VHF-UHF DIGEST

The Official Publication of the Worldwide TV-FM DX Association

MAY 2012

The Magazine for TV and FM DXers

Photo by Paul Mitschler

INSIDE!
EVERYTHING YOU WANTED TO KNOW ABOUT VHF PROPAGATION

Visit Us At www.wtfda.org

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, KEITH McGINNIS AND MIKE BUGAJ.

Editor and publisher: **Mike Bugaj**
Treasurer: **Keith McGinnis** wtfda.org Webmaster: **Tim McVey**
wtfda.info Site Administrator: **Chris Cervantez**
Editorial Staff: **Jeff Kruszka, Keith McGinnis, Fred Nordquist, Nick Langan, Doug Smith, Peter Baskind, Bill Hale and John Zondlo,**
Our website: **www.wtfda.org;** Our forums: **www.wtfda.info**

The Mailbox

P.O. Box 501 Somersville, CT 06072
Mike Bugaj - Enfield, CT mikeb@wtfda.org

MAY 2012

Welcome to the May VUD. For DXers in the Northern US and Canada, the best thing about the month of April is that May follows it. April is a teaser. The weather can be warm like May leading us to think that we'll turn on the TV to see some Es or tropo, but it doesn't happen. Day after day goes by without a trace of anything. Weather doesn't co-operate. Even the first half of May can be like that. But DX has to kick in sometime, so let's just wait and see. In the meantime, make sure your gear is ready and in shape for when it finally happens.

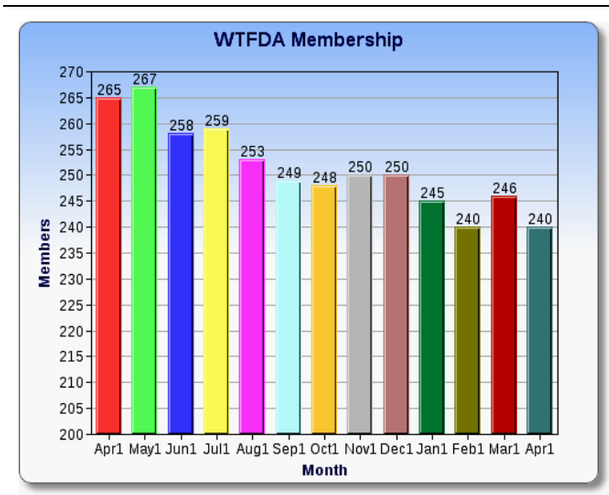
Renewals received during the period of 2/18 through 3/12 from **Chuck Rippel**(VA), **William Higgs** (CA), **Gunter Lorenz** (GER), **Glen Hale** (IN), **John Cereghin** (DE), **Ken Simon** (FL)(rejoin), **Richard Porter** (IL), **Rich Rose** (MI), **Carlon Howington** (FL), **Frank Merrill** (IL), **Allan Dunn** (MA), **Harry Hayes** (PA), **Robert Grant** (MI), **Paul Crego** (NY), **Frank Drobny** (CA) and **Jeff Wolf** (PA). Many thanks to all of you for supporting the WTFDA.

From **Calvin Glover: "**I chuckled when I read, in the latest edition of the digest, "Over the Air TV Catches Second Wind." It made me think of a conversation that I had with a Verizon customer service rep a few months ago. The polite young lady was intent on pitching the company's FIOS video service. She started off by asking me how much I paid for TV. When I responded "nothing," she was startled and asked "how is that possible?" Clearly she must have thought that I had to be pilfering cable.

She seemed even more astonished when I explained to her that it was possible to watch free TV that came in "over the air." I assured her that it was possible to perform this miracle legally almost anywhere there was a station. All that you needed, I assured her, was a set of rabbit ears. I decided to stop at this point because I didn't want to give a mini-course in antenna design.

I don't think that this service rep was atypical; nor was she unintelligent. It's very probable that majority of young people today think that the only way TV comes in is over the cable. That's the only world that they've ever known. I, for one, am very happy with the price that I'm currently paying for TV. And the new digital pictures are amazingly clear, even though ATSC signals can get a little cranky at times."

A short note from **Adam Ebel** says "I like the E-VUD better than the printed version, and it's in color too. Also I can keep it on my computer and not lost in my clutter with the technical books and other magazines. Thanks."



Remember that old 1950s Sci-Fi movie called "Mars Needs Women?" Well, WTFDA needs members; women, men, young people interested in ham radio/TV Dxing, people who think HD radio is cool and want to DX it.

Since January 1st we have had just three people join the WTFDA. In previous years we had around 20-25 people join every year but this time it's not even close. You and I know that we can't go on this way. WTFDA will stagnate, wither and cease to be relevant.

Many of you frequent other lists and boards where non-members DX and report their findings. I can think of three places: ABDX, the tvfmskiplog and the amfmtvdx reflector, and oh yes, the WTFDA Forums. Two of these lists feature unaffiliated TV and FM Dxers from Florida, the Gulf coast and the Pacific Northwest. These are the people we will have to rely on to keep the club going because these are the places that still aren't full of IBOC and translators and LPFMs. These are the places where people can still discover DXing.

So I'm asking you to talk to these people and try to convince them to try the WTFDA. I'd give them a deal to come aboard. $10/year is an incentive in itself but I'd give them 6 months for $5.00 just to try us out. As a matter of fact, I'd do almost anything within reason to get them to come aboard. Talk to them. If you think it won't work, I guarantee you it won't work if you don't even try.

You can plainly see the graph on the other column. Yes we've lost people when we went to eVUD distribution. We loose people every year. But we've always managed to replace them and keep even, but not now. You know the consequences. Help WTFDA.

TV News

Douglas E. Smith
1389 Old Clarksville Pike
Pleasant View, TN
37146-8098
w9wi@w9wi.com
http://www.w9wi.com

May 2012

Abbreviations:

AF	Applied For (a new station)	NW	New station on the air
Aux	Auxiliary (backup) transmitter	PA	Proposed Amendment
CC	Callsign change	PC	Power (and/or tower height) change on the air
CL	City-of-license change	PG	Power change granted
CX	Canceled	PR	Power change requested
DC	Converted to DTV	RA	Returns to the air
DCC	Digital Companion Channel	QC	Channel (frequency) change on the air
NS DCC	Granted flash-cut to DTV	QG	Channel change granted
DE	License/permit deleted	QR	Channel change requested
DR	Requests flash-cut to DTV	RE	Reinstated (previously-dismissed app.)
FC	Programming (format) change	ROA	Request of Applicant
FTP	Failure to Prosecute	SI	Off the air (silent)
GA	Granted amendment (to table of channel allotments)	STA	Special Temporary Authority
LC	License to Cover	XC	Transmitter site changed
MX	Mutually Exclusive	XG	Transmitter site change granted
NDA	Non-directional antenna	XR	Transmitter site change requested
NS	Permit granted for new station	lpdtv	Low Power Digital TV
DG	Granted conversion to DTV	DRT	Digital Replacement Translator

News:

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

Mexico

Baja California Norte

Tijuana	*6*	*XETV*	*FC to Canal 5 XHGC*
Tijuana	23	XETV-DT	Adds Canal 5 XHGC on 23.2. (23.1 remains CW in English)
Tijuana	*45*	*XHBJ-TV*	*FC to Galavision XEQ*

Canada

British Columbia

Kelowna	27	CHBC-DT	DR from 2, 32.6kw/510m
Penticton	30, 32	CHKL-1, CHBC-1	DR from 10/ 13, 3kw/365m
Vernon	20, 22	CHBC-2, CHKL-2	DR from 7, 3kw/185m

Ontario

Ottawa	33	CBOFT-DT	QG from 9, 480kw/398m

Puerto Rico

Bayamon	44	W44CK	DC 3kw, 18-17-38/ 66-10-01
Mayaguez	32	W32DZ	PR>15kw, 18-19-07/ 67-10-48
Ponce	2	W02CS-D	PR>2.9kw, 18-09-15/ 66-33-15; PG
Yauco	36	W36EP	NS 15kw, 18-02-37/ 66-50-25

USA

Alabama

Birmingham	20	W20DE-D	DC from W34BI, 10kw, 33-27-37/ 86-51-07
Huntsville	48	WAFF	QC from 49, 48kw/576m
Montgomery	31	WNCF	PG>720kw/473 32-08-58/ 86-46-51
Mt Cheaha	7	WCIQ	PC>47kw/593
Troy	40	W40DI	NS 15kw, 32-04-05/ 85-56-41

Alaska

Dillingham	16	NEW-lpdtv	AF 2.5kw, 59-02-38/ 158-29-18 dismissed; DCC for K05KF
Ketchikan	13	KUBD	NW 413w/-71m
Sitka	7	KTNL-TV	QC from 2, 350w

Arizona

Bullhead City	3	K02HR	DR from 2, 21w; previous application at 29w dismissed
Payson	22	KPSN-LP	DR 3.3kw; DG
Phoenix	11	KDTP-LD	AF 3kw, 33-20-01/ 112-03-45; DCC for analog 58
Prescott	30	K30JD	DR from K09KV, 2.1kw, 34-29-25/ 112-32-00; DG
Window Rock	45	K45LU-D	PR<2.52kw

Yuma	17	K17LM	DG from K52EG, 6.15kw
Arkansas			
El Dorado	18	K18AB	DC 2.54kw
Sheridan	47	KMYA-LD	DG 15kw, 34-47-56/ 92-29-44
California			
Bishop	20	KVME-	CC from KBBC-
Cedarville	22	NEW-lpdtv	AF 104w; DCC for K13IU
Cedarville	24	K51KJ	DR from 51, 100w, 41-38-13/ 120-05-27
Greenfield	20	KSCZ-LD	XC 37-11-05/ 121-33-13
Indio	6	KKKK-CA	CC from K06MB
Lakeshore	35	K35LB-D	NW 1.32kw, 40-54-52/ 122-26-42
Long Valley Region	45	K60BR	DR from 60, 100w, 37-36-18/ 118-20-32
Los Angeles	36	KNBC	AF 43.5kw/ 424m, 34-11-48/ 118-15-30 (aux)
Lucerne Valley	16	K16KH	NS 2w; DCC for K19BT
Mariposa	34	K34MK	NS 15kw, 37-39-46/ 120-27-34; DCC for K27GZ
Ridgecrest	42	K59AO	DC from 59, 250w, 35-38-56/ 117-40-17
Sacramento	6	KEFM-LP	PC>3kw, 39-12-21/ 121-49-10
San Jose	50	KQEH	PC>310m
Santa Barbara	15	K15JE	NS 15kw, 34-31-28/ 119-57-35
Santa Barbara	30	K30MV	NS 8.1kw, 34-31-28/ 119-57-35
Santa Maria	25	KLFA-LP	DC 15kw
Santa Rosa	2	K02QO	PG>3kw, 38-40-09/ 122-37-53
Santa Rosa	3	K03IC	PG<100w, 38-30-31/ 122-39-43
Yreka	30	K30JS-D	PR>3kw
Colorado			
Aspen	*40*	*KCXP-LP*	*XG 39-13-10/ 106-51-33*
Castle Rock	45	KETD	QG from 46, 1000kw/348m, 39-40-17/ 105-13-06
Colorado Springs	38	KJCS-LP	DC 5.3kw
Colorado Springs	43	K43CG	DR 15kw; DG
Colorado Springs	46	KTLO-LD	DG from 49, 15kw
Glenwood Springs	23	KREG-TV	NW 16.1kw/ 771m
Jacks Cabin	24	K24KR-D	NW 108w, 38-42-47/ 106-48-36
La Junta	35	K35DZ	DR 352w; DG
Lamar	42	K42EA	DR 260w; DG
Las Animas	40	K40DP	DR 348w; DG
Loveland	33	K33MG	DG from 48, 15kw, 40-09-27/ 105-01-00
Paonia	9	KKCO - 0308AAM	NS 7w, 38-52-28/ 107-39-40; DRT for ch. 12 Grand Junction
Pueblo	36	K48CU	DR from 48, 915w, 38-06-22/ 104-29-18 (displaced by KVSN)
Rocky Ford	39	K39ED	DR 353w; DG
Vallecito	13	K13PJ	NS 7w, 37-21-33/ 107-33-11; DCC for K02ET
Woodland Park	33	K33EW	DR 352w; DG
District of Columbia			
Washington	48	WRC-TV	NS 291kw/ 159m (aux); NW
Florida			
Fort Myers	31	WGCU	PR>311kw/274 PG
Key West	15	W15DL	NS 100w, 24-33-22/ 81-48-11
Key West	19	WEYW-LP	DR 5kw; DG
Lake City	22	W22EF	PG<1kw, 29-48-42/ 82-42-34
Orlando	38	WHDO-CA	DR 15kw, 28-22-01/ 81-23-13; DG
Panama City	17	WEWA-	DC 14kw
Panama C.	38	WFSG	PC>158kw/133
Panama City	44	W44DL-D	PG 15kw, 30-10-20/ 85-40-20
Sarasota	39	WLWN-	DG 5kw
Sarasota	39	WLWN-	PR<8.5kw
Georgia			
Athens	14	WAGC-LD	NS 8.2kw, 33-52-02/ 83-49-44; DCC for ch. 50
Atlanta	41	WATC-	PC>330kw
Toccoa	24	WUGA-TV	PG 100kw/ 395m, 34-12-28/ 83-37-48
Waycross	17	W17DQ	NS 15kw, 30-57-30/ 82-01-20; DCC for W45CU
Hawaii			
Honolulu	11	KHET	PR>28.7kw dismissed
Lihue	17	K17LK	DG from K69BZ, 250w
Idaho			
Boise	26	K26LT	PG 15kw, 43-32-58/ 116-24-38; CL from Lubbock, Texas
Boise	28	KYUU-LD	AF 8.8kw, 43-45-21/ 116-05-54; DCC for analog 35
Illinois			
Arlington Heights	24	NEW-lpdtv	AF 15kw, 41-52-44/ 87-38-08; DCC for W22AJ; site is on the Sears Tower
Indiana			
Evansville	20	WYYW-LD	NW 15kw, 37-59-13/ 87-16-11; DCC for analog 41
Indianapolis	13	WTHR	PC>42.1kw
Indianapolis	45	WXIN	PC>1000kw
South Bend	25	WCWW-	DG 14.9kw
South Bend	34	WMYS-	DG 15kw
Iowa			
Lansing	39	K39LW	QG from K38LE; QC
Sioux City	6	K06QG-D	PG 300w, 42-35-12/ 96-13-19; CL from Brownwood, Tex
Kansas			
Lawrence	39	KGKC-LD	QG from 10, 5kw, 39-02-31/ 95-23-14; CL from Grantville; XR 39-02-17/

			95-23-53; XG
Wichita	24	KGPT-LD	NS 15kw, 37-48-01/ 97-31-29; DCC for analog 49
Wichita	30	KSMI-LD	DG from 51, 15kw, 37-48-01/ 97-31-29
Louisiana			
Monroe	22	KMNO-LP	CX
New Orleans	18	WBXN-	DR 4kw
Maine			
Bangor	5	W05DF	NS 300w, 44-48-14/ 68-48-16
Lincoln	39, 41	W39DT, W41EG	NS 1.5kw, 45-20-45/ 68-30-32
Orono	24, 26, 49	W24EE, W26EG, W49EC	NS 1.5kw, 44-51-42/ 68-41-34
Portland	32	W32CA	DG 15kw, 43-51-06/ 70-19-39
Maryland			
Salisbury	7	WNGA-LD	PR<100w, 38-55-38/ 75-25-46
Salisbury	7	WNGA-LP	DC 3kw, 38-35-19/ 75-18-33
Massachusetts			
Marlborough	27	WUTF-DT	PG>400kw/356
Michigan			
Alpena	33	NEW-lpdtv	AF 1kw, 44-45-46/ 83-19-13; DCC for W18BT
Battle Creek	14	WOBC-CA	DC 277w
Detroit	40	WLPC-LD	PR>15kw
Flint	20	WHNE-LD	QG from 26
Onondaga	10	WILX-TV	PC>30kw
Minnesota			
Albany	27, 33, 36, 46	K27LY, K33MH, K36MF, K46LU	NS 1kw, 45-38-00/ 94-35-14
Bemidji	16	NEW-lpdtv	AF 15kw, 47-10-18/ 94-48-01; DCC for K42FH
Sauk Centre	15, 25	K15JF, K25NH	NS 1kw, 45-48-08/ 95-35-10
St. Cloud	40	KPXM-TV	PR>433m, 45-03-44/ 93-08-21; PG
St. James	20	K20LP	NS 1.3kw; DCC for K42AV
St. James	38	K38MY	NW 1.9kw, 44-06-25/ 94-35-44
Walker	24	K24KT	DG from K51KE, 3.5kw
Mississippi			
Grenada	13	W13CS	DC 300w, 33-46-45/ 89-49-33
Missouri			
Anderson	44	K44LG	DR from K53IS, 300w; DG
Joplin	33	KDSI-LD	NS 15kw, 37-04-37/ 94-32-15; DCC for analog ch. 5
Monett	38	K38DD	DR 336w; DG
Neosho	32	KCLG-LD	DG 342w
Osage Beach	49	KRBK	PC, see text
St. Joseph	26	KNPN-LD	CC from K26LV-
St. Louis	25	K25NG-D	NS 15kw, 38-37-55/ 90-13-59
Montana			
Bull Lake Valley	7	NEW-lpdtv	AF 35w, 48-29-07/ 115-48-16; DCC for K09KE
Conrad	16, 18, 23, 25	K16KB, K18KM, K23LX, K25MZ	NW 373w, 48-11-13/ 112-01-15
Kalispell	15	K15GP	PR>1.26kw; PC
Kalispell	26	K26DD	DC 15kw
Kalispell	34	K34MJ	NS 4.6kw, 48-10-34/ 114-20-57
Livingston	41	K41MZ	NS 550w; DCC for K60BE
Scobey	3, 13	K03DP, K13MA	DG 30w/ 38w
Sweetgrass	25, 30	K25NJ, K30MW	NS 75w; DCC for K61BZ & K65DK
White Sulphur Spring	6, 7, 9, 11	K06NV, K07NU, K09MH, K11MP	DR 60w/ 90w/ 90w/ 90w, 46-27-44/ 110-51-22
White Sulphur Springs	8	K08LI	PR>90w
White Water	34	K34DN	DC 98w
Whitefish	38	K38OE	NS 12kw, 48-00-51/ 114-22-07
Wynot	7, 11, 13	K07IB, K11GX, K13DU	DC 9w, 48-45-38/ 107-45-05
Nebraska			
Grand Island	21, 23	K21LX, K23MC	NS 15kw, 40-53-13/ 98-02-23
Grand Island	50	K50MT-D	DG from K56FC, 5.8kw
Norfolk	29	K29KK	NS 15kw, 41-42-51/ 97-02-39; DCC for K21HS
Ogallala	26	K26CV	DG 15kw, 41-06-18/ 101-15-06
Nevada			
Golconda	33	K33GB	DC 190w
Laughlin	28	K28EU	DC 1kw
Orovada	29, 32	K29KJ, K32KQ	NW 200w, 41-28-28/ 118-03-27
Overton	*6*	*KGHD-LP*	*XG 36-19-24/ 114-55-49*
Panaca	17	K17LL	DG from K55AO, 4kw, 37-27-36/ 114-27-58
Reno	12	K12RB	PG 3kw, 39-30-44/ 119-42-47; CL from Beeville, Texas
Reno	44	KRXI-TV	PG>950kw
Round Mountain	25	K25KR-D	XR 38-38-23/ 116-59-55
New Jersey			
Morristown	17	WNMF-	CC from WLIG-
Trenton	49	W49CW-	CX
New Mexico			
Albuquerque	43	K43HW	DR 15kw, 35-12-54/ 106-27-02
Albuquerque	48	KTFA-LP	DR 15kw
Carlsbad	35	NEW-lpdtv	AF 1.2kw, 32-28-37/ 104-31-28; DCC for K36GD
Farmington	19	K19CM	DR 1kw
Roswell	50	K50IA	DR 15kw
New York			
Buffalo	49	WNYO-TV	granted non-DA
Elmira	46	W46EZ	NS 15kw, 42-08-31/

			77-04-40
Mineola	45	WMUN-	CC from WLNY-
New York	3	WBQM-	QG from 50, 3kw
New York	9	WYXN-LD	CC from WRNN-
New York	44	WNYW	PG 500kw/ 424m
New York	46	WMBQ-	DC 15kw
New York	50	WBQM-	PR>14.5kw
Plainview	17	WLIG-LP	CC from W17CR
Plattsburgh	38	WCFE-DT	PR>200kw dismissed
Utica	28	WVVC-LD	QR from 33, 14kw dismissed
North Carolina			
Asheville	22	W22EI	DG from W41BQ, 2.5kw
Asheville	23	W23BQ	DR 7kw; DG
Bryson City	40	W69CN	DC from 69, 3kw
Cherokee	*10*	*W10AL*	*XG 35-29-45/ 83-20-04*
Greenville	15	NEW-lpdtv	AF 1.2kw, 35-50-13/ 77-04-57; DCC for W44CN
Hendersonville	31	W31AZ	DR 4kw (reinstated expired permit)
Lumberton	47	WPEM-LP	DR 5kw; DG
Raleigh	68	WAUG-LP	CC from W68BK
Williamston	22	WFTB-LD	DG from 55, 15kw, 35-53-54/ 76-59-10
Wilmington	14	W14EC	NS 3kw, 34-14-38/ 78-07-23
North Dakota			
Bismarck	28	NEW-lpdtv	AF 15kw; DCC for K46DY
Fargo	35	K35KD	DR 15kw
Ohio			
Bucyrus	28	WMNO-CD	DG from 22, 15kw, 40-35-20/ 83-07-50
Marietta	22	WVEX-LP	DR 15kw, 39-21-00/ 81-33-56
Marion	28	WMNO-CA	DR from 22, 15kw, 40-35-20/ 83-07-50; CL from Bucyrus
Toledo	48	WMNT-	DR 15kw
Oklahoma			
Broken Bow	28	K28DJ	DC 380w
Lawton	38	K38GL	DC 7.31kw, 34-36-27/ 98-16-26
Tulsa	23	K23MD	NS 15kw, 35-58-08/ 95-36-55; DCC for K25GJ
Oregon			
Bend	29	NEW-lpdtv	AF 800w, 44-16-50/ 121-32-13; DCC for K33AG
Bend	43	KUBN-LP	DR 650w, 44-34-45/ 121-09-09 dismissed; refiled without site change, granted, and on the air
Camas Valley	23	K23ME	NS 500w, 43-00-06/ 123-46-32; DCC for K21AI
Canyonville	43	K43DI	DR 132w
Cave Jctn.	7	K07PZ	DR 28w; DG
La Pine	9	K09YE	DG 300w
Mapleton	21, 25	K21LY, K25NI	NS 450w; DCC for K03CQ & K05DF
Midland	19	K19HH-D	PR>3kw
Milton	50	K50FX	DC 1.2kw
Phoenix	47	K47LD-D	PR>3kw
Port Orford	43	K43NZ	NS 500w; DCC for K14GT
Portland	47	KUNP-LP	DC 15kw
Prineville	35	K35LD	DR 1kw
Roseburg	18	KTVC	PR<1.68kw/ 35m dismissed
Squaw Valley	13	K13MI	DR 123w, 42-23-51/ 124-21-51; DG
Squaw Valley	22	K22LB	NS 500w, 42-23-51/ 124-21-52; DCC for K02IQ
The Dalles	18	K18HH	DR 1kw
The Dalles	25	K25KS	DC 2.4kw
The Dalles	31	K31HZ	PG>2.06kw
Tillamook	43	K43EJ	DR 1kw
Pennsylvania			
Gettysburg	31	WGAL - 0824ADR	NS 15kw, 39-57-40/ 77-28-32; DRT for ch. 8 Lancaster
Indiana	49	WLLS-LP	CX ROA
Philadelphia	38	WPHA-CD	XG 40-02-30/ 75-14-11; XC
Philadelphia	42	WTXF-TV	PG>620kw
South Carolina			
Beaufort	21, 49	NEW-lpdtv	AF 12kw, 32-33-21/ 80-17-09; DCC for W19CH
Columbia	50	WKDC-LP	DC 15kw
Florence	14	W14EB	NS 15kw, 34-04-57/ 79-37-20
Myrtle Beach	17	W34CQ	QR from 34, 15kw, 33-35-45/ 79-03-11
South Dakota			
Aberdeen	39	K39CZ	DR 2.28kw
Brookings	50	K50DG-D	DG 4.5kw
Pierre	14	K14IO-D	DG 1.6kw
Wagner	8	K08PM	NS 30w, 43-11-21/ 98-04-16 (SDPB)
Watertown	32	K32DK	DR 2.28kw, 44-51-56/ 97-06-21
Tennessee			
Chattanooga	18	W26BE	DC from 26, 10.24kw
Jellico	23	WPXK-TV	PR>1000kw/ 529m, 36-00-13/ 83-56-34; PG
Knoxville	32	WEEE-LP	DR 3kw, 35-57-46/ 84-01-23; DG
Nashville	5	WTVF - 0322ADY	AF 3kw, DRT for ch. 25; NS
Texas			
Beaumont	*9*	*KEBQ-LP*	*XC 30-04-51/ 94-05-59*
Calvert	38	K38OD	NS 15kw, 30-56-23/ 96-35-06; DCC for K47ED
Denison	23	K23LZ	PG 15kw, 33-59-23/ 96-23-45
Fort Worth	9	KFWD	PR>55kw/546, 32-35-19/ 96-58-05; PG
Houston	28	KUGB-CD	PG>15kw
Kingsville	48	K48LL-D	NW 15kw, 27-40-10/ 97-54-59
Lubbock	42	K42LB	PG 15kw, 33-31-04/ 101-51-23; CL from Wichita Falls
McAllen	44	KNUC-LD	DG from 69, 15kw, 26-06-01/

			97-50-21
Midland	21	KMDF-LP	CC from K22IZ
Odessa	38	KPBT-TV	PG>85m, 31-53-50/ 102-20-14
Sherman	13	K13HI	PG 3kw, 34-01-58/ 96-48-00
Tyler	50	K50MU	DG 10kw, 32-32-23/ 95-13-11; CL from Charlottesville, Va.
Uvalde	42	NEW-lpdtv	AF 1.5kw, 29-31-54/ 99-44-39; DCC for K15BV
Wichita Falls	32	K32KT	PG 15kw, 33-54-05/ 98-32-21

Utah

Blanding	36, 38, 42, 43, 44, 45, 46	K36AK, K38AJ, K42AD, K43MD, K44AG, K45GM, K46AF	DC 105w
Juab	18	K18GX	DC 300w; CL from Levan
Vernal	31	K31JL-D	PG>170w

Virginia

Staunton	11	WVPT	PC>10kw

Washington

Ardenvoir	8, 10, 12	K08AX, K10BB, K12BF	DG
Chelan Butte	3, 5	K03DI, KCEM-LD	DG
Entiat	9, 11, 13	K09BJ, K11BI, K13BI	DG
Grays River	38	K38GS	DR 1kw
Orondo	8, 10, 12	K08BA, K10BA, K12BE	DR, 47-39-36/ 120-11-37; DG
Pullman	10	KWSU-	PG>23kw
Richland	31	K54DU	DC from 54, 6.01kw, 46-14-04/ 119-19-13
Sunnyside	13	K13WP	DG 3kw
Yakima	38	NEW-lpdtv	AF 6.8kw; DCC for K49GF
Yakima	49	K49GF	DR 15kw dismissed

West Virginia

Clarksburg	22	W22CY	DR 1kw; DG
Clarksburg	30	W30CH	DR
Elkins	31	W31CQ	DR 1kw
Parkersburg	36	W36ER	NS 15kw, 38-58-42/ 81-43-46; DCC for W45BW
Parkersburg	49	WTAP-TV	NW 315kw/ 197m

Wisconsin

Eau Claire	38	WEAU-TV	QC from 13, 1000kw/616m
Milwaukee	21	WMKE-CA	DR from 7, 15kw, 43-05-46/ 87-54-15
Milwaukee	24	WMLW-	DR 15kw
Milwaukee	25	WCGV-	PC>1000kw
Wausau	7	WSAW-	PC>72kw

Wyoming

Casper	27	K27LZ	NS 3.3kw, 42-44-26/ 106-21-34; DCC for 10560
Crowheart	18	K18JJ-D	NW 900w, 43-08-06/ 108-54-59 (KCWC)
Freedom	*25*	*K25NE*	*QG from K66DU*
Meeteetse	21	K21JU	DG from K69CS, 1.34kw, 44-12-44/ 108-51-27; DC
Sheridan	26	K26LW	DG from K55BL, 1.43kw

Thanks to Dennis Smith for information appearing elsewhere in this column.

Three new Distributed Transmission Systems (DTS) have been approved.

The two in Virginia are co-owned and are already operating under Special Temporary Authority:

WVPY-21 Front Royal:

DTS1	100kw/400m Front Royal	38-57-36/78-19-52
DTS2	100w/175m Fulks Run	38-36-31/78-54-07
DTS3	98w/580m Luray	38-36-05/78-37-58
DTS4	39w/637m Ruckersville	38-28-43/78-24-58

WVPT-11 Staunton:

DTS1	10kw/689m Staunton	38-09-54/79-18-51
DTS2	100w/333m Charlottesville	37-59-00/78-29-02
DTS3	8w/470m Monterey	38-20-39/79-35-47

WUNF-25 Asheville, NC:

DTS1	125kw/816m (existing Asheville site)	35-25-32/82-45-25
DTS2	1.5kw/181m Cherokee Indian Reservation	35-28-24/83-19-22

A fourth DTS has gone on the air in southwest Missouri:

KRBK-49 Osage Beach, MO:

DTS1	92.3kw/275m Eldridge (KJEL 103.7)	37-49-10/92-44-52
DTS2	42.9kw/136m Polk	37-43-26/93-16-32
DTS3	170.9kw/192 Springfield (KTOZ-FM 95.5)	37-13-25/93-14-30
DTS4	88.8kw/104m Stockton (K252EF-98.3)	37-45-17/93-50-07
DTS5	43.7kw/119m Warsaw	38-14-17/93-19-06

And, an application for a DTS to serve Washington, DC has been *dismissed*:

WWPX-12 Martinsburg, WV:

DTS1	23kw/314m Martinsburg (existing site)	39-27-27/78-03-52
DTS2	100w/115m Washington DC, WJLA-7/ WUSA-9/ WETA-26/ WHUT-32 tower	38-57-01/77-04-48

TV NEWS CONTINUES ON PAGE 31

FM NEWS

BILL HALE
6124 Roaring Springs Drive, N. Richland Hills, TX 76180
FMnews@wtfda.org

INDEX OF ABBREVIATIONS

MAY 2012

APP: application
APP Mod: Change to an already submitted application
Class: FM license class
CP: construction permit (authority to broadcast with facilities noted)
CP Mod: change to an already granted CP
DA: directional antenna
FF: French language
$: Stereo
XL: Transmitter Location
[ ]: Calls in brackets signifies assumed or applied-for

Note: antenna heights are HAAT except where noted

— CANADA —

— CALL LETTER CHANGES —

			Old Call	New Call
SK	Fort Saskatchewan	107.9	CP	CKFT-FM

— FORMAT and SLOGAN CHANGES —

AB	Plamondon	92.1	CHPL-FM	Signs on with a Community/Variety format (FF)
ON	Kemptville	97.5	CKVV-FM	Becomes *Starr FM*
SK	Marcelin	104.3	CICN-FM	Signs on with an Aboriginal/Variety format for 5-1/2 hours per day, and the remaining 18-1/2 hours are // CJLR-FM 89.9 La Ronge

— TECHNICAL CHANGES —

				Now on the air:
AB	Plamondon	92.1	CHPL-FM	1.215 kw/128 m, 54-49-24/112-19-08; Class A; $
SK	Marcelin	104.3	CICN-FM	30 w-V/12 m, 53-00-15/106-52-36; Class LP; $

— TECHNICAL CHANGES —

				CP granted for:
ON	Cornwall	92.1	CHOD-FM	>60 kw/>107 m, DA, XL to 45-10-33/74-31-38; Class C1 (from B)

— TECHNICAL CHANGES —

GRANTS FOR NEW STATIONS

				CP granted for:
BC	Kamloops	94.1	[CKYK-FM]	4.75 kw/124 m, 50-40-15/120-23-55; Class B; Mono
ON	Uxbridge	105.5	CP	900 w/140 m, DA, 44-04-28/79-09-53; Class A; $; will be Classic Hits

— TECHNICAL CHANGES —

— APPLICATIONS FROM EXISTING/PROPOSED FACILITIES —

				Applies for:
ON	Windsor	99.1	CJAM-FM	> 2.084 kw/> 51 m,

— DISMISSALS —

NB	Bathurst	96.5	-------	Application rejected because of the applicant's apparent misunderstanding of what a 'community radio station' should entail
QC	Chandler	96.3	CFMV-FM	Application to add a low-power FM transmitter in Percé to rebroadcast the programming of CFMV-FM

— OTHERNEWS —

A new regional CBC Radio One network based out of Kamloops, British Columbia has been announced. The network will simulcast a new station just authorized (see above). These stations are currently simulcasting CBTK-FM 88.9 Kelowna. The affected stations are:

CBUS	100 Mile House 91.3	CBUH-FM	Chase 95.5	CBTY-FM	Lytton 93.1
CBYU-FM	Alexis Creek 93.7	CBKZ	Clearwater 860 kHz	CBUP	Merritt 860 kHz
CBWA	Ashcroft 860 kHz	CBUU	Clinton 1070 kHz	CBXA	Mica Dam 1150 kHz
CBYO-FM	Barriere 104.1 FM	CBTF-FM	Falkland 102.7	CBRN-FM	North Bend 90.7
CBKM	Blue River 860 kHz	CBTG	Gold Bridge 860 kHz	CBKN	Shalath 990 KhZ
CBRZ	Bralorne 1350 kHz	CBUL-FM	Lillooet 92.7	CBYZ-FM	Vavenby 91.9
CBKS	Cache Creek 1450 kHz	CBYE-FM	Logan Lake 92.9	CBRL	Williams Lake 860 kHz

All of the above AM stations are 40-Watt Low Power facilities. Two stations now simulcasting CBTK-FM, CBTO-FM 91.3 Revelstoke and CBUC-FM 96.9 Salmon Arm, will remain with them, due to geo-political affiliations being much more in line with the communities being within the District of North Okanagan, which includes Kelowna.

—— UNITED STATES AND TERRITORIES ——

FULL POWER and LPFM STATIONS

— CALL LETTER CHANGES —

			Old Call	New Call
AK	Kodiak	90.7	CP	KODK
AR	Cedarville	94.9	KYNF	KRMW
CA	Oroville	91.1	CP	KROV **
CA	Salida	104.9	KQRP-LP	KGIG-LP
CA	San Diego	103.7	KSCF	KEGY
CO	Pueblo	96.9	KCCY	KCCY-FM
CO	Walsenburg	101.3	KOCK	KFEZ
GA	Sasser	88.3	NEW	WUTU
IL	Normal	100.7	WVMG	WWHX
IL	Paxton	90.5	CP	WRTK
IL	Princeton	88.3	WPRC	WUNT
IN	Fort Wayne	92.3	WFWI	WOWO-FM
KS	Liberal	91.5	CP	KYEH
KY	Morehead	106.1	WQXX	WMOR-FM
ME	Bowdoin	88.1	CP	WMEY
NJ	Camden	106.9	WKDN	WWIQ
NJ	Hazlet	104.7	WDDM	WPDI
NM	Alamo	88.1	KABR-FM	KYGR
NM	Alamo Community	107.5	CP	KYGR
	then . . .		KYGR	KABR
NY	Milford	88.5	NEW	WUWO
NY	Newport	106.1	WKUY-LP	WGLU-LP
NY	Oneonta	104.7	WUOW-LP	WUWO-LP
NY	Utica	100.7	WRCK	WUTQ-FM
NC	Dillsboro	89.7	WNCM	WMJE
OK	Cordell	93.7	CP	KOKV
OR	Coos Bay	89.5	NEW	KDCB
OR	Union	103.1	KZUO	KVBL
PA	Confluence	98.5	WKEL	WYRA
SC	Ridgeville	91.9	CP	WWOS
TN	Union City	104.9	WYVY	KYTN
TX	Abilene	92.5	KULL	KMWX
TX	Abilene	100.7	KFGL	KULL
TX	Andrews	91.5	CP	KJRA
TX	Bay City	101.7	KXGJ	KNTE
TX	Monahans	91.1	CP	KMRA
TX	Seminole	106.3	KSEM-FM	KSEM
TX	Stratford	91.7	KLXN	KOGW
TX	Wheeler	88.3	KLXL	KOGC
WY	Dayton	101.1	CP	KOWY

** Call corrected from last issue

TRANSLATORS and BOOSTER STATIONS

— CALL LETTER CHANGES —

			Old Call	New Call
AL	Tuscaloosa	100.9	W267BF	W265CG
AL	Valley Head	93.9	CP	W230BV
AZ	Nogales	91.1	K219BU	K216GI
AZ	Prescott	106.7	APP	KPPV-1
AZ	Prescott Valley	106.7	APP	KPPV-2
AZ	Whitman	99.5	KRPH-1	KRPH-FM1
AZ	Willcox	102.7	NEW	K274CB
AZ	Willcox	103.5	NEW	K278BS
AZ	Williams	99.7	K258BX	K259BR
CA	Arcata	90.9	K211DJ	K215BW
CA	Calexico	94.9	CP	K235BX
CA	Calexico	100.7	CP	K264BJ
CA	Clark Mountain	105.3	K284AU	K287BE
CA	Edison	104.9	K209FB	K285GG
CA	Glamis	95.5	CP	K238BJ
CO	Sterling	103.3	K279BA	K277BR
FL	Mount Dora	106.3	W241BL	W292DZ
GA	Athens	88.5	W201BJ	W203BO
GA	Danielsville	89.3	W209BJ	W207BY
GA	Donalsonville	98.1	NEW	W251BP
GA	Donalsonville	104.7	NEW	W284CC
GA	Lithia Springs	92.5	W221CG	W223BP
GA	Waycross	88.7	W201DK	W204CM
HI	Kailua	88.1	KHPR-2	KHPR-FM2
HI	Kailua	89.3	KIPO-2	KIPO-FM2
ID	Filer	92.1	K225BC	K221FT
ID	Soda Springs	104.5	NEW	K283BR
IN	West Lafayette	104.1	CP	W281BC
IA	Sioux City	100.1	K205DC	K261DY
MI	Charlevoix	95.1	CP	W236CB
MI	Mackinac Island	93.1	CP	W226BN
MI	Marquette	106.1	W294AI	W291CJ
MI	Petoskey	91,7	W221BQ	W219DR
MO	High Ridge	96.1	K239BI	K241BS
MT	Great Falls	96.3	K201DC	K242CA
NV	Henderson	94.5	KXLI-2	KXLI-FM2
NC	Winston-Salem	103.1	W273BD	W276CI
OH	Middletown	106.7	W292CO	W294BM
OH	Wadsworth	90.7	W219BT	W214CD
OK	Enid	93.1	K227AT	K226BR
OR	Ashland	88.7	KJKL-1	KJKL-FM1
PA	Bloomsburg	105.9	W291BD	W290CG
SD	Brookings	88.9	K204FH	K205FL
SD	Milbank	98.3	K255BP	K252FB
TX	Beeville	105.1	CP	K286BT
TX	Canton	93.7	CP	K229BA
TX	Canton	95.7	CP	K239AN
TX	Carrizo Springs	92.9	CP	K225BM
TX	Crystal City	95.1	CP	K236BJ
TX	Hebbronville	95.7	CP	K239BK
TX	Hebbronville	103.5	CP	K278BT
TX	Roma	96.5	CP	K243BO
TX	Quanah	100.7	K254BJ	K264BI
TX	Uvalde	100.5	CP	K263BC
UT	Mount Pleasant	99.5	CP	K258CA
UT	Oak City	92.1	CP	K221FU
UT	St. George	93.1	K244DU	K226BQ
VA	Bellwood	97.7	W247AV	W249CI
WA	Centralia	101.7	K201GP	K269FS
WA	West Seattle	92.1	K201AB	K221FR
WV	Harrisville	91.1	W209BO	W216CJ
WI	Prairie du Chien	89.5	W208AX	K208FO
WI	Wisconsin Rapids	93.1	CP	W226BM

— FORMAT AND SLOGAN CHANGES —

— Full Power and LP Facilities —

AL	Abbeville	105.1	KFTE	> Rock: *Planet Radio*
AR	Cedarville	94.9	KYNF	> Contemporary: *Warm 94 point 9*
AR	West Helena	89.9	KWHA	Signs on with Religious Teaching: *Radio 74 Internationale* [Radio 74 Internationale]
CA	Riverside	89.7	KSGN	Adds slogan *Family Friendly 89.7, KSGN*
CA	San Diego	103.7	KSCF	> CHR: *Energy 103 point 7*
CO	Bennett	107.1	KDHT-FM	> Rhythmic CHR (remains *Hot 107 point 1)*
CO	Meeker	98.1	KAYW	> Classic Hits: *Drive 105*
CO	Rifle	105.3	KZKS	> Classic Hits [remains *Drive 105*]
FL	Daytona Beach Shores	99.5	WLOV-FM	Signs on with Soft AC: *Soft Favorites, WLOV*
FL	Everglades City	88.1	WBGY	Returns to the air with News/Talk
FL	Gretna	93.3	WGWD	> Talk: *Talk Radio 93 point 3*

FL	Jacksonville	107.x	WJGH	Remains AC, but changes their slogan to *Jack FM*
FL	Jacksonville Beach	92.5	WFJO	> Sports: *1010XL- Jax Sports Radio* [ESPN Radio]
FL	Tallahassee	106.1	WQTL	> A mix of classic rock/AAA?/Americana: *106 point 1, The Path*
GA	Valdosta	90.9	WVVS-FM	> Variety: *WVVS, Blaze FM 90 point 9*
GA	Valdosta	92.9	WAAC	Changes their slogan to *C 93 WAAC*
IL	Aparta	90.3	WMSH	Signs on with Religious Teaching [Eternal Word Network]
IL	Kankakee	92.7	WKIF	> Adult Hits: *92 point 7 FM - We Play Anything*
IL	Lexington	99.5	WZIM	> Sports: *99 point 5 The Ticket* [Fox Sports)]
IL	Normal	100.7	WVMG	> CHR: *Hits 100 point 7*
IL	Sheffield	88.7	WPRC	Signs on with Contemporary Christian
IN	Cloverdale	89.1	WSPM	Changes their slogan to *Catholic Radio Indy*
IN	Nobelsville	90.9	WSQM	Changes their slogan to *Catholic Radio Indy*
IN	South Whitley	101.1	WMYQ	> Adult CHR: *Hot Q101*
IA	Tabor	89.3	KHLW	Signs on with Religious Teaching [Calvary Chapel of Omaha]
KS	Paola	89.7	KWJP	> Variety: *Positive Mix, Eagle 1*
KY	Okolona	88.5	WJIE-FM	Adds the slogan *88 point 5, WJIE*
KY	Versailles	106.3	WCDA	Changes their slogan to *Today's Best Music, Your 106 point*
LA	Lake Charles	103.3	KBIU	> Adult Contemporary: *Warm 103 point 3* [Cumulus - Hits and Favorites]
ME	Augusta	89.5	WWTP	Signs on with Religious Teaching: *The Presence* [Eternal Word Network]
MD	Baltimore	91.5	WBJC	Remains Classical with new slogan: *Maryland's Classical Music Station*
MI	China Township	91.5	WVMV	Signs on with Contemporary Christian: *Smile FM, Michigan's Positive Hits*
MI	Hart	94.1	WWKR	Changes their slogan to *West Michigan's K-Rock*
MI	Houghton	98.7	WGLI	Adds Political talk to schedule on Saturday and Sunday mornings
MN	Eden Prairie	105.7	WGVZ	> Hot AC: *Best Songs, Best Variety*; includes // WGVX 105.1 Lakeville and WGVY 105.3 Cambridge
MN	Lakeville	105.1	WGVX	> Adult Contemporary: *Love 105*
MN	Cambridge	105.3	WGVY	> Adult Contemporary: *Love 105*
MN	Eden Prairie	105.7	WGVZ	> Adult Contemporary: *Love 105*
MN	Marshall	89.9	KRGM	Signs on with Contemporary Christian: *Refuge Radio*
MN	Waconia	88.3	KJGT	Signs on with a Variety Format
MT	Belt	88.1	KGFJ	Returns to the air with Religious Teaching: *CSN International* [Christian Satellite Network]
NY	Clayton	89.3	WRVH	Signs on with News/Talk/Variety [NPR]:*24 Hour Source For NPR News*
NY	Ellenville	99.3	WRWB-FM	> Country: // WRWD-FM 107.3 Highland
NY	Schenectady	89.7	WRUC	> Variety: *WRUC - First Station In The Nation*
ND	Jamestown	93.3	KSJZ	> Hot AC: *Mix 93 point 3*
ND	Kindred	92.7	KFNL	Returns to the air with Active Rock: *The Bone*
ND	Richardton	101.9	KZZQ	Signs on with Talk: *NewsTalk 101 point 9*
OH	Munroe Falls	98.1	WKDD	> CHR: *Akron's 98 point 1 - KDD*
OK	Goltry	90.5	KGVV	Signs on with Contemporary Christian: *My Praise FM*
OR	Prineville	107.7	KWXS	Signs on with CHR: *Wild 107 point 7*
PA	Confluence	98.5	WYRA	> Christian CHR/Rock: *Air One*
PA	Mill Hall	97.7	WVRT	Remains CHR with new slogan *V97* // WVRZ
PA	Mount Carmel	99.7	WVRZ	Remains CHR with new slogan *V97* // WVRT
PA	Scottsdale	103.9	WQTW	> Classic Hits: *Music Power 104*
PA	Scranton	89.9	WVIA-FM	Changes their slogan to *WVIA Public Radio*
PA	Williamsport	89.7	WVYA	Changes their slogan to *WVIA Public Radio*
PR	Vieques	106.1	WVIS	Adds *Radio Joe, 106 point 1* as a slogan
TN	Madisonville	107.7	KKLB	Returns to the air with Contemporary Christian and adds the slogan: *Christian Family Radio*
TN	Trenton	97.7	WTGP	> Contemporary Christian: *97.7 The Dove*
TX	Beaumont	88.1	KLBT	Adds slogan: *KLBT Live By Truth*
TX	Hudson	96.3	KZXL	Returns to the air with Urban AC: *Hot 96 point 3*
TX	Mountain Home	102.1	KAXA	Signs on with Country [Cumulus - Today's Best Country]
TX	San Antonio	88.3	KPAC	Adds slogan *Classical Oasis*
VT	Grand Isle	102.3	WIER	> Hot AC: *Mix 102 point 3*
VA	Windsor	105.3	WVMA	> CHR: *105 point 3, Today's Hit Music*
WA	Opportunity	96.1	KIXZ-FM	> CHR: *Hits 96 point 1*
WI	Baldwin	95.7	WDMO	Returns to the air, after moving here (ex: 95.9) with Country: *Thunder Country 95 point 7*
WY	Antelope Valley-Crescent	93.3	KLED	Signs on with Classic Country: *Legends Country 93.3*

— Translator and LP Facilities —

				Carries the programming of:
MI	Coldwater	95.5	W238CD	WTVB-1590 Coldwater with Oldies: *The Voice Of Branch County*
MI	Harrison	97.5	W248AQ	WDTK-1400 Detroit with Talk: *NewsTalk 1400 AM, WDTK*
MI	Hastings	92.9	W225BA	WUOM 91.7 Ann Arbor [Michigan Public Media]
MO	Lees's Summit	107.9	K229AU	KCFX-HD3 93.7 Harrisonville: *The Fountain* [Calvary Chapel of Kansas City]
OH	Norwood	100.7	W264BW	WKFS-HD3 107.1 Milford
TN	Cookeville	100.9	W265BC	WATX-1600 Algood with Talk: *NewsTalk 100.9/1600*
TN	Findlay	106.1	W291CA	WPTN-780 Cookeville with Classic Country [W291CA has a CP to move to Cookeville]
UT	St. George	95.3	KTIM-LP	Returns to the air on this new frequency (ex: 101.9) with Travel Information

— OTHERNEWS —

AL	Camden	102.3	WYVC	License cancelled; call deleted
AL	Selma	105.3	WBFZ	License cancelled; call deleted
AL	Lisman	107.7	WHSL	Is silent
AL	Uniontown	107.5	WVFG	License cancelled; call deleted
AZ	Parker	90.3	KWFH	Changes frequency from 90.1
AZ	Cordes Lakes	101.1	KNRJ	Changes City-of-License from Payson
CA	Hollister	93.1	KXSM	Changes frequency from 93.5
CA	Salida	104.9	KWRP-LP	Changes frequency from 106.1
CA	San Luis Obispo	90.1	KCBX	Fined $10,000 for failure to properly maintain their Public Inspection File
CO	Colorado Springs	107.9	KWIR-LP	Is silent
FL	Bronson	91.1	WZXJ	Is silent
FL	Islamorada	105.5	WWWK	Is silent
FL	Miami	98.7	Pirate	Fined an individual $10,000 for operating an unlicensed transmitter

FL	**Pompano Beach**	**92.7**	**Pirate**	**Fined an individual $10,000 for operating an unlicensed transmitter**
FL	**Sarasota**	**106.5**	**WCTQ**	**Is silent due to copper theft at the transmitter site**
FL	**West Palm Beach**	**107.3**	**Pirate**	**Fined an individual $20,000 for operating an unlicensed transmitter**
IN	**Clifford**	**89.9**	**WISG**	**License cancelled; call deleted**
HI	**Kaunakakai**	**102.3**	**KMKK-FM**	**Is silent**
IN	**Huntertown**	**105.1**	**WQHK-FM**	**Changes City-of-License from Decatur**
KS	**Elkhart**	**90.3**	**K212EN**	**License cancelled; call deleted**
KS	**Olpe**	**89.3**	**APP**	**Application for a new station cancelled per applicant's request [Catholic Radio Network, Inc]**
KY	**Louisville**	**93.9**	**W230AK**	**License cancelled; call deleted**
KY	**Walton**	**95.5**	**WFKC-LP**	**Application for changes dismissed**
LA	**Monroe**	**88.7**	**KBMQ**	**Fined $10,000 for failure to properly maintain their Public Inspection File**
MI	**Harrison**	**90.7**	**WKKM**	**Is silent**
MS	**Jackson**	**100.1**	**WLEZ-LP**	**Application for changes dismissed**
NE	**Shelton**	**90.5**	**KQQA**	**The CP for this station being donated by its owner, Platte Valley Educational Radio, to Radio 74 Internationale**
OH	**Marietta**	**90.9**	**WTYC**	**Is silent**
OR	**Bend**	**106.7**	**KCPU-LP**	**License cancelled; call deleted**
SC	**Forest Acres**	**94.3**	**WWNQ**	**Fined $10,000 for Public Inspection Files violations**
TN	**Cosby**	**87.9**	**Pirate**	**Fined an individual (*Voice of the Smokies*) $22,000 for operating an unlicensed transmitter (party time at the FCC!)**
TX	**Houston**	**90.1**	**KPFT**	**Is silent (at deadline) after a lightning strike to its tower. Their website and three translators are continuing programming.**
TN	**New Tazewell**	**98.3**	**WTAZ-LP**	**Is silent**
TX	**Meridian**	**95.3**	**KOME-FM**	**Is silent**
WA	**Nile**	**88.3**	**KSBC**	**Is silent**
WY	**Bairoil**	**94.9**	**KCYO**	**License cancelled; call deleted**

++

NEWS ITEM: Tiny Georgetown Radio Station Broadens Reach with New Antenna – Georgetown's (California) KFOK-LP 95.1 has been called the 2-watt station with the 500-watt heart. Now it's the 2-watt station with the 100-watt reach.
A new antenna perched on a water tank on Hotchkiss Hill, elevation 3,192 feet, means the weak signal from the tiny community radio station can finally reach most of the small community in the hills north of Placerville. It's reaching beyond, too. Since the new antenna went up Friday, workers from the quirky, all-volunteer station have been burning up $4-plus gallons of gas driving up and down the hills just to see where they can tune in.
Previously, reception was so spotty you almost had to see the station building to get it reliably, unless you streamed online at www.kfok.org. Now, it can be heard along much of Highway 50 between Camino and Cameron Park. An engineer who helped place the antenna got the signal in Fair Oaks. Audience may increase even more than signal strength, as people come to see KFOK as something they can tune in reliably.
Information about forest fires is key to residents of the isolated, heavily forested region. The new antenna comes after years of effort. Just when it was thought things had been worked out to place it on a Verizon "tree" on Hotchkiss, it was found that the trunk would block much of the signal. In the end, the station piggybacked on a tower held by the Georgetown Public Utilities District.
Now all the station needs – well, besides Federal Communications Commission permission to boost wattage – is more volunteers with better training. KFOK stalwarts hope to recruit some at an open house from 2 to 5 p.m. Saturday at the station on Main Street in Georgetown.

NEWS ITEM: FM Channel Protections to Soon Change to Accommodate LPFM - As of June 4, third-adjacent channel spacing requirements to protect most full-service FMs are going away. Federal Register publication of the FCC's recent actions to implement the Local Community Radio Act triggered the effective date. The commission is still required to maintain current channel protections to protect Radio Reading Services. Questions still to be decided regarding LPFMs and FM translators have also been published in the Federal Register. The commission is asking for public input on questions like whether LP10s and LP250s should be licensed or whether and under what conditions it should allow waivers of second-adjacent channel spacing requirements for full-service stations to allow more LPFMs in a market. The FCC also asked for comments on complaint procedures for cases of third-adjacent channel interference to full-service FMs and interference to FM translator inputs.

NEWS ITEM: Breakthrough technology poised to let radio carve out local zones with their signal. In an era where advertisers are increasingly looking at geo-targeting their message, breakthrough technology is under development for radio that would make localized broadcasting a reality for radio. Geo-Broadcast Solutions (GBS) has developed a system that combines radio, cellular, GPS, and mobile broadband technology to enable FM stations to be divided into several geographic zones within an existing coverage area. By slicing a station's service area into subsets using a series of high-powered boosters, GBS says a single frequency network is created that will give broadcasters the flexibility to geo-target both advertising and programming. "You would go from one zone to another, much like you would when driving your car and going from one cell network to another," CEO Peter Handy explains. He says depending on the size and topography of a city, a market could be divided into as many as seven regions. The ZoneCasting system already cleared one big hurdle — the FCC's Media Bureau said it was in the public interest to see how the system would work in the real world as it granted approval to test the technology in a market. Under experimental authority, GBS and broadcast equipment maker Harris tested ZoneCasting with the Bustos Media stations in Salt Lake City in March 2010. It worked well, and the next step was to test it in a market where there's no terrain shield like the mountain-ringed Salt Lake market has. So Handy says last year the system was tested at the Cohan Radio Group stations in Sebring, FL in July 2011. GBS says there was "minimal interference" between the FM boosters or the main FM signal. Based on those results they're now asking the FCC to open a rulemaking to modify its regulations to allow FM booster stations to originate programming — something that's necessary in order for stations to subdivide their signal. With the support of the industry, Handy thinks they could see an expedited approval by the FCC. So far he's had positive feedback so far from several radio executives intrigued by its possibilities. GBS chief technology officer Bill Hieatt says they continue to work with Harris on designing better equipment to fine-tune the technology so they'll be better able to create more customized zones for each broadcaster.

++

Thanks to Shawn Axelrod, Dave Bright, Tim Noonan, Dale Park, Radio World Online and Upper Midwest Broadcasting for news.

If you hear any changes occur on your FM dial, share the news! 73

++

FM FACILITIES

MAY 2012

AF	Applied For (a new station)	PC	Power (and/or tower height) change on the air
Aux	Auxiliary (backup) transmitter	PG	Power change granted
CC	Callsign change	PR	Power change requested
CL	City-of-license change	RA	Returns to the air
DE	License/permit deleted	RE	Reinstated (previously-dismissed app.)
FC	Programming (format) change	ROA	Request of Applicant
FTP	Failure to Prosecute	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

Changes:

CITY/STATE/PROVINCE	FREQ	CALLS	CHANGE
AB Lac La Biche	90.5	CFWE-FM	AF 19.6kw/100m, 54-37-14/111-57-09; to replace five LPFM stations on 89.9
AK Fairbanks	90.7	KWMB	NW 4kw/506m, 64-52-49/148-03-08
AK Kodiak	88.3	KZXD	PR<-8m, 57-48-40/152-21-40
AK Kodiak	90.7	KODK	CC for NS
AK Naknek	100.9	KAKN	XG 58-44-40/156-58-32
AK Sterling	105.3	KKNI	NW 7kw/87m, 60-29-19/150-44-43
AL Alexander City	89.7	WJHO	PG>10.5kw/150m, 33-12-30/85-59-31
AL Camden	102.3	WYVC	CX
AL Camden	90.5	WQLS	PR>8.5kw/171m, 31-53-32/87-14-14
AL Greensboro	99.1	WDGM	PG>6.4kw/197m
AL Jemison	89.3	WZLM	PR<100w/101m, 32-58-12/86-43-04
AL Uniontown	107.5	WVFG	CX
AR Benton	106.7	KHLR	AF 10.5kw/282m, 34-47-56/92-29-44 (aux)
AR Benton	106.7	KHLR	NS 10.5kw/282m (aux)
AR Benton	106.7	KHLR	PR 13kw/293m
AR Cedarville	94.9	KRMW	CC from KYNF
AR Diamond City	88.5	KKJJ	NW 2kw/81m, 36-22-54/92-56-07
AR Fayetteville	89.3	KAYH	PR 25kw/112m; amendment from 39kw
AR Ozark	96.7	KDYN-FM	PR>18kw/251m, 35-47-49/94-10-04; amendment from 17.5kw/258m
AR Searcy	88.7	KLUY	PG<900w/115m, 35-16-40/91-44-02
AR West Helena	89.9	KWHA	FC; sold to R. 74
AR West Helena	89.9	KWHA	NW 5kw/81m, 34-31-52/90-36-44
AZ Cordes Lakes	101.1	KNRJ	PC>40kw/807m, 34-13-47/112-21-03
AZ Drake	89.5	KJZA	PR>1kw
AZ Parker	90.3	KWFH	PG>800w/760m, 34-33-06/114-11-37
AZ Pirtleville	88.1	KREE	PR>1.5kw/46m
AZ Quartzsite	91.7	KEQS	NW 100w/-63m, 33-40-19/114-12-24
AZ San Carlos	91.1	KYAY	PR 2kw/492m, 33-34-31/110-22-41
AZ Taylor	103.5	KXBK	NW 1.4kw/248m, 34-12-22/109-56-32
AZ Willcox	92.5	NEW	NS 4.9kw/225m, 32-18-22/109-44-39
CA Beaumont	100.9	KAEH	PG 5.3kw/38m, 33-56-51/116-59-03
CA Boulder Creek	90.1	NEW	PR>7w/475m, 37-07-19/122-09-19
CA China Lake	102.1	KSSI	QR from 102.7, 1.5kw/396m, 35-28-38/117-41-59
CA Eureka	88.1	KMUE	QC from 88.3, 10kw/494m, 40-43-39/123-58-17
CA Felton	93.7	KXZM	PC>410w/690m, 37-09-35/121-54-32
CA Fortuna	100.3	KWPT	PR 13.5kw/545m, 40-30-03/124-17-08 dismissed ROA
CA Fowler	96.7	KALZ	PR<88m, 36-42-15/119-44-32 dismissed ROA
CA Hollister	93.1	KXSM	QC from 93.5, 480w/643m, 36-54-13/121-13-45
CA Hopland	88.7	KORB	PG>11/w425m, 38-55-54/123-08-30
CA McKinleyville	89.3	KNDZ	PR 640w/339m; amendment from 334m
CA North Shore	105.1	KRSX-FM	QR from 105.3, 56m, 33-42-13/116-00-40; CL from Twentynine Palms
CA Oroville	91.1	KROV	CC for NS
CA Point Reyes	91.3	KDVZ	PG 25w/152m, 37-59-50/123-00-43
CA San Diego	103.7	KEGY	CC from KSCF
CA Sunnyvale	104.9	KCNL	FC; sold to USC (to relay KUSF-90.3)
CA Temecula	88.9	KSDW	AF 270w/914m (aux)
CA Yucca Valley	88.1	KRTM	PG>150w/774m, 34-02-16/116-48-48
CO Brush	90.5	KBEI	PC>1kw/56m, 40-16-30/103-38-33
CO Grand Junction	100.7	KMOZ-FM	NS 1.12kw-H/850w-V/379m (aux)
CO Grand Junction	100.7	KMOZ-FM	NW 1.1kw-H/850w-V/379m, 39-04-00/108-44-41 (aux)
CO Grand Junction	92.3	KJYE	NS 1.1kw-H/830w-V/384m (aux)
CO Grand Junction	92.3	KJYE	NW 1.1kw-H/830w-V/384m (aux)
CO Grand Junction	93.1	KMGJ	NW 1.15kw-H/880w-V/372m (aux)
CO Grand Junction	93.1	KMGJ	PG 1.16kw-H/880w-V/372m (aux)
CO Hugo	93.7	KFCY	NW 6kw/87m, 39-06-20/103-40-30 (Kona Coast Radio)

CO Log Lane Village	93.5	KZLL	QG from 104.5, 11kw
CO Pueblo	96.9	KCCY-FM	CC from KCCY
CO Strasburg	97.7	KSJL	NW 25kw/16m, 39-42-19/104-12-17 (R. 74 Intl.)
CO Walsenburg	102.3	KSPK-FM	CC from KSPK
CO Weldona	103.1	KFWA	PG<25kw/46m, 40-14-44/103-55-29
CO Woodland Park	89.5	KILE-FM	PR<-148m
CT Somers	89.7	WDJW	PR<5w/-24m, 41-58-36/72-27-33; supersedes permit to go to 105.3 with existing facilities
FL Daytona Beach Shores	99.5	WLOV-FM	NW 2.2kw/104m, 29-14-11/81-04-22
FL Islamorada	89.3	WAZQ	PR<100w/11m, 24-53-49/80-39-31
FL Palm Bay	90.3	WEJF	PG>30kw/147m
FL Valparaiso	103.1	WZLB	CC from WMXZ
FL Winter Park	91.5	WPRK	PG>32m, 28-35-28/81-20-56
GA Augusta	104.3	WBBQ-FM	PC>78kw/436m, 33-25-17/81-50-19
FL Valparaiso	103.1	WZLB	PG<114m, 30-23-10/86-17-48
GA Barrettsville	90.7	WLTS	PR<225w/43m, 34-23-25/84-14-41
GA Fort Valley	106.3	WQBZ	PR 50kw/139m, 32-34-13/83-45-26
GA Jeffersonville	93.7	WPEZ	PR<6kw
GA Sasser	88.3	WUTU	CC for NS
GA Tallapoosa	88.7	WEYY	PG<250w/30m, 33-44-43/85-17-16
GA Tallulah Falls	91.7	WHTD	CC from WNGM
GA Tallulah Falls	91.7	WHTD	PR>60w/385m, 34-50-42/83-30-02
HI Honolulu	105.1	KINE-FM	AF 50kw/566m (aux)
HI Pahala	91.7	KAHU	PG>16kw/33m, 19-05-51/155-33-59
HI Wahiawa	103.5	KHAI	AF 2.2kw/566m (aux)
IA Anamosa	95.7	KWMG	PR>18kw/118m, 42-03-39/91-32-35; amendment from 6kw/91m at different site
IA Asbury	98.7	NEW	PA from 95.5 dismissed
IA Hudson	93.5	KCVM	PR>24.5kw/82m, 42-33-28/92-13-43
IA Independence	95.1	NEW	PA from 95.3 dismissed
IA Indianola	88.9	KSTM	PC>150w, 41-21-49/93-33-37
IA Maquoketa	95.3	KMAQ	PA from 95.1 dismissed
IA Sidney	107.7	KIMI	QG from 107.9, 3.8kw/134m, 40-48-36/95-42-43; CL from Humboldt, Nebraska
ID Jerome	102.9	KZNO	CC from KMVX
ID Moscow	90.3	KRFP	CC for NS
ID Twin Falls	90.7	KCIR	PR>44.1kw/766m; amendment from 45kw/760m
ID Ucon	104.5	KZKY	NW 37kw/173m, 43-32-34/111-53-07
IL Chicago	100.3	WILV	AF 6.9kw/363m, 41-53-06/87-37-18 (aux)
IL Chicago	100.3	WILV	NS 6.9kw/363m, 41-53-06/87-37-18 (aux)
IL Collinsville	105.7	KPNT	PG<54kw/254m, 38-34-28/90-19-32
IL Harvard	88.9	WCNM	NW 160w/33m, 42-25-09/88-36-52 (Marian Central Catholic H.S.)
IL Normal	100.7	WWHX	CC from WVMG
IL Paxton	90.5	WRTK	CC for NS
IL Princeton	88.3	WUNT	CC from WPRC
IL Round Lake Beach	89.1	WZKO	PR>36m; add H (was V-only)
IL Sheffield	88.7	WPRC	CC from WUNT
IL Sheffield	88.7	WPRC	NW 8.5kw/127m, 41-36-33/89-40-19 (WIBI)
IL Sparta	90.3	WMSH	CC for NS
IL Sparta	90.3	WMSH	NW 5.2kw/136m, 37-57-11/89-52-37
IN Dayton	91.5	WCNB	PR<255w/5m, 40-22-32/86-46-34
IN Fort Wayne	92.3	WOWO-FM	CC from WFWI
IN Greensburg	89.9	WHOZ	PR>1kw/62m, 39-20-04/85-35-55
IN La Porte	96.7	WCOE	XR 41-38-01/86-45-33
IN Morristown	88.1	WJCF-FM	PR>28kw/49m dismissed
IN Plymouth	89.3	WIKV	PG>42.5kw/79m, 41-19-13/86-16-25
IN Seymour	88.5	NEW	CX
IN Wanatah	88.5	WTMK	PG>4kw/103m, 41-18-15/87-01-30
IN Warsaw	88.7	WQKV	QG from 88.5, 49m
IN Wilkinson	89.1	WRFM-FM	PR<140w/20m, 39-52-43/85-30-09
KS Dodge City	90.7	KQSH	PG<1w-H/7kw-V/106m
KS Hays	89.7	KHYS	PC>450w/87m
KS Liberal	91.5	KYEH	CC for NS
KS Olpe	89.3	NEW	CX
KY Morehead	106.1	WMOR-FM	CC from WQXX
LA Gray	96.7	KCIL	PG>50kw/105m, 29-36-32/90-53-43
LA Jean LaFitte	107.5	KXMG	PG>98kw/299m, 29-48-30/89-45-42
LA New Orleans	93.3	WQUE-FM	PA from C to C0 (no actual change in facilities)
LA Opelousas	107.1	KOGM	PC>750w/284m, 30-20-32/91-57-46
MD Catonsville	105.7	WJZ-FM	AF 430w/287m, 39-20-05/76-39-03 (aux)
ME Augusta	89.5	WWTP	NW 690w/6m, 44-16-47/69-40-50
ME Benedicta	89.3	WRPB	PR>2kw/61m
ME Ellsworth	91.7	WRNM	NW 700w/56m, 44-31-04/68-24-09
ME Lincoln	90.5	WWLN	PR>2.4kw/147m
ME Milbridge	93.7	WRMO	PC>22.5kw/204m, 44-38-33/68-10-18
MI Allendale	88.5	WGVU-FM	PR>4kw/90m
MI Bear Lake	100.1	WCUZ	PC 2.05kw/172m, 44-30-54/86-06-53
MI China Township	91.5	WVMV	NW 1.05kw/75m, 42-39-42/82-35-24 (Smile FM)
MI Harbor Beach	103.7	WCZE	PG 47kw/155m
MN Cloquet	89.1	WGZS	PR>92kw
MN Marshall	89.9	KRGM	NW 4kw/163m, 44-29-03/95-29-27
MN St. Paul	95.3	KNOF	PR 900w/258m, 44-58-34/93-16-20
MN Waconia	88.3	KJGT	NW 11kw/86m, 44-47-20/93-54-27
MO Adrian	88.9	KYLF	PG>30kw/138m, 38-12-04/94-16-12
MO Cameron	91.7	WJTJ	FC; sold to WVCY
MO Cameron	91.7	WJTJ	PR<27.5kw/116m, 39-57-36/94-07-09

MO Columbia	96.7	KCMQ	NW 10.5kw/105m, 38-57-18/92-16-20 (aux)
MO Crestwood	94.7	KSHE	PG<309m, 38-34-28/90-19-32
MO Garden City	105.1	KCJK	PR 72kw/346m
MO Rolla	89.7	KMNR	PG>1.85kw/114m, 37-57-36/91-46-18
MO St. Louis	91.5	KSIV-FM	AF 17.1kw/167m (aux)
MO St. Louis	91.5	KSIV-FM	NS 17.1kw/167m (aux)
MO St. Louis	91.5	KSIV-FM	PG<309m, 38-34-28/90-19-32
MO St. Louis	96.3	KIHT	PG>92kw/309m, 38-34-28/90-19-32
MO Steelville	107.3	KLPW-FM	PG 25kw/98m, 38-02-41/91-30-05
MO Sunrise Beach	90.3	KCRL	PR>25kw/63m
MS Ellisville	102.5	WJKX	PR 11.4kw/256m, 31-31-37/89-08-07
MS Holly Springs	96.5	WWWN	CC for NS
MS Holly Springs	96.5	WWWN	PR 4.1kw/122m
MS Summit	93.5	NEW	PA, class A
MS Union	104.1	WZKS	PG>28kw/161m, 32-29-51/88-53-14
NB Moncton	96.3	CIRM-FM	QR from 90.1, 250w
NC Chadbourn	89.9	WZCO	NW 25kw/113m, 34-32-17/78-42-36
NC Dillsboro	89.7	WMJE	CC from WNCM
NC Enfield	107.3	WVRA	CC from WBOB-FM
NC Newton Grove	90.7	WYBJ	PR<61m, 35-12-27/78-27-07
NC Williamston	90.5	WTGX	CC for NS
ND Richardton	101.9	KZZQ	NW 26kw/177m, 46-41-35/102-37-07
ND Williston	91.7	KNDW	PR>750w/50m, 48-08-34/103-47-50
NE North Platte	89.3	KJTF	PR>80kw/230m
NE North Platte	90.1	KFJS	PR>1.4kw/107m, 41-12-13/100-43-58
NH Conway	91.1	WMTP	NW 90w/264m, 44-03-30/71-05-31
NJ Barnegat	91.9	WBNJ	PR>15kw dismissed
NJ Cape May	89.1	WWCJ	PC 8.5kw-H/14.2kw-V/117m, 39-07-28/74-45-56
NJ Freehold Township	89.7	WRDR	PC 1.67kw/100m, 40-07-49/74-07-19
NJ Hazlet	104.7	WPDI	CC from WDDM
NJ Newark	94.7	WFME	PC 23.5kw/207m
NJ Newark	94.7	WFME	PG 23.5kw/207m
NJ Pennsville	88.1	WFDS	NW 47w-H/1.05kw-V/40m, 39-35-46/75-29-41
NJ Pennsville	88.1	WFDS	XG 39-35-30/75-29-30
NM Alamo Community	107.5	KABR	CC from KYGR
NM Alamo Community	107.5	KYGR	NW 10kw/-41m, 34-25-01/107-30-04
NM Alamo Community	107.5	NEW	PG>10kw/-41m
NM Alamo	88.1	KYGR	CC from KABR-FM
NM Albuquerque	101.3	KKRG	PR 3.37kw/135m, 35-03-57/106-46-58 dismissed
NM Clayton	90.3	KUHC	PG 140w/28m
NM Ruidoso	89.3	KENP	PR 620w/921m, 33-24-17/105-46-52
NM Tucumcari	90.5	NEW	PR<1kw/-11m, 35-10-19/103-41-03
NV Smith	92.3	KSVL	PC<624m
NY Annandale-on-Hudson	88.1	WLHV	PG 910w/116m
NY Brighton	94.1	WZNE	NW 710w/102m, 43-09-23/77-36-43 (aux)
NY Copiague	89.3	WGSS	NW 110w/10m, 40-40-58/73-23-04
NY Ellenville	99.3	WRWB	CC From WKIP-FM
NY Jamestown	101.9	WHUG	PG 2.2kw/167m, 42-05-06/79-17-22
NY Milford	88.5	NEW	NW 100w/223m, 42-35-44/74-51-53 (SUNY Oneonta)
NY North Salem	90.1	WJZZ	PG>440w/-13m, 41-23-03/73-34-35
NY Rochester	101.3	WRMM-FM	NW 710w/102m, 43-09-23/77-36-43 (aux)
NY Utica	100.7	WUTQ-FM	CC from WRCK
OH Dublin	106.7	WCGX	PR<3kw/144m, 40-01-02/83-01-11
OH Kenton	88.5	WKEN	PG<640w/59m, 40-40-25/83-36-32
OH Kenton	88.5	WKEN	PR<650w/59m, 40-40-25/83-36-32
OH Martins Ferry	90.7	WDWC	NW 75w/98m, 40-04-08/80-50-11
OH Mason	97.7	WOXY	PG 2.7kw/152m, 39-30-57/84-21-05
OH Mason	97.7	WOXY	PR 2.7kw/152m, 39-30-57/84-21-05
OH Oak Hill	96.7	WKOV-FM	req. CL from Frazeysburg
OH West Chester	89.9	WLHS	PG<85w/108m, 39-18-58/84-22-11
OK Davis	95.7	KKAJ-FM	PR<50kw/140m, 34-23-50/96-55-17
OK Goltry	90.5	KGVV	NW 3kw/40m, 36-27-45/98-02-28
OK Lawton	94.1	KZCD	PC>34.5kw
OK Mooreland	104.5	KZZW	CC for NS
OK Mooreland	104.5	KZZW	PG>62kw/366m, 36-16-06/99-26-56
OK Oklahoma City	100.5	KATT-FM	CX (aux, main transmitter remains operational)
ON Clarence	92.5	NEW	AF 300w/60m, adcon
ON Cornwall	92.1	CHOD-FM	PG>60kw/107m, relocate XR
ON Toronto	88.1	CFZM-1-FM	AF 225w/264m, amendment
ON Uxbridge	105.5	NEW	NS 900w/140m, 44-04-28/79-09-53, classic hits
ON Windsor	105.5	CBEF-2-FM	NW 2.4kw/74m, 42-18-59/83-02-58, relays AM 540
OR Coos Bay	89.5	KDCB	CC for NS
OR Prineville	107.7	KWXS	NW 800w/570m, 44-11-53/120-58-40 (Combined Communications)
OR Prineville	107.7	KWXS	PR>2.5kw
OR The Dalles	88.1	KQHR	PC>4kw
OR Union	103.1	KZUO	PG>950w/758m, 45-18-33/117-43-54
PA Confluence	98.5	WYRA	CC from WKEL
PA Dallas	107.7	WCIG	PR 2.45kw/158m, 41-20-11/75-50-52
PA East Stroudsburg	90.3	WESS	PR>2.5kw/-44m dismissed 73.509 (prohibited overlap with other stations)
PA Lehman Township	96.7	WABT	CC from WTSX
PA Newburg	90.1	WZXN	PG<420w-H/5.6kw-V/-14m
PA Scranton	99.5	WUSR	PG>410w/378m, 41-25-41/75-44-50
PA Telford	91.7	WBMR	PG>125w/77m, 40-18-48/75-17-29
PA Telford	91.7	WBMR	PR>125w/77m, 40-18-48/75-17-29
PR Culebra	102.1	WNVE	QC from 101.7, 9.5kw/178m, 18-19-19/65-17-59

PR Quebradillas	91.7	WZCA	PR>6kw/46m, 18-29-11/66-56-37; amendment from 700w V-only/44m
PR Vieques	90.1	WVQR	CC for NS
QC Perce	97.3	NEW	AF *denied*, would have relayed CFMV-FM Chandler. Due to mutual interference with CJRG-FM-2.
RI Narragansett Pier	102.7	WRNI-FM	PC<1.95kw/69m
RI Smithfield	88.7	WJMF	PR>1.5kw
SC Isle of Palms	95.9	WMXZ	CC from WIOP
SC Ridgeville	91.9	WWOS	CC for NS
SC South Congaree	95.3	WFMV	PG<1.9kw/80m, 33-52-34/81-04-28 CX ROA; will remain 6kw/100m at old site
SC South Congaree	95.3	WFMV	PG<80m, 33-52-34/81-04-28
SC South Congaree	95.3	WFMV	PR<80m, 33-52-34/81-04-28
SD Hartford	91.3	KSTJ	PR>58kw/225m, 43-37-56/97-22-24 dismissed 73.7002(c), for four years, permit awarded through comparative process cannot be modified to reduce service that resulted in preference. (they do propose higher power, but since the transmitter site would change, presumably some underserved area would lose service.)
TN White Pine	104.7	WLNQ	QC from 92.9, 2.8kw/150m, 36-13-00/83-11-38
TX Abilene	100.7	KULL	CC from KFGL
TX Abilene	92.5	KMWX	CC from KULL
TX Alpine	90.3	NEW	PR<1kw/-72m, 30-21-58/103-38-26
TX Alpine	91.7	KRTP	CC for NS
TX Andrews	91.5	KJRA	CC for NS
TX Bay City	101.7	KNTE	CC from KXGJ
TX Big Sandy	90.7	KTAA	PG>42kw/166m
TX Buda	101.5	KROX-FM	NS 12.5kw/229m (aux)
TX Bullard	94.3	KZXM	NW 2.05kw/172m, 32-08-38/95-19-59
TX Centerville	94.3	NEW	PA from 101.3, class A
TX Dallas	102.9	KDMX	NS 60kw/545m, 32-35-20/96-58-05 (aux)
TX Eden	91.5	KPDE	CC for NS
TX El Campo	96.9	KXGJ	CC from KNTE-FM
TX Escobares	104.7	KERG	PR>6kw
TX Fort Worth	102.1	KDGE	NS 60kw/545m, 32-35-20/96-58-05 (aux)
TX Hillsboro	102.5	KBRQ	XR 31-49-29/97-09-32
TX Jacksboro	95.9	KFWR	PR>100kw/425m, 33-04-14/98-00-34
TX Meridian	95.3	KOME-FM	PC 6kw/69m, 31-54-17/97-40-49
TX Midway	101.3	NEW	PA, class A
TX Monahans	91.1	KMRA	CC for NS
TX Monahans	91.1	KMRA	NW 1kw/40m, 31-33-56/102-59-53
TX Odessa	91.3	KXWT	CC from KOCV
TX Odessa	91.3	KXWT	PC>20kw/112m, 32-02-54/102-18-04
TX Ozona	89.1	NEW	NS 300w/39m, 30-42-43/101-07-30 (Templo Piedra Angular)
TX Paris	91.9	NEW	PG<450w
TX Paris	91.9	NEW	PR<500w/39m, 33-37-17/95-33-54; amendment from 34m
TX Perryton	93.7	KEYE-FM	QC from 96.1
TX Stratford	91.7	KOGW	CC from KLXN
TX Trent	92.1	KGDL	NW 19kw/114m, 32-38-05/100-07-51
TX Wheeler	98.9	KOGC	CC from KLXL
UT St. George	99.9	KONY	PC<620m
VA Charlottesville	88.5	WVTW	1kw H&V (was V-only)
VA Fairview Beach	95.9	WGRQ	PR 2.5kw/158m, 38-16-21/77-29-46
VA Fredericksburg	90.5	WJYJ	PG<125m
VA Spotsylvania	88.3	WQIQ	PG>5kw/120m, 38-07-47/77-42-55
VA Staunton	93.1	WSVO	PR>3.9kw/125m, 38-14-33/78-59-24
VA Vinton	101.5	WVMP	PG 650w/216m
VT Albany	94.5	NEW	AF 6kw/30m, 44-48-54/72-14-23; amendment from -60m at different site
VT Albany	94.5	NEW	NS 6kw/30m, 44-48-54/72-14-23
VT Brighton	106.9	WVTI	PR>212m
WA Bellevue	89.9	KASB	PC<10m
WA Manson	88.3	KHNW	NW 340w/166m, 47-51-16/120-09-59
WA Pasco	98.3	KEYW	PR>25kw
WA Port Townsend	91.1	KROH	AF 37w/459m (aux)
WA Spokane	91.9	KSFC	PC>2.2kw/335m
WI Appleton	91.1	WOVM	PR>30kw
WI Eau Claire	104.5	WAXX	PC>100kw
WI Mineral Point	95.5	NEW	PA dismissed
WI Sparta	89.3	WEQS	PG>18kw/150m, 44-07-12/90-49-28
WV Wardensville	103.3	WTCF	CC for NS
WY Antelope Valley	93.3	KLED	CC from KWDU
WY Antelope Valley	93.3	KWDU	QG from 93.3, 13.5kw/136m, 44-14-35/105-32-19
WY Bairoil	94.9	KCYO	CX ROA
WY Clearmont	102.3	KLQQ	PR<366m dismissed ROA
WY Dayton	101.1	NEW	NW 2.1kw/343m, 44-37-20/107-06-57
WY Dayton	102.3	KOWY	CC for NS
WY Dayton	102.3	NEW	QR from 101.1
WY Fort Washakie	91.7	KRKM	FC; sold to Educational Media Foundation
WY North Rock Springs	101.9	KXJW	QR from 101.1
WY Rock Springs	91.3	KWWM	NW 280w/-54m, 41-35-31/109-14-13

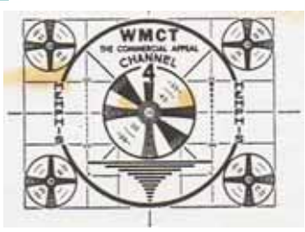
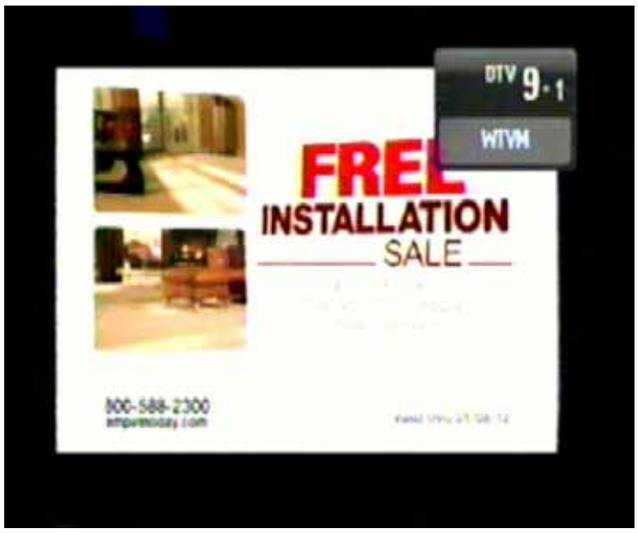


PHOTO NEWS

Jeff Kruszka
1909 Lost Lake Place
Pearland, TX 77581
jkruszka@sbcglobal.net

May 2012

More great digital and analog catches from Chris Dunne of Pembroke Pines, FL:

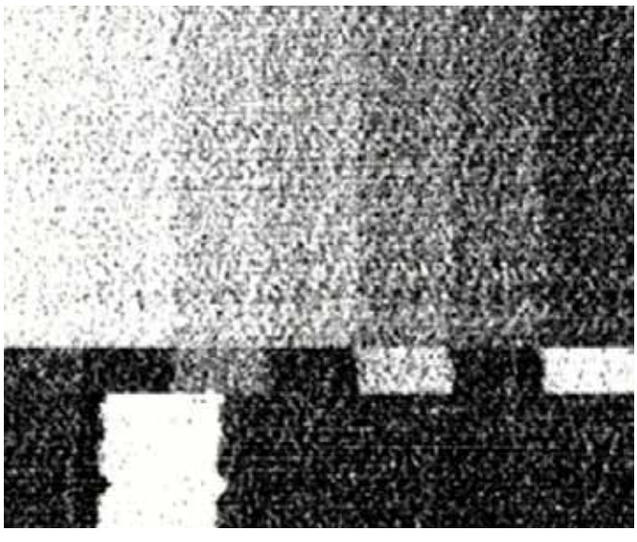


WTVM-11 Columbus, GA
520 mi Tr seen 12-19-11

WGVK-5 Kalamazoo, MI
1150 mi Es seen 1-22-12

CKCO-2 Wiarton, ON
1280 mi Es seen 1-22-12

CIII-TV-2 Bancroft, ON
1320 mi Es seen 1-22-12



YNTC-2 Managua, NIC
1025 mi Es seen 1-22-12
"right after sign off"

And now some more excellent photos from Danny Oglethorpe, Shreveport, LA:

XHCHF-6 Chetumal, QRO
1025 mi Es seen 7-24-11

XEWO-2 Guadalajara, JAL
1002 mi Es seen 8-11-11

XHLSI-6 Mazatlan, SIN
996 mi Es seen 8-12-11

XHBC-3 Mexicali, BCN
1268 mi Es seen 8-13-11

XEPM-2 Cd. Juarez, CHIH
742 mi Es seen 9-10-11

KADF-LP-20 Austin, TX
277 mi Tr seen 8-22-11

CMBA-2 Havana, Cuba
950 mile Es seen 12-29-11

XHBS-4 Los Mochis, SIN
1028 mile Es seen 1-21-12

XHI-2 Los Mochis, SIN
1028 mile Es seen 2-8-12

XEWH-6 Hermosillo, SON
1045 mile Es seen 2-28-12
"Telemax logo upper right"

And a couple from me from last year:

KTVE-27.2 El Dorado, AR
298 mile Tr seen 4-9-11

WUOA-6 Tuscaloosa, AL
566 mile Es seen 6-10-11

73's, JEFF

Coast to Coast TV DX

Featuring reports from the entire United States and all of Canada.

Send reports by the 15th of each month to:
Nick Langan
1040 Riverview Drive
Florence, NJ 08518
E-mail: nickl@wtfda.org (East) wtvdx@wtfda.org (West)

The Editor's Note

Another DX season is upon us! With the calendar heading toward May, it's time to start watching the dials for any E-skip activity. Let's hope the upcoming season brings you many DTV decodes via Es. Will this be the first year someone decodes a VHF high-band DTV via skip? There was some tropo across the plains and south early in the month, but it has since been quiet just about everywhere. Tropo conditions should only improve as we move deeper into spring.

Dennis Park Smith
3605 San Remo Dr
Santa Barbara, CA 93105-2523
Telephone (805) 687-7803
Times 24-hour PDT

This report is for March and into April 2012. Ocean temp cooler yet at 54F. Only a little stability and a little coastal tropo at times. High air temps mid 60s F to mid 70s F; lows in 40s F. So-Calif coastal tropo to San Diego/Tijuana/Tecate up to 220 mi:

Feb 27-Mar 2	None	Unsettled, showers
Mar 3 – Mar 5	Variably poor	Calm, some warming
Mar 5 eve	Almost good	
Mar 6 – 7	None	Wx front, cooler, windy
Mar 8 morn	Fair	Calm, some warming
Mar 8 – 9	*Out of town, to Wasco*	
Regulars only		
Mar 9 eve-Mar 10	Fair	Still calm
Mar 11 – 19	None	Cooler, rain Mar 17-18, colder
Mar 20 – 21	Poor-fair	High pressure, calm-cool
Mar 22-Apr 1	None	Unsettled, rain Mar 25
Apr 2 – Apr 4	Var. poor-fair	Calm, hi pressure, warming
Apr 5	None	Windy

Mar 5: Es at 1820 PST for apx 6 minutes, analog chs 2-5, Spanish, no IDs
Mar 24: There was an hour of fair tropo 2000-2100 PDT only.

Best of DX to All Dennis

Dave Pomeroy
2321 SE Libra Ct.
Topeka, Kansas 66605-3505
davepomeroy@sbcglobal.net

December 2011
24 1030 Tr KBTO-15 Oklahoma City, OK
KDOR-17 Bartlesville, OK
KOKI-22 Tulsa, OK

January 2012
20 1720 Es UNID analog 2,3,4 Spanish
23 1400 XEPM-2 Juarez, CH

April 2012
1 0645 Tr KLBY-17 Colby, KS
KERA-14 KDAF-32 Dallas, TX
KUVN-23 Garland, TX
KDCU-31 Derby, KS
0700 KVUE-33* Austin, TX
KAZD-39* Lake Dallas, TX
KDFI-36 Dallas, TX
KXAS-41 Ft. Worth, TX
KPXD-42 Arlington, TX

KACD-CD 50* Mesquite, TX
KSTR-48 Irving, TX
KMPX-30 Decatur, TX
KTXR-29 Dallas, TX
KPTX-28 Tulsa, OK
KTEN-26 Ada, OK
KQCW-20 Muskogee, OK
KDOR-17 Bartlesville, OK
KHAS-5 Hastings, NE
KBSD-6 Ensign, KS
KNOP-2* North Platte, NE
KAKE-10 Wichita, KS
KAFT-9 Fayetteville, AR
KLKN-8 Lincoln, NE
KOOD-16 Bunker Hill, KS

		KQTV-7	St. Joseph, MO
	0730	WOWT-22	Omaha, NE
	0740	KTXD-46	Greenville, TX
		KBTX-50*	Bryan, TX
	0800	KXVO-38	Omaha, NE
	0815	KOZJ-25	Joplin, MO
		KFSM-18	Ft. Smith, AR
	0840	KETH-24*	Houston, TX
	0845	KRSC-36	Claremore, OK
		KSNF-46	Joplin, MO
		KNWA-50	Rogers, AR
	0900	KOET-31	Eufaula, OK
	0930	KMEG-39	Sioux City, IA
	0940	KBIN-33	Council Bluffs, IA
		KSIN-28	Sioux City, IA
	1020	KYNE-17	Omaha, NE
		KCAU-9	Sioux City, IA
2	0700	KOCW-14	Hoisington, KS
		KSPR-19	Springfield, MO
		KARK-32*	Little Rock, AR
		KVTN-48*	Jonesboro, AR
		KNWA-50	Rogers, AR
		KWTV-9	Oklahoma City, OK
	0720	KERA-14	Dallas, TX
		KMPX-30	Decatur, TX
	0740	KMEG-39	Sioux City, IA
	0745	KTIV-41	Sioux City, IA
		KUVA-23	Garland, TX
		KTBO-15	Oklahoma City, OK
	0805	KTVT-19*	Ft. Worth, TX
		KDAF-32	Dallas, TX
		KSTR-48	Irving, TX
		KWHB-47	KOTV-45 Tulsa, OK
		KTEN-26	Ada, OK
		KDFW-35	Dallas, TX
		KSBI-51*	Oklahoma City, OK
		KTUL-10	KJRH-8 Tulsa, OK
		KAFT-9	Fayetteville, AR
		KFSM-18	KHBS-21 Ft. Smith, AR
		KOCB-33*	Oklahoma City, OK
		KTUZ-29*	Shawnee, OK

A couple of decent days of tropo with Houston and Austin, TX being the most distant. Austin is around 600 miles and Houston around 625. Signals were generally pretty strong with three channel 33's making it past local low power channel 33. KVUE-TV from Austin was one of those. Many other stations overcame strong semi-local signals from Kansas City. I was surprised to have seen anything past KCPT-18, KTAJ-21, KCTV-24, KMBC-29, KMCI-41, KSHB-42 and KPXE-51. Available channels are limited for DX but it can still be fun. I have had KNOP-2 show on the Zenith box, but this is the first confirmed reception and my first channel 2 via tropo. The low power channel 50 from Texas is my most distant low power digital. One more month in Alaska and we will be back home in Kansas. The year in Alaska has been a real adventure and I miss it except for DX and not enough days to get out on a bicycle.

FCC OPENS RADIO AIRWAYS TO SMALL NONPROFIT LOCAL STATIONS

www.allgov.com
March 22, 2012

Advocates of community radio won an important victory this week when the Federal Communications Commission (FCC) announced it would dismiss a backlog of more than 6,000 pending applications for what are known as translators and open the application process to Low Power FM (LPFM) stations.

Translators are repeater stations that rebroadcast distant radio stations, something commercial radio networks rely on to pull in million-listener audiences. LPFM stations will now have access to the same frequencies previously dominated by the big networks.

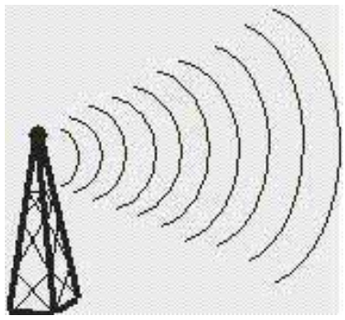
Generally speaking, LPFM stations are run by nonprofit groups such as colleges, churches, schools, labor unions and other community organizations, and have a range of 5 to 10 miles.

According to the Prometheus Radio Project, “Low power community stations are non-commercial and cost as little as $10,000 to launch, putting these stations within reach of many communities who have limited access to other media outlets.”

The Local Community Radio Act was signed into law by President Barack Obama on January 7, 2011, but it has taken more than a year for the FCC to sort out the implementation of the law.

Northern FM DX

Keith McGinnis
18 Newbridge St., Hingham, MA 02043
longwave@comcast.net 781-875-1944



For Dxers in the following states: CT IA ID IL IN MA ME MI MN MT ND NE NH NJ NY OH OR PA RI SD VT WA WI WY and all of Canada. Please submit by the 10th of each month.

EDITOR'S NOTE PLEASE SUBMIT ALL REPORTS IN THE FORMAT SHOWN BELOW.

Time(tab)Calls(tab)Freq(tab)City(tab)State(tab)details

Formats can either be plain text, Word or Excel as long as format is adhered to. Any submissions in other formats may not be used at editor's discretion.
All Submissions must be in to me by the 10th of each month.

Jeff Falconer, VA3NN - Clinton ON EN93fo
Sangean HDT-1X, Sony XDR-F1HD, APS-13 at 22', 10db preamp
New=* New calls={XXXX} t=Tentative Time=ELT Distances=Miles

Feb 10 Ms

2033	**WLBF**	**89.1**	**Montgomery**	**AL**	**RDS PS: Faith FM / PI: bogus 'KALE' / PTY: Religious Music 813**

Feb 11 Tr

1404	**WDHT**	**102.9**	**Urbana**	**OH**	**R&B, legal ID, "WDHT, 'Hot 102.9' Urbana-Springfield-Dayton" 280**

Feb 17 Ms

2349	**WZKM**	**89.7**	**Waynesboro**	**MS**	**Preacher, RDS PI: WZKM 905**
2350	**KJTH**	**89.7**	**Ponca City**	**OK**	**REL: AC, RDS PI: KJTH 975**
2359	**KMA**	**99.1**	**Clarinda**	**IA**	**Sports, RDS PS: KMA / PI: bogus 'WAN' 712**

Feb 18 Ms

0059	**KBEZ**	**92.9**	**Tulsa**	**OK**	**Pat Benetar song, RDS PS: BOB FM / PI: KBEZ 925**
1249	**KCCM**	**91.1**	**Moorhead**	**MN**	**CLA, RDS PI: KCCM / PTY: Classical, prev by Es 766**
1430	**KKXL**	**92.9**	**Grand Forks**	**ND**	**RDS PI: KKXL / RT: XL93 805**
1515	**Unid**	**101.5**	**?**	**??**	**RDS PI: WNFI, beamed NW**

Feb 18 Tr

1445	**WIMK**	**93.1**	**Iron Mountain**	**MI**	**"Rocking the UP '93-Rock'", Ted Nugent song 354**

Feb 21 Tr

2126 WWCD 102.5 Baltimore OH Columbus Bluejackets HKY 272

Feb 25 Ms

1740 KXGT 98.3 Carrington ND Pings of girls HS BKB, one mentioned Central Prairie, //stream 883

Mar 03 Ms

1127 WMAE 89.5 Booneville MS RDS PS: Think Radio / PI: WMPN 728
2350 KERX 95.3 Paris AR RDS PI: KERX 880

Mar 03 Tr

2245 WNDV 92.9 South Bend IN Good with ads 275
2301 WGTZ 92.9 Eaton OH Legal ID, RDS PS: The Fly 300

Mar 04 Ms

1144 WRLD 95.3 Valley AL ".on Boomer 95.3 we." 775
1200 KBBN* 95.3 Broken Bow NE ".KBBN." 944

Mar 04 Tr

1233 {WTRC} 95.3 Niles MI Promo for Elkhart General Hospital, "Michiana's News Channel WTRC", ex WAOR 273
1708 {WAOR} 95.7 Nappanee IN Info on tornados in Indiana, calls, ex WYPW

Mar 10 Tr

1649 WPWX 92.3 Hammond IN Ads, "Power 92.3" 334
1657 WDRV 97.1 Chicago IL Fair with classic rock, "Drive 97.1" 331
2043 WCXT 98.3 Hart MI "98.3 The Coast". RDS PS: WCXT 242

Mar 11 Tr

0102 WIMK 93.1 Iron Mountain MI Legal ID "WIMK, '93 Rock', Kingsford-Iron Mountain" 354

Mar 13 Tr

1709 WPPN 106.7 Des Plaines IL Chicago ads in SS 343

Mar 15 Tr

1720 WUWM 89.7 Milwaukee WI Calls 322
1725 WMYX 99.1 Milwaukee WI Poor //stream 332

Mar 16 Tr

2331 CICW* 92.9 Fergus ON AC. "The Grand 92.9", 200 watts, only been on about 1 month 58

Mar 17 Tr

0015	{CFLZ}	101.1	Fort Erie	ON	AC, ads, ex CKEY 140
0023	{CJED}	105.1	Niagara Falls	ON	AC, "Ed FM", ex CFLZ, heard on Sony 129
0100	CHES*	88.1	Erin	ON	OLD, legal ID, 250 watts, heard on Sony 75
2241	CKFG*	98.7	Toronto	ON	R&B, "G-98.7", RDS PS: G98-7 FM / PI: bogus 'KWI" 108

Mar 18 Tr

0049	CKQB*	106.9	Ottawa	ON	Loud, rock, "The Bear", RDS PS: The Bear / PI: bogus 'WVZ' 310
0100	CKKL	93.9	Ottawa	ON	Rock, "Bob FM", legal ID 310
0102	CJMJ	100.3	Ottawa	ON	AC, "Magic 100" 310
0129	CBOQ	103.3	Ottawa	ON	Loud, "CBC Radio 2", RDS PS: CBC - R2 / PI: bogus 'WZJ' 310
0201	CHMS*	97.7	Bancroft	ON	Good with rock, "Moose 97-7", RDS 204
0209	CJKX	95.9	Ajax	ON	C&W, "GTA's country, 'KX-96'" over CFPL!
1006	WUWM	89.7	Milwaukee	WI	Calls, into "NPR Weekend Edition" 322
1600	WGNB	89.3	Zelland	MI	Rare, SRN News, legal ID, Moody REL 230

Mar 18 Ms

0135	Unid	88.5	?	??	RDS PI: bogus KZKE, pointed NE, may have been via Tr
1552	KXNE	89.3	Norfolk	NE	CLA, RDS PI: KXNE, prev by Es 803
1559	KRSW	89.3	Worthington	MN	CLA, RDS PI: KRSW 719

Mar 24 Ms

1020	KMLV	88.1	Ralston	NE	Long burst, REL: AC, RDS PS: K-LOVE / PI: bogus 'WAD' 756
1020	KKBB*	88.1	Waterloo	IA	Same burst as KMLV, R&B, HD, only my third HD logging via Ms 551
1036	KNTU	88.1	Denton	TX	RDS PI: KNTU / PTY: Jazz 1102

Mar 24 Tr

1059	WHID	88.1	Green Bay	WI	Begging for donations, legal ID 325

Mar 25 Ms

0047	KMLV	88.1	Ralston	NE	RDS PS: K-LOVE / PI: bogus 'WAD' 756

Mar 30 Ms

2147	WLBF	89.1	Montgomery	AL	RDS PS: artist/song / PI: bogus 'KALE' 813
2329	WEGX*	92.9	Dillon	SC	C&W, RDS PS: WEGX 649

Apr 06 Tr

2103	WVMV*	91.5	China Township	MI	REL: AC, "Smile FM", came on air Mar 27 84

Apr 07 Ms

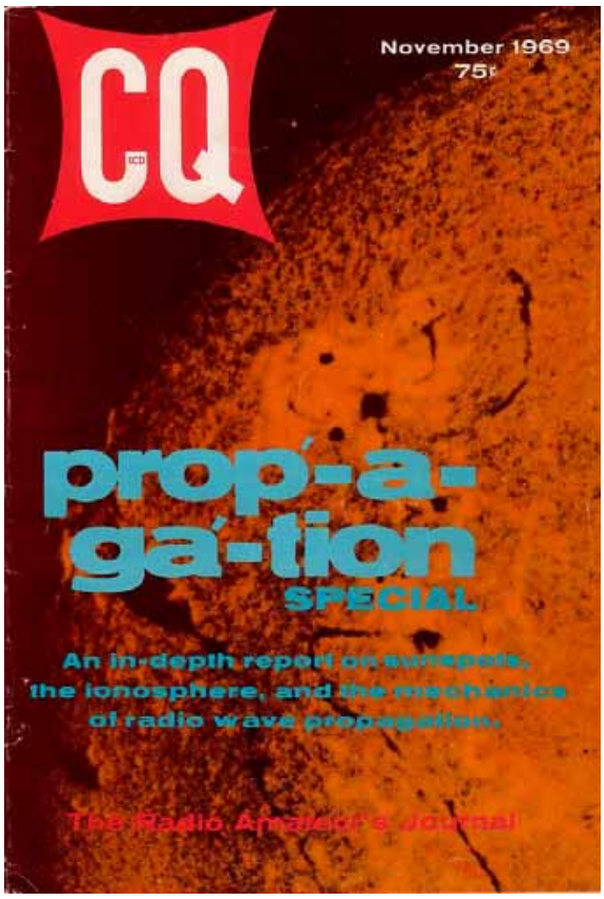
1009	KJTH	89.7	Ponca City	OK	RDS PS: artist/song / PI: KJTH 975

Apr 08 Ms

1125	KJTY	88.1	Topeka	KS	RDS PS: FAMILY / PI: KJTY 785

VHF IONOSPHERIC PROPAGATION

By GEORGE JACOBS, W3ASK and STANLEY LEINWOOL
CQ MAGAZINE NOVEMBER 1969



Long-distance propagation via ionospheric reflection normally takes place over the frequency range 3 to 30 mc. Higher frequencies are generally propagated through the troposphere and are often limited to distances not much greater than line-of-sight. From time-to-time, however, ionospheric propagation is possible in the lower v.h.f. range and openings on the 50 mc amateur band may take place over distances of up to several thousand miles, while openings on 144 mc may be possible up to approximately 1300 miles.

This article reviews the conditions under which ionospheric propagation may be possible on the 50 and 144 mc bands, and the characteristics of such openings that may result from regular F2—layer reflection sporadic-E, auroral and meteor ionization, and trans-equatorial andionospheric scatter.

Regular F2-layer ionospheric openings may be possible on 50 mc during years of high solar activity. Openings on this band took place for many hours at a time for distances of 2000 miles or more, and between the United States and all other continents during the maximum periods of the past two sunspot cycles, 1947-1950 and 1956 to 1960. Many trans-continental openings and openings between north and south America have been reported during the present period of peak solar intensity.

F2-layer openings on the 50 mc band peak during the winter months to Europe and the Far East, and during the spring and fall months to Africa, South America, Australasia and other areas in a more-or-less southerly direction. Signal levels are often exceptionally strong during these openings, and communication over very great distances may be possible with relatively low power levels.

Regular F2-layer openings on 50 mc are a daytime propagation phenomena, with the band opening to Europe during the hours before noon, to Africa during the noontime period, to South America during the afternoon and sometimes extending into the early evening, and to the Far East and Australasia during the late afternoon and early evening hours, local standard time in the United States.

Propagation conditions in the 28 mc band may often provide clues to 50 mc openings during the fall, winter and spring months. When F2-layer openings are observed on 28 mc over distances of 1200 miles or less, the m.u.f. is rising rapidly and 50 mc may also be open in the same general direction, but over a considerably greater distance.

For the next year or two, solar activity may still be high enough to permit some F2-layer 50 mc openings from the fall through the spring months in the United States. Openings of this type will, however, decrease as the solar cycle declines, with little likelihood of any taking place during years of low solar activity.

The regular F 2 layer of the ionosphere is never sufficiently electrified to propagate signals on the 144 mc band. Not even during the unprecedented peak years of 1957-58 were frequencies in this range propagated via the F2-layer.

Sporadic E- Ionization

There frequently forms in the vicinity of the normal E-layer of the ionosphere, clouds or patches of abnormally intense ionization, which are capable of reflecting radio waves of frequencies much higher than those reflected by the regular E or F layers. These clouds usually cover a rather small geographical region, approximately 50 to 100 miles in diameter. They occur more or less at random

and are relatively short lived, usually dissipating within a few hours. This sporadic ionization generally occurs about 60 miles above the earth's surface, at about the same height as the regular E layer. For this reason it is called sporadic-E ionization, or Es.

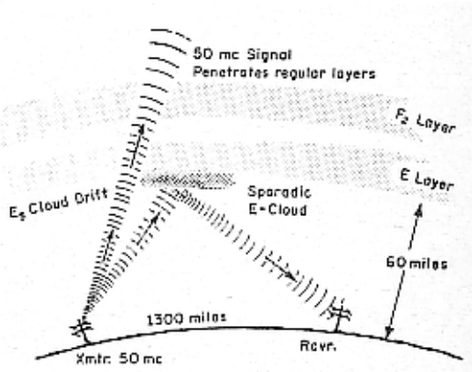


Fig. 1—50 mc short-skip propagation by means of sporadic-E reflection.

As a result of an intensely ionized sporadic-E cloud, it is at times possible to communicate over relatively long distances on the 50 mc band, and on some occasions on 144 mc as well (See fig. 1).

The height at which sporadic-E ionization occurs limits one-hop propagation to a maximum distance of approximately 1300 miles. During periods of widespread Es ionization, two-hop propagation may sometimes be possible up to distances of approximately 2400 miles. Band openings due to Es are often referred to as short-skip openings for this reason.

Reflection from sporadic-E clouds takes place with very little signal loss, resulting in exceptionally strong signal levels during most openings, even when very low power levels are used. Quite often it is possible to maintain communications considerably off the great circle path between two stations by means of back and side scatter from sporadic-E clouds. For example, a station in eastern New York State may work another station in the central part of the State by both stations pointing their antennas toward a common Es cloud, say for example, located over Georgia.

Sporadic-E ionization varies diurnally, seasonally and geographically. It occurs most frequently, and with greatest intensity, in polar and equatorial regions. In mid-latitudes, for example in the United States and Europe, it occurs most often during the late spring and summer months and during December, and has a tendency to peak during the late morning hours and again about sunset, although it can occur at any time.

In equatorial regions, Es is essentially a daytime phenomenon, with little seasonal variation. In polar regions, sporadic-E occurs most frequently during the nighttime hours, and again there is little seasonal variation, except for somewhat of an increase during the spring and fall.

Sporadic-E ionization is subject to erratic and often rapid variation. The ionized clouds are known to drift, generally in a westerly or north-westerly direction, at approximately 150 to 250 miles per hour. The drift appears to be due to winds that are believed to exist in the ionosphere. Because of this drift, reception areas can change within a relatively short period of time, and it is not uncommon for a sporadic-E opening to fade out completely from an S-9 plus level in a matter of a few minutes.

While the relationship between Es and the sunspot cycle is not yet fully understood, it appears that Es occurs somewhat more frequently in mid-latitudes as the solar cycle declines. Lf this is true, sporadic-E propagation on 50 mc is likely to be more prevalent during the next several years.

What causes sporadic-E ionization is not yet fully known. Since it occurs more often during the hours of daylight, it seems that ultra-violet radiation might play some role in its formation. Since it also occurs at night, especially in polar regions, auroras and meteor trails are other suggested possible sources of ionization. More recent theories indicate that the ionization might be caused by shearing forces associated with rapid wind movements in the ionosphere.

Since little is known about the ionizing sources for Es, its behavior cannot be predicted by positive means at the present time. Statistical studies show, however, that a sharp increase takes place at mid-latitudes during the late spring and summer when short-skip openings up to distances of about 1300 miles should be possible on the 50 mc band between 5 and 10% of the time, during the daylight hours. Occasional openings up to approximately 2400 miles may also be possible on 50 mc, and up to 1300 miles on 144 mc. The optimum time for v.h.f. short-skip openings is between 8 and 11 A.M. and 6 and 8 P.M., local standard time.

Here's a useful tip for predicting 50 mc *short skip* openings. The geometry of propagation is such that as the skip distance decreases on the 28 mc band, the highest frequency that will be reflected by a sporadic-E cloud is increasing. By observing the minimum skip distance heard on 28 mc during an Es opening, and using the chart shown in Fig. 2, it should be possible to tell whether or not 50 mc is open, and what the skip distance might be.

For example, if the minimum skip heard on 28 mc in a south westerly direction is observed to be 400 miles (it's the distance to the nearest skip station heard that counts, not others), from fig. 2 the intersection between 400 miles and the 28 mc curve corresponds to an muf of 60 mc. This means that 50 mc short-skip openings in a south- westerly direction is very likely. The minimum skip

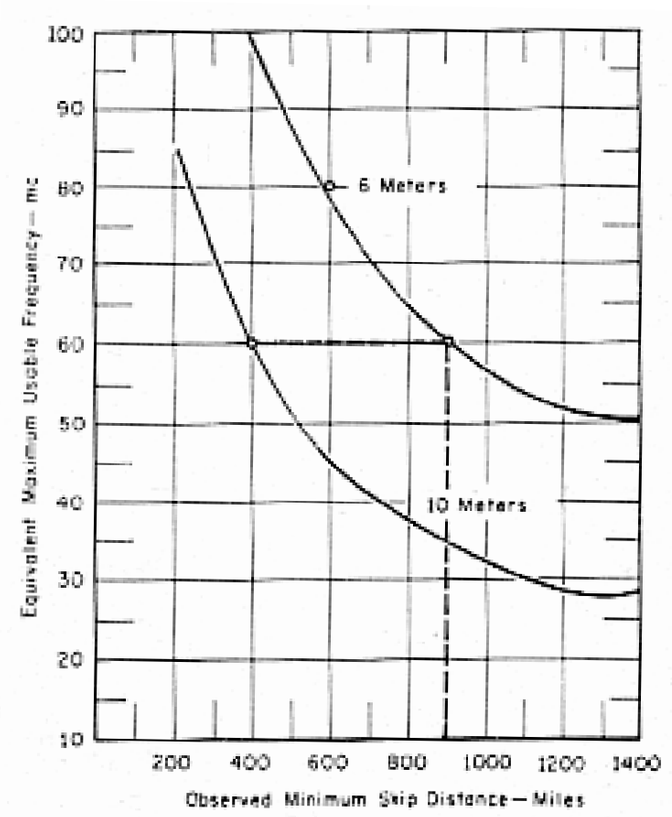


Fig. 2—Chart describing correlation between sporadic-E openings on the 10 meter amateur band and possible 6-meter openings at the same time. The example shows a minimum skip distance of 400 miles observed on 10 meters; from the chart 6 meters should be open with skip greater than 900 miles.

distance that can be expected on 50 mc can be found from fig. 2 by locating the intersection between 60 mc and the 50 mc curve. The resulting distance is found to be 900 miles. A useful rule of thumb to remember is that when skip stations are heard less than 500 miles away on 28 mc, the chances are very good that 50 mc will open in the same general direction.

Auroral Ionization

Corpuscular radiation, consisting of charged particles emitted time-to-time from the sun's surface (usually from solar flares), bombard the atoms and molecules of the gases present in the rarified atmosphere at the extremities of the earth, causing them to ignite, forming an auroral display.

Of all natural phenomena, auroras are probably the most breathtaking and spectacular. They arc across the night sky as weird, yellowish-green, dancing ribbons and violently throbbing rays, or as great draperies folding and unfolding. Some of the rarer displays may also contain shades of red and purple. They occur at E layer height in the ionosphere, about 60 miles above the earth's surface, and can be seen obliquely from the ground for distances up to about 600 miles from the zenith point (See fig. 3).

Observations made over the past 100 years, and intensified during the past decade with investigation by high flying airplanes and satellites, have defined areas of the world where auroras occur most frequently. The zones of maximum occurrence, where they are seen on approximately 250 nights a year, are belts about 23 degrees wide centered on the northern and southern magnetic poles. In the northern hemisphere, the zone arcs across northern Alaska, central Canada, the southern tip of Greenland and Iceland, the northern tip of Norway, and the northern coast of European Russia and Siberia.

Auroras are seen less frequently as one proceeds south of this zone. In the northern areas of the U.S. mainland, they are seen between 10 and 40 nights a year, while in southern states several years may pass before one is seen.

Auroras play havoc with shortwave communications. The excessive ionization which causes auroras also causes severe signal absorption. As a result, an aurora acts like a screen, shielding shortwave transmissions from passing through. For this reason, trans-polar communication from the United States is extremely difficult and often unreliable. The presence of auroral effects on propagation can frequently be detected by a unique fading component, consisting of a low frequency "flutter" of from 100 to 1000 c.p.s. which the aurora superimposes on a signal. During intense auroral activity, this fading component is often strong enough to render a voice signal unintelligible.

There is a very close relationship between ionospheric storms and the occurance of auroras. During storms, the zones in which auroral effects are most pronounced expand and move southward. The more severe the storm, the further south the alfected area. During great storms auroras have been seen as far south as Cuba, virtually blacking out shortwave communications throughout the entire northern hemisphere.

While auroral displays can seriously disrupt communications on the amateur h.f. bands, propagation on 50 and 144 mc often improves during these periods. Ionization associated with an aurora is often intense enough to reflect or scatter 50 and 144 mc signals over distances up to about 1300 miles, when propagation over these paths by other modes may not be possible.

Auroral ionization varies rapidly in intensity and height. This often causes severe multipath distortion on v.h.f. signals reflected from an aurora. Voice modulation is often unintelligible on 50 mc signals, and nearly always on l44 mc. While voice communication may sometimes be possible using s.s.b., experience has shown that keyed c.w. is the most effective way to communicate under these conditions

While auroras may occur at any time of the year, they take place most frequently

during the fall and spring months, usually peaking during March and September. A secondary peak takes place during the winter months, with the fewest number occurring during the summer.

Fig. 3—A brilliant aurora of the type associated with ionization intense enough to reflect 50 and 144 mc signals between 300 and 1300 miles.

Geographically, the more northerly the latitude, the greater the number of v.h.f. auroral openings. In the U.S., the northern tier states are favored with fairly good openings between 50 and 75 days a year. In the central states openings may occur between 10 and 35 days a year, while considerably fewer occur in the southern tier states.

While auroral displays can be seen visibly only during the hours of darkness, their radio affects are felt during the daylight hours as well. Most v.h.f. openings begin during the late afternoon and early evening hours, lasting from several minutes to several hours. During prolonged ionospheric storms, auroral openings may occur and re-occur several times throughout a day, for several days in a row. Communication by means of auroral reflection can take place over distances between approximately a few hundred to a thousand miles, with some approaching the geometrical maximum of 1300 miles.

Since auroras occur in northern areas, north is the optimum antenna bearing to establish communications by this propagation mode. Once communication is established, antennas should be rotated slowly to maximize signal reflection or scatter from the auroral ionized regions.

Since most auroras are produced by solar flares, they occur most frequently two or three years after a peak in solar activity has been reached, when flares are most numerous, and they taper off gradually thereafter, occurring infrequently during periods of minimum solar activity. With the peak of the present sunspot cycle occurring a year ago, a maximum number of v.h.f. auroral openings are expected during the next year or two.

Since v.h.f. auroral openings often coincide with ionospheric storminess, the best times to check for these openings are during periods when the ionosphere is predicted or expected to be disturbed. Warnings of v.h.f. openings may be had by carefully monitoring reception on the h.f. bands. When an ionospheric storm is noted, usually by erratic or flutter fading on signals, or a lack of signals, auroral openings may be possible on the 50 and 144 mc bands.

Meteor Ionization

Meteors, or shooting-stars as they are often called, are particles of mineral and metallic matter which are continually entering the earth's atmosphere from outer space. It has been computed that hundreds of millions of meteors, most of them microscopic in size, enter the earth's atmosphere every 24 hours. This figure increases many fold during certain times of the year, when meteor showers occur.

As large meteors enter the earth's atmosphere at velocities of up to 50 miles per second, the intense heat generated by friction with the upper air causes them to leave an ionized trial behind as they burn some 30 to 100 miles above the earth. This ionization is often intense enough to reflect or scatter v.h.f. signals over distances of several hundred miles. Signals reflected by meteor ionization can be identified by the very short, sudden bursts in signal strength that take place when the ionized trail passes through the path of the signal. The signal increase, on the order of 20 to 40 decibels, is sharp and sudden, lasting for a few seconds then gradually decreasing. A burst may last from a few seconds to a half minute or so before fading into the background signal or noise level. A Doppler shift may also often be noticed on signals reflected from meteor trails. This is caused by the rapid motion of the reflecting point. In some cases the shift can amount to as much as 2 kc and last for several seconds.

Meteor reflected signal bursts are of little communication value unless they occur frequently enough, or are of sufficient duration to permit the transmission of some information. A 50 mc signal may appear as a few readable words, while on 144 mc the burst is usually shorter, often being nothing more than a ping. At this rate, even during major meteor showers, it requires a great deal of time and patience to transmit information between two stations. For this reason, high keying speeds are preferable to voice transmissions, although the exchange of voice information may at times be possible on 50 mc, especially when using voice-controlled s.s.b.

During a typical 24-hour period between 300 and 500 meteor reflected bursts lasting five seconds or longer can be counted on 50 mc. Approximately 25% of these will last from between10 and 30 seconds, and occasionally one may last considerably longer. A great number of bursts will be heard on 28 mc and the lower frequency bands and considerably fewer on 144 mc and higher frequencies.

Shower Name	Date of Peak Intensity	Shower Duration (Days)	Number of Meteors per Hour
Quadrantids	January 3	1	35-40
Lyrids	April 21	2	12-15
Eta Aquarids	May 5	9	12-20
Delta Aquarids	July 29	10	20-30
Perseids	August 12	5	50
Orionids	October 21	4	20-25
Taurids	November 5 & 12	20	12-15
Leonids	November 17	4	20-25
Geminids	December 13	5	40-50
Ursids*	December 22	2	15

*Peaks during the early afternoon hours, all others peak during the hours of darkness.

Fig. 4—List of major meteor showers. The dates given are approximate, and the intensity of various showers may vary from year-to-year. About 20 other showers of less intensity also occur during the year; 7 between January and June, 13 between July and December.

While meteors may occur at any time, most of them enter the earth's atmosphere between midnight and dawn, peaking between 5 and 7A.M., local time. Since ionized meteor trails occur at an average height of 60 miles, the optimum communication range is approximately 800 miles, with maximum range about 1300 miles. Seasonally, considerably more meteors occur during June and July than at any other time, with a minimum number occurring during January and February.

From time-to-time, on a regular basis, the earth moves through areas in space in which there are very large swarms of meteors. During such periods, called meteor showers, meteors enter the earth's atmosphere with more than average frequency. During many showers meteors will appear at the rate of one to two each minute and during certain very large showers, many thousand may be observed during a single night. The possibility for 50 and 144 mc communication by means of ionized meteor trails increases considerably during meteor showers.

Figure 4 lists the major showers, the dates they occur and the average number of meteors that will probably enter the earth's atmosphere each hour during these periods. While meteor burst communication can be quite difficult, requiring a great deal of time and patience to move a small amount of information, it does provide a means for intermittent ionispheric communication on the v.h.f. bands over distances of between approximately 800 and 1300 miles.

Trans-Equatorial Scatter

Strong 50 mc band openings can occur, particularly during periods of moderate and high solar activity, over long north-south paths spanning the magnetic equator at times when the expected maximum usable frequency is considerably lower for the paths involved. These are called trans-equatorial or TE openings.

TE propagation was first observed by radio amateurs during the intense solar period of 1947. They also have pioneered into this propagation mode during subsequent periods of moderate and high solar activity.

In the western hemisphere the magnetic equator lies approximately 20 degrees south of the geographical equator and roughly follows an arc extending from Lima, Peru to Recife, Brazil and passing through La Paz, Bolivia. The optimum distances for TE openings range between 1500 to 2500 miles above and below the magnetic equator. Typical TE paths of high reliability are Puerto Rico to Argentina, Japan to Australasia, Southern Europe to Zambia, etc.

TE propagation is believed to be due to a highly ionized bell-shaped distortion known to exist in the ionosphere over the magnetic equator. Radio signals entering this area at a favorable angle are reflected considerable distances between the sides of the bulge in much the same manner that a ball rebounds off the sides of a billiard table. This may result in a long single hop opening, without intermediate ground reflection, of up to 5000 miles.

TE openings occur most often during periods of moderate and high solar activity, and hardly at all during the remainder of the cycle. Although they may occur during any season, TE openings peak during the spring and fall months. TE is a nighttime propagation phenomenon, with most openings occurring between 8 and 11P,M., local time at the path mid-point.

Signals must cross the magnetic equator in a north-south direction, or TE openings will not take place. A right angle crossing is optimum, but TE contacts have been reported between stations as much as 20 degrees off from a right angle crossing.

The TE maximum usable frequency is approximately 1.5 times greater than the daylight m.u.f. observed on the same path Thus 50 mc TE openings may be expected during the evening hours when an m.u.f. of 34 mc is observed during the daytime. TE openings may often occur on 50 mc when propagation is not possible on lower frequency bands on the same path, at the same time.

In the western hemisphere 50 mc TE openings occur almost every night during the spring and fall months over an area extending from Mexico City in the north to southern Chile and Argentina in the south. Within this area there is little variation in signals from night-to-night and reliability is high. Less frequent openings extend into the southern and central areas of the United States, with openings falling off rapidly at greater distances to the north.

Serious flutter fading is often noted on shorter path TE openings, but voice readability is seldom seriously impaired on longer path openings.

The 144 mc band is too high in frequency for TE propagation.

Ionospheric Scatter

When a frequency is at or below the muf, ionospheric propagation takes place by reflection from the ionized layers existing in the earth's atmosphere. Signals strike the ionosphere obliquely and are normally reflected in a forward direction. When the signal is above the muf, it will penetrate the ionosphere, with a very small amount of energy scattered back towards the earth in more or less random directions. The mechanism involved in ionospheric scattering is not yet fully understood, but it is believed to be due to roughness in the ionosphere and may involve the earth's magnetic field in a magnetic equator. In northern and temperate regions ionospheric scattering increases considerably with increases in magnetic activity and during ionospheric storms. While 50 mc scatter openings can occur at any time, they seem to peak during the evening hours of the spring and fall months, during periods of high and moderate solar activity.

To communicate by means of forward scattered signals, it is usual for both stations to direct their antennas at each other along the great circle path. To communicate by means of back scattered signals it is often best to orient both antennas at the apparent point of scatter, which may be considerably off the great circle path. This point can best be determined by slowly rotating until signal strength is maximized.

Signals scattered in a forward direction from the D and E layers may permit 50 mc openings over distances between approximately 600 and 1200 miles, while openings over considerably greater distances may be possible with signals scattered by the F layers. Backscattered signals may often permit 50 mc ionospheric communication between stations separated by relatively small distances.

The various modes of v.h.f. ionospheric propagation and their signal characteristics are summarized in Fig. 5. While normally propagation may be due to a single particular mode, there are times when a combination of several modes may be involved and taking place at the same time. All-in-all, ionospheric propagation takes place often enough in the 50 and 144 mc amateur bands to add an extra dimension of interest in operating in these bands.

Propagation Mode	V.h.f. Bands Prop. Possible	Latitude Zone Peak	Time of Day Peak	Seasonal Peak	Optimum Sunspot Period	Communication Distance-Miles	Band Opening Period	Signal Characteristics
Regular F-layer reflection	50 mc	Temperate	Daytime	winter	High	E-W paths 1800-3600 N-S paths 1800-6000	Several minutes to an hour or more	Exceptionally strong
	50 mc	Low, Equatorial	Afternoon to late evening	spring & fall	High	E-W paths 1800-3600 N-S paths 1800-6000	Several minutes to an hour or more	Exceptionally strong
Sporadic-E	50 & 144 mc	High, Polar	Night	spring & fall	High & Moderate	300-1300	Several minutes to an hour or more	Weak to strong with some flutter fading
	50 & 144 mc	Temperate	Before noon & early evening	late spring & summer	All	800-2400 on 50 mc 1100-1300 on 144 mc	Several minutes to an hour or more	Exceptionally strong
	50 & 144 mc	Equatorial	All day	All seasons	All	800-2400 on 50 mc 1100-1300 on 144 mc	Several hours to a complete day	Strong with flutter fading
Auroral Ionization	50 & 144 mc	High & Temperate	Late afternoon & early evening	spring & fall	High & Moderate	300-1300 miles	Several minutes to an hour or more	Weak to moderately strong, with strong flutter fading. Voice badly distorted, c.w. recommended
Meteor Ionization	50 & 144 mc	All	Night & early morning	June & July & during specific shower periods	All	800-1300	Several seconds to a half minute or so per burst	Strong bursts High speed c.w. recommended
Trans-Equatorial	50 mc	Low & Temperate	Evening through midnight	Spring & Fall	High & Moderate	2400-5400	From one to several hours	Weak to moderately strong, with some flutter fading at times
Ionospheric Scatter	50 mc	Low & High	Evening through midnight	Spring & Fall	High & Moderate	600-2400	A few minutes to several hours	Weak, fluttery signals

IBOC…
THE BEGINNING

Part One – Doug Smith
Part Two – Scott Fybush

PART ONE

I think HD Radio was designed to protect incumbent broadcasters from competition.

The technology certainly existed to switch to digital audio broadcasting. It was already being implemented overseas, using the Eureka system.

The problem with the Eureka system was that it equalized AM stations. If every existing analog station received a Eureka channel with similar daytime coverage, then AM stations that had little or no nighttime signal would suddenly cover just as well at night as they do during the day.

Not only that, but existing broadcasters, both AM and FM, could launch as many as five additional stations on their Eureka signals, with coverage and audio quality equal to that of their main station.

One could tell from the vigor with which LPFM was fought, that incumbent broadcasters wouldn't stand for anything that created that many newly-competitive signals.

HD Radio addressed those fears. A station's HD signal is fully conformed to its analog coverage area -- including any nighttime reductions in coverage for AM stations. That pesky little AM daytimer with IBOC remains a daytimer & 108.1 Big FM doesn't have to worry about it siphoning off any nighttime audience.

It also addresses the split-channel thing. AM HD doesn't allow for any of those annoying subchannels at all, and FM is limited to four programs at the most. (assuming you're willing to run two of them at greatly limited technical quality)

In the end incumbent broadcasters really don't care whether HD succeeds. They probably need to try to keep it going long enough to depreciate the gear off the books, and to avoid making it too totally obvious the purpose of HD was to block other digital schemes. I would imagine most stations will continue to repair trivial problems with their HD gear, but major failures will probably go unaddressed.

PART TWO

I would add that among the biggest early supporters of HD were some very well-meaning but less than technically proficient station owners who understood that the world was going "digital" but lacked a coherent concept of what that really meant in practice. Some of the smaller AM stations that were early adopters were essentially sold a bill of goods that they'd be able to broadcast in "FM quality" - and in fairness, few even within the engineering community understood how badly the AM HD system would function in the real world.

I would also add that the law of unintended consequences came into play pretty quickly.

When HD was approved, nobody anticipated the use of subchannels (that came along later, at the behest of public broadcasters who saw an opportunity), and thus nobody could have anticipated that some creative broadcasters would get the FCC to declare that an HD subchannel could be translated on an analog translator. And so nobody could have foreseen that in markets like Olean and Binghamton, clever smaller broadcasters could take one or two class A signals and create translator-based clusters of four or five "stations," or that in Atlanta and Kansas City and other bigger markets, Cumulus and others would create quasi-class A signals out of high-power translators fed by HD2s.

It's funny how the market finds ways of working around almost any regulatory attempts to restrain it, isn't it?

I will be very interested to see how much HD gear is on the floor when I go to the National Association of Broadcasters convention in Las Vegas in a couple of weeks. It's been a while since I've seen broadcast equipment makers unveil much new HD stuff. Especially telling will be the Ibiquity booth, where they've traditionally had a pretty extensive display of all the receivers that are at least notionally "available." That's become very slim pickings lately, as anyone who's actually

tried to buy an HD receiver knows. (At WXXI, as many of you know, we've been hopeful about using our 91.5-HD2 to fill in some very significant nighttime signal holes in our NPR news coverage on AM 1370 - but that's hard to do when we simply can't find receivers that are consistently available to would-be member/listeners.)

I think that when the retrospective history is written, one thing that will stand out is how needlessly afraid terrestrial broadcasters were of XM and Sirius at the beginning. I think that fear was part of why broadcasters were so quick to adopt the Ibiquity system. But I argued early on that the better approach might have been for the big broadcast groups to try to find opportunities to partner with satellite radio, providing broadcast content for national distribution over the satellite platforms, selling local ads on satellite content and using the existing marketing power of terrestrial radio to sell new radios with both satellite and HD reception capability. Instead, terrestrial radio spent a bunch of wasted time fighting a satellite radio industry that turned out to be more of a niche than a mass-market threat, and in the meantime the satellite radio companies paid their way into the distribution chain (automakers, big box stores, etc.), squeezing out the rather inept efforts of the HD forces.

A lot of people lost, and not many won in the end, save perhaps for Howard Stern.

<u>TV NEWS CONTINUES FROM PAGE 7</u>

WTVF Nashville is currently operating on RF channel 5, with a co-located Digital Replacement Translator (DRT) on RF channel 50. They hold a permit to move the main transmitter from RF-5 to RF-25.

The station now proposes to continue to operate the RF-5 transmitter, as a new Digital Replacement Translator at reduced power of 3kw. (the currently authorized power on channel 5 is 22kw. 3kw is the maximum limit for a DRT on channel 5, although the FCC has been known to waive this limit with regard to UHF stations if a good reason is given.)

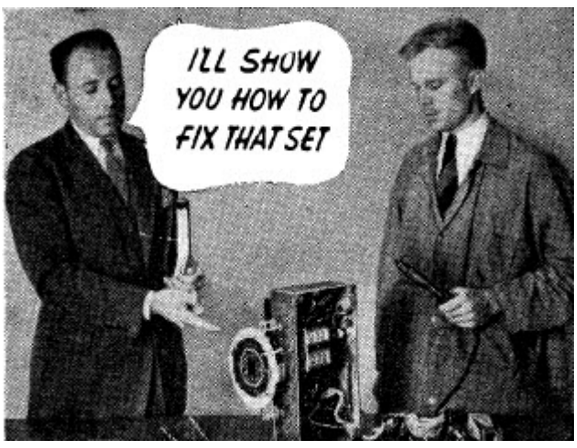
I haven't heard anything about the disposition of the existing RF-50 transmitter. It would seem it would no longer be necessary after the move to RF-25.

The new site for KPXM-41 is on the WCCO-4/KSTP-5/WUCW-23 tower in Shoreview, Minneapolis. Similarly, the new site for WPXK-54 is on the WATE-6/WTNZ-43 tower on Sharp's Ridge, Knoxville.

The FCC has granted more experimental permits for use of TV spectrum for tests in other services. Permits include:

- Channels 7-13 at Philipsburg, Montana: for testing smart grid applications.
- Channels 14-18 at the University of Notre Dame: (South Bend, Indiana) for “waveform research testing”.
- Channels 25, 26, 32, and 33 at San Diego: for 3G and “next-generation” wireless testing.

Good DX!



SIGN UP/Renewal form

YEARLY DUES $10.00 USD for Monthly VUD eZine

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 ( )

I have no computer or access to one. Please send a paper VUD(**$24**) ( )
Please, 12 month renewals only for paper VUDs. Thank you.

Yearly dues **Mail your dues to: WTFDA, P.O. Box 501, Somersville, CT USA 06072**
Make your checks/money orders payable to: WTFDA
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	mikeb@wtfda.org
Doug Smith, 1385 Old Clarksville Pike, Pleasant View, TN 37146-8098	dougs@wtfda.org
Greg Coniglio, 11825 Genesee St., Alden, NY 14004	gregc@wtfda.org
Keith McGinnis, 18 Newbridge St., Hingham, MA 02043	nfmdx@wtfda.org

---

TV and FM STATISTICS

Fred Nordquist, 147 Travis Hill Road, Moncks Corner, SC — stats@wtfda.org

WTFDA.ORG WEBSITE

Tim McVey, webmaster — webmaster@wtfda.org

WTFDA.INFO WEBSITE

Chris Cerventez, webmaster — chriscervantez@gmail.com

WTFDA EMAIL REFLECTORS

Enhance your DXing experience! Entertaining and informational.
E-skip alerts! Tropo alerts! DX discussion and more!
For WTFDFA members! Sign Up Today!
The WTFDA list with 200 users...send an email to tvfmdx-subscribe@wtfda.info
And for AM Dxers there's the AMDX list. To join, send a blank email to amdx-subscribe@wtfda.info

FM LIST

Call changes, format changes and new stations are updated to FM List as soon as they are received. HTTP://WWW.FMLIST.ORG