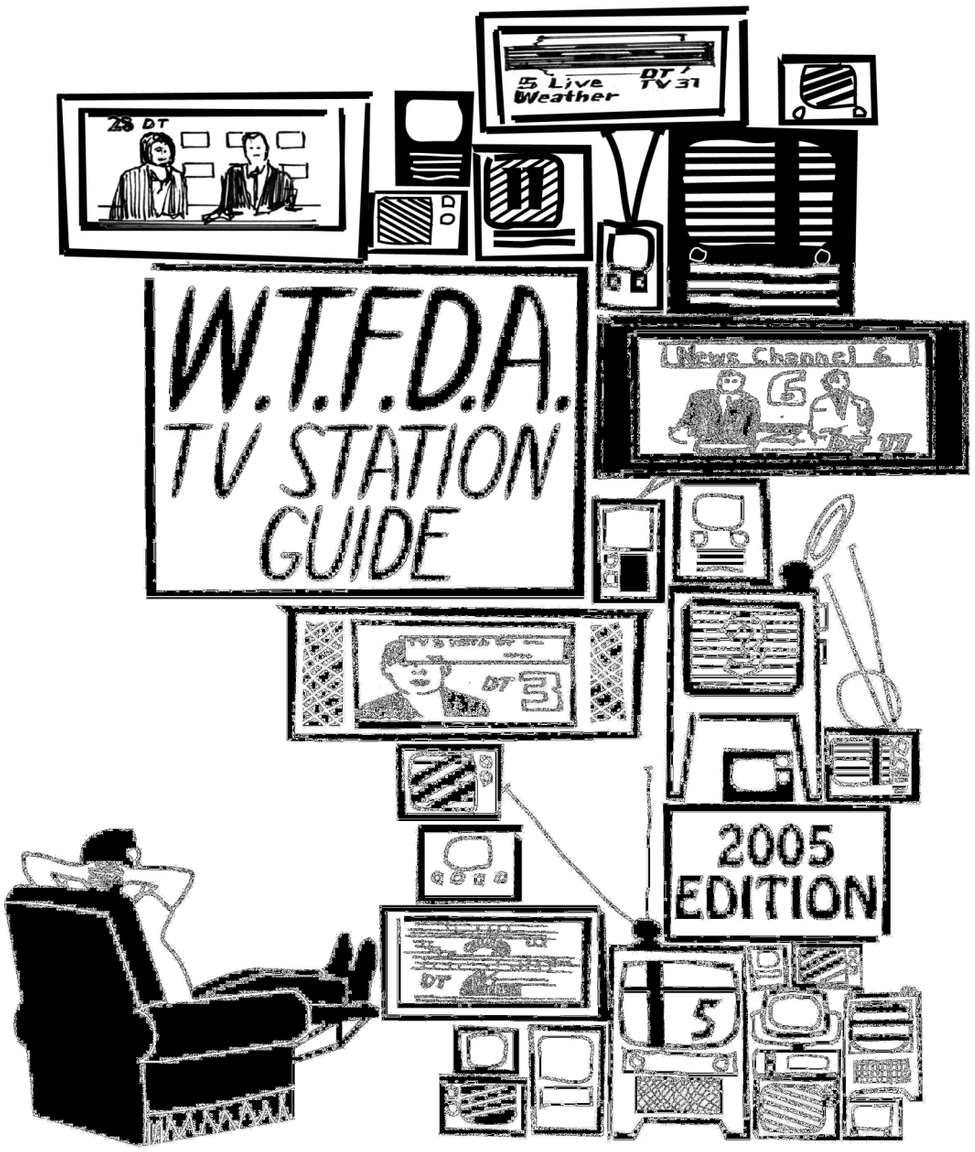
Vhf-Uhf DIGEST

The Official Publication of the Worldwide TV-FM DX Association

APRIL 2005

The Magazine for TV and FM DXers

R E A D Y F O R D X S E A S O N !



CHANNEL MAPS
TV STATION LISTS
For United States, Canada & Mexico

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CONVENTION NEWS
TV STATION GUIDE ORDERING INFO
MEXICAN FM STATION GUIDE INFO
...and more...

TV and FM DXing was never so much fun!

THE WORLDWIDE TV-FM DX ASSOCIATION

Serving the UHF-VHF Enthusiast

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

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APRIL 2005

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

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

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

VUDS ON A CD!

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

CONTENTS

This month Doug tells us about Mexico's transition to digital TV, Russ Edmunds shows how audio editing programs can be used for DXing purposes and both Peter and I (unknowingly) decided to show you some really nice verifications from Jeff Kadet, two of which go back to the 1960s!

FM News will return next month, so take care, stay cool and we will see you then!

WTFDA Convention 2005

DALLAS, TEXAS

JULY 22, 23, 24

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The Mailbox

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

Hi folks. Is it spring where you are? I hope so. Spring is having a very late start here in the northeast. This situation hasn't been good for DX but we'll muddle on and hopefully things will improve as the weather warms up.

MEMBERS AND MORE

First let's say welcome back to **Chuck Rippel** down in Virginia Beach, VA. Nice to have you back, Chuck. And thanks to the following folk for renewing for another year: **Chris Cervantez** (IL), **Nate Ely** (WI), **Frank Drobny** (CA), **Carlon Howington** (FL), **Andrew MacKenzie** (NY), **Allan Dunn** (MA), **Joe Perge** (OH), **David Shapiro** (OK), **Paul Crego** (NY), **Greg Barker** (IN), **Owen Wood** (NY), **Peter Taylor** (WA), **Gary Siegel** (OH) and **Dan Dankert** (CA). The last eight people get a gold star for making their checks payable to WTFDA.

Also a few people have received at random a WTFDA red or yellow cling along with their VUD. If I remember we'll do it again for April. What other club gives you freebies like this.

THE SYLVANIA SRZ3000

Jeff Kruszka posted this on the WTFDA list It's worth reading, I think. Jeff wrote "I thought the season was kind of slow, too (although this rash of off-season Es is keeping me entertained), so I decided to buy a new VCR and DTV set topbox (STB) to tinker with.

I got the new VCR (actually used, from eBay), a Mitsubishi HS-U448, because my old one, a HS-U31 of 1990 vintage, finally died. I like the Mitsubishi line because they still offer a feature I had on my original, which is a "video mute on/off" switch. This allows you to defeat that stupid blue screen and allow weak channels to come in. Also if it lasts 14 years with heavy use, it's pretty good.

I also got a new-in-box Sylvania SRZ3000 STB off eBay last week, based on favorable comments from and discussions with Glen Hale. And so far, I am verrry happy with this unit! And I'll go out on a limb right now and say it's going to be far superior to my WinTV-D card when tropo finally comes back. I've done some comparison tests between the two with my locals, and the results are overwhelmingly in favor of the STB. For example, I can pick up WVLA-DT-34 on the STB with an 87% signal strength, and the WinTV-D is in a null! Semi-local WMAU-DT-18 comes in clearly with no breakup and an 81% signal strength on the STB while the WinTV-D is showing 10.6 dB sync lock and no picture! I can even pick up WBRZ-DT-13 on the STB with the UHF antenna selected (41% signal strength), and no sync lock on the WinTV-D. It usually takes anywhere from 13-18 dB on the sync lock (depending on the station) to produce a picture or even PSIP info on the WinTV-D, but the Sylvania is usually way ahead and displaying a picture well before this. And there's very few digital artifacts with the Sylvania; it's either a solid picture or it'll display "no signal."

Now granted, I've received record-setting tropo to North Carolina with the WinTV-D, but I can just imagine what else I would have had with the SRZ3000. And I saw a lot of potential loggings missed last month that I think the STB will have no problem with when that area comes in again. The only downsides are that 1) yes, it does remap, but fortunately it doesn't store the station in memory; and 2) you can't view the signal strength unless a picture is also present (and the strength meter covers up the picture), but fortunately I have my WinTV-D to help out here. The PSIP info is also not exactly like what the WinTV-D shows, but it's close.

There are plenty of these going up for sale on eBay, and the ones I've seen are going for the $150-160 range. So if there is anyone who is at least somewhat fed up with their WinTV-D like I was, then I would highly recommend you check this unit out. And hopefully I'll have more results to report soon!"

Well, based on this review, I went over to eBay and bid on a few auctions for the Sylvania box but I lost. In each case the item sold for over $150. Then I found one that ended in midweek. I bid with 60 seconds to go and, to my amazement, nobody else placed a bid. I got mine for $96, $111 with shipping. Bill Nollman also bid on one and won with a price just over what I paid. Who says you don't get great deals on eBay anymore!

It's a slow month here at the Mailbox, so let continue with DTV if we can. I think one of the questions everybody asks is "Can you use

a DTV box with an old analog click-tuning TV set?" Yes, you can. But what you need to do is go to your favorite retailer (Walmart, for example) and purchase something called an RF Modulator (My local Walmart has dozens of them). They are not expensive (around $15) and what they do is take the DTV box output and send it out to your TV on either channel 3 or 4. The modulator I have (Philips) has no on/off switch. It turns on when the STB (set-top-box) turns on. Simply put, the STB takes your antenna input, sends it to the modulator via RCA cables or a smaller S-video cable ($5), and the modulator sends it to your television on ch3 or ch4. I am using mine with my old click-tuning GE 13" color set. Picture quality (on my TV) is better than the same channel in analog. Using the STB with my analog color set allows me to watch analog E skip like I always have. I just plug the antenna into the TV instead of the box. The Sylvania has the ability to show analog stations, but I was disappointed in the NTSC part of the tuner. Sensitivity is poor. I couldn't even see ch38 in Hartford with it and ch18 overloaded Spanish all over the place. But the digital ATSC part seems very good, and I didn't buy the thing for analog reception anyway.

ONE LESS DXER

Some of you may recognize the name of Don Erickson. Don passed away in a fire in his home at Riverside, CA on March 4th. Don was a long time DXer and IRCA publisher during the 60s and 70s. I remember the name and that of the Century Print Shop in Riverside, which Don owned.

DX EQUIPMENT ON eBAY

Rich Wertman emailed again to tell us that he's selling antennas and more on eBay under his seller name of rwantennasat. Just do an advanced search on the eBay home page and you'll find a box where you can type in his seller name. I just did and I found tripods, rotors, lots of cable and more at good prices, around 50 items in all. Also I notice that Rich is switching from Localnet to Verizon, so hopefully he'll be back posting on the WTFDA list again soon!

TRANSLATOR FREEZE?

A post on the WTFDA list from **John Ebeling**: "Received my March FMedia today from Bruce (Elving). In looking over all the new grants I was amazed. Pretty soon all frequencies will be filled everywhere if these crazy allocations by the FCC continue: Translators—100 new grants, LPFM—33, Normal Stations—67, Boosters—3. This is only one month's listing."

This post brought a reply from **Scott Fybush**. Scott wrote :"Ah, but that will slow down in a hurry. On Friday (3/18) the FCC responded to concerns from LPFM advocates about the translator flood by imposing an immediate six-month freeze on all new translator grants. LPFM interference criteria are being re-evaluated. And the flood of new full-power stations is an anomaly – remember that hundreds of new FM allocations were kept frozen for several years while the FCC switched to the new system of auctioning off new FM facilities. What we're seeing now (and for the next few weeks) is that backlog being cleared out in a hurry as the result of last fall's FM auction 37.

That said, the dial's getting very full very fast, and I'm cautiously hopeful that Friday's FCC actions are an indication that the FCC knows it, too."

FIFTH GENERATION CHIPS

Bob Cooper sent an article about a DTV set-top-box test done by Mark Shubin (well known broadcast industry guru) containing a 5th generation chip. Mark compared the box he was given with the new chip with an LG prototype with the new chip, and was unpleasantly disappointed. Mark complained that the LG box was truly plug-and-play while the other box required careful positioning of the antenna. He found that even moving about in the room and the motion of the outside traffic changed reception, and said that WCBS-DT was received less reliably than at any time since the second generation boxes! Mark, we should add, lives in New York City.

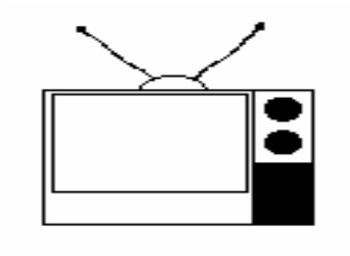
So, it appears that the 5th generation chip is not the final word in DTV reception. Maybe design and engineering is.

CONVENTION INFO

It's time for you convention-goers to start thinking about Dallas. Check out the info on page two. **John Callarman** says that there's an airport shuttle to the hotel from DFW and the hotel will be holding 15 rooms for the WTFDA convention. Check out the hotel's website for additional info. We'll have even more about the convention next month.

EDITORIAL CHANGES

Victor Frank has had to retire from editing Western TVDX. See this month's column. **David Williams** (OR) has taken the job and will begin with the May VUD. Victor has been doing the column for what seems like forever, and we owe him a huge "*thank you*" for his work. But the beat goes on and David continues next month. See you then!



TV News

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April 2005

Abbreviations:

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	QC	Channel (?frequency??) change on the air
DE	License/permit deleted	QG	Channel change granted
FC	Programming (?format??) change	QR	Channel change requested
FTP	Failure to Prosecute	RE	Reinstated (previously-dismissed app.)
GA	Granted amendment (to table of channel allotments)	ROA	Request of Applicant
LC	License to Cover	SI	Off the air (?silent??)
MX	Mutually Exclusive	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

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

Canada:

Alberta:

Coronation	**13**	**CBXT-n**	**NS 80.6kw**
Red Deer	**22**	**CBXT-n**	**NS 417.5kw**

British Columbia:

Apex Mtn.	13	CHBC-9	FC; drops CBC
Braeloch	15	CBUT-x	NS, 100w
Canoe	6	CHBC-8	FC; drops CBC
Celista	3	CHBC-6	FC; drops CBC
Celista	5	CBUT-x	NS, 2.7w
Enderby	16	CHBC-5	FC; drops CBC
Enderby	26	CBUT-x	NS, 886w
Kelowna	2	CHBC-TV	FC; drops CBC
Kelowna	45	CBUT-x	NS, 8200w
Oliver	6	CBUT-x	NS, 115w
Oliver	8	CHBC-3	FC; drops CBC
Penticton	13	CHBC-1	FC; drops CBC
Penticton	17	CBUT-x	NS, 1500w
Penticton	7	CHBC-7	FC; drops CBC
Salmon Arm	3	CBUT-x	NS, 55w
Salmon Arm	9	CHBC-4	FC; drops CBC
Sechelt	18	CBUT-35	QG from ch. 19
Vernon	18	CBUT-x	NS, 1824w
Vernon	7	CHBC-2	FC; drops CBC

Quebec:

Quebec	***12***	***CBVT-DT***	***AF 2.45kw/ 500m***

Guam:

Dededo	22	KEQI-LP	NW 970w, 13-29-17/ 144-49-30

U.S. Virgin Islands:

Christiansted	34	W34DO	NS 50kw, 17-43-42/ 64-44-47
Christiansted	35	W35CE	NS 1kw, 17-43-44/ 64-41-18 (TBN)
Christiansted	52	WEYA-LP	NW 2.5kw, 17-43-46/ 64-41-16; CC from W52DG

Alabama:

Anniston	***9***	***WJSU-DT***	***NW 15.6kw/359m***
Cullman	27	WCQT-LP	QC from ch. 52, 16kw
Huntsville	**25**	**WHIQ**	**PC<338m**
Mobile	**15**	**WPMI-TV**	**PG>563m, 30-36-40/ 87-36-27**
Montgomery	**20**	**WCOV-TV**	**PR>2742kw/519, 31-58-18/ 86-09-44 returned**
Tuskegee	**22**	**WBMM**	**NW 2820kw/341, 32-04-05/ 85-56-41**

Alaska:

Fairbanks	16, 46, 48, 52, 60, 62, 68	K16DW, K46EH, K48FG, K52EY, K60FQ, K62FB, K68EZ	PG<15kw (all seven sts.)

Arizona:

Buckeye	38	NEW-LP	AF dismissed
Casas Adobes	20	K64BV	QR from ch. 64 dismissed

Holbrook	8	K08NY	NS 3kw, 34-55-05/ 110-08-25
Prescott	47	K24EP	XR 34-42-17/ 112-06-55 dismissed
Quartzsite	38	NEW-LP	AF dismissed
Safford	38	NEW-LP	AF dismissed
Tacna	32, 47	NEW-LP	AF dismissed
Tucson	24	K54FW	QR from ch. 54 dismissed
Wellton	59	NEW-LP	AF dismissed
Williams-Ashfork	41	NEW-LP	AF dismissed
Yuma	8	K52EG	QR from ch. 52, 1.8kw, 32-40-22/ 114-20-11; then requests ch. 21, 2.23kw
Arkansas:			
Camden	***49***	***KYPX-DT***	***PR>183m, 33-16-15/ 92-42-14; PR<1000kw, switch from analog***
Fulton	64	K64GT	NS 150kw, 33-36-45/ 93-48-45
Little Rock	**7**	**KATV**	**PR<579m**
McNab	48	K48JI	NS 10kw, 33-40-46/ 93-49-42
California:			
Bakersfield	24	K24GS	QC from K25FT, 21.5kw, 35-21-42/ 119-03-34
Big Bear Lake	20	NEW-LP	AF dismissed
Chico	51	NEW-LP	AF 5.5kw rescinded
Cloverdale	36	KTVJ-LP	PG<21.3kw
Daggett	50	K50HV	QC from K69FJ
Dixieland	18	NEW-LP	AF dismissed
El Centro	**9**	**KECY-TV**	**PC<484m**
El Centro-Holtville	30	K56GC	QR from ch. 56, 3.4kw dismissed
Fresno	3	K03HK	PR>900w; PG
Fresno	***38***	***KSEE-DT***	***QG from ch. 16***
Hemet	27	KZSW-LP	CC from KHEM
Indio	6	K06MB	PC>3kw
Morongo Valley	3	K03HS	XG 33-56-38/ 116-53-37
National City	24	K61GH	QR from ch. 61, 125kw, 32-50-24/ 117-14-52 dismissed
Ontario	**46**	**KFTR-TV**	**PC 2291kw/956m**
Palm Springs	29	KSPP-LP	PC>6.6kw, 33-45-20/ 116-43-18
Red Bluff	3	KMCA-LP	QG from ch. 49, 300w
Redding	2	K02QA	PG<135w
Sacramento	***48***	***KSPX-DT***	***NW 1000kw/489, 38-15-54/ 121-29-24***
S. Bernardino	64	KHIZ-1	AF dismissed
San Diego	***40***	***KNSD-DT***	***PC>370kw***
San Diego	63	K63EN	PR<730w, 32-43-55/ 117-09-38 dismissed
S. Francisco	***27***	***KTSF-DT***	***NW 500kw/403m***
Sycamore	2	K02DC	PR>3kw, 36-32-06/ 121-37-09; PG
Victorville	29	NEW-LP	AF dismissed
Watsonville	**25**	**KCAH**	**PC>182kw/699m**
Watsonville	***58***	***KCAH-DT***	***NW 151kw/699m***
Colorado:			
Alamosa	39	K39GD	XG 37-28-06/ 105-51-58
Colorado Sprs	23	KZCS-LP	CC from K23GJ
Craig	43	K43JL	QG from K27FA, 110w, 40-33-53/ 107-36-36
Cripple Creek	14	K14MH	QC from K57BY, 1kw, 38-46-21/ 104-59-32
Cripple Creek	30	K30IK	QC from K55CJ, 110kw; PR>150kw, 39-43-51/ 105-13-54
Cripple Creek	59	K59BZ	PC>150kw, 38-46-21/ 104-59-33; QC from no offset to plus
Denver	27	KCIN-LP	PC<29.5kw, 39-40-24/ 105-13-03
Denver	47	K47HV	QC from K53AN, 3.55kw, 39-13-40/ 114-58-30
Idalia	22	K22GQ	NW 590w, 39-43-50/ 102-28-56
Julesburg	45	K45IS	NS 665w, 40-54-19/ 102-22-32
Julesburg	49	K49IN	QG from K35AB, 670w; QC
Mancos	24	K24CH	PG, 920w, 37-21-01/ 108-08-01
Salida	36	K36HS	NS 350w, 38-26-50/ 106-00-38
Steamboat Springs	33	K33IE	NS 5kw, 40-27-43/ 106-50-57
Vail	10	KRYD-LP	PR<70w, 39-38-38/ 106-32-15, CL from Wolcott; PG
Vail	45	K45IE	NW 60w, 39-38-38/ 106-32-14
Windsor	36	KZFC-LP	QC from ch. 57, 18.9kw, 40-38-31/ 104-49-03; CL from Estes Park
Delaware:			
Rehoboth Beach	59, 68	W59DZ, W68DR	FC; sold by TBN
District of Columbia:			
Washington	23	WKRP-LP	PG>150kw, 39-00-00/ 77-03-26; PR>10kw
Florida:			
Cape Coral	***35***	***WFTX-DT***	***PC<930kw***
Cocoa	**52**	**WTGL-TV**	**PG 3000kw/472m**
Gainesville	***16***	***WCJB-DT***	***NS 1000kw/270m***
Gainesville	**29**	**960920WR**	**PR<3600kw/278**
Haines City	50	WDTO-LP	XR 28-33-34/ 81-35-38; CC

			from WTOF-LP
Key West	16	NEW-LP	AF RE 1.8kw, 24-33-18/ 81-48-05
Leesburg	***40***	***WACX-DT***	***PR<494m; PG***
Leesburg	**45**	**WLCB-TV**	**PG>3700kw/514, 28-35-12/ 81-04-58**
Mayo	32	NEW-LP	AF RE 150kw, 30-00-40/ 83-01-51
Melbourne	32	W59CX	QR from ch. 59, 25.6kw
Miami	***9***	***WPLG-DT***	***PR<15.8kw***
Miami	21	WDLP-CA	PC>100kw, 25-59-09/ 80-11-37; CL from Pompano Beach
Miami	50	WSBS-CA	QC from ch. 21, 126.9kw, 25-59-09/ 80-11-37
New Smyrna Beach	***33***	***WCEU-DT***	***NW 308kw/491m, 28-36-35/ 81-03-35***
Pensacola	***34***	***WHBR-DT***	***XR 30-36-45/ 87-38-43***
Pompano Beach	21	WDLP-CA	PC>100kw, 25-59-09/ 80-11-37
Port St. Lucie	35	WSLF-LP	CC from W35BS
Reddick	8	W08EA	NS 3kw, 29-21-25/ 82-17-55
Tice	**49**	**WRXY-TV**	**PC>429m**
Georgia:			
Atlanta	50	WDTA-LP	QG from ch. 53, 150kw, 33-45-45/ 84-23-14; CL from Fayetteville
Augusta	**12**	**WRDW-TV**	**PR<478m, 33-24-36/ 81-50-37**
Dalton	***16***	***WELF-DT***	***PG<425m***
Hawaii:			
Honolulu	***10***	***KALO-DT***	***AF 25kw/577m, 21-23-45/ 158-05-58***
Idaho:			
Boise	49	KZAK-LP	CC from K56FQ
Bonners Ferry	46	K27HA	QR from ch. 27 dismissed
Lewiston	51	K55HZ	QR from ch. 55 dismissed
Lewiston	61	KIDQ-LP	PR<1.1kw, 46-27-38/ 117-01-00; PG; CC from K61HN
Illinois:			
Arlington Hts.	34	W34CK	PC>48kw
Carthage	44	WCRD-LP	NW 35.5kw, 41-59-46/ 89-12-11
Chana	46	WBKM-LP	NW 35.5kw, 41-59-46/ 89-12-11
Holcomb	7	WRDH-LP	NW 1.9kw, 41-59-46/ 89-12-11
Rochelle	25	WMKB-LP	NW 20kw, 41-59-46/ 89-12-11
Springfield	***44***	***WRSP-DT***	***PG<335kw***
Urbana	***26***	***WCCU-DT***	***PG<507kw/114m***
Indiana:			
Portage	13	W13BQ	PR>3kw; PG
Iowa:			
Cedar Rapids	**28**	**KFXA**	**PR<4470kw/449**
Des Moines	***50***	***KDIN-DT***	***NW 966kw/593m, 41-49-47/ 93-36-56***
Keokuk	46	NEW-LP	AF RE 1kw, 40-22-37/ 91-22-10
Sioux City	54	K54JN	NS 50kw, 42-29-39/ 96-18-21
Waterloo	***35***	***KRIN-DT***	***NW 250kw/584m***
Kansas:			
Dodge City	27	K27IK	NS 20kw, 37-45-36/ 100-05-53 (TBN)
Hays	43	K43JM	NS 10kw, 38-55-20/ 99-21-12 (TBN)
Pittsburg	49	K49GR	PG>71kw, 37-11-30/ 94-41-18
Topeka	32	NEW-LP	AF RE 150kw, 38-47-47/ 95-53-55
Kentucky:			
Martin	45	W32CX	QR from ch. 32, 126.4kw, 37-17-03/ 82-31-30
Louisiana:			
Delhi	33	NEW-LP	AF RE 75kw, 32-27-52/ 91-39-06
Lake Charles	***8***	***KPLC-DT***	***NW 17kw/451m***
Monroe	***7***	***KNOE-DT***	***NW 17kw/518m***
New Iberia	19	K19FR	QR from K49DE, 49.8kw, 30-01-51/ 91-48-48; QG
New Orleans	**26**	**WGNO**	**PC>3140kw**
New Orleans	**38**	**WNOL-TV**	**PC<2880kw/309**
Maryland:			
Baltimore	***38***	***WJZ-DT***	***NW 1000kw/312***
Frederick	***28***	***WFPT-DT***	***NW 30kw/159m, 39-15-38/ 77-18-45***
Pocomoke City	11	W11DB	NS 200w, 38-04-15/ 75-32-51
Michigan:			
Saginaw/ Midland	42	W46CR	QR from ch. 46, 49kw
Minnesota:			
Geneva	44	K44HE	PR>17.25kw, 43-53-21/ 93-15-35; PG>20kw
Minneapolis	13	WUMN-CA	PC>1.25kw
Rochester	43	NEW-LP	AF RE 10kw, 43-55-00/ 92-26-18
Mississippi:			
Calhoun City	34	W34BJ	PC>50kw, 34-01-17/ 89-21-17; QC from zero offset to plus
Pontotoc	15	W23CL	NW 36.2kw, 34-13-37/ 88-58-53 (UBN/TBN)
Missouri:			
Branson	38	KBNS-CA	PG>49.1kw
Kansas City	43	KCDN-LP	QR from ch. 35, 150kw

West Plains	38	K38HE	NW 30.1kw, 36-45-02/ 91-51-51 (UBN/TBN)
Montana:			
Belgrade	20	K20DY	PR<6.85kw
Colstrip	58	K58IH	NS 31.9kw, 45-50-20/ 106-54-15
Glasgow	30	K30GH	NW 350w, 48-12-16/ 106-36-47
Great Falls	50	K50IQ	XR 47-32-19/ 111-15-41; XG
Helena	41	K41CX	PC<9.8kw, 46-46-07/ 112-01-21
Helena	58	K58II	NS 9.66kw, 46-46-12/ 112-01-22
Hinsdale	42	K42FP	NW 890w, 48-21-56/ 106-58-46
Nebraska:			
Grand Island	**11**	**KGIN**	**PR>315m, 40-35-14/ 98-48-10**
Lincoln	**10**	**KOLN**	**XR 40-48-11/ 97-10-52**
Omaha	**7**	**KETV**	**PC>419m**
Omaha	***20***	***KETV-DT***	***NW 700kw/396m, 41-18-32/ 96-01-33***
Nevada:			
Ely	24, 26, 28	K65AC, K67AL, K51AD	QC from chs. 65/67/51, 800w, (400w on ch. 24) 39-09-40/ 114-36-51
Lund & Preston	27	KCIN-LP	PC<29.5kw, 39-40-24/ 105-13-03
Lund/Preston	47	K53AN	QC from ch. 53, 3.55kw, 39-13-40/ 114-58-30
Murray Canyon	50	K56AC	QC from ch. 56, 3.55kw
Paradise	***40***	***KBLR-DT***	***PG>363m***
Victoria Mines	10, 12	K10KL, K12KO	PC>40w
Wells	22, 24	K43HQ, K45HA	NW 950w, 41-11-40/ 114-56-36
New Hampshire:			
Manchester	**9**	**WMUR-TV**	**XR 42-59-01/ 71-35-25, go DA**
New Jersey:			
Burlington	***27***	***WGTW-DT***	***PG<160kw/354m, 40-02-30/ 75-14-11***
Paterson	***40***	***WXTV-DT***	***NW 300kw/421m***
New Mexico:			
Carrizozo	51	K51CN	PR>90kw, 33-49-34/ 106-14-52
Farmington	43	K43AI	PG<8.56kw
Las Cruces	***23***	***KRWG-DT***	***PG<200kw/205m, 32-17-33/ 106-41-51***
New York:			
Buffalo	***34***	***WNYO-DT***	***PR 175kw/288m, 43-01-32/ 78-55-43***
Hempstead	26	W27CB	QR from ch. 27, 12kw
North Carolina:			
Buxton	17	W17CW	NS 5kw, 35-15-49/ 75-31-42
Hickory	**14**	**WHKY-TV**	**PC>2000kw**
Manteo	17, 28	W17CT, W28CJ	NW 10.8kw, 35-51-52/ 75-39-01
Ohio:			
Cambridge	**44**	**WOUC-TV**	**PG<759kw/385m**
Cincinnati	***10***	***WCPO-DT***	***PC>16.3kw***
Oklahoma:			
Erick	16, 21	K64AX, K68AU	QR from chs. 64/68, 1.1kw
McAlester	35	K35GP	FC; sold to Hispanic Christian organization
Tulsa	***26***	***960621KE-DT***	***PR<50kw, switch from analog to digital***
Woodward	**35**	**KUOK**	**NW 320kw/339, 36-16-06/ 99-26-56**
Oregon:			
Ashland	22	KFBI-LP	QR from ch. 63, 25.8kw
Baker City	55	K55JS	NW 4.9kw, 44-35-57/ 117-46-58
Eugene	***29***	***KEPB-DT***	***NW 100kw/403m***
Glide	34	K63FR	QR from ch. 63, 4kw
Lincoln City	5	K05KY	NW 2.25kw, 44-45-23/124-02-49
Salt Creek	14	K14KW	NW 15kw, 44-58-46/123-20-57
The Dalles	6	K06NI	PR<30w, 45-37-37/ 121-08-59; PG; NW
Tillamook	5	K05KX	NW 650w, 45-27-23/ 123-50-34
Pennsylvania:			
Erie	***16***	***WSEE-DT***	***PR<75kw/271m, 42-03-52/ 80-00-19***
Pittsburgh	***48***	***WPXI-DT***	***PG>1000kw***
Rhode Island:			
Providence	***21***	***WSBE-DT***	***NW 50kw/268m, 41-51-54/ 71-17-15***
South Carolina:			
Charleston	**36**	**WMMP**	**PG 1000kw/583, 32-56-24/ 79-41-45**
Greenville	***59***	***WYFF-DT***	***NW 1000kw/577***
South Dakota:			
Brookings	***18***	***KESD-DT***	***PC>76kw***
Eagle Butte	***25***	***KPSD-DT***	***PC>61kw***
Martin	***23***	***KZSD-DT***	***PC>77kw***
Pierre	***21***	***KTSD-DT***	***PC>68kw***
Tennessee:			
Chattanooga	***35***	***WTVC-DT***	***PR>575kw/299m***
Hendersonvl.	***51***	***WPGD-DT***	***NW 264kw/417m, 36-16-03/ 86-47-44***
Kingsport	***27***	***WKPT-DT***	***PR<695m***
Lewisburg	34	W34DB	PC<8.9kw, 35-26-55/ 86-47-23
Nashville	***15***	***WZTV-DT***	***NW 1000kw/411, 36-15-50/ 86-47-39***
Nashville	42	WLLC-LP	CC from W52CT

Texas:

Abilene	18	KJTN-LP	FC; sold to Hispanic Christian organization
Amarillo	59	K59HG	NW 25.8kw, 35-20-33/ 101-49-20
Austin	***56***	***KTBC-DT***	***PR<354m; NW***
Beeville	45	NEW-LP	AF RE 25kw, 28-23-45/ 97-45-00
Comstock	57, 58	NEW-LP	AF dismissed
Conroe	***42***	***KTBU-DT***	***NW 1000kw/597, 29-33-44/ 95-30-35***
Corpus Christi	61	KCCZ-LP	NW 50kw, 27-45-10/ 97-27-19
Dallas/ Mesquite	34	KJJM-LP	QC from ch. 46, 125kw, 32-35-21/ 96-58-12
El Indio	58	NEW-LP	AF dismissed
Gainesville	2	NEW-LP	AF RE 100w, 33-50-45/ 97-06-15
Harlingen	26	KTIZ-LP	QR from ch. 52, 87kw, 26-09-19/ 97-41-30 dismissed
Kingsville	12	NEW-LP	AF dismissed
Laredo	25	KETF-CA	CC from KZLD
Laredo	31	NEW-LP	AF dismissed
Laredo	34	KLMV-LP	QR from ch. 68, 100w dismissed
Mesquite	50	KATA-LP	PC<15kw, 32-35-21/ 96-58-12
Mt. Pleasant	54	KMPL-LP	CC from K54CB
Paris	50	K50IW	NS 5kw, 33-37-15/ 95-32-50
Pecos	59	K59II	NS 1kw, 31-25-45/ 103-28-45
Quemado	58	NEW-LP	AF dismissed
Refugio	42	NEW-LP	AF RE 5kw, 28-18-15/ 97-16-14
Refugio	54	NEW-LP	AF dismissed
Sinton	9	NEW-LP	AF dismissed
Sinton	11	NEW-LP	AF dismissed
Stamford	44	KIDT-LP	PR<8.2kw; PG
Victoria	**25**	**KAVU-TV**	**PC<1298kw, 28-50-42/ 97-07-33**
Victoria	47	K47JS	NS 1kw, 28-46-45/ 96-56-32
Waco	**44**	**KWKT**	**PC>558m**
Waxahachie	22	KNAV-LP	XG 32-35-21/ 96-58-12; CL from Corsicana
West Lake Hills	47	KTXU-LP	QC from ch. 38, 3kw, 30-19-23/ 97-47-58
Wichita Falls	52	K52JO	FC; sold to Hispanic Christian organization

Utah:

Blanding	38	K38AJ	PG<300w, 37-50-22/ 109-27-42
Fishlake Resort	13	K13YL	NW 5w, 38-31-13/ 111-43-29
Mount Pleasant	46, 50	K46HO, K50HL	NW 1.8kw, 39-32-22/111-23-17
Provo	43	K34DJ	QR from ch. 34, 4kw, 40-16-24/ 111-55-27; CL from Phoenix, OR
Provo	43	K34DW	QR from ch. 34, 4kw, 40-16-24/ 111-55-27
Rural Sevier County	43	NEW-LP	AF dismissed
Scipio	43	K43JN	NS 160w, 39-11-54/ 112-08-33
St. George	6	K06OG	NS 80w, 37-04-04/ 113-31-12
Vernal	6	NEW-LP	AF RE 200w, 40-31-15/ 109-42-25

Vermont:

St. Johnsbury	***18***	***WVTB-DT***	***PG<23.5kw***

Virginia:

Grundy	7	WJDG-LP	CC from W07DA
Portsmouth	*17*	*WKTD-CD*	*LC for change to digital, 14.35kw, 36-49-14/ 76-30-41*
Richmond	***44***	***WCVW-DT***	***NW 100kw/328m***
Richmond	**57**	**WCVW**	**PC<50kw**

Washington:

Seattle	***39***	***KIRO-DT***	***PG>1000kw***
Spokane	***36***	***KSKN-DT***	***NW 250kw/622m***
Tacoma	**11**	**KSTW**	**PC>276m**

West Virginia:

Clarksburg	30, 56, 62	W30CH, W56EI, W62DF	FC; sold by TBN
Clarksburg	64	W64CZ	NS 20kw, 39-18-02/ 80-20-37 (TBN)
Parkersburg	48	W57AG	QR from ch. 57, 125kw

Wisconsin:

LaCrosse	58	W58DQ	NS 800w, 43-45-17/ 91-17-47 (TBN)
Madison	**21**	**WHA-TV**	**NS 1140kw/408m (aux)**
Milwaukee	**36**	**WMVT**	**PG>4790kw/340**

Wyoming:

Casper	7	NEW-LP	AF RE 1kw, 42-44-26/ 106-21-34
Freedom	31	K31DC	PC>200w, 43-07-08/ 111-07-46
Gillette	10	K10PC	NS 2kw, 44-18-10/ 105-27-00
Laramie	41	K41JD	NS 1kw, 41-17-17/ 105-26-42 (TBN)
Pinedale	39	K39GC	PR>250w, 42-50-40/ 109-55-24
Rawlings	26	K26HV	NW 40w, 41-46-16/ 107-14-17
Teton Village	19	K14HH	QC from ch. 14
Teton Village	25	K04NR	QC from ch. 4, 300w

Thanks to Bill Hale and Brock Whaley for information appearing elsewhere in this

month's column...

Brock forwarded an AP item noting the new WSWS-66 tower, under construction near Cusseta, Georgia, collapsed on the last day of February. Nobody was at the site when it happened, so nobody was hurt. The collapse will seriously delay WSWS's planned power increase from 794kw to 2050 and their move closer to Columbus. It will probably also seriously delay the signon of their digital station, which was planned to operate from the new tower.

Bill notes LPTV stations KATA-50 and KJJM-34 operating on their new channels. (having moved from channels 60 and 46 respectively) "It was pretty crude: A hand-made ID on a piece of cardboard which said "KJJM-LP Channel 34 Dallas". The ID on channel 50 is similar. Reports on http://www.avsforum.com suggest the piece of cardboard is the back of a pizza box...

The Mexican government has released their plan for the DTV transition. There should be more details and a channel list elsewhere in this month's *VUD*.

Some highlights:

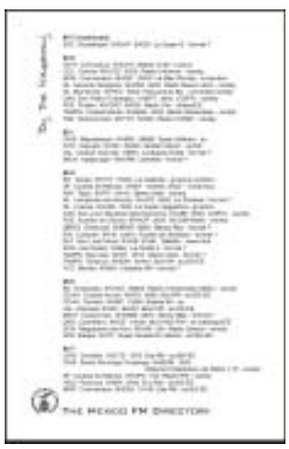
- The transition will take seventeen years, beginning
- last July and finishing at the end of 2021. That's just to get the DTVs on the air; nothing is said about shutting down analog transmitters.
- The transition will be in six steps, depending on market size. It will start in Mexico City, Monterrey, Guadalajara, Tijuana, Mexicali, Cd. Juarez, Nuevo Laredo, Matamoros, and Reynosa, with DTVs in those cities expected on the air by the end of 2006.
- There are only five VHF channels in the transition table, and only one low-band. (channel 2 in Cd. Victoria, Tamaulipas on the country's east coast) However, the table is captioned "Table of Additional Channels for the DTV Transition", and I suspect that as in the U.S. many of these channels are considered temporary. Many are "outside core" – while I am not certain that Mexico recognizes the "core spectrum" concept, it seems unlikely they could ignore it with the U.S. planning on reallotting that spectrum to other services.

Good DX!

THE 2005 MEXICAN FM STATION DIRECTORY

BY JIM THOMAS

-Over 1,000 changes in the Directory from last year's edition;
-Maps: There is a KEY map of Mexico, with each 'estado' (state) referenced.
Each state has its own page, with a mileage key (25 miles, 50 miles, or 100 miles) for that state;
-Maps have been professionally generated, using the top sales & marketing management software, with all cities and towns properly placed in their geographical location;



-Every fm station in Mexico is properly placed on its respective state map, with the correctly spelled and accented city or town of license;

-Directory: A directory guide begins the directory section, with a frequency example showing how to reference each listing. Also included is a pronunciation guide for the Spanish alphabet.

-NEW in the 2005 Mexico FM Directory - A page that describes each unique music format in Mexican radio, such as mariachi, ranchera, regional, grupero, norteño, banda, tejano, romantica, juvenil, cátalogo, as well as the common US music formats.

-In the directory listings, each fm radio station is listed numerically by frequency, progressing from 88.1 through 107.9. Each listing includes: State abbreviation, city of license, call letters, wattage, slogan, and format.

To order your copy of the 2005 WTFDA Mexican FM Directory, send a check or money order for **$7.00** payable to **WTFDA** and send it to **Jim Thomas, 280 Katsura Avenue, Milliken, CO 80543.** For more information email Jim at mrradiohead@wdemail.com

Mexican DTV

The Mexican government agency SCT has released their plans for that country's switchover to digital TV. Read for yourself on: (of course, in Spanish) http://portal.sct.gob.mx/SctPortal/appmanager/Portal/Sct?_nfpb=true&_pageLabel=B20045 .

Their plan calls for a six-part transition, based on market population:

Group	*Dates*	*Steps*
I	7/5/2004-12/31/2006	- Presence of digital signals on all commercial stations in nine major cities*.
II	1/1/2007-12/31/2009	- Replication of analog coverage on all commercial stations in the nine major cities. - Presence of digital signals on commercial stations in markets with populations of 1,500,000 or larger.
III	1/1/2010-12/31/2012	- Replication of analog coverage on all commercial stations in markets with populations of 1,500,000 or larger. - Presence of digital signals on non-commercial stations in markets with populations of 1,500,000 or larger. - Presence of digital signals on commercial stations in markets with populations of 1,000,000 or larger.
IV	1/1/2013-12/31/2015	- Replication of analog coverage on all commercial stations in markets of 1,000,000 or larger and non-commercial stations in markets of 1,500,000 or larger. - Presence of digital signals on non-commercial stations in markets of 1,000,000 or larger. - Presence of digital signals on commercial stations in markets of 500,000 or larger.
V	1/1/2016-12/31/2018	- Replication of analog coverage on commercial stations in markets of 500,000 or larger and non-commercial stations in markets of 1,000,000 or larger. - Presence of digital signals on non-commercial stations in markets of 500,000 or larger. - Presence of digital signals on commercial stations in markets of 150,000 or larger.
VI	1/1/2019-12/31/2021	- Replication of analog coverage on all TV stations.

* Mexico City; Monterrey; Guadalajara; Tijuana; Mexicali; Cd. Juarez; Nuevo Laredo; Matamoros; and Reynosa.

“Presence” means a DTV signal on the air, but with 20% or less of the areal coverage of the corresponding analog station.

“Replication” means a digital signal with at least 90% of the areal coverage of the analog.

The SCT has also created a “Table of Additional Channels for the DTV Transition”. I would presume that, as in the U.S., some of these channels are considered temporary and some stations will return to their existing analog assignments. Some of these channels are “outside core”. While I'm not certain that the Mexicans will be removing channels 52-69 from TV service, it seems unlikely they could continue to use those channels for TV with visiting Americans bringing whatever devices the FCC authorizes for these channels into Mexico. Unlike the U.S. and Canada, the Mexicans seem to have simply assigned a list of channels to each city. These channels do not appear to be assigned to any specific station.

The channels:

St	*City*	*Gp*	*Channels*
AG	Aguascalientes	III	29, 35, 39, 52, 54
AG	Calvillo	VI	38
BN	Ensenada	V	16, 24, 26, 31, 35, 43, 61, 65
BN	Isla de Cedros	VI	23
BN	Mexicali	I	25, 28, 34, 46, 47, 60, 64, 65, 67
BN	San Felipe	VI	8, 21, 22, 51
BN	Tijuana	I	23, 28, 29, 32, 46, 47, 53, 58, 59
BS	Bahia Asuncion	VI	27
BS	Bahia de Tortugas	VI	21
BS	Cd. Constitucion	VI	26, 27, 30
BS	Guerrero Negro	VI	24, 26
BS	La Paz	V	21, 25, 28, 29, 30, 34
BS	San Ignacio	VI	22
BS	San Isidro	VI	21
BS	San Jose del Cabo	VI	24, 26, 27
BS	Santa Rosalia	VI	24
CE	Campeche	V	24, 29, 30, 34, 49
CE	Cd. del Carmen	V	31, 35, 39
CE	Escarcega	VI	27, 29, 30
CH	Arriaga-Tonala	VI	27, 30, 32
CH	Bochil	VI	31
CH	Cintalapa de Figueroa	VI	33, 34
CH	Comitan de Dominguez	VI	23, 30, 35, 43, 46
CH	Copinala	VI	25
CH	El Triunfo	IV	32
CH	Motozintla	VI	25, 39
CH	Ocosingo	VI	25
CH	Palenque	VI	22
CH	Pichucalco	VI	21

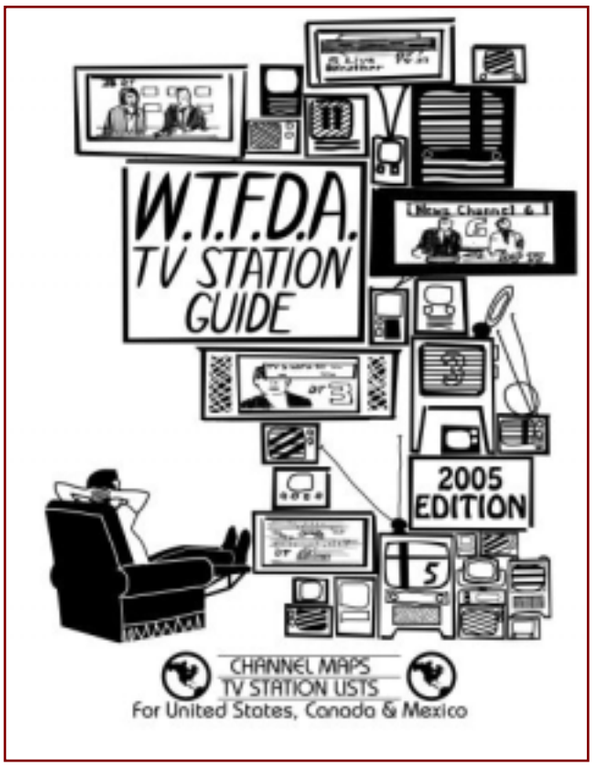
St	City	Gp	Channels
CH	San Cristobal	IV	36, 39, 42, 48, 49, 50
CH	Simojovel	VI	26
CH	Tapachula	V	28, 30, 36, 41, 43, 46
CH	Tecpatan	VI	22
CH	Tuxtla Gutierrez	V	24, 29, 44
CH	Venustiano Carranza	VI	28
CH	Villa Flores	VI	26
CI	Aldama	VI	22
CI	Balleza	VI	23
CI	Cd. Acuna	V	25, 33, 36, 43, 55, 56
CI	Cd. Camargo	VI	21, 27, 31, 46
CI	Cd. Cuauhtemoc	VI	38, 41, 47, 50
CI	Cd. Delicias	VI	40, 48, 53
CI	Cd. Jiminez	VI	24, 33, 58
CI	Cd. Juarez	I	29, 34, 36, 45, 50, 57, 58
CI	Cd. Madera	VI	56
CI	Chihuahua	IV	25, 26, 32, 34, 42, 44, 51, 55
CI	Hidalgo del Parral	VI	22, 25, 26, 30, 32
CI	Monclova	V	24, 27, 36, 40, 42, 48, 49
CI	Nvo. Casas Grandes	VI	24, 27, 54
CI	Ocampo	VI	21
CI	Ojinaga	VI	10, 23, 36, 59
CI	Parras de la Fuente	VI	22, 28, 29
CI	Piedras Negras	VI	43, 44, 51, 55, 56
CI	Riva Palacio	VI	24
CI	Sabinas	VI	41, 43
CI	Sabinas-Nueva Rosita	VI	42, 48, 50, 65
CI	Saltillo	IV	20, 30, 31, 33, 69
CI	San Buenaventura	VI	35
CI	Santa Barbara	VI	34
CI	Santa Isabel	VI	23
CL	Cd. Allende	VI	41
CL	Torreon	III	23, 35, 39, 43, 46, 47
CY	Armeria	VI	53
CY	Colima	V	40, 43, 45, 47, 48, 51
CY	Isla Socorro	VI	11
CY	Manzanillo	VI	21, 39, 42
CY	Tecoman	VI	22, 50
DF	Mexico	I	41, 44, 48, 49, 50, 53, 54, 55, 56, 57, 59
DG	Cuencame	VI	22
DG	Durango	IV	26, 32, 36, 42, 47, 50
DG	Guadalupe Victoria	VI	45
DG	San Pedro	VI	25
DG	Santiago Papasquiaro	VI	27
GN	Acambaro	VI	31
GN	Atarjea	VI	24
GN	Celaya	III	33, 41, 60, 64
GN	Comonfort	VI	31
GN	Coroneo	VI	24
GN	Dolores Hidalgo	VI	29
GN	Dr. Mora	VI	24
GN	Guanajuato	VI	20
GN	Huanimaro	VI	29
GN	Jerecuaro	VI	25
GN	Leon	II	23, 24, 27, 31, 53
GN	Ocampo	VI	26
GN	Penjamo	VI	21
GN	Salvatierra	VI	32
GN	San Diego de la Union	VI	30
GN	San Felipe	VI	21
GN	San Jose Iturbide	VI	32
GN	San Luis de la Paz	VI	25
GN	San Miguel Allende	VI	23, 24
GN	Santa Catarina	VI	28
GN	Santa Cruz de Juventino Rosas	VI	35
GN	Santiago Maravatio	VI	35
GN	Tarandacuao	VI	21
GN	Tarimoro	VI	50
GN	Taxco de Alarcon	VI	23
GN	Tierra Blanca	VI	23
GN	Victoria	VI	27
GN	Xichu	VI	22
GR	Acapulco	IV	22, 23, 32, 33, 45, 48
GR	Chilpancingo	V	24, 28, 34, 35, 39
GR	Iguala	VI	26, 41, 44, 51
GR	Ixtapa-Zihuatanejo	V	22, 25, 27, 28
GR	Ometepec	VI	26
GR	Tecpan de Galeana	VI	34
HD	Atotonilco	VI	21
HD	Huejutla de Reyes	VI	27
HD	Ixmiquilpan	VI	22
HD	Molango	VI	43
HD	Pachuca	V	24, 25
HD	Pisa Flores	VI	44
HD	San Nicolas Jacala	VI	23
HD	Tenango de Doria	VI	36
HD	Tepeapulco	VI	23
HD	Tula	VI	26
HD	Tulancingo	V	23, 51, 62
HD	Zacualtipan	VI	30
JA	Arandas	VI	33
JA	Atenquique	VI	54
JA	Atotonilco El Alto	VI	36, 49
JA	Autlan de Navarro	VI	32, 38
JA	Cd. Guzman	VI	24
JA	Guadalajara	I	22, 24, 26, 29, 31, 33, 35, 40
JA	La Barca	VI	25
JA	Lagos de Moreno	VI	44
JA	Puerto Vallarta	V	23, 25, 36, 41
JA	San Juan de los Lagos	VI	41
MC	Altzomoni	II	36, 42, 47
MC	Jocotitlan	II	27, 35, 39, 46, 51
MC	Tejupilco de Hidalgo	VI	21
MC	Valle de Bravo	VI	34
MH	Apatzingan	VI	25, 26, 30
MH	Cd. Hidalgo	VI	20, 40
MH	Jiquilpan de Juarez	VI	21, 32, 34
MH	La Piedad	VI	32
MH	Lazaro Cardenas	V	26, 29, 30, 33
MH	Los Reyes de Salgado	VI	31
MH	Morelia	IV	24, 27, 30, 44, 50
MH	Patzcuaro	IV	55
MH	Puruandiro	VI	20, 51
MH	Sahuayo y Jiquilpan	VI	38
MH	Tacambaro	VI	33
MH	Uruapan	V	21, 29, 50
MH	Zacapu	VI	23
MH	Zamora	V	27, 56, 57, 59
MH	Zinapecuaro	VI	58
MH	Zitacuaro	V	22, 53
MH	Zitacuaro	VI	54
MR	Cuernavaca	II	27, 38, 43, 49, 65
MR	Zacatepec	VI	21
NA	Acaponeta y Tecuala	VI	32
NA	Islas Marias	VI	23
NA	Santiago Ixcuintla	V	38
NA	Tepic	IV	30, 31, 33, 40, 42, 44
NL	Agualeguas	VI	45
NL	Anahuac	VI	22
NL	Aramberri	VI	21
NL	Cerralvo-Melchor Ocampo	VI	45
NL	Dr. Arroyo	VI	31
NL	Dr. Cross	VI	47
NL	Gral. Bravo – Gral. Tapia	VI	50
NL	Gral. Trevino	VI	47
NL	Higueras	VI	48
NL	Iturbide	VI	47
NL	La Chona – Aramberri	VI	23
NL	Lampazos	VI	47
NL	Linares	VI	33
NL	Los Aldamas – Estacion lo Aldamas	VI	35
NL	Los Herrera	VI	44
NL	Los Ramones	VI	48
NL	Mier y Noriega	VI	49
NL	Monterey	I	23, 31, 39, 43, 50, 52,

St	City	Gp	Channels
			55, 56, 57, 58
NL	Paras	VI	49
NL	Rayones	VI	46
NL	Sabinas Hidalgo	II	46
NL	Sabinas Hidalgo	VI	21
NL	Vallecillo	VI	49
NL	Villaldama-Bustamante	VI	46
NL	Zaragoza	VI	43
OX	Acatlan de Perez Figueroa	VI	21
OX	Asuncion Nochistlan	VI	24
OX	Coixtlahuaca	VI	28
OX	Concepcio Papalo	VI	23
OX	Corral de Piedra	VI	22
OX	Ejutla de Crespo	VI	21
OX	El Camaron	VI	22
OX	El Coyul	VI	49
OX	Huajuapan de Leon	V	31, 33, 39, 45, 46
OX	Huamelula	VI	21
OX	Huautla de Jiminez	VI	22
OX	Ixtepec	VI	34
OX	Jalapa de Diaz	VI	24
OX	Jalapa del Marquez	VI	25
OX	Juchitan Oaxaca	VI	41
OX	Loma Bonita	VI	22
OX	Mariscala de Juarez	VI	29
OX	Matias Romero	IV	25, 30, 39, 44
OX	Miahuatlan de Porfirio Diaz	VI	39, 41
OX	Oaxaca	IV	26, 27, 31, 32, 36, 48
OX	Palomares	VI	25
OX	Pinotepa Nacional	V	24, 39, 40, 43
OX	Puerto Angel	VI	27
OX	Puerto Angel	VI	38
OX	Puerto Escondido	VI	23, 29, 31, 33
OX	Putla Villa de Guerrero	VI	21
OX	Rio Grande	VI	23
OX	Salina Cruz	VI	32, 46
OX	San Agustin Loxicha	VI	28
OX	San Jose Chiltepec	VI	22
OX	San Juan Bautista Cuicatlan	VI	24
OX	San Juan Bautista Tuxtepec	VI	20
OX	San Juan Cacahuatepec	VI	23
OX	San Miguel Tlacotepec	VI	48
OX	San Pedro Pochutla	VI	22
OX	San Pedro Tapanatepec	VI	22
OX	San Pedro y San Pablo Teposcolula	VI	28
OX	San Sebastian Tlacolula	VI	21
OX	Santa Catarina Juquila	VI	27
OX	Santa Cruz Huatulco	VI	39
OX	Santa Maria Huatulco	VI	30
OX	Santa Maria Ixcatlan	VI	23
OX	Santiago Astata	VI	31
OX	Santiago Jamiltepec	VI	27
OX	Santiago Juxtlahuaca	VI	22
OX	Tecomavaca	VI	21
OX	Tehuantepec	VI	35
OX	Teotitlan de Flores Magon	VI	22
OX	Tlahuitoltepec	VI	25
OX	Tlaxiaco	VI	21
OX	Valle Nacional	VI	22
OX	Villa Alta	VI	21
OX	Villa de Tamazulapan	VI	35
OX	Villa de Tututepec	VI	21
OX	Villa Sola de Vega	VI	21
PU	Atencingo	VI	34
PU	Puebla	II	29, 51, 52, 63
PU	Tehuacan	IV	28, 40
PU	Zacatlan	IV	30, 44
QR	Cancun	V	25, 28, 31, 39, 40, 43
QR	Chetumal	V	23, 26, 27, 29, 30
QR	Cozumel	VI	30, 45
QR	Felipe Carrillo Puerto	VI	25, 28
QR	Jose Maria Morelos	VI	21
QR	Playa del Carmen	VI	41
QT	Queretaro	II	26, 34, 40, 56, 57
SL	Cd. Valles	V	27, 36, 41, 44
SL	Matehuala	VI	22, 26, 29, 30
SL	San Luis Potosi	IV	22, 28, 29, 35, 41, 43, 49, 50
SL	Tamazunchale	VI	21, 24, 28, 29
SN	Culiacan	IV	24, 30, 32, 35, 38, 44
SN	Los Mochis	IV	25, 27, 31, 39
SN	Mazatlan	IV	23, 25, 31, 34, 39
SO	Adivino	VI	38
SO	Agua Prieta	VI	22, 39
SO	Alamos	VI	22
SO	Arivechi	VI	35
SO	Arizpe	VI	30
SO	Atil	VI	34
SO	Bacadehuachi	VI	45
SO	Bacanora	VI	50
SO	Bacerac	VI	27
SO	Bacoachi	VI	49
SO	Banamichi	VI	33
SO	Baviacora	VI	41
SO	Bavispe	VI	29
SO	Benjamin Hill	VI	34, 39
SO	Caborca	VI	34, 35, 36, 55
SO	Cananea	VI	25, 43, 45
SO	Carbo	VI	48
SO	Cd. Obregon	V	32, 33, 35, 43, 45
SO	Cucurpe	VI	43
SO	Cumpas	VI	34
SO	Divisadero	VI	34
SO	Empalme	VI	30
SO	Fronteras	VI	28
SO	Granados	VI	41
SO	Guaymas	V	21, 29, 39, 47, 50
SO	Hermosillo	IV	30, 38, 40, 42, 48, 49, 51, 57, 58, 59
SO	Huachineras	VI	49
SO	Huasabas	VI	45
SO	Imuris	VI	32
SO	Magdalena de Kino	V	60, 66
SO	Mazatan	VI	46
SO	Moctezuma	VI	42
SO	Naco	VI	33
SO	Nacori Chico	VI	43
SO	Nacori Grande	VI	27
SO	Nacozari	VI	22
SO	Navojoa	VI	27
SO	Nogales	V	24, 31, 49, 53, 54
SO	Onavas	VI	21
SO	Oquitoa	VI	26
SO	Puerto Peñasco	VI	21, 22, 48
SO	Querobabi	VI	35
SO	Rayon	VI	45
SO	Rosario	VI	35
SO	Sahuaripa	VI	23
SO	San Felipe de Jesus	VI	25
SO	San Javier	VI	49
SO	San Luis Rio Colorado	VI	22, 30
SO	San Pedro de la Cueva	VI	22
SO	Santa Ana	VI	33
SO	Santa Cruz	VI	38
SO	Saric	VI	46
SO	Sasabe	VI	41
SO	Sinoquipe	VI	22
SO	Sonoita	VI	21
SO	Soyopa	VI	35
SO	Suaqui Grande	VI	34
SO	Tepache	VI	47
SO	Ures	VI	27
SO	Villa Pesqueira	VI	39
SO	Yecora	VI	39
SO	Villa Hidalgo	VI	24
TB	Frontera	VI	27
TB	La Venta	V	33, 34, 40
TB	Tenosique	VI	26, 30, 34
TB	Villahermosa	III	30, 32, 33, 41, 44, 46
TM	Cd. Mante	VI	23, 38, 45

TM	Cd. Victoria	V	2, 29, 36, 40, 41, 42, 50, 52, 55
TM	La Rosita-Villagran	VI	30
TM	Matamoros	I	13, 30, 33, 51, 58, 63
TM	Nuevo Laredo	I	25, 32, 50, 51, 54, 55, 58, 62
TM	Reynosa	I	36, 52, 56
TM	Rio Bravo	VI	41
TM	San Fernando	VI	21, 39
TM	Soto la Marina	VI	28, 32
TM	Tampico	IV	21, 26, 29, 39, 42, 43, 47
TZ	Apizaco	VI	24
TZ	Calpulalpan	VI	31
TZ	Huamantla	VI	23
TZ	San Pablo del Monte	VI	22
TZ	Tlaxcala	V	65
VC	Agua Dulce	VI	22
VC	Cerro Azul	IV	32, 36, 51
VC	Coatzacoalcos	V	24, 27, 43, 45, 48
VC	Huayacocotla	VI	32
VC	Ixhuatlan de Madero	VI	22
VC	Las Lajas	II	31, 33, 39, 41, 45
VC	Mecayapan	VI	30
VC	Orizaba	VI	30
VC	Perote	II	49, 50
VC	San Andres Tuxtla	VI	26, 35
VC	Santiago Tuxtla	VI	32, 33
VC	Veracruz	II	24
YU	Merida	III	25, 31, 33, 35, 39, 44
YU	Telchac Puerto	VI	21
YU	Valladolid-Kahua-Tizimin	V	23, 24, 26, 32, 41
ZA	Fresnillo	V	34
ZA	Jalpa	VI	22
ZA	Miguel Auza	VI	21
ZA	Nochistlan	VI	23
ZA	Rio Grande	VI	22, 23
ZA	Sombrerete	VI	27, 39, 41
ZA	Tlaltenango	VI	25
ZA	Valparaiso	VI	22
ZA	Zacatecas	IV	41, 43, 46, 48, 50

THE 2005 WTFDA TV STATION GUIDE

Three long years have gone by. Now it's time.



Cover design once again by Harry Hayes

You've been waiting for this, and it's almost ready! As a matter of fact, as we print this issue the 2005 WTFDA TV Station Guide is also at the printers.

This edition contains 400 pages and Doug's channel maps. This is our largest station guide to date, reflecting the growth of digital television in the United States.

It's three-hole-punched and ready for a binder. It's as up-to-date as humanly possible and it's just

$25.00

ORDERING INFORMATION

To order your copy of the 2005 WTFDA TV Station Guide, send a check or a money order for **$25.00** payable to WTFDA and send it to John Ebeling, 9209 Vincent Avenue S., Bloomington, MN 55341-2157

(Yes, you can use Paypal. From the Paypal website, click on *send money* and send $25 to mbugaj@snet.net. Use the comment box on that page.)

PH TO-NEWS

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

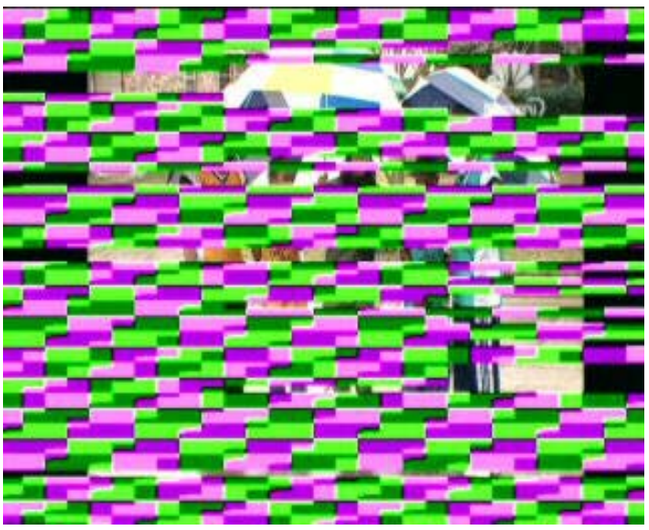
April 2005

We return to the files of Matt Sittel, of Bellevue, NE:
Equipment: Winegard PR-9032 UHF antenna w/Winegard AP-4700 preamp @35', Winegard PR-5030 VHF antenna @32'. Hauppauge WinTV-D card for HDTV loggings.

KNAZ-2 Flagstaff, AZ
947 mi Es seen 5/26/04
@2019 CT

WMAR-2 Baltimore, MD
1023 mi Es seen 5/12/04
@0725 CT

WUND-2 Columbia, NC
1116 mi Es seen 5/26/04
@1957 CT



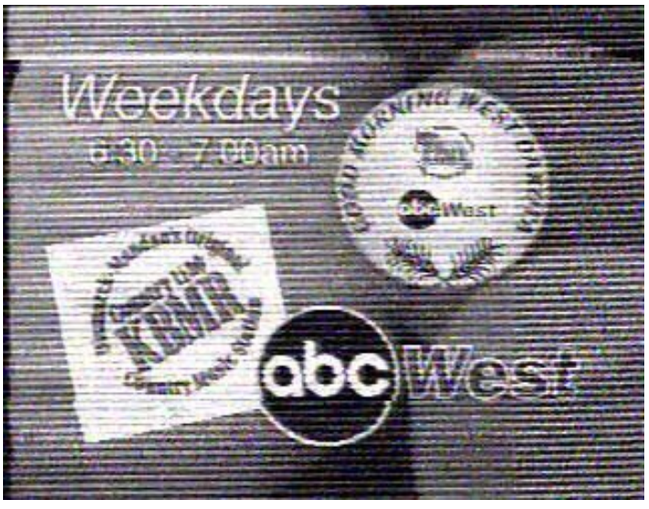
KVBC-DT-2 Las Vegas, NV
1088 mi Es seen 7/10/04
@1135 CT

WKBT-8 La Crosse, WI
299 mi Tr seen 7/20/04
@2215 CT

KWTV-9 Oklahoma City, OK
393 mi Tr seen 5/6/04
@0758 CT

KTTC-10 Rochester, MN
248 mi Tr seen 8/2/04
@1659 CT

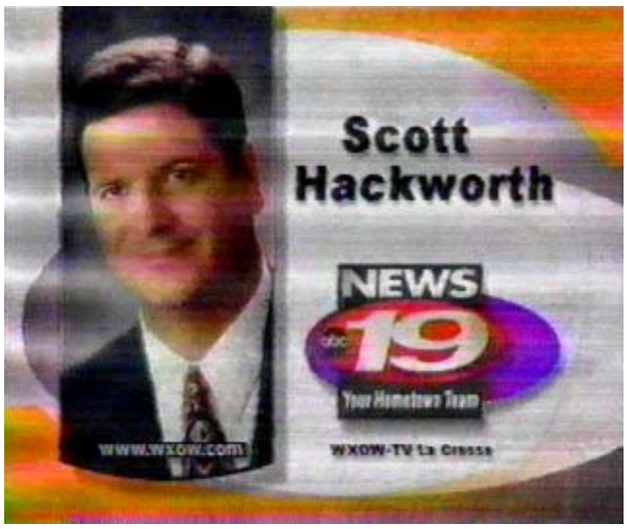
KFJX-14 Pittsburg, KS
276 mi Tr seen 7/13/04
@0731 CT



KBMY-17 Bismarck, ND
451 mi Tr seen 7/19/04
@2336 CT

WQOW-18 Eau Claire, WI
343 mi Tr seen 10/20/03
@0957 CT

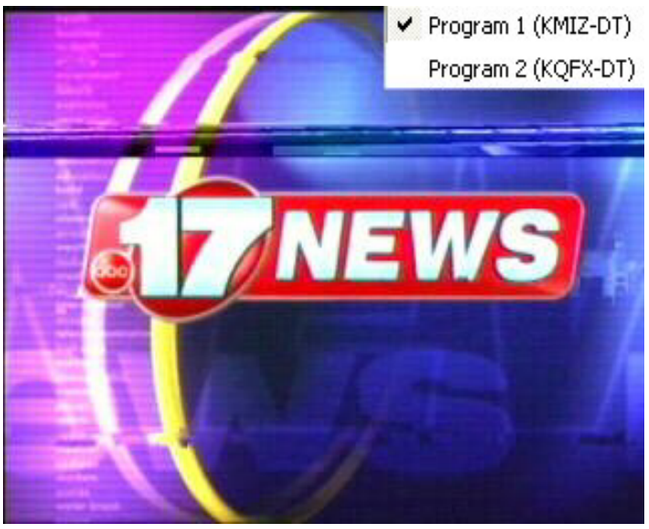
KTXA-DT-18-2 Ft. Worth, TX
591 mi Tr seen 4/16/04
@0823 CT



WXOW-19 La Crosse, WI
299 mi Tr seen 10/20/03
@0959 CT

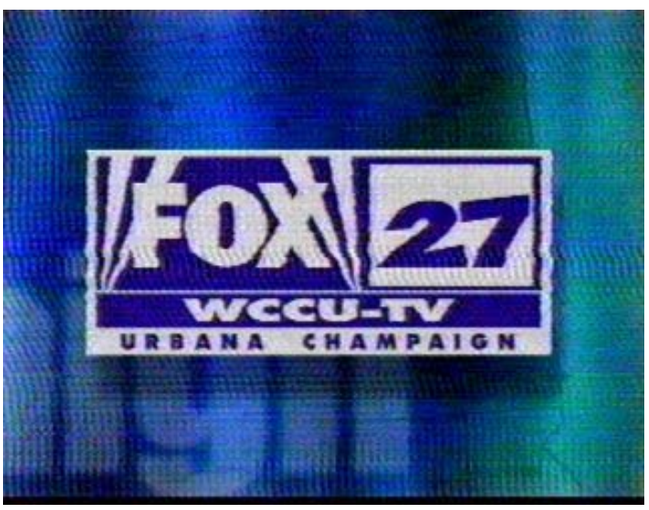
WICS-20 Springfield, IL
352 mi Tr seen 10/1/03
@0759 CT

KSMQ-DT-20 Austin, MN
233 mi Tr seen 10/20/03
@0702 CT



KMIZ-DT-22 Columbia, MO
240 mi Tr seen 10/20/03
@0726 CT

KMSP-DT-26 Minneapolis, MN
309 mi Tr seen 9/2/04
@0229 CT



WCCU-27 Urbana, IL
423 mi Tr seen 10/1/03
@0729 CT

WKOW-27 Madison, WI
358 mi Tr seen 5/19/04
@0223 CT

KFXA-28 Cedar Rapids, IA
231 mi Tr seen 10/20/03
@1059 CT

WCCO-DT-32 Minneapolis, MN
309 mi Tr seen 9/2/04
@0145 CT

KTCA-DT-34 St. Paul, MN
309 mi Tr seen 9/2/04
@0200 CT

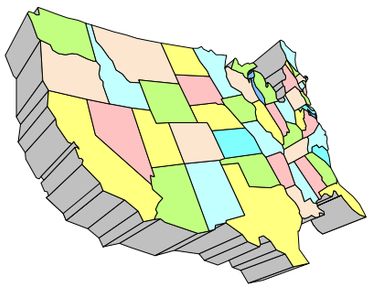
WNIT-34 S. Bend, IN
506 mi Tr seen 7/22/04
@1859 CT

More from Matthew next month!

73's,
JEFF

WESTERN TV DX

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



Dennis Park Smith, 3605 San Remo Drive, Santa Barbara, CA 931105-2523 (805)687-7803

This very short report is for February 2005. There was almost no southern-California coastal tropo this time, as far as San Diego/Tijuana, up to 200 mi—320 km, due to much storm activity, more or less typical of this time of year.

Feb 1-4 am: None (Unsettled left over from Jan 25)
Feb 4 eve: Poor (UHF only)
Feb 5: Fair (VHF and UHF)
Feb 6-8: None (Unsettled but no rain here)
Feb 9: Very poor
Feb 10-28: None (Unsettled; rainy conditions)

Best of DX to All, Dennis

William Draeb, 1304 Ellis St., Kewaunee, WI 54216-1802

Equipment: 1994 Sylvania 25" TV; Rohn 25G 40' tower; ch 2026, Y713, KU420(screened) antennas. CMA-Ub, CMA-HB; preamps; TR44 rotor; etc.

February 2005

5 tr	1930	WFBT-CA 48		almost snow-free, ID at 2100.
		S.Bend, Lansing, Chicago, Ft. Wayne Rockford UHFs in.		
8 Es	1757	unID	2 & 3	weak

Not much DX this month. Next month should be better.

Danny Oglethorpe, P.O. Box 8025. Shreveport, LA 71148-0025 E-mail: doglethorpe@yahoo.com
Mexico TV ID website:
http://www.geocities.com/doglethorpe/

Es: Only the most-productive and/or most interesting skip is reported.
Tropo: No relogs under 400 miles; no LPTV relogs under 200 miles.
Time listed for Mexicans is ID time.
Mexico IDs are classified by number of lines of text: 1-line to 4-line Mexico ID location on screen: UR=upper right, LR=lower right, UL=upper left, LL=lower left, UC=upper center, LC=lower center, Top=across top

FEBRUARY 2005 CT

11 Es	2003	XHLPT	2	BCN	3-line UL
	2007	XHQ	2	SIN	XHQ-3 logo
12 Es	2057	XHFM	2	VER	
15 tr	2130	Valley 5, 7, 9, 23			500+ miles
18 Es	0710	WGRZ	2	NY	
	0717	WJBK	2	MI	
	0750	WMAR	2	MD	
19 Es	1750	XHCSA	2	Chiapas	UL
	1810	XHTV	4	DF	"4TV"
	1852	XHFM	2	VER	
20 Es	1500	WUND	2	NC	
		WSKY	4	NC	"SKY 4"
	1520	CHBX	2	ON	Local ads
	1658	WDTN	2	OH	
	1703	WMAR	2	MD	
	1730	WCBS	2	NY	
	1740	WCIV	4	SC	
	1745	WETP	2	TN	"ETP"
	1845	WESH	2	FL	
21 Es	1850	KASA	2	NM	
	1900	KNAZ	2	AZ	
28 Es	1425	XHHHN	2	PUE	3-line LR
	1428	XHFM	2	VER	
	1715	Pittsburgh 2, 4			
		WCMH	4	OH	
		WLWT	5	OH	Rare
	1725	WFMY	2	NC	
		WUNC	4	NC	"UNCTV"
		WUND	2	NC	//4
	1729	WIVB	4	NY	
	1750	WSKY	4	NC	
	1800	WRAL	5	NC	
		WCIV	4	SC	
	1837	WSB	2	GA	551 miles
	1840	Charleston 2, 5			
	1855	XHFM	2	VER	
	1922	XHQ	2	SIN	XHQ-3
	2015	WPBT	2	FL	
	2035	Cuba	2		

MARCH 2005 CT

1 Es	1820	XHHMA	2	SON	4-line UR
		WUND	2	NC	
		WFMY	2	NC	
		WRAL	5	NC	
	2310	XHHSS	4	SON	"Hechos Sonora"
6 Es	0945	WMAR	2	MD	
	1015	KDKA	2	PA	
7 Es	1015	XHQ	2	SIN	XHQ-3

XHFM-2 Veracruz is once again an easy ID, with their circle-2 logo supered upper right. The station was difficult to ID during the years they relayed Galavision/XEQ-9 (2001-2003). Be careful not to confuse this logo with XEFB-2 Monterreys's logo.

NOTE: **This will be Victor's final column. He has had to bow out due to work commitments. Thanks for all you've done over the years, Victor, and good luck to you in your job. Starting with the May VUD your new Western TVDX editor is David Williams. Dave has large shoes to fill, but he's very capable. Dave's email is beansdad@bendcable.com. Or mail Dave your report at 3525 SW Timber Ave, Redmond, OR 97756.**

Eastern TV-DX

Matthew C. Sittel
15013 Eureux St.
Bellevue, NE 68123
mcsittel@cox.net

April, 2005 — May 2005 column deadline: Apr. 12

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

Harry Hayes, Wilkes-Barre, PA

Equipment: Zenith Sentry 1991 model, quad loop facing south on window, Radio Shack VHF Amp.

2/19 Es

1740	WEDU	3	FL	Tampa
1740	WUFT	5	FL	Gainesville

2/28 Es

1813	WPBT	2	FL	Miami
1825	WFOR	4	FL	Miami
1830	WPTV	5	FL	West Palm Beach

Interesting, I've seen summer months some years that had less skip than this February!

Keith K. Smith, 910 N. Larch St. #7, Lansing, MI 48906 (517) 482-8342 vgmc7650@webtv.net

Equipment: GPX 12" B&W TV, Funai F4813T 13" color TV, Sanyo VHR-H538 VCR, rabbit ears, loop antennas.

12/28 Es

1800	KTWO	2	WY	Casper	1104
1800	KGWN	5	WY	Cheyenne	1057

1/23 tr

2300	WDIV	4	MI	Detroit	70
2310	WNDU	16	IN	South Bend	116
2312	WKBD	50	MI	Detroit	65
	WWJ	62	MI	Detroit	73

2/5 tr

2322	WNDU	16	IN	South Bend	116
2329	WANE	15	IN	Fort Wayne	119
	WTOL	11	OH	Toledo	95
2336	WCMU	14	MI	Mt. Pleasant	58

2/6 tr

0007	WFFT	55	IN	Fort Wayne	118

Roy Barstow, PO Box 2488, Teaticket, MA 02536 roybarstow@hotmail.com

2/6 tr

1230	16/28/47		MD	Salisbury	
1230	15/27/33/43/49		VA	Tidewater	
1440	W24BI	24	VA	Virginia Beach	455
	W60BR	60	VA	Virginia Beach	455
2230	WFXI	8	NC	Morehead City	550
	WYDO	14	NC	Greenville	562
	unID xltr	36	??	w/Fox 43 WVBT	
2300	WITN	7	NC	Washington	555
	WNCT	9	NC	Greenville	562
	WPXV	35	NC	Jacksonville	577
	WEPX	38	NC	Greenville	562
	WUNM	19	NC	Jacksonville	577
	WUNP	36	NC	Roanoke Rapids	533
	WUNJ	39	NC	Wilmington	660
	WSFX	26	NC	Wilmington	660
2358	WJHJ-LP	39	VA	Newport News	450

2/7 tr

0005	WVEC	13	VA	Hampton	452
	WCTI	12	NC	New Bern	577
	W52AB	52	VA	Craddockville	420
	W63AM	63	VA	Craddockville	420
0015	WUNK	25	NC	Greenville	562
	WAVY-DT	17	VA	Norfolk	450
	(Roy, I'm confused by this logging. WAVY-DT is on 31, licensed to Portsmouth. –mcs)				
	WITN-DT	32	NC	Washington	555
0055	WPXV-DT	34	NC	Jacksonville	577
	WCTI-DT	48	NC	New Bern	577
	WMDT-DT	53	MD	Salisbury	
	WCPB-DT	56	MD	Salisbury	
0130	WTTD-LP	53	VA	Hampton	452
0650	WRAY	30	NC	Wilson	570
	W44AD	44	VA	Onancock	410
	WUPV	65	VA	Ashland	470
0700	W51DO	51	VA	Hampton	455
1000	WWBT	12	VA	Richmond	471
1015	WTAT	24	SC	Charleston	779
	in strong				
	WRPX	47	NC	Rocky Mount	560
1050	WCSC-DT	47	SC	Charleston	779
	WRAL-DT	53	NC	Raleigh	600
	WTVD-DT	52	NC	Durham	591
	WTVD	11	NC	Durham	591
	WFPX	62	NC	Fayetteville	616

	WRIC	8	VA	Petersburg	465	0020	WLFL	22	NC	Raleigh	600
1120	WNCN	17	NC	Goldsboro	592	0105	W68??	68	??	ABC, VA or SC?	
	WUNK-DT	23	NC	Greenville	562		WUNU	31	NC	Lumberton	640
	WUNM-DT	18	NC	Jacksonville	577	0225	WVIR	29	VA	Charlottesville	486
2315	WRAZ	50	NC	Raleigh	600		WRLH	35	VA	Richmond	471
2/8 tr						0945	WJPM	33	SC	Florence	650
0005	W18BB	18	NC	Elizabeth City	540	1130	WUNM	19	NC	Jacksonville	577
0020	WMMP	36	SC	Charleston	779	2110	W17CT	17	NC	Manteo	590

On the cover of the February VUD a picture after 14" of heavy snow. But one week later we had a blizzard that dropped 30 inches of snow. It took my wife and I 2 ½ days to shovel out. Most snow ever I can remember for Cape Cod. But lo and behold 2 weeks later and the snow all gone, and it's back to playing winter golf on old Cape Cod. And with the thaw came 3 days and nights of solid DXing. A very enjoyable session for mid-winter.

W18BB in NC had me stumped for 2 days. They had football games on, also "Black Family Channel" in LR on screen. The new W17CT NC picked up testing for around 4 hours using a card saying "Test Signal W28CL, W17CT". They were in color most of the time. (You should tell them, Roy… they might think the test was with too much power if they're seen that far off! – mcs)

Another short column this month… hopefully with warm weather the DX will pick up. And skip season isn't that far off either. Until next time……73s Matt.

The HD3000 HDTV CARD

Bob Timmerman

With some advice from Joe Veldhuis, I was finally able to get my HD3000 HDTV card up and running. I had only limited success using Red Hat 9. I decided to upgrade to Fedora Core 3 and everything worked as it should, both analog and digital. The card is definitely more sensitive on DTV than the WinTV-D. I get excellent reception on all locals, including WFFT, which may still be transmitting with low power on DTV.

My Linux box is a Pentium-4 2 GHz, and it just barely handles the 1080i broadcasts. The CPU is severely stressed at90-98% loading, especially during a basketball game that features a lot of motion. Not surprisingly, the audio lags a bit during these programs as well (it can be tweaked). A PCI video card with 64 MB of RAM did not offer any improvement to the slight video jitter. Perhaps the PCI bus doesn't have the bandwidth to handle true HDTV, or my card was not optimized and the CPU just isn't fast enough. I may try an AGP motherboard and a processor upgrade.

I may rewrite one of the utilities, making it capable of snatching the PSIP data and ID from incomplete frames. This would be very handy on a weak signal that normally would not decode on a card like the WinTV-D.

150KHZ FILTER AVAILABILITY

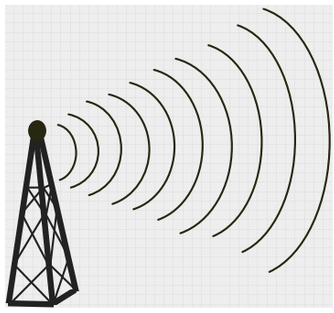
Mike Hawk reports that Murata 150khz filters are available from Mouser Electronics (www.mouser.com) with no minimum order. The part number is: SFELA10M7JAA0-B0 and they are $0.68 each, $0.59 each if in blocks of 10.

Eric Fader also reports that Murata 150khz filters are available from Digi-Key (www.digikey.com) for 59 cents each or $4.91 for 10. I suggest that $21.16 for 50 is a good number to get if you're going to attempt to match them.

Time to soup-up your FM tuner/receiver and give it a new lease on life!

Northern FM DX

Keith McGinnis
6 Ritter Road, 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. If possible please submit in the formats shown Below.

EDITORS NOTE: PLEASE NOTE THAT ANY TYPEWRITTEN OR HANDWRITTEN REPORTS MIGHT BE DELAYED TILL A LATER ISSUE AS TIME PERMITS. ALSO PLEASE KEEP REPORTS AS RECENT AS POSSIBLE (THE LAST 3 MONTHS SHOULD WORK FINE). THANK YOU.

Jeff Lehmann Hanson, MA

Tuner Yamaha T-80 (modified filters)
Antenna: Probe 9
@=New miles are at the end of each logging

February 9, 2005 Tr

2305	WJKI	103.5	Bethany Beach	DE	Lite Rock	328
2310	WYND	97.1	Hatteras	NC	The Wind 97.1	534
2315	WQZL	101.1	Belhaven	NC	The Beat of Carolina	564
2320	WFMZ	104.9	Hertford	NC	Classic Hits 104.9	509
@2348	WCXL	104.1	Kill Devil Hills	NC	Beach 104	488
@2355	WRSF	105.7	Columbia	NC	Dixie 105.7	514
0005	WKUS	105.3	Norfolk	VA	105.3 Kiss FM	469
0015	WXMM	100.5	Norfolk	VA	(RDS) Max FM	460
0020	WPTE	94.9	Norfolk	VA	94.9 The Point (RDS)	463
0020	WWDE	101.3	Hampton	VA	101.3 2WD	461
0022	WVKL	95.7	Norfolk	VA	95.7 R&B	469
0030	WWOC	94.5	Hatteras	NC	Water Country	531
0045	WAFX	106.9	Suffolk	VA	106.9 The Fox	480
@0055	WMGV	103.3	Newport	NC	Soft Rock V103	578
@0058	WNBB	97.9	Bayboro	NC	97.9 The Bear	584
@0115	WSFL	106.5	New Bern	NC	598	
@0117	WOTJ	90.7	Morehead City	NC	Fundamental Brdcst. Net.	
599						
@0130	WFKX	104.3	Tarboro	NC	Foxy 107 and 104	567
@0200	WTEB	89.3	New Bern	NC	(Classical)	586
@0215	WKOO	98.7	Jacksonville	NC	Kool 98.7	633
@0230	WBKU	91.7	Ashokie	NC	American Family Radio	534
@0235	WBXB	100.1	Edenton	NC	Love 100.1	512

Morris Sorensen Winnipeg MB

Onkyo T-403 stereo tuner with filter mods
Archer indoor FM antenna
Times CST

January 31 Tr

2000	CKSB-9	89.1	Fort Frances	ON	SRC // local CKSB-1050
2100	CBQQ	90.5	Fort Frances	ON	CBC

2103	KQMN	91.5	Thief River Falls	MN	classical music
2106	CBQX	98.7	Kenora	ON	CBC
2110	KSNR	100.3	Thief River Falls	MN	oldies "Cool-100"
2114	CKXA	101.1	Brandon	MB	new Slogan "The Farm" with country music

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Ed Barboni, Norristown, PA

Equipment for this report is Pioneer DEH 9500 Car Radio with factory antenna

September 22 Tr

0800	WEBE	107.9	Westport	CT	ID top of hour
0805	WFSI	107.9	Annapolis	MD	New
0807	WKRF	107.9	WilkesBarre	PA	New

September 22 Gw

0755	WCHR	105.7	Manahawkin	NJ	ID as "The Hawk" - Classic Rock
0757	WQXA	105.7	Hershey	PA	ID as "The X" - Rock

Strange, but the two closest WFSI and WKRF are new. WEBE comes in fairly often when the band is open. There's a new local going up on this frequency, so this is probably the last time for these three.

I'm getting back into the hobby after being out for 25+ years. In fact, I had edited the Northern FM DX column for a year or so back in the mid to late 1970's. I think that I may even have a copy of the VUDs from then here somewhere. (Welcome back, Ed and thanks for checking in!)

Harry Hayes - Wilkes-Barre, PA

Equipment: Superadio II w/110 khz filter, Bose Wave Radio, FM-6 in attic
*New

February 19 Es

1735	WFLZ	93.3	Tampa	FL	ID's, new music
1745	WPCV	97.5	Winter Haven	FL	Local ads, jingle, c/w music
1748	*WMTX	100.7	Tampa	FL	"Mix 100, Tampa Bay's 100.7"
1751	*WCFB	94.7	Daytona Beach	FL	"Star 94.7" mention of Orlando
1800	*WKES	91.1	Lakeland	FL	religion, Multi station ID
1805	WSOR	90.9	Naples	FL	parallel to WKES but much weaker
1812	*WBVM	90.5	Tampa	FL	exceptionally strong in $, "Spirit FM"
1823	*WHIF	91.3	Palatka	FL	nice signal for 1700 watts
1835	WYUU	92.5	Safety Harbor	FL	w/c/w format, no call heard
1836	*WNDD	95.5	Silver Springs	FL	"Wind FM" and album format

This quite unexpected FM opening featured very strong signals with virtually no fading at all. Most of the catches were made on the Bose Wave I have in my studio where I happened to be working when this was going on. I have a signal splitter for this radio and the Superadio II in my bedroom. I may have experienced FM Es in February before and if I did it had to be long time ago.

Jim Renfrew, Byron NY

Equipment: Sansui TU-9900, Alliance Rotor, VHF, UHF and VHF antennas, Conrad RDS Manager, RDS Decoder 3.0
* = new

March 9 Ms

915	*WLTM	94.9	Atlanta	GA	RDS PI 73AE hit

March 10 Ms

0055	*WMMQ	94.9	E. Lansing	MI	RDS PI 75A0 Ms or Tr hit
0428	*WTNT	94.9	Tallahassee	FL	RDS PI EEEE hit (widely noted error PI)
1038	WLTM	94.9	Atlanta	GA	RDS PI 73AE hit

March 14 Ms

0018	*KMSX	94.9	Maumelle	AR	RDS 3621 = former KOLL calls, hit.
0418	KMSX	94.9	again		
0715	KMSX	94.9	again		
0830	WMMQ	94.9	again		

March 15 Ms

0358	WLTM	94.9	again		
1305	WSLC	94.9	Roanoke	VA	RDS PI 8550 hit, relog.
2259	KMSX	94.9	again		

March 17 Ms

2342	KMSX	94.9	again		with "MIX 94 means variety" text

SATELLITE NEWS

GEORGE W. JENSEN
4604 ANTANNA AVE, Baltimore, MD 21206-4220
SCISATMAN@AOL.COM

A short, but nice column this month...
The Disney Channel on **Galaxy 5** XPDR 1 is switching to XPDR 7 and is running parallel at this time. Thanks to National Programming Service the following are now available - on **Galaxy 4** - KuBand -
255 - Turner Classic Movies
610 - A & E Biography
611 - History International
612 - History East
Note - 603 - Good Times Television Network is now American Life Television Network
From Ronald Purdue - NPS has also made available the following – on **Galaxy 11** -
602 - The Hallmark Channel
603 - Lifetime.
And Ron - many thanks for the info and I may have a solution to your 4DTV problem on Galaxy 10 - will get back to you in a few days.
That's all for this month, but it's NOT to have to report the vanishing of services for a change, but their reappearances. See you in 30 and
'73's

6 Meter/2 Meter Amateur DX

Peter Baskind, N4LI
3225 Forest Hill-Irene Rd
Germantown, TN 38138
N4LI@ARRL.net

This month, we continue with our basic introduction to the 6 meter "Magic Band." Our third installment begins with section IV, hints about finding potential openings on 6 meters.

IV. Finding the openings

6 meters is not the place for the impatient, ill-tempered, of faint of heart. Those hams who want frequent DX and lots of easy contacts are best advised to stick to 20 and 40 meters where the pickings are always easy. The 6 meter band is difficult to read, perhaps even a bit fickle. Those who stumble onto the band often find that success on six has a bit of a learning curve.

Attempting to make long-distance 6 meter contacts by randomly switching on the radio is a formula for frustration. While frequent monitoring is important, it is more important to know when the band might be "trying to open." Fortunately, there are some tricks to the trade.

A. The Top Down

For many frequent TV/FM DXers, this may be the best method for finding openings on the 6m band. Since 6 meters is located below both channel 2 and the FM broadcast band, one can be reasonably sure that once those media begin to show signs of ionospheric activity, 6m will be open, too. As we know, MUF starts low, and rises over time. MUF must pass through 6m before bringing excitement to TV or FM.

The bottom line here is simple – as goes VHF broadcast, so goes 6 meters. Check it out sometime!

B. The Bottom Up.

Watching the Maximum Usable Frequency rise from below is a fruitful, if not often frustrating undertaking. But, it can allow you to hop onto the band as soon as it opens.

1. Sporadic E.

As already mentioned, the vast majority of long distance contacts made on 6 meters are via sporadic E (E_s). Since there are many heavily-used bands below 6 meters that will open before 6 meters does, watching one or more of those can clue one into a possible Magic Band opportunity. There are a seemingly endless supply of methods and places to look. Here are a few of my favorites.

Watching the 10 meter band has always been very useful in my experience. 10 meters is a ham band found between 28 and 30 MHz. Before E_s makes it to 50 Mhz, sporadic E will run up through 10 meters.

10 meters is a big band, with varying amounts of activity and differing modes. I particularly enjoy running through the 10 meter beacon band. Beacons are (usually) constantly-operating lower-power Morse Code transmitters that transmit solely for the purpose of propagation detection. Most do little more than identify over and over. While having a working knowledge of Morse Code is necessary, since they ID constantly, even people with little exposure to the Code can often identify stations. Further, there are regulars one gets to know so well that their presence is often enough. I cannot convey how often I hear N4HLF in Florida or K5AB in Texas via E_s. As soon as I tune across them, I know which beacon it is. And, at my house, those beacons are *always* E_s.

Of course, one can always sweep through the 10 meter band looking for activity. The most active portion of the voice portion of the band lies from 28.300 to 28.500. I have found that monitoring 28.345 (upper sideband) to be quite useful. This is the call channel for a very large group of 10 meter enthusiasts; these guys tend to be around and active when things open up. The 10 meter FM repeater band is also a great place to look. There are a good handful of 10m FM machines on 29.620, 29.640, 29.660, and 29.680. I keep these frequencies in my quad-band radio's scan function while driving. When 10 meters opens, these frequencies can get very active, indeed. Further, the repeaters often ID via voice, making it easy to find the opening's direction.

Many 6 meter fans monitor other places looking for openings. The CB band lies just below 10 meters, and can indicate rising E_s MUF. But, CBers tend to be a bit loose with their operating practices, so finding where the signals are coming from takes some doing. The VHF-LO band, lying between 10m and 6m is another great indicator. When you start hearing fire departments from 500 or 1000 miles away, 6 meters may be hopping, or ready to open.

2. F2

Wringing one's hands and standing by with a cat-like readiness for F2 on 6 meters may be a waste of time in the immediately coming years. But, fortunately, miracles do happen and time does pass. The long-haul F stuff will return to 50 MHz, so it pays to be ready.

Many of the methods discussed above will also work for F2, with caveats. First, as already mentioned, F2 MUF is not nearly as elastic as E_s MUF. Hearing F2 on 10 meters may not be particularly meaningful. But, tracking MUF rise through the low VHF band (30 to 50 MHz) can be helpful. Keeping an eye on the distance of F2 contacts below 6 meters also implies a rising MUF. At the peak of the 6m F2 fun, it was not uncommon to hear 28 MHz F2 from as short as 1200 miles. Like with E_s, as MUF rises, paths well below the MUF shorten. Of course, learning how to recognize a 1200 mile F2 contact from a 1200 mile E_s contact is a subtle, but important skill.

C. The Clusters

Real-time DX Clusters, rolling lists of on-going contacts, may be the best method for finding the elusive 6 meter opportunity. These clusters are free, and available on the Internet, or over the air via digital packet in some towns. My favorites include, the 50 MHz Propagation Logger, http://www.dxworld.com/50prop.html, and DX Summit's 6 meter page, http://oh2aq.kolumbus.com/dxs/50.html.

D. Watching the Band Itself

While it may be a long, boring process, keeping an eye on 6 meters is perhaps the most effective method to finding the DX. Sadly, it is not uncommon for 6 meters to open, and yet no one be around. There is almost a "chicken or the egg" phenomenon here – not knowing there is an opening, no one is

transmitting. Without someone transmitting, how does one know there is an opening?

Luckily, like 10 meters, 6 meters has a small beacon band. Just like those on 28 MHz, the 50 MHz beacons ID non-stop, most often around the clock. I cannot count the number of times I have flipped through the beacon band, 50.060 to 50.080 MHz in the United States, and heard one of those low-wattage wonders pounding out ID after ID with no breathing operators on the air. But, once an operator gets onto the band and starts calling, things can heat up pretty fast.

E. Listen, Listen, Listen

The bottom line to finding opportunities for 6 meter contacts is simply to listen. Openings can be fast and fleeting. But, between monitoring the bands, and watching the clusters, those opportunities can become contacts. Remember, patience is key!

End of Part II

Loggings

We continue the plod along through the seasonal DX doldrums. February and March can be boring, indeed. But, we have seen a few scattered openings, and a few have even made some Trans-Equatorial contacts to South America, most likely by a sporadic E link. Several members of the Group either heard or worked South Americans. Both John Tudenham, W0JRP, and I tried without success to work a persistent Paraguayan. Neither he nor I could get the station to hear us. Oh, well…

Welcome to a new contributor, Dan Dankert, N6PEQ, who has quite an impressive station. Dan uses an Icom 7800, the Rolls-Royce of radios, and a very impressive antenna system. Me? Outclassed!

Bill Smith, WA1NYV, 56 Locust Street, Douglas, MA 01516

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19 FEB 2005 (Es)

2209	WD4LYV	EM81
2243	KA4DPF	EM81
2247	KE4MGB	EM81

28 FEB 2005 (Es)

2032	WB4JSM	EM90
2120	K4JTD	EM90
2126	W7SAC	EM60
2127	W4KTE/M	EL89
2129	K8WK	EM60
2130	W4LLX	EM60
2139	KC4YTX	EM60
2348	C6ANM	**FL15**
2359	K4SRB	EM70

9 March 2005 (Es double hop) Heard LU7YZ briefly (3 by 3) for about 10 seconds. Hope you did better.

Dan Dankert, N6PEQ, 13672 Faimont Way, Tuston, CA 92680

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9 March ’05 (TE)

2129	LW3EX	GF05/LU
2138	LU7YZ	FF51/LU

Argentina

Peter Baskind, N4LI. 3225 Forest Hill-Irene, Germantown, TN 38138. EM55

I have worked a few scattered openings during the past couple of months. For the sake of brevity, I will include only the high points.

The opening of 20 February was particularly strong, though not terribly useful. For variety, I switched to the low power radio.

20 Feb ‘05
(Es – all contacts made at ~4 watts)

2301	W4NP	EM96/FL
2309	KA3UQO	FM18/MD
2326	K4BMM	FM07/VA
2327	N3ETP	FM28/MD
2320	K5VRX	FM18/VA
2332	W2ACY	FM29/NJ
2335	N3ALN	FM19/MD
2338	KG4RYF	FM18/VA
2345	W8RKG	FM29/DE
2345	K5VIP	EL98/FL
2352	AB4QS	EL88/FL
2355	W4SO	EL96/FL

21 Feb ‘05

0014	WA4DOS	EL86/FL

28 Feb ‘05
(Es – 100w)

2349	KE4UWJ	EM83/GA
	Quite short – 402 miles.	
2352	W4KVS	EM94/SC

1 Mar ’05 (Es)

0003	NG4C	FM16/NC
	Connie – great guy, very active.	
0006	K4QO	EM92/SC
0007	KI4PAT	EM95/NC
0010	W4WRL	FN04/SC
0013	KR1ST	EM92/SC

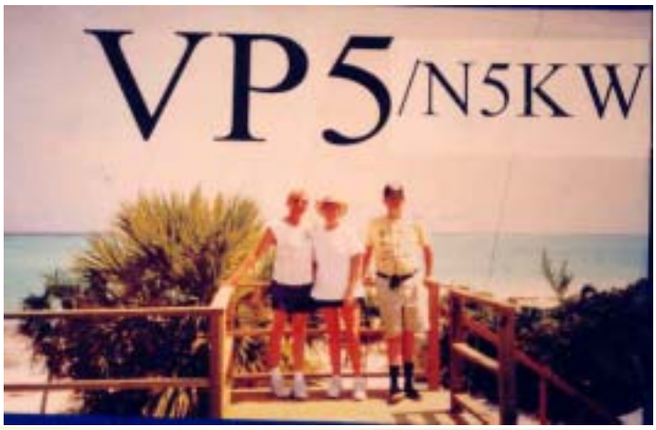
9 Mar ’05 (TE-to-Es?)

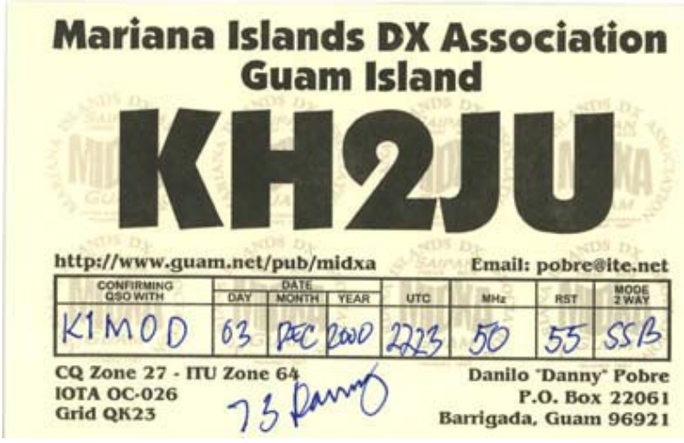
2326	LU5VV	**FE48**/LU
	Argentina	

10 Mar ‘05

0114	KG4GTR	EL96/FL
0128	WD4BYK	EL97/FL
0131	N4LTT	EL95/FL
0158	KH6ITY	**EL15**/TX
	Rare grid, or so I’m told	
0222	K5JLY	DM73/NM
0224	W7ANA	DM61/TX
0238	N5ZOE	EL09/TX
0214	KE5RS	EM10/TX
0242	N5DRG	EM10/TX

Finally this month, a couple cards members received from warm islands. The VP5 card, from the Turks and Caicos, is an SWL card Morris Sorenson got from a November, 2001 reception. The rare Guam card comes from Jeff Kadet in Illinois. Some of his stuff really makes me wish I was licensed in 2000!





TELEVISION: THE TECHNOLOGY THAT CHANGED OUR LIVES

BOB COOPER

PART SEVEN

Writing in Televiser Magazine for October 1950, CBS-TV Director Fred Rickey describes how his network opened their color TV demonstration period (20 minutes per day, typical) during January and February 1950:

"Our regular demonstration broadcast had a very simple opening. All you saw was a glass bowl of water into which we dropped a red rose while the network announcer read, 'Pure and clear as fresh water, rich and colorful as the flower of the garden is the world in which we live'. This close-up of a red rose falling into crystal clear water never failed to bring 'oh's' and 'ah's' from the hundreds of spectators who had obtained their tickets to watch CBS COLOR Television at the Walker Building in Washington."

Seemingly, following the late November side-by-side comparison testing, which followed earlier testing using coaxial cable and off-air antennas, the evidence gathering would be complete. Not quite. For intermixed in the entire hearing were two more elements.

RCA continued to maintain they had an evolving system which was "not yet complete." And they needed more time - months perhaps, not years - to reach a plateau of performance with their compatible system. This possibility played on the minds of official Washington for even the FCC had to admit that a "compatible system" was preferable to a system which antiquated the existing universe of black and white receivers. The second element was more technically mundane. The FCC had now become convinced they had to dispose of two problems simultaneously - creating more channels for television and selecting a suitable color system. Only then could "the new station freeze" be lifted.

CBS hoped to convince the commission that conversion or adaptation of existing black and white receivers, to either black and white reception of the non-NTSC CBS color system, or a full conversion with the addition of a spinning color wheel, was an acceptable interim solution for the growing universe of TV receivers.

Brown wrote: "CBS had introduced testimony to the effect that black and white receivers could be easily adapted to receive the field-sequential signal in black and white by adding a few components. Peter Goldmark had declared that this modification was cheap and easy to bring about and in turn CBS had persuaded David Cogan, President of Air King Products Company (a TV set manufacturer), to testify to his faith in such a conversion.

"Then suddenly the FCC joined the CBS team as advocates. E.W. Chapin, Chief of the FCC Laboratory Division, worked out circuitry to make possible the reception in black and white of a field sequential signal. This device was soon referred to as a 'Chapin' converter by FCC Chairman Wayne Coy as he proudly proclaimed this invention. So now we were faced with a 'judge giving testimony'.

"Chapin testified concerning his converter and entered as Exhibit 390 an FCC report titled, 'Modifications of Existing black and white receivers to receive color television'. The fallacy lay in the means of accomplishment due to the sheer number of black and white receivers already in the hands of the public; almost six million in the spring of 1950.

"While Chapin was testifying I did some calculations on a scrap of paper. I assumed that by taking heroic measures, the RCA Service company might be able to assign 100 teams of technicians to the task of converting the existing receivers. By allowing four conversions each day for each team, one finds sixty years would be expended in the task. But this situation becomes even more absurd for long before 1950 passed, ten million sets were in use and not many years past that point, 50 million."

Any "evidence" entered in testimony by one side promptly attracted a rebuttal or counter evidence from the other. CBS wanted to enlarge the importance of their pluses, minimize the importance of their minuses. And so did RCA.

RCA's October 1949 show-off system had been conceived, designed, tested and duplicated in sufficient quantity to deal with the Washington hearing between April and September. It borrowed only vaguely from the 1947 system, had achieved a modicum of technical success in compressing all of the required color plus black and white and sound information into a 6 megacycle channel width using technology that was largely totally new. In the rush to make it work, there had been some shortcuts which Brown now regretted in October.

It was a small but pivotal technical point. Using the Clarence Hansell time division multiplex technology which had been pioneered for shortwave message circuits, the Brown directed development team headquartered in Princeton made some quick decisions. The key to TDM was a "color subcarrier" which contained most of the color material instruction. The subcarrier had to be "hidden" within the channel width, at a location where it would not interfere with the basic black and white (picture detail) information. Someone at RCA, Brown does not disclose who, selected 3.8 megacycles because, "it would keep the visibility of the subcarrier as viewed on a black and white receiver at a minimum." His original calculations had suggested a frequency just below 3.6 mc.

Following the initial RCA October demonstrations (Variety: "RCA lays colored egg"), something caused Brown to ponder whether their reception instability might somehow be related to the 3.8 megacycle subcarrier. On a hunch, "I caused the subcarrier to be lowered to (my originally suggested) 3.6 megacycles which immediately produced better pictures. Because of this change, we were much better on November 21 and 22 than on October 10."

There was other evidence that RCA was making regular progress on the quality of their reception. While many of the RCA technical team were camped out in Washington, those remaining at Princeton were pursuing additional potential improvements. One effort, led by Al Bedford, was a modification to the color signal's synchronization stream. Bedford added "a burst on the back porch of the synchronizing pulse" which tests indicated suddenly resulted in a far more stable image. Over the January period Brown and team modified the Washington transmitter by adding the back porch burst and then the receivers which would interpret the new pulse and convey it to the receiver's color stability circuits. About which Brown wrote:

"A demonstration to the technical press and to some of our friendly enemies was staged on January 21. Since the FCC was in (holiday) recess, only a few of the FCC staff attended, unofficially. The results were even better than I had anticipated and not a knob was twiddled. I realized we have taken a giant step and others acknowledged this.

"Television Digest for January 21 ignored the official RCA press release and stated the case more succinctly: 'RCA solves its major color problem by transmitting 3.6 mc bursts for each line, every 63 microseconds. Dr George Brown said, 'Look - no hands'."

The FCC was back in business in February and on the 23rd yet another round of demonstrations was scheduled for the FCC Laboratory at Laurel, Maryland. One of the stated purposes of this round of testing was to allow the Commissioners to focus on the question of incompatibility. Seemingly everyone involved by now understood that when CBS transmitted in color, standard black and white receivers simply quit playing. Seemingly.

Commissioner Robert Jones showed his shallowness by explaining to a bewildered crowd that when CBS transmitted in color, "the pictures on a black and white set were 'a little fuzzy'." He was someplace between amazed and dumbfounded to confess that after months of hearings, he still had not grasped the significance of incompatibility.

Brown's reflections on the 'quality' of the commissioners would become legendary and he wrote about Jones:

"Robert Jones, a lawyer, was loud and bumptious and less than bright. He was prone to asking stupid questions and not listening to answers which were not to his liking."

Did Jones' new knowledge change his position on CBS? Of course not. Did the February 23 testing results change any commissioner's mind about anything? Brown:

"While the performance of the RCA receivers was far better than any previous appearance, the commissioners did little note nor long remember what transpired and they made no comments that day or later. The whole affair was an exercise in futility."

Intermixed with the demonstrations that seemed to be reborn every month to six weeks, highly technical and complex testimony went into the record from RCA, DuMont and others. This involved the FCC's concerns that if they adopted a color system - any color system - how would this impact co-channel and adjacent channel reception? The freeze instituted in September 1948 was to be six months after which the Commission was expected to begin anew accepting applications for additional TV stations. When the freeze began, 37 TV stations were authorized to operate, 110 total had been granted either a license to operate or a construction permit to build, and 310 additional applications were sitting at Commission "in baskets." Starting in early 1949, the commission staff had created a number of "revised allocation tables" moving channel numbers around on a large wall map trying to find city assignments which would create the maximum number of viewable channels for the largest number of people. Their effort was hampered by political and threatened retaliatory antagonists. Senators and Congressmen from states and regions already with TV feared that if channel numbers were reassigned to new communities, their constituents could lose one or more existing or promised channels of service. Tugging on the opposite ear were other elected members of Congress who saw in the original and then proposed channel assignment tables their own folks being left with too few (or no) TV channels. Television had turned into a political football and the business folks whom Congress depended upon most for re-election - the owners of radio stations and newspapers who were already or who wanted to be TV operators - placed intense, never ending pressure on their elected representatives. This in turn was transmitted to the FCC hierarchy in the form of veiled threats covering future appropriations for the FCC being reduced. Even commissioner Robert Jones understood that if FCC funding was cut in half by a frustrated Congress responding to constituent pressure, the agency would be in deep trouble.

Co-channel and adjacent channel interference, using color transmissions rather than black and white, was a technical issue to be investigated. The fear was that somehow, some way color might change the relationship between stations on the same or adjacent channels and cause more interference between stations than black and white created.

Co-channel interference could be reduced but not eliminated by any method known to man or RCA. The folks from Princeton tried. Brown wrote,

"By the end of 1947, NBC had two television transmitters in operation on channel 4; WNBT in New York City and WNBW in Washington. Immediately after WNBW turned on, we began to observe interference in the picture when we were looking at WNBT. The interference took the form of horizontal black bars that moved rapidly up or downward in the picture and were soon called 'venetian blinds' because of the effect on the screen.

"Soon similar interference was observed in other parts of the country where two or more stations were operating on the same channel. The FCC, in making channel assignments, had permitted co-channel stations to be located too close to each other."

RCA's first attempt to correct the problem was based upon good science which was unfortunately two or three decades ahead of technology to properly implement. They erected suitable high gain antennas at Princeton to track the exact operating frequency of WNBW in Washington. Then using a telephone line, this information was relayed to WNBT where the carrier frequency was tweaked up or down by a few cycles to create exact synchronisation between the two signals.

What this did was eliminate the image degrading "venetian blind" lines on the screen. But when RCA demonstrated the system to FCC engineers at Princeton, they neglected to explain that someone had to sit full time in Princeton and someone else full-time in New York City to measure the "offset difference" between the two signals and then tweak the WNBT carrier to compensate.

But RCA was hopeful this could be automated knowing that while they might tolerate the requirement for two full time personnel to constantly monitor and adjust the system, other stations across the country were far less likely to oblige. A Western Union relay site located at Brandywine, Delaware was identified as being precisely half way (103 miles) from each transmitter and here RCA established a complex off-air receiving system to full-time monitor the pair of channel 4 signals. But both signals were weak at the site, so weak that when a car drove by or a farmer operated his tractor within a few miles of the site, noise pollution caused the automatic sensing equipment developed to

go haywire. The effect was this. When both stations were received with "clean" signals, the monitoring equipment performed very well and WNBT by remote control chased the WNBW frequency around to keep both stations in perfect frequency synchronization. But if one or both signals were lost in any kind of interference, the automatic correction system went into high speed overdrive searching for the missing information. As a result, instructions to WNBT's transmitter were lost - it was flying without instruction and erratically jumped about in operating frequency hoping to find a "lock." In the field, the co-channel signals flashed from perfect synchronization to widely varying venetian blind combinations which turned out to be a far worse fix than simply putting up with stable if annoying lines on the picture. RCA simply locked the door at Brandywine and retreated to Princeton.

Fortunately Alda Bedford at Princeton was also been thinking about the problem and had come to the conclusion that if the two same or co-channel transmitters could not be reliably synchronized to the exact same frequency, perhaps there was some combination of frequencies where the venetian blind effect was more tolerable to viewers. The horizontal lines could be counted on the screen and then this "count" used to calculate the actual frequency separation between two stations who were nominally supposed to be transmitting on the same exact frequency. However it was beyond the TV transmitter designs of that era to maintain very closely their "exact frequency" so as two stations drifted around within the assigned TV channel, the slight difference in each operating frequency turned into varying numbers of black bars on the screen.

RCA's Bedford thought he found two regions which he called "frequency offset" where the visual effect of the venetian blinds was reduced, if not totally eliminated. One of these required two same-channel stations to operate with a carrier frequency difference of 7,875 cycles (7.875 kilocycles) which importantly was precisely half of the line scanning frequency for black and white television; 15,750 lines per second. Another was 10,500 cycles (10.5 kilocycles). RCA proposed to several channel 4 stations around New York City that they adopt this technique as a test. WRGB in Schenectady and WGAL in Lancaster were moved +10.5 kilocycles while WBZ in Boston and WNBW in Washington were moved -10.5 kilocycles.

All of which explains why the FCC was sensitive that by switching to color (any color system) the delicate balance between stations operating on the same channel might be upset. What RCA and RCA alone submitted to the FCC on this potentially serious flaw was assembled by Gordon Fredendall and fed to George Brown who created a voluminous written report for submission.

Brown noted:

"I submitted the study to the FCC on January 19, 1950 showing that the results for the color systems were the same as for black and white. At that point the commissioners could have lifted the ban on new-station construction if they had understood the significance of my presentation. There was no better or further data available when the ban was finally removed in April 1952."

Brown's notation, while subtle, is illuminating. After January 1950, there was no technical reason why the FCC should continue to deny new applications for additional TV stations, save their own inability to come to grips with a new channel allocation scheme. But this was real, although it was politically based, not technical in origin. Between mid 1949 and April 1952, several dozen channel assignment tables (a table is a list of cities followed by one or more channel numbers to be assigned for operation in that city) were created within the bowels of the commission. The constantly reworked tables were a fruitless, impossible effort to complete because each time a channel was taken away from one city and assigned to another, a Congressman complained. Influential newspaper publishers and radio station owners were quick to contact their own representatives in the House and Senate and they in turn were on the telephone to Chairman Coy or a subordinate. The "plums" of this exercise ultimately would be VHF channels, low band or channels 2 - 6 preferably because they travelled best through the atmosphere, in the greatest possible quantity. New York and Los Angeles had already been assigned seven VHF channels each while secondary population centers such as Peoria or Fresno had none.

By March 1950, most of the industry participants in the FCC's mandated hearing were tiring of the repetitive nature of the questions, the growing stacks of written testimony which almost everyone believed would never be read by the FCC - and if read, little comprehended - and increasingly every indication that "based upon first impressions" CBS was either a shoe-in, or, in any event, RCA would hear "no."

(To Be Continued)

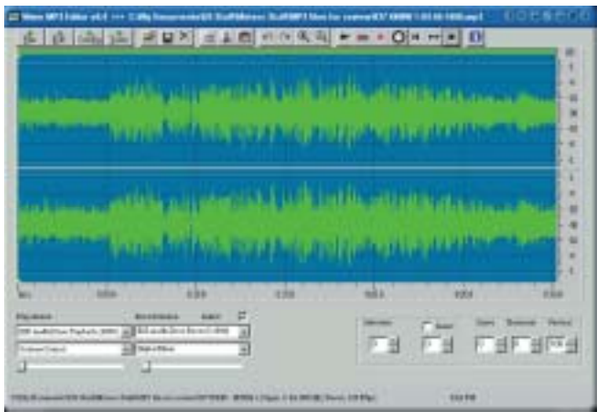
AUDIO EDITING SOFTWARE

Russ Edmunds

This article is by way of a follow-up on the one appearing a couple of issues ago which provided a review of some of the audio editing software I've been experimenting with over the past year or two. One of the pieces of Software I'd mentioned was "Power Audio Editor 2005 Pro".

A half-hour recording made by David Williams (also on 1/3/05 !! – seriously we didn't plan it this way – David and Jim both just happened to send examples from the same date as mine) which shows multiple Meteor scatter pings.

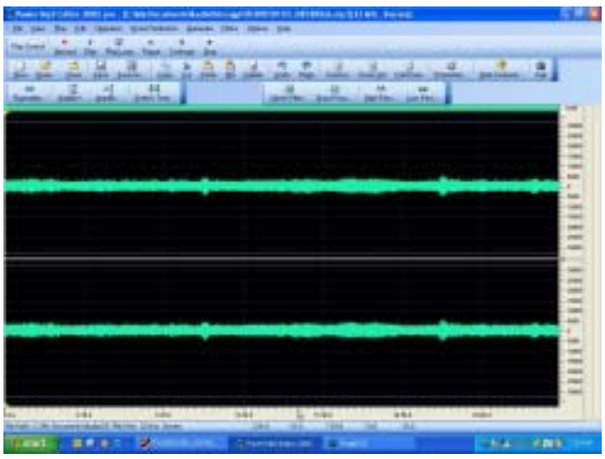
Some of us (at least David Williams and Jim Thomas and I) have been experimenting with using the graphical display features of the software, since it features a graphical display of the entire recording being loaded into it. Jim started the action with software called 'Power .wav Editor Pro". David subsequently started using "Power .mp3 Editor 2005 Pro", and tipped me off to it. Shortly afterward, the vendor (NCT Software; www.nctsoft.com) appears to have combined the two products into what is now "Power Audio Editor 2005 Pro".



Recording made by Jim Thomas of KKRW- 93.7 also on 1/3/05 at 1053 EST.

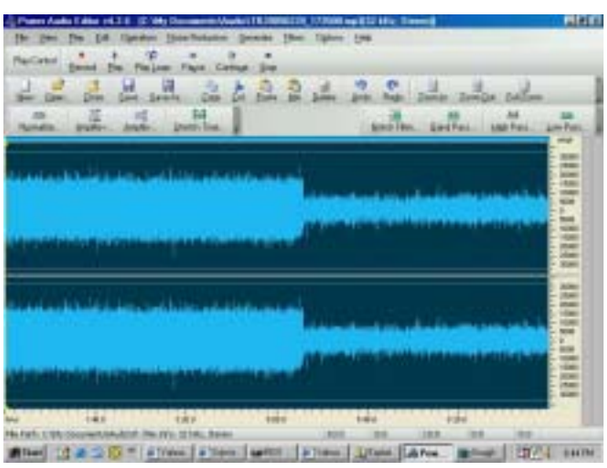
When Jim and David started mentioning using this for Ms, I became interested, since I'd been having some luck with Ms using mostly unattended sessions with the RDS software, and was looking for that proverbial 'better way'. While I've not yet experienced any Ms during 2005, I've had a couple of opportunities to load up recordings made prior to obtaining the software which contained some buildup of troposcatter, and found that it could be a useful tool for working with longer unattended recordings as well.

In each case, the essential idea is that the DX'er can make unattended recordings up to whatever length makes sense, and then subsequently load them into the software to identify where the recordings can best be cut into lengths more suitable to handling in other software and/or be parsed out to short recordings covering only periods of activity indicated by the visual reference. David notes that while often the pings are this visible, sometimes, either due to the programming on the Ms station or to the presence of other signals on the frequency via tropo or troposcatter, Ms signals may be present but not noticeable on a visual of the recording.

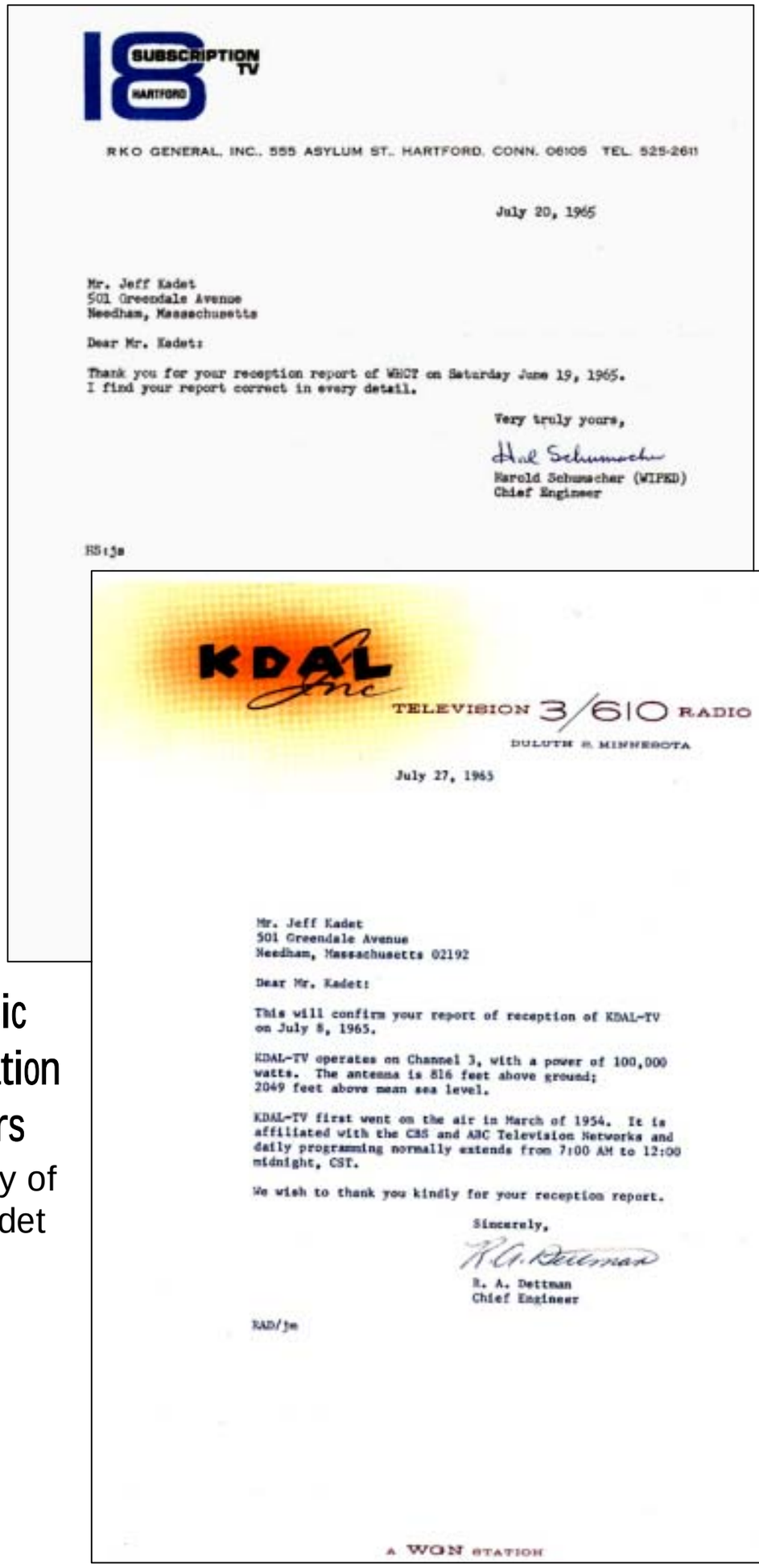


A visual image of a 30-minute recording made on 95.3 on 1/3/05 between 0827 and 0857 EST. The two 'bulges' in the track represent periods when Troposcatter built up.

The software is reasonably-priced ($39.95 US, periodic specials @ $29.95), and readily available. The visual display is nearly full-screen and has good resolution. Following are several images of some examples of how the software represents the recordings. In my case, the screen images were made using another piece of software called "Snag-It 32", which has been used for some time (and was discussed on the email list several months ago by Bill Nollman) in making screen shots of the RDS Viewer software displays.



This is for you AM fans. It is a graphical representation of the IBOC first-adjacent sideband on 960 kHz. From local WPEN-950 as the IBOC signal is turned off at local sunset. This was recorded @ 1730 EST on 2/20/05.



SUBSCRIPTION TV
HARTFORD

RKO GENERAL, INC., 555 ASYLUM ST., HARTFORD, CONN. 06105 TEL. 525-2611

July 20, 1965

Mr. Jeff Kadet
501 Greendale Avenue
Needham, Massachusetts

Dear Mr. Kadet:

Thank you for your reception report of WHCT on Saturday June 19, 1965.
I find your report correct in every detail.

Very truly yours,

Harold Schumacher (WIPKD)
Chief Engineer

HS:js

KDAL Inc
TELEVISION 3/6|0 RADIO
DULUTH 8, MINNESOTA

July 27, 1965

Mr. Jeff Kadet
501 Greendale Avenue
Needham, Massachusetts 02192

Dear Mr. Kadet:

This will confirm your report of reception of KDAL-TV on July 8, 1965.

KDAL-TV operates on Channel 3, with a power of 100,000 watts. The antenna is 816 feet above ground; 2049 feet above mean sea level.

KDAL-TV first went on the air in March of 1954. It is affiliated with the CBS and ABC Television Networks and daily programming normally extends from 7:00 AM to 12:00 midnight, CST.

We wish to thank you kindly for your reception report.

Sincerely,

R. A. Dettman
Chief Engineer

RAD/jm

A WQN STATION

Classic Verification Letters

Courtesy of Jeff Kadet

SIGN UP/Renewal form

Name_____

Address_____Apt #_____

City_____ State/Prov_____Zip_____

Country_____ Interests: TV ( ) FM ( ) 30-50( ) Weather( )

email address_____

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