



Channel Master #3671b Crossfire antenna, CM #7777 preamp, Antennacraft rotor, RG=6/u coax at 32 ft above the ground.

Picture courtesy of Gary Hickerson

WILL WINTER E-SKIP BE AS GOOD AS LAST YEAR?

MIKE BUGAJ REVIEWS THE NEW RSP2 FROM SDRPLAY

The Official Publication of the Worldwide TV-FM DX Association



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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.



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The Mailbox

PAGE TWO

P.O. Box 501 Somersville, CT 06072

Mike Bugaj - Enfield, CT mikeb@wtfda.org



DECEMBER 2016

Dues Received

DATE	NAME	S/P	EXP	REN
10/30/2016	Marv Shults	IL	11-17	R
11/4/2016	Steve Walko	PA	11-17	R
11/17/2016	Matt Sittel	NE	11-17	R
11/18/2016	Bill Nollman	CT	11-17	R
11/19/2016	Steve Solomon	CT	11-17	R

As usual, November is a slow month so there weren't too many renewals this time but thank you to everyone who did renew for another year. Hope you all had a great Thanksgiving and hope the December holidays turn out the same way!

ATSC 3.0

Technology sites all over the internet are reporting that ATSC 3.0 testing will begin in 2017 and that the roll out will begin in early 2018. The consensus is that 3.0 will actually help in TV DXing provided that repacking doesn't wipe out any open DX channels in the process. One television manufacturer (LG) showed some interest in making set top boxes but as of today nothing is definite. Hopefully we will see either boxes or USB stick devices prior to the rollout.

MEXICO ANALOG DROP DEAD DATE

Raymie Humbert posted on the WTFDA Forums "The IFT has announced the death date for analog shadows and hangers-on. 303 stations leave us on December 15, another 157 transmitters will go off the air on December 31st. Apagon or no, television reception is still a problem in some regions of the country in the digital age" and he cites the cities of San Jeronimo Xayacatlan, Xayacatlan de Bravo, Ahuehuetitla and Guadalupe Santa Ana as places that will have no TV reception at all.

THE WTFDA FM DATABASE IS NOTICED!

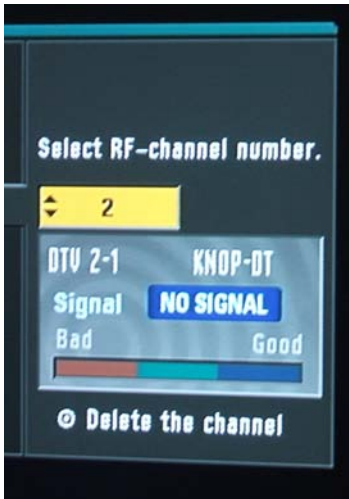
Jim Thomas reports "The Universal Radio 2017 printed catalog just came out. In the online version Fred Osterman was so impressed by the quality of the WTFDA FM database that he linked to it on this page <http://www.dxing.com/tvfmdx.htm>."

In addition, the SDRPlay "Cookbook" (user manual) compiled by Mike Ladd (NN4F) also links back to the WTFDA FM Data base as a source of information for RDS data in North America.

So whatever we're doing, we're doing right! Happy New Year! -Mike

TV News

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



December 2016





Abbreviations:

- Aux **A**uxiliary (backup) transmitter
- FTP **F**ailure to **P**rosecute
- ROA **R**equest of **A**pplicant
- STA **S**pecial **T**emporary **A**uthority
- LPDTV **L**ow **P**ower **D**igital **T**V
- DRT **D**igital **R**eplacement **T**ranslator
- # Transmitter is located near here. FCC lists location elsewhere, see notes

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*)

<i>Location</i>	<i>RF Ch</i>	<i>Callsign</i>	<i>Notes</i>
 Arkansas			
Fort Smith	6	KWFT-LP	Granted new station, 3kw, 35-31-29/94-22-27; (Van Buren) Digital Companion for analog 34
 California			
Camarillo	30	KUHD-LD	Granted special temporary authority, 15kw, 34-19-28/118-34-00 (Porter Ranch); analog station
Fort Jones	6	K06KA	Converted to digital, 21 watts
Freshwater	45	K45DS	License canceled
Greenfield	20	KSCZ-LD	Requests power increase to 3.6kw, 37-29-58/121-52-15 (Mission Peak); granted & on the air
Hemet	21	KDUG-LD	Requests conversion to digital, 2 watts, 33-12-17/117-03-19 (Valley Center)

Location	RF Ch	Callsign	Notes
Joshua Tree	21	K21GR	License canceled
Klamath	25	K25CI	License canceled
Lucerne Valley	24, 26, 32	K15CA, K17KD, K19BT	Granted permit for new stations, 1.3kw, 34-36-35/117-17-13 (Oro Grande); Digital Companion for channels 15/17/19.
Morongo Valley	16	K16AA	License canceled
Ontario	45	KPOM-CD	Granted power reduction to 535 watts, 33-57-41/117-16-47 (Box Springs)
Redding	41	KRHT-LD	Converted to digital, 15kw
Yreka	32	K32LQ	Converted to digital, 2.32kw, 41-43-30/122-37-31



Colorado

Romeo	47	K47KC	Granted Special Temporary Authority for reduced power. (1kw vs. authorized 9kw) Site owner is demanding reduced power.
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Georgia

Chatsworth	33	WNGH-TV	Requests power change to 400kw/550m, 34-45-02/84-42-52 (Fort Mountain State Park); granted
Cochran	7	WMUM-TV	Requests power change to 28kw/337m; granted
Cordele	22	WSST-TV	Channel changed from 51, 80kw
Dawson	8	WACS-TV	Requests tower height increase to 334m; granted
Macon	26	W36ED	Channel change request from 36, 15kw, 32-45-04/83-33-27 dismissed
Waycross	8	WXGA-TV	Requests tower height increase to 311m; granted










Idaho


Boise	16	KKIC-LP	Converted to digital, 15kw
Boise	33	KBSE-LP	Converted to digital, 15kw
Boise	51	KCBB-LP	Converted to digital, 15kw
Driggs	32	K32LS	New station granted, 490 watts; digital companion for K51HF; on the air
Lewiston	47	K47BW	License canceled
Pocatello	17	KISU-TV	Power change to 172kw/465m granted & on the air





Illinois

La Salle	32	WSPY-LD	New station on the air, 1kw, 41-42-18/89-04-46 (Nelson TV) (Compton)
Rockford	22	W22EE	Requests power reduction to 4.8kw, 42-17-46/89-10-15 (WIFR-TV facility)


<i>Location</i>	<i>RF Ch</i>	<i>Callsign</i>	<i>Notes</i>
			
Indiana			
Fort Wayne	35	NEW-LD	Application for new station, 500 watts, 41-06-33/85-11-42 (EICB-TV East)
			
Iowa			
Sioux City	14	KBWF-LD	Call changed from K14NV
			
Kansas			
Kansas City	22	KMJC-LD	Power increased to 15kw, 38-35-09/94-37-13 (Louisburg)
			
Kentucky			
Bowling Green	14	W14DG	Requests power increase to 4.8kw, 36-57-37/86-29-36 (WBKO-TV studios)
Louisville	22	WBXV-LP	Granted new station, 1kw; Digital Companion for analog 13
			
Massachusetts			
Boston	46	WBTS-LP	Call changed from WTMU-LP
			
Michigan			
Ironwood	32	W32CV	Converted to digital, 8.452kw
			
Minnesota			
Duluth	14	NEW-lptv	Application for new station, 1.5kw, 46-47-16/92-07-02 (EICB-TV East); granted
Grand Rapids	29	K29EB	Converted to digital, 14.909kw
Hibbing	15	K15GT	Converted to digital, 8.035kw


 Location	RF Ch	Callsign	Notes
Mississippi			
Clarksdale	12	WPRQ-LD	Requests power increase to 3kw; granted
Cleveland	9	WHCQ-LD	Granted power increase to 3kw
Pascagoula	13	WXVO-LD	Call changed from WKFK-LD

 MONTANA			
Montana			
Billings	25	K25BP	Converted to digital, 1.48kw, 45-48-27/108-20-25 (Lockwood)
Billings	27	K27IM	Converted to digital, 810 watts, 45-48-27/108-20-25 (Lockwood)
Dillon	25	K25OA	Requests channel change from K51DW; granted Special Temporary Authority
Great Falls	21	KUGF-TV	Call changed from KUGF
Thompson Falls	4	K04QV	Power increased to 30 watts

			
Nebraska			
Lincoln	26	KFDY-LD	Call changed from K26DY
Norfolk	44	New-LPTV	Application for new station, 5kw, 42-01-53/97-21-26 (EICB-TV East)

			
New Jersey			
Belvidere	43	W43CH	Converted from analog, 1kw
Sussex	35	W35DK	Converted from analog 36, 5kw

			
New Mexico			
Caballo	18	K45HJ	Granted permit for new station, 1.2kw; Digital Companion for analog 45
Las Cruces	42	K42DJ	Granted Special Temporary Authority to operate in digital, 350 watts
Silver City	8	KOOT-LP	License canceled

Location	RF Ch	Callsign	Notes
			
New York			
Hamburg	29	WDTB-LP	Converted to digital, 15kw
New York	7	WABC-TV	Application for new backup transmitter, 26.2kw/360m, 40-44-53/73-59-10 (West 33 rd St. & 5 th Ave.); granted
Port Jervis	10	W10DC	License canceled. Digital companion for W34DI which has converted to digital on its own channel.
Port Jervis	19	W19DC	Power increase permit for 15kw canceled. Going for power reduction & move to NYC instead.
Port Jervis	23	W25EZ	License canceled. Formerly known as W43CN.
Port Jervis	25,	W24EF,	Granted permit for new stations, 13.4/1.87/2kw, 41-00-35/74-35-38; (Sparta, N.J.) Digital Companions for analog 24, 49, and 46.
	28,	W49DK,	
	31	W46DQ	
Port Jervis	34	W34DI	Converted to digital, 6.7kw, 41-00-35/74-35-38 (Sparta, N.J.)
Roslyn	9	W09CZ	Requests power reduction to 68 watts, 40-44-49/73-56-39 (Long Island City)
Watertown	45	WVNC-LD	Granted power increase to 9kw, 43-58-04/75-48-21 (Watertown)



North Carolina			
Lumberton	41	WHEH-LD	Power increased to 15kw, 35-11-55/80-52-36 (Charlotte)
Wilmington	4	W04DQ	Sold to WWAY-TV







Ohio			
Springfield	20	WLWD-LP	Converted to digital, 5kw, 39-43-28/84-15-18 (WRGT-45/WKEF-22 tower, Dayton)





Oklahoma			
Enid	48	KUOC-LD	Power increased to 7.5kw, 36-07-52/96-04-13 (Chandler Park, Tulsa)




Oregon			
Butte Falls	14	K14QH	Converted from analog K04JQ to digital, 70 watts
Gold Hill	4	K04JZ	Converted to digital
Warrenton	22	KHPN-LD	Requests move from ch. 51, 15kw, 46-17-10/123-53-49 (in Washington State, just across the Columbia from Astoria)

<i>Location</i>	<i>RF Ch</i>	<i>Callsign</i>	<i>Notes</i>
			
Puerto Rico			
Quebradillas	19	WWKQ-LD	Converted from analog 26 to digital, 2.48kw
			
South Carolina			
Florence	14	WVEB-LD	Power increased to 10kw, 35-11-55/80-52-36; call changed from W14EB (Charlotte, N.C.)
Spartanburg	38	WSQY-LD	New to the air, 15kw, 34-56-30/82-24-42; Digital Companion to analog 51. WGTK-FM tower, Paris Mountain
			
South Dakota			
Aberdeen	33	K33MI	New station on the air, 15kw, 45-28-29/98-31-36 (Red River Broadcast)
			
Texas			
Beaumont	13	K34LK	Requested channel change from 34, 2.25kw dismissed but refiled
Big Spring	14	NEW-lptv	Application for new station, 10kw, 32-13-18/101-27-33 (EICB-TV East); granted
Big Spring	35	NEW-lptv	Application for new station, 12.5kw, 32-13-18/101-27-33 (EICB-TV East); granted
Bovina	38	K38KZ	License canceled
College Station	49	K49LC	Requests power reduction to 4.7kw, 30-38-34/96-19-52 (KBTX-TV studios, Bryan)
Garland	23	KUVN-DT	New backup transmitter on the air, 220kw
Harlingen	22	KTLM	Requests power reduction to 14.92kw, 26-09-19/97-41-28 (this is a Digital Replacement Translator, the main transmitter on ch. 40 remains unchanged)
Laredo	13	KVTV	License canceled
Lufkin	48	KLNK-LD	Power reduced to 5kw, 31-03-44/94-49-37 (Corrigan)
Uvalde	2	KNHB-LP	Granted new station, 3kw, 29-19-10/99-19-58 (Sabinal); Digital Companion for analog 7
Victoria	7	KBHO-LD	Power increased to 1.5kw, 29-18-24/96-07-48 (Wharton)
Victoria	36	K36ND	New station on the air, 700 watts, 28-46-20/96-57-17 (DAIJ Media)

Location	RF Ch	Callsign	Notes
			
Virginia			
Harrisonburg	48	NEW-lptv	Application for new station, 1.5kw, 38-29-23/78-51-50 (EICB-TV East); granted
Richmond	48	WRID-LP	Converted to digital, 15kw, 37-30-45/77-36-06 (WCVE-23 tower)

			
Washington			
Cle Elum	6	KDMD-LD	Site changed to 47-19-29/121-53-18 (Kanaskat)
Pullman	38	K38KK	New station on the air, 6kw, 46-51-43/117-10-26 (KXLY) (Kamiak Butte)
Seattle	24	KRUM-LD	Requests power reduction to 1.5kw, 47-26-01/122-11-14 (Renton); granted
Stemilt	38	K38IT	License canceled

			
Wisconsin			
Ashland	45	W45CI	Converted to digital, 9.332kw
Hayward	31	K31GH	Granted conversion to digital, 9.484kw; on the air
Madison	36	WZCK-LD	Power increased to 8.4kw, 43-03-09/89-28-35 (WKOW-TV studios – probably on their radar tower)
Milwaukee	29	WPVS-LP	Granted Special Temporary Authority to continue operation in analog at 148 watts, 43-29-03/87-55-19 (Fredonia)

Southern FM DX

John Zondlo
 4009 Driftwood Circle – Yukon, OK 73099
southernfmdx@wtfd.org – Deadline: 15th
 December 2016



DECEMBER 2016

Gus Mancuso – Cheverly, MD
 Car radio, all new

7/28 Tr
 1531 WOWD-LP 94.3 MD Takoma Park

8/2 Tr
 1800 WARN 91.3 VA Culpepper

8/7 Tr
 2100 WERA-LP 96.7 VA Arlington

8/15 Tr
 1742 W248CQ 104.7 MD Bethesda, // WQHT 99.5

10/18 Tr
 2001 W264DB 100.7 VA Falls Church, // WFAK 1220

10/21 Tr
 ... 9... 1900 WXSH 106.1 MD Pocomoke City
 TV NEWS, SOUTHERN FM DX

FM Facilities Report

Check FM Database at <http://db.wfda.org> for technical data, formats, slogans and RDS Data for Individual Stations not shown in this Monthly Report.

Abbreviations:		
AF- New Station Applied For	NS-New Station Permit Granted	RA>Returns to the Air
Aux- Auxiliary Backup Transmitter	NW-New Station on the Air	ROA-Request of Applicant
CC- Call Change	PC-Power/Height Change Granted	XG-new site granted
CL-City of License	PG-Power Change Granted	XC-transmitter site changed
CX-Canceled	QG-Frequency Change Granted	

DECEMBER 2016

AL	Flence	98.3	WLXA	XX req. CL from Loretto, TN.
AL	Brent	93.3	W297AO	QC from 107.3, 250w, 33-09-36/87-30-54
AL	Leeds	92.7	W224CN	NW 10w/115m, 33-32-33/86-30-31; relays WGIB 91.9
AL	Fort Rucker	103.9	WDBT	PC>214m, 31-18-02/85-35-05; CL from Hope Hull
AL	Demopolis	88.7	WMWI	PG>100kw/88m, 32-22-34/87-47-02
AL	Hartford	96.9	WDJR	CL changed from Enterprise
AL	Stewartville	98.3	WFXO	PG 2.7kw/151m, 33-04-20/86-10-08; CL from Southside
AL	Birmingham	105.9	W290CN	NW 99w, 33-29-19/86-47-58; relays WBHM 90.3
AL	Huntsville	97.3	W247AT	PG>250w; CL from Harvest; relays WAYH 88.1
AL	Mobile	97.9	W239AP	QC from 95.7, 250w
AL	Mobile	106.1	W279AS	QC from 103.7; CL from Colquitt, Ga.
AL	MTgomery	94.1	W231DF	PG>250w, 32-22-04/86-15-42; relays WNZZ 950
AL	Decatur	107.9	WAJF-LP	NW 96m, 34-30-43/86-50-55 (Taxpayers Defense Fund)
AL	Headland	105.3	WECB	PC<10kw/132m, 31-11-33/85-24-43
AL	New Hope	103.5	WHVK	PC>900w/463m
AL	Slocomb	100.5	WJRL-FM	PC<10kw/132m, 31-11-33/85-24-43; CL from Fort Rucker
AL	Headland	105.3	WECB	PC<10kw/132m, 31-11-33/85-24-43
AL	New Hope	103.5	WHVK	PC>900w/463m
AL	Slocomb	100.5	WJRL-FM	PC<10kw/132m, 31-11-33/85-24-43; CL from Fort Rucker
AL	Dothan	107.7	W299BX	PG<88w, 31-11-33/85-24-43 rescinded but reapplied; PG; PC; relays WCNF 700
AK	Sitka	102.3	K272FV	QG from K278AC-103.5, 250w, 57-03-28/135-20-03; CL from Kake; relays KIFW 1230
AK	Wasilla	99.1	K256CH	NW 70w, 61-20-13/149-30-47; relays KYMG 98.9
AK	Kodiak	100.1	KMXT	PC<271m
AK	Shungnak	101.7	KHGQ	NW 90w/-14m, 66-53-09/157-08-24 (Nome SDA Church)
AK	Healy	101.7	K269AD	PC<50w, 63-53-07/148-49-38
AZ	Star Valley	103.3	K277BX	NW 250w, 34-15-13/111-18-39; relays KMOG 1420
AZ	Kachina Village	97.1	KBTK	QC from 105.1
AZ	Wickenburg	105.1	KHOV-FM	QC from 105.3, 46kw/410m
AZ	Prescott	105.3	K287BW	QG from 94.7, 180w
AZ	Wickenburg	101.9	K270BA	PC>120w, 33-57-56/112-45-02; relays KLVK 89.1
AZ	Cottonwood	104.9	K285HA	QG from K246AQ-97.1, 42w; relays KQST 102.9
AZ	Prescott	92.1	K221GL	QG from K285CW-104.9, 120w, 34-29-24/112-31-59; relays KKLD 95.9
AZ	Sierra Vista	91.3	K219CR	QC from 91.7
AR	Junction City	101.5	KMLK	PG 4.6kw/114m, 32-56-10/92-37-29; CL from El Dorado
AR	Hot Springs	102.5	KUHS-LP	QG from 97.9

AR	Johnton	95.3	K248EV	QC from 97.7, 95w
AR	Jonesboro	97.9	K250BH	NW 250w, 35-57-14/90-41-41; relays KIYS 101.7
CA	Alturas	96.9	K245CP	QG from K269AG-101.7
CA	Petaluma	94.5	K233CM	PG<92w
CA	Soledad	92.1	K221FZ	PG 200w, 36-27-34/121-17-55
CA	Alturas	96.9	K269AG	QC from 101.7
CA	CAstoga	92.3	K275CB	QC from 102.9, 47w; CL from Clear Lake; relays KLVR 91.9
CA	INo	97.3	K247CL	XG 33-48-08/116-13-30
CA	MDsville	98.1	K251BP	QG from K245AU-96.9, 150w, 39-12-17/121-48-59; CL from East Quincy; relays KMYC 1410 but rescinded
CA	Paradise	102.9	K275CO	QG from K251AV-98.1, 190w, 39-39-04/121-27-43; relays KPAY 1290
CA	Corning	98.1	K251CE	QG form 92.1, 155w, 39-12-20/121-49-10; relays KUBA 1600
CA	Fresno	100.7	K264CK	PG>250w, 36-50-16/119-55-55; CL from Portola; NW; relays KHOT 1250
CA	MDsville	104.3	K282BS	QG from K245AU-98.1, 250w, 39-08-18/121-33-14; CL from East Quincy; relays KMYC 1410
CA	New Auberry	100.5	K263BH	NW 20w, 37-04-26/119-25-52; relays KLVY 91.1
CA	Palm Springs	99.1	K256CU	QG from K284CB-104.7, 25w, 33-52-00/116-26-03; CL from Peach Springs, AZ.; relays KPSI 920
CA	San Francisco	104.1	K281BU	NW 80w, 37-41-15/122-26-01; relays KLV5 107.3
CA	Santa Barbara	93.3	K227BI	PG>250w, 34-28-15/119-40-33; relays KYGA 97.5
CA	Santa Barbara	102.7	K274CJ	PG>120w, 34-28-15/119-40-33; CL from Carpinteria
CA	Stockton	92.7	K224FB	NW 200w, 37-57-34/121-15-28; relays KWG 1230
CA	Fallbrook	99.5	KXFB-LP	NW -73m, 33-22-17/117-10-29 (Three Angels Global Networking)
CA	Modesto	90.5	KADV	PG<38m, 37-36-28/120-57-27
CA	Modesto	90.5	KADV	PG<38m, 37-36-28/120-57-27
CA	Apple Valley	99.5	K258DE	QG from K232EW-94.3, 190w, 34-36-34/117-17-11; CL from Ventura; relays KWRN 1550
CA	BeauMT	99.1	K256CX	QG from 106.5, 200w, 34-06-50/117-59-50; relays KDIS 1110
CA	Culver City	98.3	K252FK	NW 80w, 34-00-19/118-21-44; relays KOCP 104.7
CA	Desert Center	99.5	K258DD	QG from K245BL-96.9, 250w, 34-33-06/114-11-37; relays KNTR 980
CA	Los Alamos	106.3	K292HD	QG from K233CT-94.5, 70w, 34-41-28/120-15-58; CL from Tracy; relays KUHL 1440
CA	Oxnard	96.3	K242CW	QG from K264BW-100.7, 100w, 34-14-13/119-12-09; CL from Mojave; relays KKZZ 1520
CA	Riverside	102.3	K272FQ	NW 45w, 33-57-42/117-16-47; relays KCAA 1050
CA	San Jose	92.7	K224FG	QG from K281CL-104.1, 250w, 37-12-41/121-50-43; CL from Carson City, Nev.; relays KVVN 1430
CA	Santa Barbara	103.9	K280FV	XG 34-30-11/119-50-59
CA	Santa Clarita	98.1	K251CF	QG froM K260CO-99.9, 100w, 34-25-34/118-31-33; CL from Mammoth Lakes; relays KHTS 1220
CA	Soledad	92.1	K221FZ	PG>250w, 36-32-05/121-37-09
CA	Ventura	97.9	K250BV	QG from K257FZ-99.3, 170w, 34-14-13/119-12-09; CL from Santa Cruz Island; relays KVTA 1590
CA	Watsonville	107.9	K300DD	QG from K234CS-94.7, 24w, 37-03-28/121-46-30; CL from Soledad; relays KSCO 1080
CA	Yuba City	98.1	K251CE	NW 155w, 39-12-20/121-49-10; CL from Corning; relays KUBA 1600
CO	Commerce City	95.1	K266BP	QC from 101.1, 250w, 39-57-25/104-43-44; CL from Craig
CO	Limon	91.9	K220IK	PG<50w, 39-22-30/103-48-05
CO	Aspen	93.1	K226BU	PG>25w, 39-13-16/106-48-47
CO	Aspen	98.1	K251BU	NW
CO	Aspen	99.9	K260BZ	NW 23w/-171m, 39-13-08/106-54-33; relays KWGL 105.7
CO	Aspen	100.1	K261EG	PG>25w, 39-13-16/106-48-47
CO	COrado Springs	95.7	K239CH	NW 99w, 38-49-08/104-46-32; relays KCBR 1040
CO	Craig	106.1	K291CA	NW 250w/-7m, 40-30-51/107-26-24; relays KZKS 105.3

CO	Falcon	103.3	KHYR-LP	PC<-16m, 38-47-45/104-43-20
CO	Grand Junction	100.3	KWSI-LP	XG 39-04-43/108-33-55
CO	Aspen	93.1	K226BU	NW 25w, 39-13-16/106-48-47; relays KGHT 100.5
CO	Aspen	100.1	K261EG	NW 25w, 39-13-16/106-48-47; relays KTND 93.5
CO	Greeley	101.9	K280EQ	QG from 93.1, 20w, 40-25-15/104-51-35; CL from Fort Morgan CX ROA; going for 104.7 COrado Springs instead
CO	Monument	103.1	KEIM-LP	PC<-187m, 39-03-31/104-50-54
CO	Alamosa	94.5	K233DJ	QG from K242CN-96.3, 250w, 37-28-20/105-51-13; CL from Aspen; relays KGIW 1450
CO	COrado Springs	104.7	K284CP	QG from K280EQ-103.9, 25w, 38-49-08/104-46-32; CL from Fort Morgan relays KFCS 1580
CO	Denver	97.7	K281BW	QC from 104.1, 140w, 39-43-46/105-14-08; CL from Cheyenne, Wyo.; relays KBNO 1280
CO	Grand Junction	102.9	K275CC	NW 90w/-98m, 39-01-07/108-31-43; relays KAFM 88.1
CO	Grand Junction	103.7	K279CB	NW 99w, 39-03-59/108-44-41; relays KSTR-FM 96.1
CO	MTe Vista	100.1	K261ER	QG from K267BQ-101.3, 250w, 37-36-10/106-08-58; CL from Lake City; relays KSLV 1240
CO	Monument	93.9	K230BO	NW 250w, 39-10-33/105-02-03; relays KVUU 99.9
CO	Pagosa Springs	102.5	K273CZ	QG from K285GT-104.9, 200w, 37-11-32/107-05-55; CL from Aspen; relays KWUF 1400
CO	Pueblo	93.9	K230BZ	QG from K227DA-93.3, 250w; relays KWRP 690
CT	Shelton	105.1	W286CL	NW 10w/110m, 41-21-43/73-06-48; relays WMNR 88.1
CT	Bloomfield	98.7	WGZO-LP	PC 36m, 41-49-41/72-39-09
DE	Dover	103.3	W277AH	PG<80w, 39-09-48/75-32-08
FL	Live Oak	98.7	WMOF-LP	NW 30m, 30-17-59/82-59-55 (Charles F. Martin Ministry)
FL	Miami	92.7	WYTG-LP	CX
FL	Panama City	106.9	WPCU-LP	PG>23m, 30-09-45/85-39-39
FL	Bayshore Gardens	93.7	W229BR	NW 99w, 27-20-59/82-31-23; relays WLSS 930
FL	Fort Myers	94.1	W231DC	PC>250w, 26-29-16/81-55-46
FL	Tampa	92.9	W225CR	QG from W246BT-97.1, 140w, 27-52-01/82-37-27; CL from ClerMT; relays WHNZ 1250
FL	Debary	99.9	WJVE-LP	PC 34m
FL	Cocoa	99.9	W260CL	NW 250w, 28-21-22/80-44-47; relays WWBC 1510
FL	Jacksonville	98.7	W254CW	XG 30-16-34/81-33-51; CL from Lake Wales; relays WZAZ 1400
FL	Miami	97.7	W249DM	QG from W298AM-107.5, 99w, 25-46-24/80-11-18; CL from Aurora; relays WHIM 1080
FL	Milton	94.5	W233CM	QG from W290DC-105.3, 250w, 30-37-19/87-05-12
FL	Orlando	93.5	W228DF	PG<10w, 28-32-29/81-30-39; CL from Four Corners
FL	Panama City	88.7	W204CD	PG>55w
FL	Tavernier	88.1	WMKJ	PG>1kw/15m, 25-01-25/80-30-34
FL	Tavernier	88.1	WMKJ	PG>1kw/15m, 25-01-25/80-30-34
FL	Bartow	103.9	W280FE	QG from W259CC-99.7, 27-56-35/81-54-45; relays WQXM 1460
FL	Callahan	97.5	W248CT	QG from W237EF-95.3, 250w, 30-22-28/81-44-28; CL from Tallahassee; relays WEWC 1160
FL	Fernandina Beach	92.3	W222CL	QG from W244DG-96.7, 250w, 30-40-33/81-27-35; CL from New Hope, Ga.; relays WVOJ 1570
FL	Gainesville	98.1	W251CG	NW 250w, 29-38-36/82-25-10; relays WRUF 850
FL	North Miami Bch.	107.9	W300DF	QG from W263CJ-100.5, 99w, 25-58-07/80-13-20; CL from Immokalee; relays WAVS 1170
FL	St. Petersburg	101.1	W266CW	NW 250w, 27-52-01/82-37-27; relays WTIS 1110
FL	Brandon	90.1	WYPW-LP	QG from 99.9
GA	Dalton	93.3	W227DG	PG>250w
GA	Macon	88.5	W203BH	XG 32-53-48/83-32-05
HI	Waimea	104.3	K282BO	NW 100w, 19-53-10/155-39-32; relays KHPH 88.7
ID	Aberdeen	96.1	KID-FM	XX req. CL from IDo Falls
ID	Boise	92.7	K224EP	XG 43-35-44/116-08-40

ID	Sun Valley	98.3	K252FP	QG from 105.1, 250w, 46-48-08/113-58-21; relays KGVO 1290
IL	Elmhurst	102.3	W272DQ	NW 90w, 41-52-03/87-55-07; relays WCKG 1530
IL	Plano	94.5	W233BW	PG 170w, 41-39-55/88-34-34; CL from Sandwich
IL	Springfield	104.9	W285EX	PG<19w, 39-48-48/89-44-34
IL	Bolingbrook	95.1	W236CG	PG<1w, 41-42-51/88-01-47; relays WTMX 101.9; NW
IL	Pekin	99.1	W256CH	PG<13w, 40-37-10/89-34-20
IL	Plano	94.5	W233BW	NW 170w, 41-39-55/88-34-34; relays WSPY-FM 107.1
IL	Cicero	99.1	WZQC-LP	PG 30m, 41-49-54/87-45-33
IL	Greenup	107.9	W300DD	QG from W299BU-107.7, 250w, 39-12-55/88-13-49; CL from Effingham; relays WKZI 800
IL	Lawrenceville	99.3	W257DW	QG from W241BW-96.1, 250w, 38-43-21/87-39-15; CL from Lebanon, Ind.; relays WAKO 910
IL	Marion	95.5	W238CQ	NW 250w, 37-45-15/88-56-05; relays WFRX 1300
IL	Cuba	98.1	WILP	NW 4.9kw/112m, 40-29-18/90-07-19 (Family Life Broadcasting)
IL	Cuba	98.1	WILP	NW 4.9kw/112m, 40-29-18/90-07-19 (Family Life Broadcasting)
IL	Anna	102.5	W273DE	QG from K298BW-107.5, 250w, 37-27-10/89-15-01; CL from Jackson, Mo.; relays WIBH 1440
IL	Beardstown	106.3	W292FC	QG from K248CF-97.5, 250w, 40-00-10/90-23-52; CL from Keokuk, Ia.; relays WRMS 790
IL	Carlyle	92.1	W221DY	QG from W224BJ-92.7
IL	Rockford	103.9	W280EN	PG<38w, 42-15-59/89-04-23
IN	Columbus	93.5	WGPI	CX ROA
IN	Lafayette	105.9	W290CM	NW 220w, 40-17-50/86-54-05; relays WBAA 920
IN	Hartford City	93.5	WMXQ	PC 3.4kw/135m
IN	Linton	89.3	WYTJ	PG<1.43kw/78m
IN	Hartford City	93.5	WMXQ	PC 3.4kw/135m
IN	Linton	89.3	WYTJ	PG<1.43kw/78m
IN	Lafayette	104.3	W282CJ	QG from W239CF-95.7, 250w, 40-32-48/86-50-59; CL from Albion, MI.; relays WSHY 1410
IN	Richmond	95.3	W237AT	PC>250w
IN	Richmond	101.7	W269BP	PC>250w
IN	Seymour	101.1	W266CH	NW 28w/26m, 38-57-24/85-53-07; relays WAUZ 89.1
IN	Decatur	103.5	WDBF-LP	NW 17m, 40-50-12/84-54-45 (North Adams Community Schools)
IA	Burlington	100.9	K257GC	NW 250w, 40-49-11/91-07-02; relays KBUR 1490
IA	Bettendorf	97.9	K250BU	QG from K253BL-98.5, 140w, 41-36-13/90-26-04; CL from Bluegrass; relays KAIP 88.9
IA	Muscatine	107.1	K296GZ	PG<10w, 41-27-15/90-34-26; relays WAXR 88.1; NW
IA	Davenport	97.5	K248CE	NW 75w, 41-30-03/90-40-24; relays KAIP 88.9
IA	Sioux Center	101.5	K254CK	QC from 98.7, 43-05-34/96-09-24; relays KSOU 1090
KS	Pittsburgh (sic)	106.1	K291CQ	QG from K258BF-99.5, 250w, 37-24-46/94-38-15; CL from Warsaw, Mo.
KS	KSas City	95.3	K237GQ	QG from K246BW-97.1, 39-00-58/94-41-23; CL from Edina, Mo.
KS	Lawrence	101.7	K269GP	QG from K247BN-97.3, 38-57-14/95-16-11
KS	Wichita	100.9	KAXZ-LP	NW 39m, 37-40-22/97-20-08 (CSN)
KS	Goodland	99.9	K260DA	QG from K256BT-99.1, 250w, 41-49-41/104-12-05; relays KGOS 1490
KY	Bowling Green	95.9	W240CP	PG>250w
KY	Bowling Green	104.1	W281BV	QG from W234CI-94.7, 250w, 36-57-37/86-32-49; CL from Decatur, Ill.
KY	Winchester	96.5	W243DG	PG 82w, 38-02-06/84-27-02
KY	Frankfort	88.3	W202AZ	PG>38w
KY	Glasgow	98.1	W251BT	NW 250w, 36-57-34/86-00-08; relays WPTQ 105.3
KY	Berea	103.5	W278CC	NW 250w, 37-30-28/84-12-58; relays WKXO 1500
KY	Okolona	101.9	W270CR	PC>150w, 38-21-55/85-50-24; relays WNDA 1570
LA	Slidell	107.1	K296GJ	NW 36w/63m, 30-16-30/89-47-39; relays WBSN-FM 89.1
LA	Many	94.3	K230BE	QC from 93.9

LA	Lafayette	94.9	KECS-LP	NW 21m, 30-13-28/92-00-02 (Proyecto Hispano de Ayuda a la Comunidad)
ME	Oakland	88.9	WMDR-FM	PG>398m, 44-15-02/70-25-24
MD	WV Ocean City	95.9	WKZP	CL changed from Bethany Beach, Delaware
MD	Hagerstown	99.3	W257DZ	PG<13w; to relay WZXH 91.7
MD	Chesapeake City	100.5	W263CQ	PC<99w, 39-32-01/75-49-12; CL from Warwick; relays WHGM 1330
MD	Frederick	94.3	W232DG	QG from W225AQ-92.9, 160w-H/55w-V, 39-27-53/77-29-43; CL from Lock Haven, PAa.; relays WWFD 820
MD	Baltimore	96.7	W244DA	PG<2w, 39-23-54/76-33-26
MD	Hagerstown	99.3	W257DZ	PC<13w; relays WZXH 91.7
MA	Springfield	100.1	W219AU	QC from 91.7, 250w, 42-05-55/72-37-45; CL from Tupper Lake, N.Y.; relays WACM 1270
MA	East Falmouth	102.3	WQMC-LP	PG 33w/51m, 41-33-31/70-35-45
MA	East Longmeadow	105.1	W286DB	QG from W249CD-97.7, 250ws, 42-04-25/72-31-29; CL from Ithaca, N.Y.; relays WHNP 1600
MA	Pittsfield	93.9	W230CP	QG from W221CZ-92.1, 250w, 42-26-52/73-15-19; CL from South Burlington, Vt.; relays WBEC 1420
MA	Belchertown	107.7	WAIY-LP	QC from 97.9, 12m
MA	Franklin	102.9	WFPR-LP	PG>67m, 42-04-37/71-26-13
MA	Haverhill	92.1	W249AW	QC from 97.7, 205w, 42-46-23/71-06-01; CL from Lebanon, N.H.; relays WCEC 1490
MA	Ware	95.1	W236CX	QG from W272AU-102.3, 42-08-30/72-20-55; CL from Hanover, N.H.; relays WARE 1250
MI	Grand Rapids	104.9	W285FO	QG from W231DD 94.1, 250w
MI	Grand Rapids	104.9	W231DD	QC from 94.1, 250w
MI	Manistee	107.7	W299CB	PG<19w; relays WWMN 106.3
MI	Detroit	104.7	W284BQ	XC 42-29-43/83-02-53; relays WUFL 1030
MI	Riverside	88.7	WSIS	PG>50kw
MI	Riverside	88.7	WSIS	PG>50kw
MI	Grand Rapids	98.3	W252DG	NW 250w, 42-57-25/85-54-07; relays WVHF 1140
MI	South Haven	106.5	W293DB	QG from W221DL-92.1, 250w, 40-13-27/88-17-56; relays WKJR 1460
MN	Litchfield	95.9	W269DA	QC from 101.7, 250w, 45-07-02/94-33-13; CL from Ironwood, MI.; relays KLFD 1410
MN	Pine City	106.5	W293DA	QG from W264CX-100.7, 250w, 45-54-07/92-57-25; CL from VAinia; relays WCMP 1350
MN	Roseau	98.5	K253CB	XG 48-51-10/95-46-13; NW 12w, relays KBHW 99.5
MN	Grand Rapids	88.1	K254CC	QC from 98.7
MN	Grand Rapids	99.1	K256CW	QG from W258CG-99.5, 70w, 47-14-23/93-34-34; relays KMFG 102.9
MN	Marshall	101.7	K269GR	QG from W267AO-101.7, 250w, 44-29-03/95-29-27; CL from Chisholm; relays KMHL 1400
MN	St. Paul	94.9	W235CT	QG from K247BO-97.3, 44-56-54/93-05-44; CL from Blue Earth; relays WREY 630
MN	MNeapolis	107.5	K298CO	QG from W263BS-100.5, 44-57-39/93-21-26; CL from Rhinelander, Wis.; relays WWTC 1280
MN	Park Rapids	100.5	K286AS	QC from 105.1, 46-55-42/95-00-22; relays KPRM 870
MN	St. Paul	94.9	W235CT	NW 250w, 44-56-54/93-05-44; relays WREY 630
MS	Collins	107.1	WLVS	PC
MS	Biloxi	103.5	W278CE	PG 10w, 30-23-36/89-00-03; CL from Tallulah, La.
MS	Vicksburg	100.3	WVMK-LP	NW 46w/44m, 32-20-18/90-51-46
MS	Biloxi	103.5	W278CE	NW 10w, 30-23-36/89-00-01; relays WXBD 1490
MO	Fulton	92.5	K223CE	PG>250w
MO	Cape Girardeau	106.9	K295FB	NW 92w, 37-22-07/89-35-34; relays WBMV 89.7
MO	Fulton	92.5	K223CE	PG>250w
MO	KSas City	104.7	K284CH	PG>99w, 39-00-57/94-30-24; CL from Monroe City; relays KCXL 1140
MO	Rolla	100.7	K264BZ	NW 205w, 37-58-44/91-44-52; relays KGNN-FM 90.3
MO	Warsaw	93.9	K230BI	NW 250w, 38-14-17/93-19-06; relays KCRL 90.3
MO	Saint Las	100.7	K264CF	PG<96w, 38-41-07/90-22-54; NW; relays KMJM-FM 100.3
MO	Columbia	98.3	KDVC	NW 9.5kw/113m, 38-57-19/92-16-20 (Iris Media)

MO	Columbia	98.3	KDVC	NW 9.5kw/113m, 38-57-19/92-16-20 (Iris Media)
MO	Hannibal	93.3	K227CH	NW 140w/105m, 39-43-47/91-24-22; relays KSIV-FM 91.5
MO	KSas City	100.5	K263BU	QG from K229CP-93.7, 250w, 38-45-26/94-26-02; CL from Branson; relays KCTO 1160
MO	KSas City	104.7	K284CH	NW 99w, 39-00-57/94-30-24; relays KCXL 1140
MT	Kalispell	104.3	K282BP	NW 250w, 48-05-39/114-16-11; relays KOFI 1180
MT	MOula	105.5	KFGM-LP	PG 100w/-237m, 46-52-15/113-59-30
MT	Walkerville	107.7	KMTZ	PC>2.6kw/563m, 46-00-24/112-26-30
MT	Lewistown	105.5	KSJG-LP	NW 2m, 47-03-24/109-26-14 (Saint Joseph Radio)
MT	BILngs	104.5	K283CP	QG from K292GG-106.3, 250w, 45-46-04/108-27-27; relays KYLW 1450
MT	WV Yellowstone	105.9	K290CA	NW 140w, 44-45-04/111-11-42; relays KBYI 94.3
MT	BILngs	104.1	KVRM-LP	QG from 104.5, -6m, 45-46-30/108-30-48; NW (Rocky Mountain College)
NE	Chadron	103.1	K276DM	PC>250w
NV	Reno	89.5	KNCJ	NW 1.6kw/142m, 39-35-03/119-47-52
NV	CalNVir (sic)	101.7	K269GB	NW 250w/553m, 35-01-58/114-21-57; relays KJJJ 102.3
NV	Crystal Bay	95.9	K240CA	PG<21w; PC
NH	Littleton	103.1	WNHZ-LP	NW -21m, 44-18-47/71-46-08 (Radio America Media)
NH	Dover	98.1	W269BA	QC from 101.7, 250w, 43-14-11/70-53-37; relays WTSN 1270
NJ	Hackettstown	91.9	WXPJ	PC 5.4kw/167m
NJ	Harmony Twnshp	92.3	W222BV	NW 10w/243m, 40-46-14/75-03-52
NJ	Manahawkin	100.9	W265CS	NW 250w, 39-42-57/74-17-33
NJ	Millville	105.7	W289BY	NW 55w, 39-25-19/75-01-18; relays WJPH 89.9
NJ	Vernon	107.9	WSRX-LP	NW 100w/-7m, 41-12-09/74-31-39
NJ	Egg Harbor City	102.5	W273CL	PG<10w, 39-31-47/74-38-56
NJ	Marlton	94.9	W235BZ	NW 22w, 39-56-03/74-53-39; relays WVVB 90.5
NJ	Weehawken	91.9	W220EJ	XG 40-45-22/73-59-12
NJ	Cherry Hill	103.7	W279CN	NW 9w/79m, 39-51-33/74-56-51; relays WXHL-FM 89.1
NJ	Egg Harbor City	102.5	W273CL	NW 10w, 39-31-47/74-38-56; relays WYRS 90.7
NJ	Eatontown	100.7	W264DH	QG from W272DF-102.3, 21w, 40-16-41/74-04-51; CL from Ocean City; relays WHTG 1410
NM	Tularosa	88.1	KNMA	PG<3.7kw/505m, 32-49-47/105-53-10
NM	Grants	102.1	K271CP	QG from 102.3, 99w, 35-07-56/106-37-18; relays KDEF 1150
NM	Raton	101.7	K269GQ	QG from K268CM-101.5, 70w, 36-51-19/104-23-39; CL from Trinidad, CO.
NM	Roswell	91.1	K216BJ	PG>250w, 33-23-43/104-35-18
NM	Alamogordo	91.1	K216EA	XG 32-49-47/105-53-12
NM	Santa Fe	103.7	K279CX	QG from K235CO-94.9, 250w, 35-40-43/105-59-28; CL from Socorro; relays KTRC 1260
NY	Cortland	106.5	W293CU	NW 36w, 42-34-26/76-11-15
NY	Fort Greene	95.1	W236CH	NW 27w, 40-45-09/73-58-06
NY	Gordon Heights	98.1	W251BY	NW 250w, 40-51-18/72-46-11
NY	Watertown	96.9	WWTJ-LP	PG 36m, 44-02-28/75-54-11
NY	Auburn	106.1	W291CV	QG from W237CS-95.3, 42-57-05/76-35-05; CL from Smethport, PAa.; relays WNDR 1340
NY	Camillus	98.7	W254CI	PG>250w, 43-08-00/76-20-20; relays WOLF-FM 92.1
NY	Ithaca	94.1	W231DK	QG from 95.3, 42-23-31/76-28-30; CL from East Liverpool, OH; relays WNYW 1470
NY	Newburgh	100.5	W263CX	QG from W210CE-89.9, 1w
NY	Rome	92.3	W222BU	NW 150w, 43-13-11/75-25-38; relays WRVO 89.9
NY	Syracuse	93.5	W228CS	PG<55w, 43-02-11/76-07-10
NY	Cobleskill	105.9	WCSQ-LP	NW 2m, 42-39-03/74-31-24 (Dialogos of Cobleskill)
NY	Bath	106.5	W293CE	NW 90w, 42-21-27/77-19-17; relays WCIK 103.1
NY	Elmira	93.5	W228DN	QG from W281BP-104.1, 10w, 42-01-55/76-47-01; CL from Sayre, PAa.; relays WPAL 91.7

NY	Glens Falls	97.9	W250CC	NW 250w, 43-19-45/73-38-54; relays WMML 1230
NY	Queens	101.5	W268BY	XG 40-45-13/73-49-27
NY	Remsen	106.1	W291CT	NW 3w, 43-19-23/75-12-08; relays WNGG 90.9
NY	Mohawk	97.5	WHMV-LP	NW -89m, 43-00-48/74-59-49 (Mohawk Valley Radio Group)
NY	Albany	98.7	W254DA	QG from W287AB-105.3, 80w, 42-47-09/73-37-43; relays WGDJ 1300
NY	Baldwinsville	107.5	W298CI	QG from W207BH-89.3, 250w, 43-08-00/76-20-20; relays WSEN 1050
NY	Dunkirk	100.5	W263CN	PC<150w, 42-29-20/79-19-49; relays WCOM-FM
NY	Horseheads	101.3	W267CJ	QG from W282AH-104.3, 250w, 42-09-43/77-02-15; CL from Alexandria Bay; relays WWLZ 820
NY	Islip	100.7	W264DG	QG from W266CI-101.1, 250w, 40-48-27/73-10-48; CL from Ithaca; relays WNYH 740
NY	Newburgh	98.1	W251CI	QG from W247AW-97.3, 41-28-25/74-08-22; CL from Poughkeepsie; relays WGNV 1220
NY	Plainview	101.5	W268AN	PC>13w, 40-47-48/73-27-49
NY	Queens	101.5	W268BY	NW 38w, 40-45-13/73-49-27; relays WVIP 93.5
NC	Charlotte	102.5	W273DA	FC; to relay WSOC-FM 103.7
NC	Henderson	105.7	W289BX	PG<13w, 36-20-30/78-22-14
NC	Asheville	107.9	W300CR	NW 250w/-1m, 35-35-49/82-33-18; relays WCQS 88.1
NC	Concord	98.3	W252DI	XG 35-24-03/80-37-04; relays WTIK 1410
NC	Gastonia	101.1	W266DC	QG from W264CZ-100.7, 220w
NC	Raleigh	95.7	W239CK	QG from W223CI-92.5, 140w, 35-46-47/78-40-30; CL from Rose Hill
NC	Raleigh	100.3	W262CZ	QG from W284CL-104.7, 250w, 35-41-07/78-43-14; CL from Sanford; relays WFNL 570
NC	Wendell	97.9	W250AZ	PG<25w, 35-47-52/78-24-59; CL from Zebulon
NC	Gastonia	101.1	W264CZ	QC from 100.7, 220w
NC	Franklin	98.9	W255CR	NW 20w, 35-05-27/83-25-24; relays WHLC 104.5
NC	Lenoir	99.5	W258CS	PG>250w, 35-53-33/81-33-32; CL from Tramway; relays WKGX 1080
NC	Pineville	100.5	W263CY	QG from W283AY-104.5, 110w, 35-17-14/80-41-45; CL from Conway, S.C.; relays WGIV 1370
NC	Pisgah Forest	94.9	W235CA	NW 250w, 35-17-08/82-36-39; relays WGCR 720
NC	Roanoke Rapids	102.7	W274AZ	PG>250w, 36-26-45/77-39-51; CL from Woodlawn, Va.; relays WCBT 1230
NC	Valdese	96.5	W243DV	QG from W248CI-97.5, 15w, 35-43-23/81-36-33; CL from Brevard; relays WSVM 1490
ND	Fargo	101.3	K267CI	QG from K261BA-100.1, 115w, 46-49-03/96-48-07; CL from Rolla; relays WDAY 970
ND	Dickinson	106.9	K295BR	XG 46-55-08/102-43-47
ND	Fargo	92.7	K288FF	QC from 105.5, 250w, 46-52-22/96-46-59; relays KQWB 1660
OH	Logan	103.3	W277CX	NW 250w, 39-31-43/82-23-06
OH	Jeffersonville	106.9	WZAA-LP	PG 100w/15m, 39-39-13/83-33-45
OH	Toledo	92.1	W221BG	QG from W220EM-91.9, 10w
OH	Beachwood	101.5	W268CV	QG from W266CJ-101.1, 2w, 41-26-32/81-29-29; relays WGAR-FM 99.5
OH	Columbus	92.9	W225CS	QG from W258CK-99.5, 39-56-14/83-01-16; CL from Youngstown; relays WVKO 1580
OH	Columbus	95.1	W236CZ	QG from W230AR-93.9, 59w, 39-58-16/83-01-40; CL from Muncie, Ind.; relays WMNI 920
OH	Findlay	99.5	W258CE	NW 250w/27m, 41-02-08/83-38-35; relays WBCY 89.5
OK	Chelsea	100.5	KTFR	PC>25kw/92m, 36-27-33/95-29-56
OK	Guymon	88.1	K203FF	QG from 88.5, 75w, 36-51-38/101-12-28 CX ROA; going for 15w on 99.1
OK	Tulsa	97.9	K250BN	NW 20w, 36-05-13/95-51-33
OK	Tulsa	99.1	K256CR	PG>250w
OK	Taft	100.3	KCXR	PC>4kw
OK	Muskogee	100.7	K264BT	PG>92w, 35-42-46/95-15-08
OK	Stillwater	99.9	K260CV	NW 250w/80m, 36-07-06/97-00-06; relays KQCV-FM 95.1
OK	Tulsa	103.7	K279CW	QG from K272DQ-102.3, 250w, 36-06-25/95-47-13; CL from Fayetteville, Ark.; relays KAKC 1300
OK	Guymon	99.1	K256CV	QG from K203FF-88.5, 15w; relays KD JW 1360

OK	Tulsa	93.5	K228BR	XG 36-07-53/96-04-13
OK	Clinton	97.3	K247CO	QG from K273CQ-102.5, 250w, 35-26-43/98-59-19; CL from Hereford, Tex.; relays KCLI 1320
OK	Muskogee	100.7	K264BT	NW 92w, 35-42-46/95-15-08; relays KQCV-FM 95.1
OR	Salem	96.1	K241CR	QG from K219KX-91.7, 250w, 44-51-18/123-07-15; CL from Redmond; to relay KWIP 880
OR	Butte Falls	97.7	KORJ	NW 1.8kw/182m, 42-31-36/122-38-25 (Threshold Communications)
OR	Portland	97.5	K248DD	NW 250w, 45-27-11/122-32-51; CL from Tacoma, WA.; relays KKPZ 1330
OR	Albany	92.5	K223CV	NW 99w, 44-36-49/123-03-59; relays KCSH 88.9
OR	The Dalles	100.5	K263BT	QG from K223AZ-92.5, 250w, 45-37-12/121-05-59; CL from Chelan, WA.; relays KODL 1440
OR	Albany	105.3	KHJJ-LP	NW 24m, 44-38-16/123-06-22 (Fusion Faith Center)
OR	Brookings	101.7	K216AK	QC from 91.1, 250w, 42-02-44/124-14-00
OR	Salem	93.5	K248CD	QC from 97.5, 240w; relays KZZD 1390
PA	Easton	106.7	W294BQ	PG>109w
PA	Pittsburgh	88.7	W204CT	QG from W257CD-99.3
PA	Chester Springs	97.1	W246CS	NW 10w, 40-03-31/75-35-54; CL from Collegeville; relays WVBV 90.5
PA	Hershey	100.9	W265DE	NW 120w, 40-15-02/76-39-45; relays WSOX 96.1
PA	Lock Haven	102.3	W272DV	QG from W269CX-101.7, 250w, 41-07-12/77-24-26; CL from Jersey Shore; relays WILQ 105.1
PA	Tyrone	89.3	W206CD	QC from 89.1, 250w, 40-43-56/78-19-33; CL from Clearfield
PA	Wellsboro	93.5	W228DM	QG from W225AT-92.9, 200w; relays WNBT-FM 104.5
PA	Carbondale	96.1	W241CL	QG from W297AV-107.3, 50w, 41-33-23/75-29-07; CL from Hazleton; relays WEJL 630
PA	Columbia	96.5	W243DS	PG<50w, 40-02-54/76-27-22; CL from Gettysburg; relays WVZN 1580
PA	Erie	98.7	W254AJ	PC>250w; relays WXKC 99.9
PA	Homer City	101.1	W236BN	QC from 95.1, 250w, 40-38-16/79-08-49; CL from Berwick; relays WCCS 1160
PA	Pittsburgh	102.1	W283BU	QC from 104.5, 25w, 40-26-46/79-57-51; CL from Du Bois; relays WKHB 620
PA	Punxsutawney	100.9	W231BK	QC from 94.1, 250w, 40-57-36/79-00-08; CL from Oswego, N.Y.; relays WECZ 1540
PA	Scranton	96.1	W241AZ	PG<37w, 41-24-34/75-40-01; CL from Clarks Summit
PA	Scranton	100.9	W265CU	NW 25w/-88m, 41-24-34/75-40-01; relays WBYH 89.1
PA	Wellsboro	93.1	W226CG	QG from W233CB-94.5, 250w, 41-44-41/77-17-35; CL from Hazleton; relays WNBT 1490
PA	Johnstown	101.3	W267CM	QG from W250BA-97.9, 180w, 40-22-15/78-59-02; CL from Manahawkin, N.J.; relays WKGE 850
PA	Lansdale	98.5	W253CA	QG from 107.9, 250w, 40-14-48/75-19-00; CL from Toms River, N.J.; relays WNPV 1440
PA	Reading	106.5	W293CL	XG 40-23-45/75-52-03
PA	Wellsboro	93.5	W225AT	QC from 92.9, 200w; relays WNBT-FM 104.5
PA	York	93.9	W230CQ	QG from W253AC-98.5, 250w, 39-59-56/76-41-43; CL from Reading; relays WSBA 910
PR	Mayaguez	95.5	W283BI	QC from 104.5, 140w, 18-18-49/67-11-26; relays WNVI 1040
SC	Columbia	92.7	WROP-LP	NW 30m, 34-00-20/81-02-17 (St. Peter's Catholic School)
SC	Batesburg	103.3	W235AS	QC from 94.9, 250w, 33-52-49/81-33-16; CL from Irwinville, Ga.; relays WBLR 1430
SC	Spartanburg	97.1	W246CV	NW 100w/76m, 34-10-35/82-08-57; relays WORD 950
SC	Bluffton	91.5	W218BX	PG>13w
SC	Atlantic Beach	95.5	W238CJ	NW 250w, 33-50-11/78-47-03; relays WJXY-FM 93.9
SC	Atlantic Beach	103.5	W275AH	QC from 102.9, 250w, 33-50-11/78-47-03; CL from Maxton, N.C.; relays WMIR 1200
SC	Clinton	96.5	W243DU	QG from W252BH-98.3, 250w, 34-26-43/81-53-21; CL from WAington, Ga.; relays WPCC 1410
SC	Monroe	97.3	W247CV	QG from W296CN-107.1, 250w, 34-58-58/80-32-13; CL from Stallville; relays WXNC 1060
SC	Spartanburg	97.1	W246CV	PG>250w, 34-58-52/81-59-11; CL from Greenwood; relays WORD 950
SC	Spartanburg	98.3	W252DQ	QG from W283AV-104.5, 250w, 34-58-26/81-55-37; CL from Little River; relays WSPG 1400
SD	Lead	100.3	K262CU	NW 250w, 41-42-04/103-40-49

SD	Sioux Falls	92.9	KRWH-LP	NW 27m, 43-31-49/96-38-06 (Words of Hope Media)
TN	Hollywood	94.7	W234CD	NW 10w/130m, 35-29-16/87-01-30
TN	Memphis	92.1	W221CR	PG<99w, 35-09-16/89-49-19; CL from Covington
TN	Chattanooga	107.3	W297BX	NW 99w, 35-03-06/85-16-20; relays WNOO 1260
TN	Bellevue	104.9	W285FB	NW 230w, 36-02-47/86-49-47; relays WMOT 89.5
TN	Chattanooga	93.9	W286BJ	QC from 105.1, 250w, 35-09-41/85-19-05; CL from Reynolds, Ga.; relays WDEF 1370
TN	Hendersonville	100.3	W262CN	PG>150w, 36-21-22/86-34-29
TN	Memphis	107.9	W300DE	QG from K255CP-98.9, 250w, 35-08-45/89-48-48; CL from Flippen, Ark.; relays KWAM 990
TN	Bristol	98.9	W255DB	QG from W272DE-102.3, 250w, 36-31-15/82-15-54; CL from Elizabethtown; relays WFHG 980
TN	Chestnut Ridge	95.3	W237DY	NW 10w/123m, 35-21-18/86-31-27; relays WMOT 89.5
TN	COrial Heights	96.3	W274AS	QC from 102.7; CL from Pigeon Forge; relays WPWT 870
TN	Dickson	99.1	W256CG	NW 27w/56m, 36-17-46/87-15-44; relays WLTD-LP 100.7
TN	Kingsport	97.3	W247CH	NW 250w, 36-26-03/82-08-03; relays WHGG 1090
TN	Lenoir City	95.1	W269CG	QG from 101.7, 15w, 35-47-32/84-17-45; CL from Priceville, Ala.; relays WBLC 1360; amendment from 27 watts
TN	Nashville	98.7	W254CK	NW 250w, 36-16-05/86-47-45; relays WAMB 1200 (WFCN)
TX	Groveton	93.9	KFON	PG>50kw/82m, 31-13-44/94-57-36
TX	Houston	92.5	K223CW	NW 18w, 29-49-33/95-22-36; relays KCOH 1230
TX	Houston	102.5	K273CW	PG<90w, 29-33-44/95-30-35; CL from Three Rivers
TX	Dallas	95.9	K240EQ	QG from K237FY-95.3, 80w, 32-35-25/96-58-23; CL from Cleburne; relays KBFB 97.9
TX	Houston	102.5	K273CW	NW 90w, 29-33-44/95-30-35; relays KBRZ 1460
TX	Huntsville	101.3	K267CJ	QG from K265EU-100.9, 75w, 30-32-03/95-23-59
TX	McKinney	104.1	K281CS	QG from K259CI-99.7, 33-03-50/96-35-02; relays KHSE 700
TX	Rosenberg	107.1	K296HD	QG from K294BI-106.7, 250w, 29-41-27/95-58-17; CL from Sealy; relays KKQB 92.9
TX	Sequin (sic)	100.9	K266BW	QC from 101.1, 140w
TX	Clarksville	99.3	K257GD	QG from K253BZ-98.5, 250w, 33-36-47/95-01-04; CL from Mountain Home, Ark.; relays KCAR 1350
TX	Del Valle	92.9	K225CA	NW 250w, 30-19-23/97-47-58; relays KVLR 92.5
TX	El Campo	106.7	K294DD	QG from K256AT-99.1, 250w, 29-12-34/96-15-50; CL from Nacogdoches; relays KULP 1390
TX	Cypress	101.5	KOER-LP	NW 30m, 29-59-52/95-37-28 (Rhema Gospel Radio)
UT	Fillmore	99.7	K259AR	PG>250w, 38-52-01/112-13-58; to relay KMXD 100.5
UT	Fillmore	104.7	K284CF	PG>250w
UT	Park City	95.5	K238CE	QG from K229CK-93.7, 50w, 40-05-21/111-49-15
UT	Provo	98.3	K252DB	PG>165w, 40-05-21/111-49-16; CL from UT Co.
UT	Beaver	92.7	K224ES	PG>250w, 38-27-24/112-39-28
UT	Beaver	102.5	K273CL	PG>250w, 38-27-24/112-39-28
UT	North Salt Lake	93.7	K229CJ	PG>125w, 40-55-19/111-53-37; CL from Tooele; relays KSVN 730; NW
UT	Price	103.3	K280AG	QC from 103.9, 250w, 39-36-33/110-48-50; relays KARB 98.3
UT	Price	107.3	K259CM	QC from 99.7, 60w, 39-31-48/111-03-03; CL from Moab; relays KOAL 750
UT	Cedar City	107.7	K299BU	QG from K282BL-104.3, 37-38-43/113-22-22; CL from Kanosh; relays KSUB 590
UT	Smithfield	102.5	K273CY	QG from K237FN-95.3, 75w, 41-53-50/111-57-39; CL from Garden City; relays KVNU 610
VT	Springfield	106.5	W293BH	PG>175w, 43-16-52/72-29-16
VT	Waterbury	96.5	W243DT	QG from 97.1, 250w, 44-27-50/72-44-43
VT	North Bennington	103.1	W276DF	QG from W228AU-93.5, 250w, 41-21-57/71-50-11; relays WBLQ 1230
VT	Randolph	100.1	W261DJ	QG from W273BH-102.5, 43-56-15/72-38-11; CL from Middlebury; relays WCVR 1320
VA	Norfolk	96.9	W245CK	PG<99w, 36-48-37/76-16-58; CL from Suffolk CX ROA

VA	Norfolk	100.1	W261DI	QG from W275AL-102.9, 250w, 36-48-37/76-16-58; CL from High Point, N.C.; relays WPMH 1010
VA	Harrisonburg	103.3	W277CY	XG 38-27-08/78-54-32; relays WPVA 90.1
VA	Richmond	93.3	W228AB	QC from 93.5, 1w
VA	Centreville	92.9	W227BM	QC from 93.3, 25w, 38-51-18/77-22-28; CL from Winchester; relays WTNT 730
VA	Hopewell	96.9	W245CU	QG from W281BM-104.1, 250w, 37-17-46/77-18-50; CL from Durham, N.C.; relays WHAP 1340
VA	Moneta	98.3	W252DP	QG from W222CJ-92.3, 250w, 37-09-53/79-38-04; CL from Clarksburg, W.Va.; relays WSLK 880
VA	Richmond	106.9	W295CM	QG from W228AB-93.5, 250w, 37-30-52/77-30-28; CL from Paramount, Md.; relays WXGI 950
WA	Mount Vernon	88.3	K202ED	XG 48-21-55/122-16-03; to relay KEFX 88.9
WA	Mount Vernon	107.3	K297BH	PG<7w, 48-21-55/122-16-03
WA	Spokane	93.3	K227CD	PG 99w, 47-41-52/117-31-07
WA	Bellingham	96.5	K243BX	NW 250w, 48-46-34/122-26-25; CL from Skamania; relays KGMI 790
WA	Bellingham	97.3	K247CM	NW 250w, 48-46-34/122-26-25; CL from Centerville; relays KPUG 1170
WA	Bellingham	98.9	K255DC	NW 250w, 48-46-34/122-26-25; CL from Twisp; relays KBAI 930
WA	KY	95.3	K237GM	QG from K263BJ-100.5, 99w, 47-23-50/122-10-45; CL from Richland; to relay KZIZ 1560
WA	Lakewood	104.1	K281CI	QG from K253BW-98.5, 250w, 47-09/55/122-35-45; CL from Union Mill
WA	Spokane	95.7	K237DS	QC from 95.3, 172w, 47-35-58/117-17-57; CL from Pendleton, Ore.; relays KMBI 1330
WA	Burlington	104.7	KTFJ-LP	NW -52m, 48-28-56/122-18-40 (Skagit Valley Family Radio)
WA	Bellingham	101.9	K270CL	NW 46w, 48-46-22/122-31-15; relays KWLE 1340
WA	Redmond	98.5	K253CG	PG<18w, 47-37-44/122-10-10; CL from Sumner; relays KARR 1460
WV	Clarksburg	92.3	W220BZ	QC from 91.9; relays WYXA 90.1
WV	Granville	97.5	W248BF	PG<10w; relays WYXA 90.1
WV	Wheeling	100.1	W261DH	QG from W244BR-96.7, 250w, 40-02-09/80-46-16; CL from Springfield, OH; relays WOMP 1290
WV	Weirton	102.1	W271CZ	QG from W234AV-94.7, 25w, 40-22-53/80-36-00; CL from Punxsutawney, PAa.; relays WEIR 1430
WI	Sheboygan	91.7	WSHS	XG 43-46-36/87-43-05
WI	Racine	98.1	W251BU	NW 250w, 42-36-32/87-50-56
WI	WV Bend	101.3	W267CL	QG from W237CJ-95.3, 190w, 43-26-31/88-11-17; CL from Reedsburg
WI	Appleton	97.3	W247BY	PG<8w, 44-15-16/88-26-13
WI	Eau Claire	88.7	W204BP	PG>19w, 44-51-02/91-25-24; PC
WI	SHIno	96.1	W241CJ	NW 250w, 44-46-49/88-37-52; relays WTCH 960
WI	SHIno	96.5	W251CE	QC from 96.1; relays WOTE 1380
WI	Appleton	103.5	W278AU	XC 44-15-37/88-22-00; relays WHBY 1150
WI	Hayward	96.9	W245CT	QG from W272DJ-102.3, 250w, 45-59-07/91-32-23; CL from Ladysmith; relays WHSM 910
WI	Madison	97.7	W227BL	QC from 93.3, 225w, 43-03-03/89-29-13; relays WHIT 1550
WI	Manitowoc	103.5	W278BQ	PG<38w, 44-07-31/87-37-41; NW; relays WSJP-FM 100.1
WI	WV Bend	101.3	W237CJ	QC from 95.3, 190w, 43-26-31/88-11-12; CL from Reedsburg; relays WBKV 1470
WI	Appleton	107.9	W300CM	PG<90w, 44-13-56/88-28-05
WI	Cedarburg	104.5	W283CJ	NW 250w, 43-17-36/87-59-23; relays WMBZ 92.5
WI	Madison	94.5	W233CN	QG from W225AV-92.9, 250w, 43-01-29/89-23-48; CL from Ironwood, MI.; relays WLMV 1480
WI	Madison	96.7	W244DR	QG from W236AS-95.1, 230w, 42-57-47/89-22-47; CL from Park Falls; relays WOZN 1670
WY	Laramie	96.7	K244FN	QG from K222BL-92.3, 250w, 41-17-15/105-26-38; relays KHAT 1210

We're looking for a dedicated FM DXer to take over the *FM News* column. The *FM Facilities* column was a temporary fill-in that ends this month. E-Mail Ryan Grabow if you're interested in contributing to the VHF-UHF Digest. ryang@wtfda.org

PHOTO NEWS



December 2016

Jeff Kruszka
1909 Lost Lake Pl.
Pearland, TX 77581
jkruzka@sbcglobal.net

The DX just keeps rolling in for Chris Lucas in Poughkeepsie, NY:



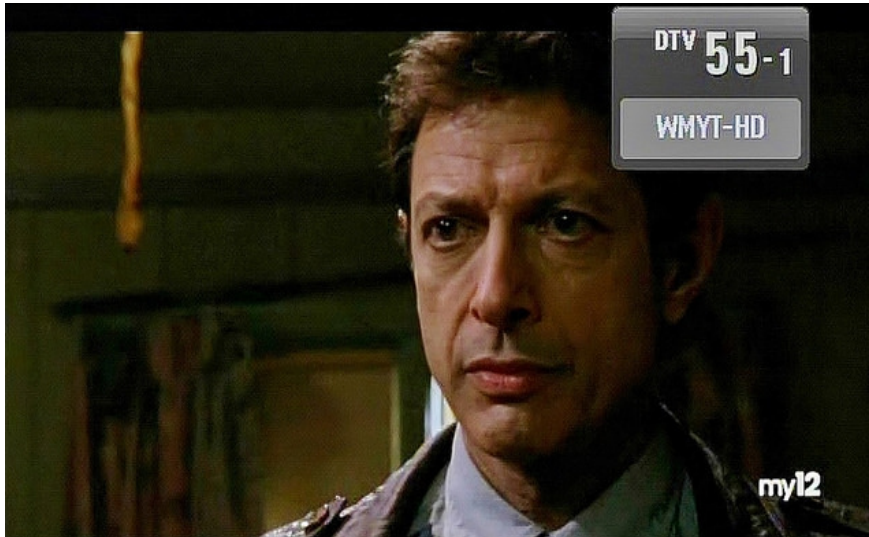
WBTV-23 Charlotte, NC
593 mi Tr seen 10-12-16



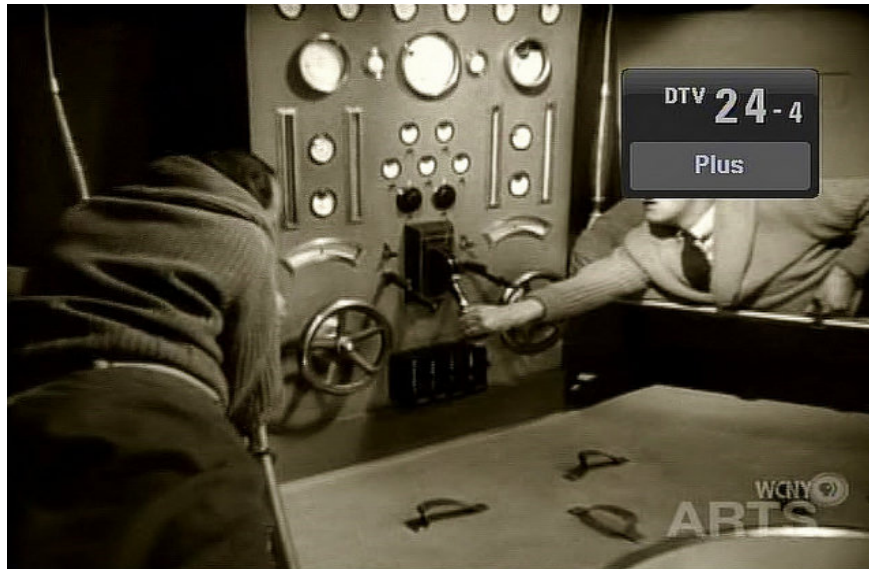
WCWG-19 Lexington, NC
512 mi Tr seen 10-12-16



WHUT-33 Washington, DC
257 mi Tr seen 10-12-16



WMYT-39 Rock Hill, SC
592 mi Tr seen 10-12-16



WCNY-25 Syracuse, NY
140 mi Tr seen 10-19-16



WTVH-47 Syracuse, NY
140 mi Tr seen 11-18-16



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:

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Tabernacle, NJ 08088

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The Editor's Note

Some decent tropo persisted throughout November in the Great Lakes and Midwest, and we even had a respectable couple of days of E-skip reported across the eastern portion of the continent around Thanksgiving, including on the 24th and the 25th. After what ended up being a very entertaining winter Es season last year between Christmas and New Year's Day, it'll be interesting to see if we can muster a few more openings with the seemingly early start.

We hope you and yours have a happy and safe Christmas and holiday season!

Glenn Hauser

Enid, OK

DTVDX Tropo to Enid OK, Nov 16 & 16, 2016

** OKLAHOMA. It's been a chilly night, but bright sun by 1518 UT Nov 10, provoking some tropo enhancement. Here's something new on RF 42: a 7-program multiplex, mostly decoding with some lapses, so I quickly tune thru them. PSIP ID for all of them is KBZC-LD, DTV 42-1 thru -7.

42-1, has an E/I docu, Animal Rescues

42-2, with ads, apparently infomercial

42-3, more ads, soon BUZZR in LR, games

42-4, Country bug in LR, music videos

42-5, QVC

42-6, a different QVC, Q bugs in LL

42-7, LCH (?) bug in LR, shopping

So where is this? W9WI.com shows Oklahoma City, 7.2 kW horizontal only, but no subchannel info. Then to rabbitears.info ---

City of license is shown as Enid! But coverage map shows site really in the northern OKC antenna farm: <http://rabbitears.info/contour.php?appid=2003342&map=Y> and does not reach anywhere near Enid. {Antenna height only 292 feet (AAT?), distance approx. 105 km or 65 miles.}

It's one of those proliferating DTV America outlets; lineup details:

<http://rabbitears.info/market.php?re...lsign=KBZC-LD>

42-1 42.1 480i DD2.0 Bounce TV

42-2 42.2 480i DD2.0 Laff

42-3 42.3 480i DD2.0 BUZZR

42-4 42.4 480i DD2.0 The Country Network

42-5 42.5 480i DD2.0 QVC

42-6 42.6 480i DD2.0 QVC Plus

42-7 42.7 480i DD2.0 Liquidation Channel

Lost by 1530 UT. Tho from nearest major market OKC, I have *never* seen this before on either of my antennas aimed toward OKC. Hepburn`s tropo maps show marginal enhancement east of Oklahoma City and Enid, but not directly between us. Nothing on 36 from another OKC LD, KUOK-CD, I have seen before, 7.3 kW, so must be a very selective duct.

I was also getting insufficient signals on various channels correlating with Tulsa/Muskogee market such as 11, 20, 28, notwithstanding the 900 kW Tulsa station on RF 42! (Glenn Hauser, Enid, DX LISTENING DIGEST)

** U S A. Morning of November 16, lots of Bad signals on most UHF channels, with tropo enhancement, but a Good one breaking thru at 1529 UT on both my antennas:

RF44, PSIP immediately shows 45-1 KSHV-TV. It`s 500 kW ERP in Shreveport LA per W9WI.com with MyTV on 45.1, but ads at the moment. I am also getting a 45.2 with super ID at lower left: KSHV-TV,45.2 Shreveport (but no 45.3 or 45.4). [and sic, there is no space after -TV, comma]. At 1547 the program on 45.1 is `Crime Watch` as IDed at lower-left; while 45-2 says John Simms, and soon more aptly `Forensic Files` on the ESCAPE network (bug LR: the P elevated so it`s half visible, get it?). At 1559 break, 45-1 with Weather Focus, Louisiana map; and 45-2 again supers KSHV-TV ID at LL. These hold up until finally about 1620 starting to fade and break up.

W9WI.com shows KSHV only with My on 45.1, no 45.2. But rabbitears.info also has Escape on 45-2.

Shreveport by tropo used to be not too rare in analog era on 3 and 12 (and 6 with Texarkana). City to city distance is 574 km = 356 statute miles. Other decodes during this opening, from OKLAHOMA, q.v. (Glenn Hauser, OK, DX LISTENING DIGEST)

** OKLAHOMA. During Tropo DTVDX from RF 44, KSHV-TV Shreveport, see USA, other decodes in this opening:

RF 31 at 1533, DTV 3-1 OETA-DT, i.e. KOET Eufaula OK, seldom seen here

RF 28 at 1534, Ion as on 44-1, i.e. KTPX Okmulgee OK

RF 24 at 1535, OKC local KOKH 25 is not decoding due to some DX CCI

RF 20 at 1536, KQCW-HD as 19-1, i.e. Muskogee OK

RF 17 at 1537, local Enid multi-channel 3ABN Adventist translator is not decoding due to DX CCI

RF 45 at 1552, as 6.2 KQCW-SD: this is really KOTV Tulsa transmitter as on 6.1 (Glenn Hauser, OK, DX LISTENING DIGEST)



UPCOMING METEOR SHOWERS

DATA FROM THE
AMERICAN METEOR SOCIETY
amsmeteors.org



Shower	Activity Period	Maximum		Radiant		Velocity km/s	r	Max. ZHR	Time	Moon
		Date	S. L.	R.A.	Dec.					
Geminids (GEM)	Nov 30-Dec 17	Dec 13	261°5	07:33	+32.4°	33.7	2.6	120	0100	13
Ursids (URS)	Dec 17-Dec 24	Dec 22	270°7	14:30	+74.8°	32.6	3.0	10	0500	01
Quadrantids (QUA)	Dec 28-Jan 12	Jan 03	283°15			41	2.1	120		

^ 2017 info from International Meteor Organization (imo.net)

A Review of SDRplay's RSP2 Radio Spectrum Processor for FM DXing

Written by Mike Bugaj

It was a couple of years ago now that I received an email from Jon Hudson of SDRplay telling me about a new SDR they had developed, called the RSP. I wrote back to Jon, telling him that if he would like to send me one, I'd try it and then write a review on it for its FM DXing potential. Jon sent one. I tried it. I liked it and I bought it and since then it has been my receiver of choice for FM DXing, helping me work many summertime skip openings and log new stations.

So it surprised me recently when Jon emailed me again and told me about a new offering from SDRplay. He explained that this was an enhanced version of my original RSP. This one is called the RSP2 and operates with SDRuno software. He again offered to send me one to review. I said sure, so here we are again.

Since I already use an RSP1, I physically compared both of them. As you can see, both are about 3" wide. My original RSP (one of the first built) is about 4" long while the newer RSP2 is 3 ¾ inches long, just shy of mine. Both are about 1 ¼" in height.

My original RSP has an F fitting on one end while the newer RSPs were changed to SMA fittings and also have black housings instead of the blue and white housing that mine has. The RSP2 housing is now shielded and has three antenna inputs with two SMA fittings plus one green terminal which can be used for long wire antennas or loops. The two SMA inputs work from 1500khz through 2ghz. The other input works from 10khz through 30mhz. The antennas are switched through the software. The RSPs connect to a computer with a USB cable. Be advised you'll need at least one SMA to F adapter fitting for FM DX use.

While playing with my RSP2 I noticed that the noise floor on FM was about -120dBm which was about the same as my RSP1. I also noticed that when switching from one SMA input to the other, my strong local WAQY 102.1 registered a 60db signal but registered 20db on the other input with no antenna connection. One of my local LPFMs (WSIM-LP 103.5) registered 20db with the antenna connected and S-9 with the empty input chosen.



SDR Uno

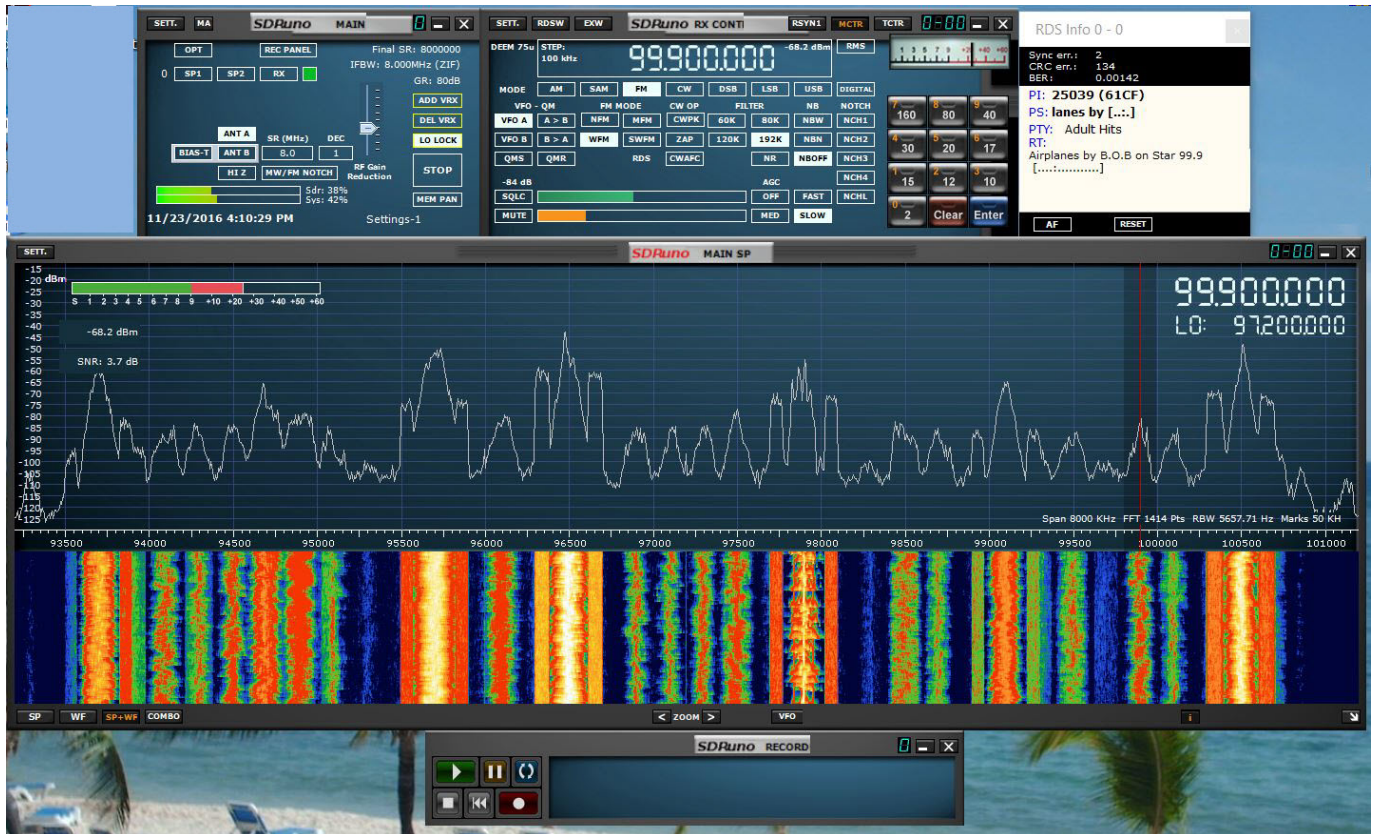
To get your RSP2 working, you'll need to download SDRuno software first from the SDRplay website. Once you finish downloading the software, connect your RSP2 and run it. When you run SDRuno, you will



encounter one of the windows shown on the left, called the Main Window. If you use the software with an RSP1, you will see the window on the left. If you use an RSP2 you will see the window on the right. The Main difference between the two is the buttons for antenna switching. To start SDRuno, click **PLAY**.

When people first download SDRuno, their thoughts are probably like mine. They think “Is that all there is and what did I do wrong!!”

Well, you didn’t do anything wrong. This is where you start, and where you finish could be something like where I ended up, which is here:



As you can see, I have five windows showing. This is all I need for FM DXing. What you use and how you put them together is up to you.

Now that you see these windows, how do you get them to appear on your monitor? It’s easy.

- A. To add the RX control window (top row, middle) just go to your Main window and click on the RX button.
- B. To add the RDS info window, go to your RX control window and click on the RDSW tab on the top.
- C. To get your Main Spectrum window (big window in the middle) go to your Main window and click on SP1.
- D. To get the Recording Window, go to the Main window and click on REC PANEL.

There are other windows available. If you are a ham you’d probably appreciate them. If you want to check them out later, go right ahead.

Move these windows wherever you want. Resize whichever you want. Every window has a SETT button on the upper left side of each window (except RDS). Click it and you’ll find all kinds of settings and ways to customize your windows.

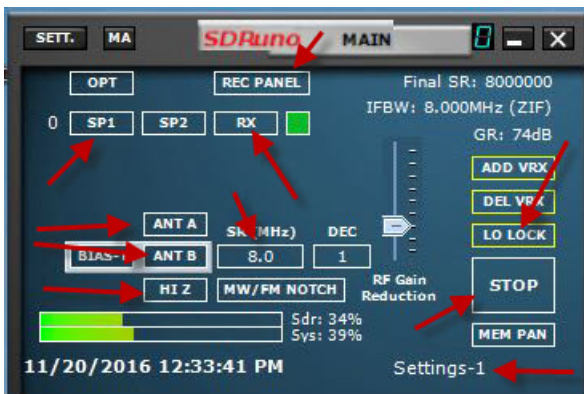
Then save your settings. Go to your Main window and look on the bottom. In my picture you'll see Settings-1. This is a Profile name. You may see something else. It doesn't matter. Hold down your CTRL key and keep it depressed. Click on whatever you see there and when you see a menu drop down with the same name on it, click on that name in that menu again. Then release your CTRL key. You have just saved your layout and all settings. You can also change the name to something you like better by double clicking on the profile name, typing in something else and hitting enter.

THINGS YOU SHOULD KNOW

De-emphasis comes with 50us as a default. The US value is 75us. Change it. Go to your RX Control window, click on the EXW tab, make sure DEEM is turned on and select 75us. Note that the FM stereo noise reduction slider is on the bottom of that window. Click on the bar and move it left or right to change the NR.

RDS Pty settings come set with European settings. Change them back to RBDS (North American) settings. Go to your RX control window. Click on the RDS tab and select PTY Region NA.

How much spectrum you want to see depends on you and it depends on how much your computer wants to deal with it. Ten MHz is nice to see but your computer might not handle it. You may experience freezing, locking or stuttering in your recordings and playbacks. Your computer might digest 8 MHz or even 6 MHz better. You can change your spectrum bandwidth by going to your Main window and changing it by double clicking on the SR (MHz) box and typing in something else (8.0 instead of 10.0). Or click and get a menu that shows all choices between 2 and 10 MHz and select one.



Functions of the Main Window that we've talked about

When you select the FM band, you have two choices on the RX Control window. You have WFM (wide FM mono) or SWFM (wide FM stereo). You also have four filtering presets: 192khz, 110khz, 80khz and 60khz. You can choose one of those or anything in between. Just click on the SP2 box on the Main window and move the red line either left or right. On the image below we have selectivity set for 100khz.



RDS Works best from around 150-192khz filtering. Once you narrow it more you may find that RDS on weaker stations may not decode. 150khz is a good compromise.

Next, we will deal with the recording window.



Here is the recording window. Before we record anything, first we need to tell SDRuno where to put the recording, so put your cursor anywhere in the bluish area to the right of the controls and right click. A menu appears and lets you select the folder where you want to keep your spectrum files. Press the red button with the white dot to begin recording. Next we need to find where to find the spectrum files we just recorded. Go back to the Main window, look for the OPT box and click on it. Look for SELECT INPUT and select wav file. Once that is selected, click the green button on the recording window and the file will play.

There are a few ways to change frequencies. Consult the user manual (found by clicking on the OPT box on the Main window) and then clicking on the User Manual. The easiest way to enter an FM frequency at the beginning is to look at the RX window frequency display, then count over 9 places to the left of the last digit. Put your cursor there and then type in the proper frequency. For 100.5 you would need to type in 100500000 then hit enter (found under the keypad). This will show in the display as 100.500.000. Once you do this, changing from one frequency to another should be relatively easy with the mouse wheel (or just put your cursor anywhere in the SP1 window and click to change frequencies OR click on the frequency digits in the SP1 window.)

The LO LOCK button on the Main window serves two purposes. When turned on (shown as a white block with black letters) the red tuning bar moves while the spectrum stays locked. The button in this position locks the center frequency, LO or local oscillator. With the LO LOCK turned off, the tuning bar stays locked while the spectrum moves. For DXing the FM band, LO LOCK turned on works best as it lets you tune the entire spectrum window.

Tuning steps can be changed by right clicking in the frequency display and selecting 100khz from the menu of steps that appears.

To stop or exit the program, go to your Main window and click STOP. Then X out that window to quit.

CONCLUSIONS

The RSP-2 is an RSP-1 with enhancements. Both perform very well as FM DX machines. Audio, selectivity and sensitivity are very good. On my heavily congested FM band, I had no problem with overloading. The RSP will work on a 2.6 ghz dual core computer although spectrum files may stutter on recording or playback. Recording and playback work fine on my core 2 duo 2.6 ghz desktop. For heavy recording, an external drive along with a USB 3.0 port would be recommended.

The RSP-2 sells for \$169 and can be ordered from Ham Radio Outlet in the United States. The RSP-1 is on sale from HRO for \$119.95. Both perform very well on FM with the free included SDRuno software. Pick the one that suits your needs best.

Additional resources consist of the SDRplay Group on Facebook, the SDRplay SDRuno Group on Facebook and the SDRplay Community Forum on the SDRplay website (<http://www.sdrplay.com/community>). The Facebook groups are administered by users/beta testers and contain a wealth of information for users and for those thinking about purchasing an RSP. If you have a problem or question, you'll get your fix or answer there.

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NBC Lighting Up Boston Station Jan. 1

The market's longtime NBC affiliate, WHDH, will become an independent

Written by Diana Marszalek for *Broadcasting & Cable* [Nov 1, 2016]

Source: <http://www.broadcastingcable.com/news/local-tv/nbc-lighting-boston-station-jan-1/160825>



After a high-profile ramp-up, NBC Owned Television Stations will launch its new Boston station, WBTS, Jan. 1, the group announced Tuesday.

The station, which will be available over-the-air on channel 8 or 8.2 and on cable and satellite services, will be branded NBC Boston, the company said.

It will air local news, including a 7 p.m. newscast, a daily lifestyle show, and a Sunday morning public affairs program in addition to network programming.

WBTS will have many of the same resources that have been rolled out across the station group including a consumer investigation unit, a chopper and a Doppler-radar equipped mobile weather unit.

Beginning Nov. 10, a "Countdown NBC Boston" channel will be available to over-the-air viewers.

The station's launch caps off NBC's longstanding effort to launch its own station in Boston, which involved pulling its affiliation from Sunbeam's WHDH. After losing its fight against that move, WHDH announced will relaunch as an independent station in January.

Editor note: This channel will air on WNEU (RF 34), licensed to New Hampshire, and use translator WBTS-LD (RF 46) in Needham, MA.



Is It Time To Go Commando?

This isn't the commando we're talking about.

Comando 88, La Que Radio Manda.
Santiago, Dominican Republic's 1st FM radio station on the dial, at 88.5.

The logo for 'COMANDO 88' features the text 'COMANDO 88' in large red letters with a white outline, and 'LA RADI QUE MANDA' in smaller white letters below it.

HIDO-FM, known as Comando 88, is also known for being a common Es target up and down the US's Atlantic seaboard. Comando 88 is famous in the Caribbean for their tropical flavor of merengue, bachata, and salsa music. Amazing stuff!

You can get other amazing stuff on the WTFDA Searchable Online Database of North American FM Radio Stations. It's a database of FM radio stations for the US, Canada, Mexico, the Bahamas, the Caymans, Cuba, Haiti, and the Dominican Republic.

You don't have to go commando. Just make a bold statement, using the WTFDA FM database!!

<http://db.wtfda.org>

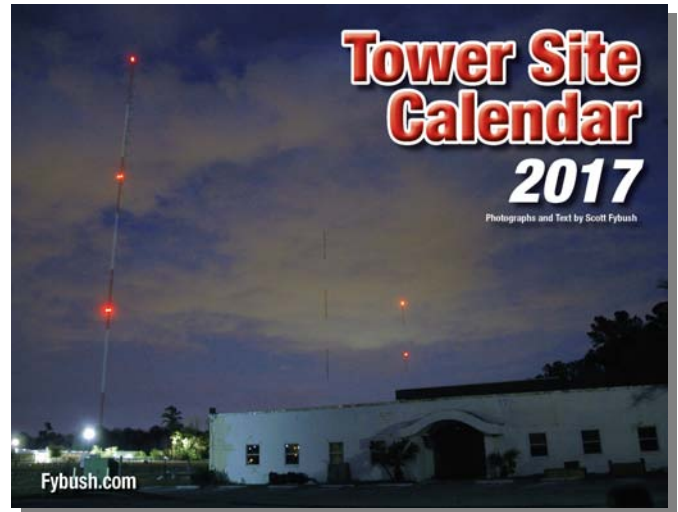
Worldwide TV-FM Dx Association
Searchable Online Database of North American FM Radio Stations

**THEY'RE BEAUTIFUL. THEY'RE TOWERS.
THEY'RE IN OUR CALENDAR.**

Open the pages of the 2017 *Tower Site Calendar* and you'll see art-deco buildings at twilight, lush fields of corn, cloudscapes to dazzle the imagination, and beautiful skies in myriad shades of blue.

And the towers. TV, FM, AM directional and nondirectional and a beautiful Blaw-Knox.

These photos are the reason people buy Scott Fybush's *Tower Site Calendar* year after year after year.



“Engineers are notoriously underappreciated for the hard work they do,” says Fybush, who has worked in radio and television news for more than two decades. “The calendar shows some recognition for their design and maintenance of the infrastructure that allows all of us to have easy access to radio, TV and cellphones.”

The 2017 edition, soon shipping from the Fybush Media store (fybush.com/shop) features thematic page designs, durable coil binding and pictures taken from Fybush's travels all over North America and beyond. This year's towers:

- **WBOB.** The Jacksonville, Florida station signed on during World War II.
- **WWVA.** A site dating back to the 1940s, still standing even after a recent severe storm.
- **WFEA in Manchester, New Hampshire.** America's oldest vertical AM tower.
- **A tower farm in Hales Corners, Wisconsin.** The site broadcasts radio to Milwaukee.
- **The site of the former CKSL.** The second station to sign on in London, Ontario.
- **The Voice of America's Edward R. Murrow transmitting plant in Greenville, North Carolina.** The only survivor of three VOA plants.
- **Two tower farms in the New Jersey Meadowlands.** The towers broadcast New Jersey and New York City radio signals.
- **Ann Arbor's 107one.** A rooftop site overlooking the University of Michigan campus.
- **KFXX in Portland, Oregon.** A three-tower array that diplexes with its Vancouver sister station.
- **KELO in Sioux Falls, South Dakota.** Celebrating its 80th anniversary in October 2017.
- **WBEE in Rochester, New York.** The station playing country music for 30 years.
- **KKAP, Aptos-Capitola.** A site camouflaged as flagpoles in the middle of a golf course.
- **KCTV in Kansas City.** A self-supporting tower more than 1,000 feet high, now a local landmark.

In addition to the photos, the calendar's monthly pages include significant dates in radio and television history, as well as civil and religious holidays.

The 2017 calendars cost \$19.50 each (\$21.10 including sales tax for New York State residents) plus \$3.50 shipping first class or \$6.50 Priority Mail, and can be purchased by check (payable to “Fybush Media”) or money order to 92 Bonnie Brae Avenue, Rochester NY 14618, or online at www.fybush.com.

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