WPJO 99.3, CC to WTZR, FC to modern rock "Z-Rock" (Tri-Cities)
 Gainesboro: WENV-LP 97.3, calls for new station
 Germantown: WMPS 107.5, FC to CHR/Pop "Q107.5", CC to WHBQ-FM



Jackson: WMXX-FM 103.1, PC>42kw/164m
 Jamestown: WSAB-LP 92.5, NW ?w/120m, 36-25-51/84-58-03
 Jasper: WJCR-LP 94.9, calls for new station
 Lawrenceburg: WLLX 97.5, PR 2.3kw/100m, 35-15-18/87-19-30 (aux)
 Lexington: WZLT 99.3, FC to AC
 Lobelville: WFGZ 94.5, FC to contemporary Christian "The Dove"
 Martin: WCMT-FM 101.7, PG 22kw/94m, 36-29-00/88-57-10
 Vonore: WTRL-LP 106.9, NW ?w/59m, 35-34-19/84-15-23

TEXAS:

Abilene: KVVO-LP 94.1, calls for new station
 Abilene: KHYS 100.7, FC to classic rock "100.7 The Eagle"
 Allen: KESN 103.3, PC 98kw/606m, 33-32-08/96-49-54
 Austin: KMFA 89.5, NW 32kw/287m (aux)
 Bay City: KZBJ 89.5, PR>35kw/146m, 29-08-58/95-59-14
 Bay City: KXGJ 101.7, PR>35kw/450m, 28-48-03/96-07-32
 Brookshire: KQLC-LP 107.9, NW ?w/27m, 29-48-48/95-59-13
 Brundage: KHIA-LP 97.5, calls for new station
 Cleveland: KORGLP 105.3, NW ?w/41m, 30-20-52/95-05-20
 Comfort: KCOR-FM 95.1, PG>100kw/282m, 29-50-26/98-49-32



Dallas: KRBV 100.3, PC>97kw/474m, 32-32-36/96-57-32
 Dallas: KERA 90.1, PC>100kw/388m
 Dallas: KLLI 105.3, PC 97kw/474m, 32-32-36/96-57-32
 Devine: KSJL 92.5, FC to R&B "Hot 92-5" (San Antonio)
 Edinburg: KBFM 104.1, FC to rhythmic CHR "Wild 104" (Brownsville)
 El Campo: KIOX 96.9, PR>450m, 28-48-03/96-07-32
 Elgin: KKL 92.5, PR>3.5kw/135m, 30-13-07/97-24-03

Fannett: KZFT 90.5, NW 35kw-V/110m, 29-53-33/94-08-06
 Galveston: KOVE 106.5, NS 600w/225m, 29-45-26/95-20-19 aux
 Gonzalez: KQQT 106.3, FC to contemporary Christian "K-Love"
 Hillsboro: KBRO 102.5, AF 890w/144m, 31-30-51/97-11-44 (aux)
 Hutto: KQJZ 92.1, FC to contemporary Christian "K-Love"
 Ingleside: KCCG 107.3, CC to KRPX, FC to active rock "107-3 The X"
 Jacksboro: KJKB 101.7, PR>100m, 33-19-43/98-16-46
 Jasper: KQYX 102.7, PR>50kw/150m
 Jasper: KJAS 107.3, PG>8kw
 Laredo: KNEX 106.1, PC>54m
 Lufkin: KLFK-LP 104.1, calls for new station, NW ?w/26m, 31-20-18/94-41-16
 Madisonville: KMVL 100.5, FC to country
 Marble Falls: KFGG-LP 101.9, calls for new station
 Mercedes: KMAZ 106.3, CC to KHKZ, FC to top 40 "Kiss 106.3"
 Midland: KCHX 106.7, FC to AC "Mix 106.7"
 Perryton: KEYE 96.1, FC to classic hits
 Plainview: KOLF-LP 100.7, NW ?w/29m, 34-11-41/101-42-02
 Plainview: KBAH 90.5, PR>75kw/130m, 34-03-58/101-42-16
 Point Comfort: KAJI 94.1, RA, simulcasting KZAM 104.7
 San Angelo: KYZZ 100.1, PR>50kw/117m
 San Antonio: KISS-FM 99.5, PG>453m
 Santa Fe: KJIC 90.5, PC>7.7kw/177m
 Stamford: KOES 106.9, CC to KLGD
 Temple: KRYH-LP 104.7, calls for new station, ?w/52m, 31-05-56/97-21-53
 Texarkana: KTXK 91.5, PC>100kw/93m
 Waco: KXZY-LP 100.7, calls for new station
 Wells: KVLL-FM 94.7, XR 31-24-32/94-50-09 dismissed

UTAH:

Blanding: KBDX 92.7, RA with contemporary Christian
 Brigham City: KRAR 106.9, simul. rhythmic KUUU 92.1
 Huntsville: KPFB 103.1, PG 89kw/647m, 40-52-16/110-59-43
 Levan: KCFM 96.7, signs on with Spanish "La Tierra"
 Manti: KMXU 105.1, CC to KNJU
 Nephi: KMDG 103.9, CC to KUDE
 N. Ogden: KNKL 88.7, signs on with K-Love cont. Christian
 Park City: KPCW 91.9, PR>120w/647m, 40-36-34/111-28-49
 Provo: KZHT 94.9, CC to KMXU and then KHTB, FC to modern rock "The Blaze"
 Randolph: KWKD 102.3, CC to KMDG and then KDUT, FC to regional Mexican "La Grand"



Salt Lake City: KISN 97.1, CC to KZHT, former 94.9 format moves to 97.1 as "97.1 ZHT"
 Vernal: KLCY-FM 105.5, PG 3.3kw/518m, 40-32-16/109-41-57

VERMONT:

Hyde Park: WYTC-LP 89.1, calls for new station
 Lyndonville: WLYN-LP 106.7, calls for new station
 Randolph: WRAN-LP 100.1, NW ?w/120m, 43-57-20/72-36-18
 Saint Johnsbury: WKXH 105.5, PC>1.25kw
 Warren: WMRW-LP 95.1, calls for new station

VIRGINIA:

Cape Charles: WROX 96.1, PR 23kw/220m
 Charlottesville: WUMX 107.5, FC to smooth jazz, CC to WCJZ
 Exmore: WROX-FM 96.1, CL granted from Cape Charles
 Front Royal: WFQX 99.3, PC>6kw/100m, 39-03-56/78-22-58
 Midlothian: WJMA-FM 98.9, PR>7.3kw/183m, 37-36-52/77-30-56; CL from Orange, simulcasting country WCUL 103.1
 Petersburg: WARV 100.3, simulcasting oldies WBBT-107.3
 Poquoson: WKOC 106.1, CC to WPYA, PR 1.7kw/153m, 37-04-24/76-17-33, CL from Exmore, FC to Hot AC/Classic hits hybrid "Bob FM"
 Powhatan: WBBT 107.3, flips to oldies "Oldies 107.3"
 Richmond: WFMC-LP 102.9, calls for new station
 Roanoke: WMGR-FM 104.9, PG>14.5kw
 Vinton: WZZI 101.5, FC to oldies (Roanoke)
 VirginiaBeach: WWHV 102.1, PC>100m, 36-45-07/76-08-57



Williamsburg: WYOU-LP 103.5, calls for new station
 Windsor: WJCD 107.7, FC to soft AC "Lite FM"//92.1
 Moyock NC

WASHINGTON:

Amanda Park: KOHS-LP 105.5, calls for new station
 Basin City: KZLN 97.5, CC to KHTO



Deer Park: KAZZ 107.1, PR>25kw/100m
 Ellensburg: KXLE 95.3, PC 51kw/129m, 47-09-49/120-47-37
 Mabton: KLES 98.7, FC to spanish R&B, rock "Tekila"
 Republic: KETL-LP 100.5, calls for new station
 Seattle: KYPT 96.5, FC to classic alternative "K-Rock", CC to KRQI
 Spokane: KYRS-LP 95.3, NW ?w/30m, 47-31-58/117-26-20
 Tacoma: KBTC-FM 91.7, CC to KXOT

WEST VIRGINIA:

Benwood: WVJW-LP 94.1, LC dismissed
 Berkeley Springs: WDTF-LP 107.9, NW ?w/47m, 39-36-18/78-13-01
 Bethlehem: WVWF 105.5, FC to oldies, CC to WUKL
 Buckhannon: WVPW 88.9, PC>259m
 Charleston: WKWS 96.1, SC to "The Wolf"
 Fairmont: WVFR-LP 99.7, calls for new station
 Gary: WHQX 107.7, PC>8.6kw/172m, 37-08-01/81-35-42; CL from Cedar Bluff, VA
 New Martinsville: WXCR 92.3, FC to classic rock
 Parkersburg: WHBR-FM 103.1, PG 2.1kw/171m, 39-21-00/81-33-56
 Parkersburg: WAUA 89.5, PR<322m
 Salem: WVBL-LP 99.9, calls for new station
 Summersville: WMLJ 90.5, PR>11kw/315m

WISCONSIN:

Ashland: WRNC-LP 97.7, calls for new station
 Berlin: WBJZ 104.7, FC to country
 Eau Claire: WIEC-LP 102.7, calls for new station
 Fond Du Lac: KFIZ 107.1, CC to WFON
 Goodman: WMVM 90.7, PC>9kw/48m, 45-46-27/88-24-28
 Marinette: WLWR-LP 107.7, PC>31m
 Neillsville: WPKG 92.7, signs on with Hot AC "Spankin' New 92.7 FM"
 Sauk City: WCJZ 96.3, CC to WMAD, FC to modern rock "Mad Radio" (Madison)
 Sturtevant: WEXT 104.7, SC to "The Wolf"
 Sun Prairie: WMAD 92.1, CC to WXXM, FC to hot AC "Mix 92.1", PG>3.7kw/125m, 43-10-10/89-15-38
 Wausau: WDEZ 101.9, PC>98.5kw/329m
 Wausau: WHRM 90.9, PC>81kw/329m
 Wausau: WYCO 107.9, CC to WLRK

WYOMING:

Buffalo: KSLW-LP 99.5, NW ?w/-48m, 44-20-52/106-42-10
 Cheyenne: KRRR 104.9, PC>25.5kw/35m, 41-08-04/104-41-32
 Evanston: KOTB 106.1, PG 89kw/649m
 Gillette: KXXL 103.9 signs on with classic rock
 Pine Bluffs: KREO 105.3, PC>6kw/76m
 Teton Village: KJHR-LP 100.1, calls for new station

Some news and notes:

- Bubba The Love Sponge and Clear Channel have severed ties, and the controversial shock jock will be off the air, at least for now, at WXTB (98X/Tampa), WJRR/ Orlando, and WPLA (Planet 93.3/Jacksonville). Howard Stern has also been pulled off all Clear Channel stations.

- In Hartford, from 10pm-2am Monday-Thursday, WKSS flips to alternative as "Channel 957"

-The Harrisburg market becomes more overcrowded with mainstream music as Citadel flips WCAT-FM to CHR as "Cool Pop 106.7", while moving WCAT's country format up the dial to 102.3. WHKF, WNNK, WLAN, WYCR all play similar music in Harrisburg.



- The death of 22-year old CHR KQKQ in Omaha happened on March 11th, as "Sweet 98.5" dropped the CHR format. Another heritage CHR going down the tubes. What's wrong with CHR these days? Too much urban? It goes Modern AC as "Q98-5".

-Memphis finally gets CHR again as The Pig 107.5 flips to CHR as "Q107.5", taking the prestigious WHBQ call letters.

Welcome to the new version of FM news. I am your new editor, Adam Rivers. A big whatup to Mike for giving me this opportunity

to help out the club, most importantly to Doug Smith for helping me with all of the technical data from the FCC which I otherwise would have no clue about; and to everyone else for taking the time to read this

I am always open to contact no matter what way you have to reach me; if you'd like you can email me at redsoxdxer417@hotmail.com; IM me on AOL at XxPatsRule417xX (for the two time champion New England Patriots), or send me a snail mail at the address above. Whatever way it is, I hope to do as best as I can serving the club with FM news. I'm looking for a lot of feedback on this first issue.

A lot of stuff in this column is retroactive to the last date that the column was published, therefore we've got a lot more than usual. Like the Red 104.1 format change in St. Louis happened on January 1st, but is still in this edition of FM news.



SATELLITE NEWS

GEORGE W. JENSEN
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SCISATMAN@AOL.COM

The biggest events taking place in recent months are the dropping of West Coast feeds by major programmers - at least from the analogue side.

AMC7 - most audio subcarriers have been dropped except WOKIE at 7>50 on XPDR 5 Satcom C4 - drop - XPDR 6 -The History Channel - West XPDR 24 - Country Music Television will move to Galaxy 10 XPDR 17 soon. Add - XPDR 101 - Starz Kids - West. XPDR 601 is now color bars only - not Bloomberg

Galaxy 1 - XPDR 1 - Comedy Central West - DROP. XPDR 6 - SPIKE West to be dropped. Add - 157 - Starz Kids - East

Satcom C3 - XPDR 600 - Delete Bloomberg - only color bars and tests now

Galaxy 13 has replaced Galaxy 9 and also has a Ku Band component called Horizons 1. Add XPDR 122 and 124 - Starz HDTV E and W

Galaxy 5 -Delete XPDR 12 - Discovery West and Audio Subcarrier 6 6.43 - Brother Staires Radio Network the Overcomer

Galaxy 10 - XPDR 17 - Nickelodeon West will be dropped soon and be replaced by

Country Music Television. On the Ku side - The Jason Project has reappeared on XPDRs 100, 200, 300 and 400 with the Panama Project. I have never seen any programming on this venture - does anybody know what this is.

G-Star 4 at 105 West has been replaced by new AMC 2 - have no details as yet.

Galaxy 4 - Ku - XPDR 643 - Game Show Network noted here -still on Galaxy 11 6666XPDR 6

Telstar 6 - XPDR 7 - now Ten Exxxstacy VC2, XPDR 7 - PBS, XPDR 14 - delete Exxxstacy VC2

Galaxy 11 - Delete the following - XPDR 605 - KJLA and XPDR 606 - KXLA , and Crawford Communications barker on 800.

Add the following - 601 - Bloomberg and 800 Blue Highways (NO it is not a porn channel).

AMC 2 at 85 West has moved to Galaxy 9 slot and has been replaced here by AMC 9 which is both C and Ku Band (I think).

That sums it up for this month - hope to see you in 30. Good DX and "73"s

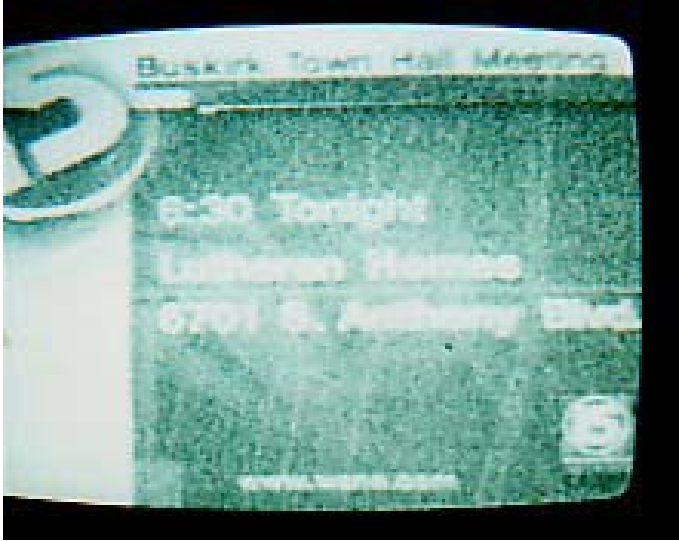
A handwritten signature in black ink, appearing to read "George".

April 2004

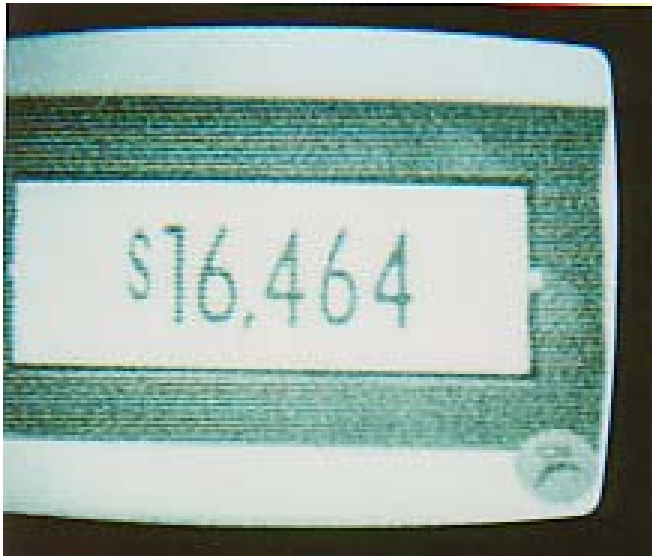
Here's some fantastic tropo photos from Roy Barstow of Teaticket, MA:



WXMI-17 Grand Rapids, MI
 767 mi Tr seen 8/21/03
 @0105 ET
 "Wow! – jtk"



WANE-15 Ft. Wayne, IN
 755 mi Tr seen 8/21/03
 @1000 ET



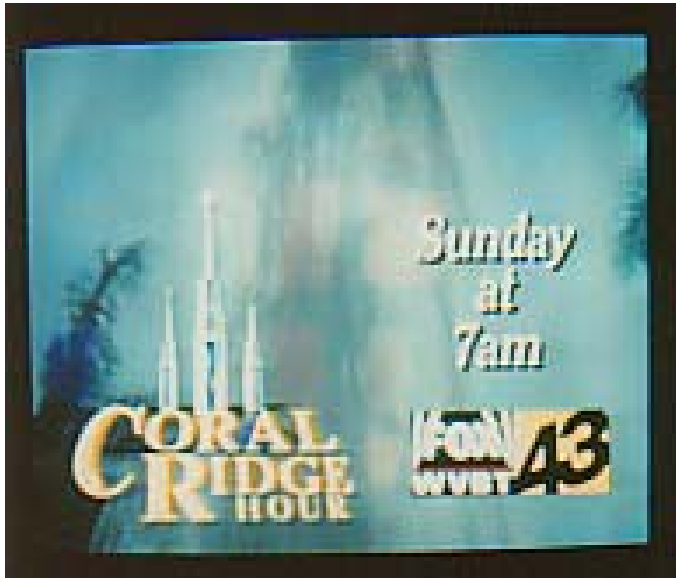
CHCH2-51 London, ON
 557 mi Tr seen 8/21/03
 @1120 ET
 "CH" logo lower right



WAVY-DT-31 Portsmouth, VA
 448 mi Tr seen 6/2/03
 @1930 ET



WTKR-DT-40 Norfolk, VA
 441 mi Tr seen 6/2/03
 @2345 ET



WVBT-DT-29 Virginia Beach, VA
443 mi Tr seen 6/2/03
@2250 ET



WCBB-DT-17 Augusta, ME
196 mi Tr seen 6/3/03
@0730 ET

Roy was very proud of his DX to the west on the evening of August 21, 2003 – he took 65 shots of the 3 stations printed! He even sent me a videotape. A rare event indeed, Roy! I know the feeling. I experienced the same when I received North Carolina by tropo last May.

And now one more photo, this is one of the first 7 ft. dish antennas made (circa mid-70's), owned by Roy. Roy personally screened it with regular window screen. It was on a 70 ft. Triex tower until one day, unfortunately, a storm broke the lower rotor housing and it sailed 70 feet during a winter storm. What a shame!



73's,

JEFF

ATSC PRIMER Part VII

DOUG SMITH

Special Temporary Authority:

As the transition table shows, a small majority (56%) of DTV stations on the air at the end of July 2003 were operating with special temporary authority. Almost always, this meant the station was operating at reduced power.¹ The amount of power reduction varies wildly. Just as an example, on channel 7 KOCO-DT Oklahoma City holds a STA for 10kw/35m; their full-power construction permit calls for 34kw/430m. At the same time and on the same channel, KTTW-DT Sioux Falls holds a STA for 20w/96m; their full-power CP calls for 65kw/126m. (and yes, that's 20 WATTS on the STA.) A typical STA is that held by WPSD-DT Paducah, Kentucky, which calls for 4.47kw/74m on the studio-transmitter link tower at their offices in Paducah. WPSD's permanent DTV facility will be on their existing analog tower, running 906kw/492m. Network-affiliated stations in the 30 largest markets are not allowed to take advantage of STAs. They're required to build at full-power immediately.

STAs can be much less expensive than full-power operations. A FCC review of transition quotes a letter from Harris Corp.² claiming that it could equip a small-market station with a 500-watt DTV facility for less than \$160,000. Modest power increases could run up to \$625,000. Obviously that's still a lot of money, even for a TV station!

Right now, DTV allotments are being protected from interference on the assumption that stations are running full power. For example, no station that would interfere with WPSD's 906kw coverage will be authorized – even though WPSD-DT cannot be received through much of that area due to their temporary low power.

This interference protection will not be maintained forever. Originally, a deadline of the end of 2004 was set for commercial stations to begin full-power DTV operation. Stations still operating on reduced power at that time would be protected from interference only within their actual coverage area – not the area covered by the unbuilt higher-power facilities. Non-commercial stations got another year.

In this year's review of the DTV transition, the Commission agreed to suspend this deadline. They have promised to establish a new deadline during 2004 – and in any case, this deadline will be no later than the end of transition.

“City-grade” signal:

STAs must still provide a city-grade signal across the city of license. See the table below:

	Channels 2-6	Channels 7-13	UHF
Digital (initial)	28dBu	36dBu	41dBu
Digital (final)	35dBu	43dBu	48dBu
Analog ³	74dBu	77dBu	80dBu

dBu means decibels above 1 microvolt per meter. DTV stations are required to comply with the increased “final” figures by the end of 2004 for commercial stations, the end of 2005 for non-commercial outlets.

Obviously, the definition of a “city-grade” signal is much weaker for digital than it is for analog. Some DTV stations have been built at a considerable distance from the associated analog station. WPXE-DT Kenosha, Wisconsin is located on a community tower on the north side of Milwaukee, roughly 25 miles north of their analog transmitter. WNPX-DT Cookeville,

1In a few cases STAs are for full-power operation on a different channel from the one originally allotted; temporary authority is necessary to use this channel pending its permanent assignment.

2A major manufacturer of broadcast equipment.

3To some degree these figures are “apples and oranges”. Analog coverage is determined using the “F(50,50)” curves – the signal strength a station will have at 50% of locations 50% of the time. Digital coverage uses “F(50,90)” - 50% of locations 90% of the time.

For example, consider reception of WCIQ-7 Mt. Cheaha, Alabama (316kw/610m) at a receiver 100km from the transmitter. The F(50,50) curves predict that WCIQ will deliver a 64dBu signal at this location. F(50,90) methods predict 56dBu at this location.

Tennessee transmits from a tower on the northwest side of Nashville, roughly 70 miles west of their city of license⁴⁵.

LPTV:

LPTV stations do not get a second channel for digital. They may choose to switch to digital operation on their existing channel if they choose. To my knowledge WTHC-LP (channel 42) in Atlanta is the only LPTV to do so so far. Since there are no multiple-ownership regulations for LPTV, it is possible for a LPTV station to buy a second station and operate one as analog and the other digital. I have seen no indication that the FCC will ever ban analog operation by LPTVs. Maybe after transition, some full-power DTV stations will buy LPTVs to simulcast their signals in analog for viewers without digital sets?

While no specific date has been set, LPTV stations operating on channels 52-69 are on notice that their days are numbered. LPTV stations operating on channels to be used by full-power digital operations are also to be “bumped”. Congress' creation of a “Class A Television Service” will protect LPTV stations qualifying for this service from being “bumped” by future digital stations, but Class A stations are still secondary to the digital facilities of existing full-power stations. Thousands of these LPTV stations have already filed for permission to move to lower channels. Many of these applications have already been granted, and indeed many stations are already operating on their new channels⁶. A few LPTVs will not be able to find a new channel and will have to go off the air.

Simulcast & receiver requirements:

There are a couple of miscellaneous FCC regulations regarding transition that don't fit into any of the other categories...

Stations are required to simulcast at least 50% of their analog programming on their digital station. This requirement increases to 75% on April 1st, 2004, and to 100% on April 1st, 2005. The regulations state these requirements will be repealed when the analog station is closed.⁷

Transition requirements have also been imposed on TV receivers. DTV tuners are required in new TV sets according to the following schedule:

Date	Receivers
July 1 st , 2004	50% of 36” and larger receivers.
July 1 st , 2005	All 36” and larger receivers; 50% of 25”-35” sets.
July 1 st , 2006	All 25” and larger receivers.
July 1 st , 2007	All 13” and larger receivers; all “reception devices” such as VCRs.

4WNPX-DT just barely meets the 41dBu figure from this location. They're running 733kW ERP and are on top of the tower at that site – there is no way they can increase their signal by 7dB from that location. In theory they'll have to move at the end of 2004, barring changes in the rules. (which their licensee has requested)

My guess is if the rules aren't changed, they'll change the city of license. A place like Mt. Juliet, Gladeville, or Gallatin will receive an 80dBu signal from their existing analog station on channel 28 and 48dBu from their DTV transmitter in Nashville. And since there's another TV station (WCTE-22) licensed to Cookeville, the channel 28 allotment can be moved without deleting Cookeville's only service.

5The 7dB increase in city-grade signal requirements applies to STAs as well.

6Some, however, have been rather slow about it. One LPTV station in Nashville didn't file for a new channel until after a new DTV signed on on the same channel. Both stations operated simultaneously on channel 36 for a week or two before the LPTV shut down pending a move to channel 48.

7I hope so!

Eastern TV-DX

Matthew C. Sittel
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mcsittel@cox.net

April, 2004

May, 2004 column deadline: Apr. 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. Overseas reports welcome!

It's been a quiet start to 2004, judging from the lack of reports to this column! But skip season is just around the corner, so hopefully our screens will be filled with DX signals soon.

Doug Smith, W9WI, Pleasant View, TN

w9wi@earthlink.net
http://www.w9wi.com

1/12 Es

0840 unIDs briefly to ch. 5, ch. 3 NBC & PBS
former w/wx (41 degrees) and CST time

2/12 Es

1134 WFSB 3 CT Hartford, CT weather

Saul Chernos, 57 Berkeley St., Toronto, ON M5A 2W5 (416) 364-0725

schernos@sympatico.ca

10/11/2003 tr (TO-Bluffs)

0650 WNPA 19 PA Jeanette
0655 WWPX 60 WV Martinsburg, // 64
0655 WQPX 64 PA Scranton, // 60
0704 WPCB 40 PA Greensburg, // 47
0704 WKBS 47 PA Altoona, // 40
(Cornerstone)
0710 WVIA 44 PA Scranton, PBS

0712 WBRE 28 PA Wilkes-Barre, NBC
0715 WOLF 56 PA Hazleton, Fox
0720 WDCA 20 DC Washington
0730 WPSX 3 PA Clearfield, PBS

12/28 tr (TO-Downtown)

1030 CITY2 65 ON Ottawa, // CITY-57
1030 CFMT2 60 ON Ottawa, // CFMT
(Omni 1)

Nice bit of tropo at the Scarborough Bluffs in eastern Toronto, to round out the year. WV is a new state for me for TV. Using various portable TVs with 5-inch screens, and a two-bay antenna that I can easily carry to the edge of the Bluffs, which overlook Lake Ontario to the south and southeast. 73s, Saul

Charles Gauthier, St-Lambert, PQ

tvfmdx@yahoo.ca

Equipment: JVC AV-20120 20" TV, JVC HR-S3800U SVHS VCR, Antennacraft 32 element VHF-UHF-FM antenna at 30' AG, CM9510A rotor, RG6 coax, Tin Lee MQ7-CH2S6P switchable notch trap for ch. 2 and 6, 20dB indoor "Provo" amplifier for UHF, Radio Shack FM trap.

11/22/2003 tr

1005 WPXG 21 NH Concord 195

11/24 tr

0000 WUTV 29 NY Buffalo 316
0005 WCDC 19 MA North Adams 199

12/14 Es

0210 WEDU 3 FL Tampa 1309
0230 WESH 2 FL Daytona Beach 1218

0250 WSAV 3 GA Savannah 1015
0330 WUND 2 NC Columbia 678

12/28 tr

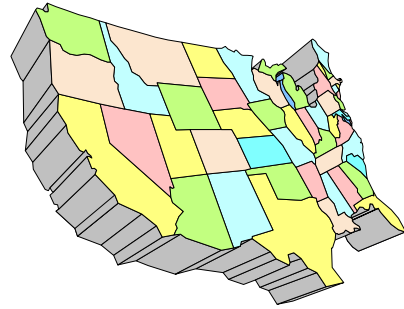
0105 WXXI 21 NY Rochester 257
0105 WUHF 31 NY Rochester 257

2/12/2004 Es

1345 WTVY 4 AL Dothan 1201

WESTERN TV DX

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



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

This report is for Leap Year February 2004. Southern California coastal tropo conditions on TV-FM to San Diego/Tijuana (200mi/ 320km) did not exist most of the time, typical of this time of year when stormy unstable weather keeps stable air layers from forming.

Feb 1 –11: None (Feb 2 rain)
Feb 12: Poor

Feb 13 morning None
Feb 13 evening Poor
Feb 14-29: None (Periods of rain)

We haven't been over to Wasco lately, but were just informed of a late-February burglary at the Wasco house, as of this writing in early March. We are about to go over there to see what is damaged and missing, so more on that next time.

Best of DX to All. Dennis

Denon TU1500 RDP RDS Tuner



The Denon TU1500RD is my DX tuner of choice these days. RF performance is wonderful, and changing the IF filters (there are four of them) for better selectivity is very easy. It handles my high RF environment (< 5 miles from 2 100 KW FMs) better than any receiver I've ever tested. I like this tuner so much that I sold my Onkyo T9090II.

I notice that Denon now calls this tuner the TU1500RDP. Apparently the added "P" stands for "professional." Other than the name change, I can't see any difference between it and the older TU1500RD.

When you open the TU1500RD it looks like a gutless wonder inside... That's because most

of the components are surface mounted on the "underside" of the circuit board. There are very few components mounted on the "top" of the circuit board.

The TU1500RD does not automatically switch from narrow to wide IF mode while tuning. But it does have selectable Auto / Manual tuning mode. I always run mine in manual because in auto it wants to "scan" to the next fairly strong signal it finds (which is annoying). In manual it tunes "normally" in 100 KHz steps. However, in manual mode it won't do stereo. I think that's kind of odd, but it doesn't bother me for DX work. In either auto or manual, it retains whatever IF setting (wide or narrow) that you've selected. –Girard Westerberg

(Note: This Denon tuner currently retails for about \$300 on the internet, although one WTFDA member has been able to purchase one of these tuners on eBay for slightly over \$100.)

SOUTHERN



FM DX

John Zondlo
4009 Driftwood Circle
Yukon, OK 73099
sfm@fmdxweb.com
Deadline: 15th

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

April 2004

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

11/9 Gw

1855 W214BQ 90.7 TN Brentwood, ID for several other KAWZ translators 28

date unknown Gw

WAYQ 88.3 TN Clarksville, "Way FM" sometimes // WAYM-88.7 14

2/12 Es

1134 WGBH 89.7 MA Boston, calls 941



John Zondlo – 4009 Driftwood Circle – Yukon, OK 73099 – CST – All new

Akai AT-VO4 tuner (modified w/2 110 filters), APS-9B antenna w/Channel Master 9521A rotor at 16',
Conrad RDS Manager

12/29 Es

1952 WJGO 102.9 FL Tice, calls
2008 WLLD 98.7 FL Holmes Beach, r, "Wild"
2020 WSUN 97.1 FL Holiday, r, "97-X"
2026 WTLT 93.7 FL Naples, local spots
2050 WSJZ 95.9 FL Sebastian, smooth j
2100 WNRW 98.5 FL San Carlos Park, "The News Station"

1/7 Es

1710 XHDNG 96.5 DU Durango, ads, "La Tremenda"
1717 XHMZT 93.1 SN Mazatlan, baseball promo, local ads

1/26 Es

2034 XHSM 100.9 SN Ciudad Obregon, "Maxima FM"

2/1 Es

1723 XHMSL 101.3 SN Los Mochis, "Stereo Uno"

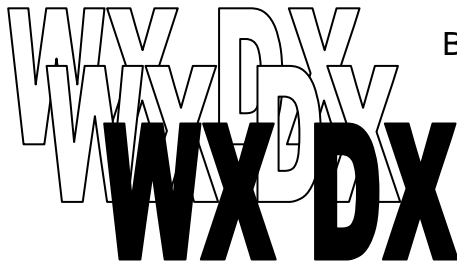
2/2 Es

1928 XHCLI 98.5 SN Culiacan, "La Comadre"
1931 XHCNA 100.1 SN Culiacan, "Exitos"
1933 XHNW 103.3 SN Culiacan
1940 XHBL 91.9 SN Culiacan, local mentions, spots



From the Editor

Looks like things have been pretty quiet all around this winter. The Es in February was a welcome surprise here. Trop started picking up a bit in March, but nothing spectacular. See y'all next month!



Beyond FM
 Beyond TV
 USA – CANADA
 Weather Radio Monitoring

Submit weather band loggings and weather radio news to Jason Koralja at: jkbi01@hotmail.com (Subject: WXDX)

April 2004

Weather Radio Frequencies

WX1	162.550 MHz	WX6	162.500 MHz
WX2	162.400 MHz	WX7	162.525 MHz
WX3	162.475 MHz	WX8*	161.650 MHz
WX4	162.425 MHz	WX9*	161.775 MHz
WX5	162.450 MHz	* =	Canada Only

NEWS: Feb. 5 to Mar. 4

FREQUENCY CHANGE – Dixon, MO – WNG648 has moved from 162.425mHz to 162.500mHz.

DX LOGGINGS (Jan.18 to Feb. 15)

No DX loggings were submitted this month. Loggings for February should be submitted before April 15th.

COLUMN NEWS

I want to feature YOUR TOWN as the listening site of the month! Please send me YOUR ***non-dx*** loggings before April 15 using the format below.

LOCATION OF THE MONTH

A monthly feature highlighting weather radio reception around the country during normal reception conditions.

St-Lambert, QC:

Frequency	Station	City	Quality
162.400	KIG60	Burlington, VT	Strong
162.400	XLR411	Trois-Rivieres, QC	Fair
162.425	WWG50	St-Johnsbury, VT	Good
162.450	XLM300	Montreal, QC	Strong
162.475	XLR412	Sherbrooke, QC	Fair
162.550	XLM300	Montreal, QC	Strong

(Submitted by Charles Gauthier, St-Lambert, QC)

WEATHER RADIO LINKS

www.weatherradio.info

www.nws.noaa.gov/nwr/

CLING TO ME!

It won't cling to you but it will cling to glass. Stick this cling on the inside of a car window or a window in your home. Let everyone know you're a WTFDA member! Just **\$2.00 each** for a removable cling. We'll even mail it to you in your next VUD!

Send your check or money order for \$2.00/ea (payable to Dave Janowiak) to WTFDA, P.O. Box 501, Somersville, CT 06072. Specify red or yellow clings.

FINE PRINT: Permanent decals are available upon request for \$2.00 a pair (two). PLEASE SPECIFY REMOVABLE CLINGS OR PERMANENT DECALS WHEN ORDERING.



WTFDA 2003 FINANCIAL REPORT

Opening balance on January 1, 2003 **\$6,310**

Receipts:

Revenue from dues, samples, guides, and miscellaneous **\$7,868**

Expenses:

VUD publishing, subscriptions, and PO box rental **\$7,809**

Operating Margin (receipts minus expenses): **+\$59**

Closing Balance on 12-31-2003 **\$6,369**

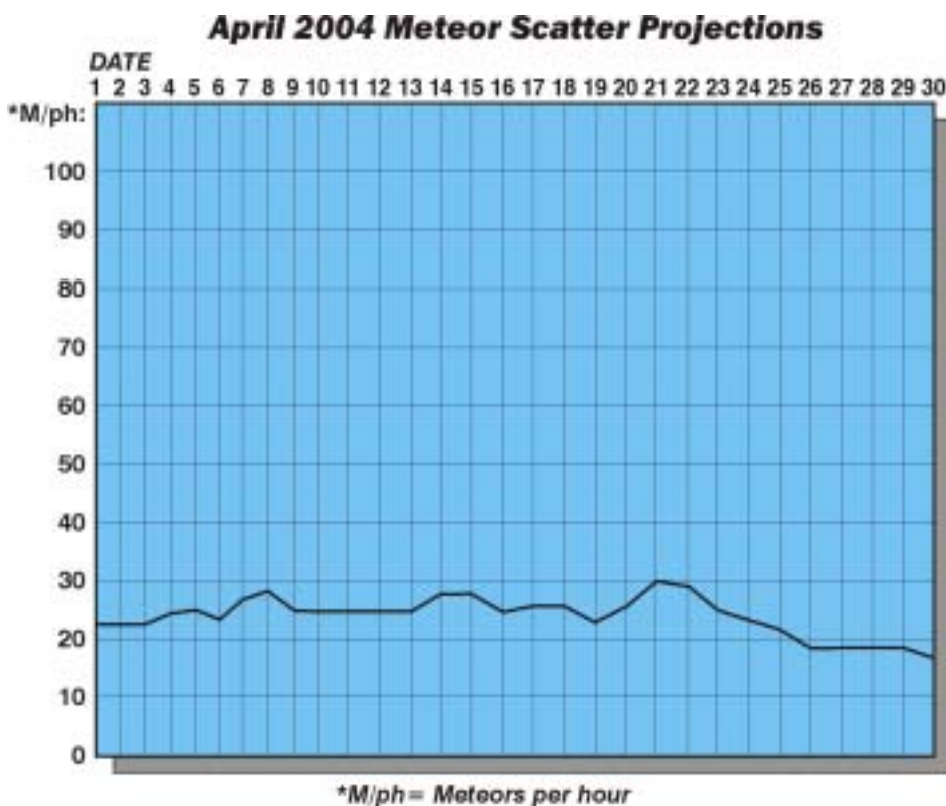
NOTE

The WTFDA realized a small profit of \$59 in 2003. This profit was less than the profit in 2002 due to larger VUDs and less income from TV station guides in 2003.

Submitted 3-1-04
Dave Janowiak
WTFDA Treasurer

METEOR SCATTER GUIDE FOR APRIL 2004

CHART COURTESY OF JIM THOMAS



Jim says:

The only interesting item to notice this month is the Lyrids shower, peaking April 22 @ 02:45 UT.... peak of 10 per hour, with occasional bursts of up to 100 per hour. Other than that, just a slew of tiny showers through the month that will put the hourly average slightly above average.

WTFDA MEMBERSHIP LIST

AS OF MARCH 8, 2004

Robert E.	Fischer	Fairbanks	AK	4/30/2005	
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George	Rogers	Rising Fawn	GA	3/31/2005	
Nick	Lombardi	Atlanta	GA	7/31/2004	
James	Snow	Darien	GA	9/30/2005	
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Marvin	Shults	Toulon	IL	11/30/2004	
Neil	Kazaross	Barrington	IL	6/30/2006	neilkaz@interaccess.com
Roger	Sabella	Oak Lawn	IL	12/31/2004	

Aaron	Mitterling	Warsaw	IN	3/31/2005	mitterling@email.com
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Robert	Rush	HOLYOKE	MA	7/31/2004	
Bill	Smith	Douglas	MA	9/30/2004	smith575@yahoo.com
Paul E.	Kinnaly_ Jr.	Dedham	MA	9/30/2004	
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Keith	McGinnis	Winthrop	MA	6/30/2004	longwave@attbi.com
Morris	Sorensen	Winnipeg	MB	2/28/2005	mosor2002@yahoo.ca.
Joseph	Kureth_ Jr.	Uniontown	MD	3/31/2005	
Charles	Tumosa	Timonium	MD	7/31/2004	ctumosa@scmre.si.edu
Gus	Mancuso	CHEVERLY	MD	4/30/2004	
Jeff	Wolf	Silver Spring	MD	2/28/2005	
William G.	McGuire	Cheverly	MD	7/31/2004	williammcguire616@hotmail.com
George W.	Jensen	Baltimore	MD	7/31/2005	scisatman@aol.com
William W	Thompson	Cheverly	MD	4/30/2005	viverett@smart.net
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Roderick	O'Connor	Southwest Harbor	ME	5/31/2004	
Wayne	Benkinney	Burton	MI	9/30/2004	
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Keith K.	Smith	LANSING	MI	4/1/2004	vgmc@webtv.net
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Timothy J.	Clampit	Brooklyn	MI	4/30/2005	tjc2@frontiernet.net
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Melvyn E.	Larson	Rochester	MN	12/31/2004	
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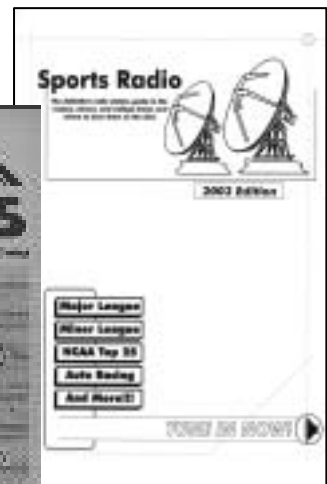
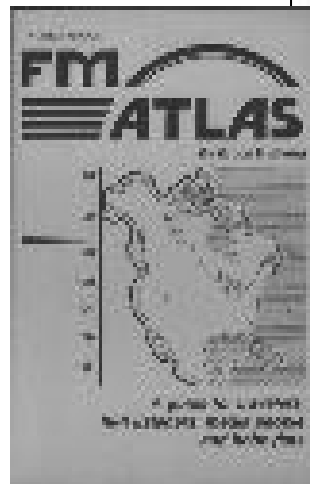
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WEAK SIGNAL TECHNIQUES PART II

BOB COOPER

Because there is noise, external noise brought in by the antenna and internal noise generated by the receiving equipment, it is important to understand where the 'thresholds' of noise occur. Or, how weak a signal can be and still be detected on a TV set.

If we employ 'state-of-the-art' masthead pre-amplifiers in each frequency band, and properly install these mastheads directly at the output terminals of the antenna (before the downline begins), the real-world thresholds are as follows:

Band I - minus 37 dBmV/14 microvolts

Band III - minus 39 dBmV 11 inicrovolts

Bands IV/V - minus 45 dBmV: 5.6 microvolts

To achieve these threshold numbers (the signal level at which you can detect the presence of a 'frame-bar' on the screen) requires a 2.0 dB noise figure masthead at bands I and III, and a 0.5 dB noise figure unit at bands IV/V. Note these are not watchable pictures (not even TASO 6); just detectable signals. Actually measuring signal levels this weak is not possible using conventional installer signal level field strength meters. Knowing these threshold points, however, gives you a 'feel' for where you are when you are surveying a site for possible installation.

THE MATH OF MASTHEADS

The quality of the pictures delivered to a customer depends primarily upon the ratio between the signal (the good guy) and the noise (the not-so-good guy). There is only one signal source; the (usually distant) desired transmitter (DT). Recall there are at least two families of noise in our ratio.

- 1) The noise collected, along with signal, by the antenna, and
- 2) The noise generated by the receiving system.

When electricity is applied to a circuit, electrons 'move' or flow. When this happens, a series of random pulses is created; pulses of broadband static, as it were; noise. The only way to silence this electron-agitated-pulse train is to turn off the electricity; and cool the circuit itself to a temperature of -273 C; absolute zero. A circuit with no electricity and so cold no electron movement can take place is totally quiet. It is also a very poor amplifier in this state.

If we can't shut it off, and we can't cool it down to absolute zero, well ... we just have to accept noise.

REACHING THE REAL-WORLD NOISE THRESHOLD FLOOR

Noise generated within the receiving system (system: 'Masthead through video and audio amplifiers in receiver proper') can be reduced to the system threshold floor by careful selection and installation of a suitable masthead amplifier. Using modern pre-amplifier technology, a masthead noise figure (n/f) as low as 0.5 dB is possible. This represents an improvement of from 15 dB (at band I) to 10 dB (at UHF) over TV receiver noise figures (thresholds) normally established by the (higher noise figure) TV RF tuner stage in the receiver.

Conversely, at band I and III frequencies (4 to 230 MHz), noise originating from man-made sources (such as power lines, combustion engine ignition systems) will very rarely be lower than the equivalent of a 2.0 DB masthead noise figure at an antenna receiving site. As a practical matter, masthead amplifier noise figures lower than 2.0 dB within bands I and III are not useful since the antenna system receives a constant background noise from manmade sources equivalent to a 2 dB noise figure: or more. Only in very remote, rural areas will 'background noise' from manmade (or cosmic) sources be so low as to make a masthead pre-amplifier with a noise figure below 2 dB useful.

At UHF (bands IV and V) frequencies, while it is possible to have background noise as great as 4 to 6 dB. it is equally possible to have antenna sites where the background noise is well below 2DB equivalency. Thus at bands IV and V. space-age GaAs-FET masthead amplifiers with noise figures in the 0.5 dB range can be beneficial.

Fortunately as technology has advanced, substances which generate less noise when used as amplifiers have been found. Gallium Arsenide or GaAs is one such substance. GaAs configured as a field-effect-transistor (FET) produces a GaAs-FET and with this as a starting point amplifier circuits which create noise figures in the 0.5 dB and under region are now commonplace through SHF (super high frequencies).

At frequencies below 300 MHz, while some GaAs-FET amplifiers are available, such uses are typically limited to very narrow bandwidth receiving systems where the noise floor can be reduced with selective receiver filtering. For a TV signal occupying a 6.105 MHz bandwidth, a GaAs-FET amplifier at 50 or even 200 MHz is much like installing a Chevy V8 in a VW Bug. You can never realize the potential of the GaAs-FET at these frequencies given the ambient noise levels of the VHF range in a 6.105 MHz bandwidth.

At frequencies above 500 MHz the antenna-induced ambient noise levels (ie., man-made and natural) have diminished to the point that installations in reasonably quiet locales can actually benefit from noise figures under 1 dB; even in a 6.105 MHz demodulated bandwidth.

Alas, whether you are attempting to use a 2 dB noise figure conventional masthead amplifier at bands I and III, or, a 0.5 dB noise figure GaAs-FET pre-amplifier at 600 MHz, there are very important procedures which must be followed.

a) Match Loss. The antenna in your system, whether a single yagi/log or a multiple-antenna-stacked array, has a nominal impedance. Your masthead amplifier also has a nominal impedance. The two must be the same (ie., matched) or the impedance mis-match will result in energy (signal voltage) loss in the antenna-to-masthead connection process.

1) Many consumer oriented antennas are 300 ohm. Virtually all properly designed masthead amplifiers are 75 ohms; input and output. The standard practice is to place a 300 ohm / 75 ohm (balanced to unbalanced) weatherproof (ie., outdoor) transformer between the antenna and the pre-amplifier.

Ask yourself how do you select your matching transformers? By their price? The packaging? Or, because they come from the same supplier as your antennas?

Most balun matching transformers are installed and seldom considered as potentially very destructive elements in an antenna system installation. Here's what you should be considering.

2) Baluns often use ferrite wound transformers to achieve the impedance adjustment between 300 and 75 ohms.

3) Especially at UHF, unbalance of the 300 ohm side is a common design flaw. When there is a bad match at the 300 ohm side of the transformer, the antenna you are connected to sees a mis-match which creates an undesirable effect known as standing waves (high VSWR) at the antenna output terminal. This mismatch reduces the transfer of energy from the 300 ohm antenna to the 75 ohm side of the matching transformer. It may also create coupling of signal voltage to the antenna support structure and the shield of the 75 ohm coaxial line. None of this is good; signal is lost (without hope of retrieval).

Let's hop to the bottom line. *An out-of-the-catalog matching transformer using ferrite winding cores will lose no less than 1 dB of signal at 600 MHz; as much as 2.* That's lost signal, as in gone forever. You can reduce this loss to less than 0.2 dB at 600 MHz by carefully sourcing the matching transformers you are forced to use in your systems.

A slightly harder problem to visualize is the physical placement of the masthead amplifier. We all know it is called 'masthead' because it goes on the mast at the head of the system. But how often does this become the bottom of the mast because you didn't think you were going to need/use a masthead, and then once you knew you needed one, well, it was far easier to insert it into the line at the roofline than at the actual antenna!

Here's the harder-to-visualize part.

Any signal loss, no matter how seemingly small, between the output connector on the antenna and the input connector on the masthead amplifier, is lost forever. You will never gain it back, no matter how much amplifier gain you stick in the system after the point of amplifier insertion. How's that true?

Isn't voltage to be lost, and re-gained, at will; with an amplifier? Voltage, yes. Except when we are dealing with a signal + noise to noise ratio (SNR), the signal voltage alone is not the determining factor in the quality of the customer's picture. SNR is a ratio, between the signal the noise. Unless carefully engineered, an amplifier raises the voltage (the 'S' in SNR) and at the same time increases the 'N' as well. Stay tuned.

The noise figure of a planned receiving system is established by the first of the system. We don't count the antenna as a stage but everything between the antenna output and the first active (voltage operated) amplifier is a stage. If we exit the (300 ohm) antenna terminals with a matching transformer and it has 2 dB conversion loss, and then go through what we would like

to think of as a short length of RG-6/U with 1 dB more loss before we plug into the active (masthead) amplifier, there is now 3 dB of signal loss between the antenna output terminals and the masthead input terminal (2 -|- 1 3).

If this is a band IV UHF system and a 0.5 dB noise figure GaAs-FET masthead amplifier has been installed, we might expect the system noise figure to be set at 0.5 dB by that 0.5 dB GaAs-FET pre-amplifier.

Wrong.

The 2 dB matching transformer loss plus the 1 dB makes this example system a 3 dB noise figure receiving system no matter what we do from the masthead amplifier onwards. In fact, the system would produce the same quality pictures with a 2 dB or even 3 dB noise figure masthead amplifier as it will with the 0.5 dB GaAs-FET unit! By not placing the masthead amplifier directly at the antenna system output terminal, you have degraded the system noise figure (ie., threshold of sensitivity) by all of the loss between the output of the antenna and the input to the masthead.

The math behind this valid statement is lengthy but the facts solid; that is why satellite dishes install the LNA (low noise amplifier) right into the feedhorn on the dish; to eliminate all loss between the feed and the LNA (masthead).

And needless to say if you have tried to improve the picture quality on a previously installed home system by tacking on a masthead amplifier at the back of the TV set after 20 or 30 meters of RG-6U between antenna and the TV set and wondered why the improvement was disappointing ... well, now you know.

Let's restate these very important points.

1) Impedance mismatch between the antenna output and the input to the masthead amplifier is lost energy never to be regained. How serious is this? Consider the 3 dB loss in our just-cited example. 3 dB is equivalent to cutting your antenna system in half; ie., the effective gain of your antenna just went down 50% because you gave away 3 dB between the antenna output and the masthead input. Pretty sloppy.

2) Any loss, whether due to impedance mismatch or because you have placed coaxial line between the antenna output and the masthead amp input, is signal lost forever. You cannot get it back in your all-important signal noise to noise equation: the one that counts when monitored on your customer's TV screen!

And this it-should-be-obvious-but additional point. When you have two or more separate antennas to be combined into a single downline (such as separate band I and III antennas, or, a VI-IF to a UHF antenna), what do you suppose happens when you follow the antenna-combiner with a masthead amplifier?

Nothing good, rest assured. If you are installing in an area where you have plenty of margin for error (and giving away signal), continue your unpure habits. But, if you are always fighting for the last dB of signal and routinely joining (combining) antennas before masthead amplifying, change your ways. Here's why.

A two-way splitter employed as a signal combiner joining dissimilar antennas does undesirable things to the impedance seen by the masthead amp; especially if the combiner is closely followed (a meter or less of cable) by the amp. The loss in the combiner is permanent loss never to be recovered. The combined-side that will suffer the most is usually the UHF antenna; normally it will be the weaker of the two (signal) sides (although it could be the VHF side or band III side when combining band I and III antennas). Mismatch effects vary quite unpredictably.

Certainly it is desirable to bring down a single transmission line to the TV set with all signals intact. The purist way of doing this is to:

1) Employ a masthead with two separate inputs; one specifically for UHF, one for VHF (examples: the Fringe Electronics UV1228 or Kingray MHW34T where gain is required at VHF and UHF; the Fringe Electronics WB22V or Kingray MHU34T where only UI-IF gain is required). This eliminates the combiner.

2) Or, although more expensive, employ two separate mastheads (one for each antenna) with a combiner following the mastheads that passes thru-power to both amplifiers, and a power supply capable of powering two mastheads.

Note: If you have plenty of signal to burn, or only require amplified signal because of

subsequent signal splitting/ distribution, skip the masthead altogether and install a multiple-output distribution amplifier inside the house, powered directly from AC mains.

Which brings us to masthead amplifier gain. How much is enough?

The real purpose of a masthead amplifier is to improve the signal + noise to noise ratio of the received signal(s). This happens only when the noise figure of the masthead is lower than the noise figure of the TV set to follow. and when the gain of the masthead is sufficient to override the noise figure of the TV set (VCR tuner). The computation of how much gain is enough involves taking the known noise figure of the TV tuner VCR tuner, the noise figure plus gain/loss of all subsequent stages (RFTF) in the receiver to the detector, and subtracting any losses such as the loss of the transmission line between the output of the masthead and the input to the tuner. It might require 30 minutes or so to calculate one situation. We can summarize for you.

20DB OF GAIN

This is almost always sufficient gain to establish the noise figure of the masthead (assuming you have not placed loss between the antenna output and the input to the masthead) as the noise figure of the receiving system. There is an exception to this generalized rule; UHF when you have substantial line losses between the output of the masthead and the input to the TV tuner.

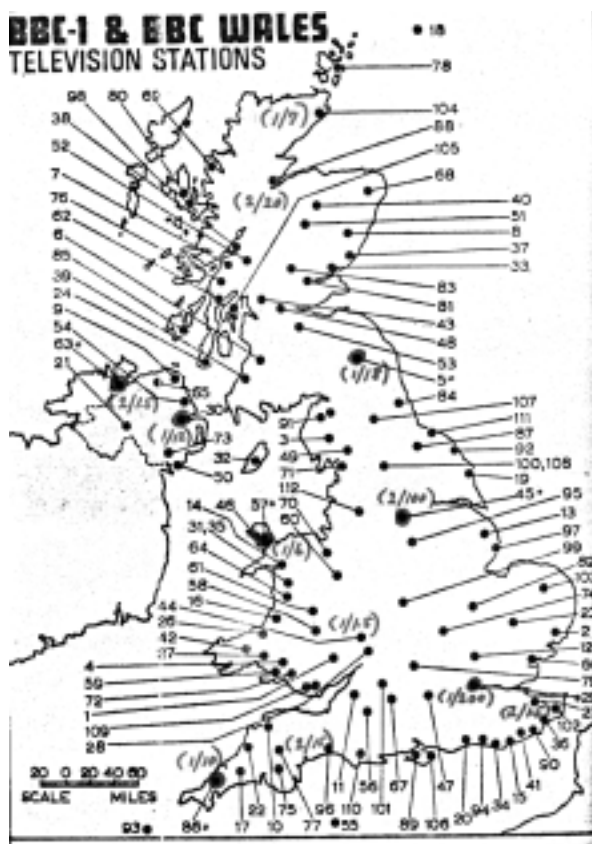
Those losses can be in the form of cable loss (10.4db per 100 metres at channel 40 when using 11 Foam series cable), splitter loss (at least 4 db – perhaps more- for each two-way splitter), or a combination of the two.

Generally speaking, the TV tuner has a noise figure. The masthead voltage gain needs to be no less than 3db greater than the noise figure of the TV tuner after losses between the masthead and the TV tuner have been subtracted.

Keep in mind the masthead voltage gain must be no less than 3db greater than the noise figure of the TV tuner after line and possible split losses between the two if you are to establish the noise figure of the masthead as the new system noise figure.

Warning! If your input signal(s) are strong, it is not advisable to use a masthead amplifier as a substitute for a distribution amplifier. The transistors chosen for masthead units are selected because of their low noise characteristics, not because of their signal handling capabilities. Using a masthead designed for pre-amplification in a medium to strong signal area (with two or more signals available through the masthead) can result in amplifier overload and cross modulation. Conversely, distribution amplifiers (typically offering two to eight bridge outputs) make poor substitutes for masthead amplifiers, lacking the necessary low noise figures and weak-signal amplifying circuits.

(to be continued)

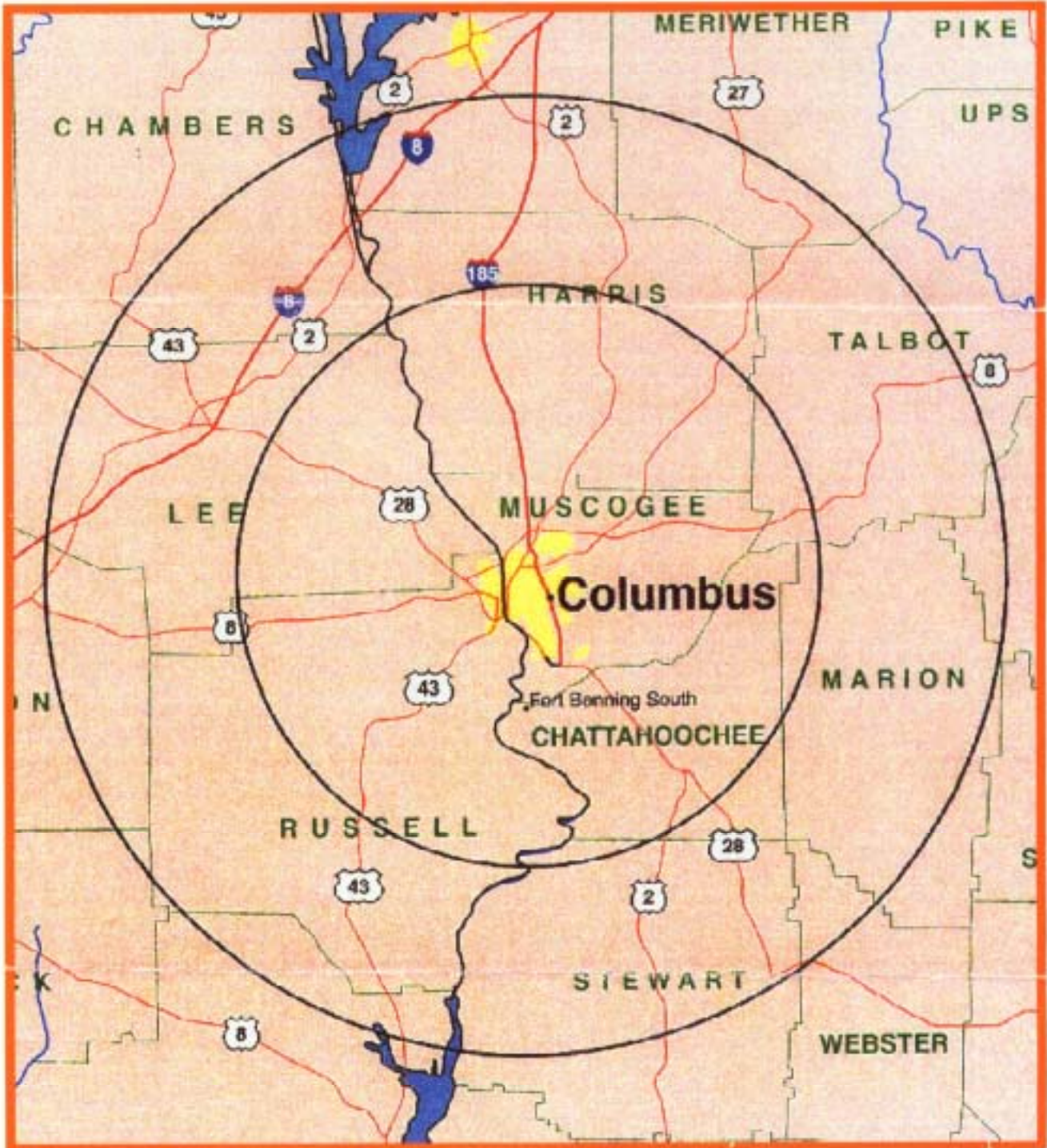


ONCE UPON A TIME...

There were actually VHF TV stations in the United Kingdom. Yes, there were! And many of these low band VHF stations were heard here in North America by TV DXers like WTFDAer Bill Grant, who supplied this map of VHF transmitters given to him by the BBC.

What happened to them? Well, they all got pushed to UHF because of interference problems and a super source of overseas TV DX disappeared! Sad, but true. But it was true, once upon a time.

COVERAGE MAP



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(Thanks to Dr. Bruce Elving for the coverage map.)

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Omaha, NE, July 30-August 1, 2004

Make plans now to attend the annual WTFDA convention, hosted this year by Matthew Sittel and Michael Hawk.

Our host location for the event is the Park Plaza Regency Lodge, located at 909 South 107th Avenue in Omaha, conveniently located one block east of the I-680 exit at Pacific Street. The hotel room rate for the convention is \$79/night for two doubles or one queen bed. This rate includes a complimentary hot breakfast with waffles made to order. All rooms feature a microwave, refrigerator, coffee maker, iron, in-room safe and radio with CD player. There is also a small business center with internet access. To make your reservations and receive the special rate, the hotel has asked that you call them directly at (402) 397-8000. *Be sure to mention WTFDA to get the \$79 rate; we have a block of rooms set aside for us at this rate!*

We have received permission from Park Plaza to set up antennas. Feel free to bring along your favorite DX equipment and try it out-hopefully we'll have some DX! Bring along video or audio tapes and photos of your DX to share; we'll have equipment set up to share your catches.

The registration fee for the convention is \$28, which includes the Saturday night banquet on-site at the Park Plaza. You can purchase additional banquet tickets for spouses or other guests at the rate of \$24 per additional meal.

If you plan on attending, please take a moment to fill out the form below and mail it along with check or money order for fees to **Matthew Sittel, 15013 Eureux St., Bellevue, NE 68123**. Registration deadline is June 30, 2004. If you have questions e-mail Matt at mcsittel@cox.net or Mike at thisisatest22@yahoo.com.

We hope to see YOU at WTFDA 2004 Omaha!

CONVENTION 2004 REGISTRATION FORM

Name :	_____				
Address:	_____				

E-mail:	_____				
	Fee	Number		Total	
Registration :	\$28	x	_____	=.	_____
Additional banquet tickets:	\$24	x	_____	=	_____
Total amount enclosed (check/money order, payable to Matthew Sittel): _____					

SIGN UP/Renewal form

Name _____

Address _____ Apt # _____

City _____ State/Prov _____ Zip _____

Country _____ Interests: TV () FM () 30-50() Weather()

email address _____

Sign me up/renew me for: 1 year () 2 years () More ()

Yearly dues \$24 (US), \$26 to (CANADA), \$10 (Electronic VUD)
(Students get a discounted rate of \$15 yearly for the paper VUD.)

Mail your dues to: WTFDA, P.O. Box 501, Somersville, CT USA 06072

Make your checks/money orders payable to: DAVE JANOWIAK

And *thanks* for your support of the WTFDA!

Return this form with your dues or make a copy of it and return that.

WTFDA BOARD OF DIRECTORS

Mike Bugaj, use the WTFDA Mailing address listed below	mbugaj@snet.net
Doug Smith, 1385 Old Clarksville Pike, Pleasant View, TN 37146-8098	w9wi@w9wi.com
Greg Coniglio, 11825 Genesee St., Alden, NY 14004	wgrc@rochester.rr.com
Bruce Hall, 5 Stirton Ave., Brantford, ON N3T 1E2	dbruceaa@hotmail.com
Dave Janowiak, 5023 S. 65 th St., Greenfield, WI 53220	tvdxr@hotmail.com

THE MAILBOX and all general club correspondence:

Mike Bugaj at WTFDA, PO Box 501, Somersville, CT 06072	mbugaj@snet.net
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SATELLITE NEWS

George Jensen, 4604 Antana Ave., Baltimore, MD 20206-4220	scisatman@aol.com
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TV NEWS

Doug Smith, 1385 Old Clarksville Pike, Pleasant View, TN 37146-8098	w9wi@w9wi.com
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FM NEWS

Adam Rivers, 37 Carlton St., Chicopee, MA 01020	redsoxr417@hotmail.com
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PHOTO NEWS

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

Matt Sittel, 15013 Eureux Circle, Bellevue, NE 68123	mcsittel@cox.net
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WESTERN TV DX

Victor Frank, 12450 Skyline Blvd., Woodside, CA 94062-4554	victor.frank@sri.com
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SOUTHERN FM

John Zondlo, 4009 Driftwood Cir., Yukon, OK 73099	sfm@fmdxweb.com
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NORTHERN FM

Keith McGinnis, 387 Shirley Street, Winthrop, MA 02152	longwave@comcast.net
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Fred Nordquist, 7945 Boxford Road, Clay, NY 13041	nordquis@twcny.rr.com
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WEATHER DX

Jason Koralja, Surf City, NJ	jklbi01@hotmail.com
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<u>BACK ISSUES</u> Dave Nieman, PO Box 17, Clarence, NY 14031-0017	nieman@localnet.com
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We have a large selection available for \$1.00 each. Email or write Dave for availability.

<u>WEBSITE</u> Tim McVey Webmaster http://www.anarc.org/wtfda/	tkmcvey@erols.com
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Please Remember to make your renewal checks payable to Dave Janowiak
Checks made payable to WTFDA may be returned and your renewal may be delayed.