



GA WDMG 99.5 Douglas, P. O. Box 860, zip 31533. A disappointing printed post card mentioning only the AM facilities, signed by William B. Fletcher.

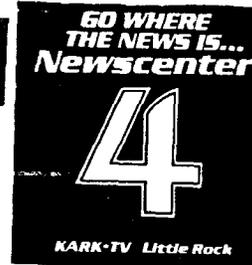
(Elving)  
 PA WJAC 6 Johnstown, P. O. Box 38, zip 15907. Letter from Art Urooman, CE in 10 days. (Barstow)  
 PA WMCP 8 Johnstown, 1450 Scalp Ave., zip 15904. Letter from PA WMPC 23 Altoona Charles H. Goode, UP of ENG. reply in 3 weeks. (Barstow)  
 PA WFAT 19 Johnstown, P. O. Box 19, zip 15907-0019. Letter in 3 weeks from Lee Mack, mentioned highest tower in PA. (Barstow)  
 OH WAKC 23 Akron, 853 Copley Rd., zip 44320. Letter in 6 days from William J. O'Neil, NBCHO Program Dir. (Barstow)  
 NH WGOT 60 Merrimack, P. O. Box 60, zip 03054. Letter from John A. Fergie. (Barstow)  
 NE WOHT 6 Omaha, 3501 Farnham St., zip 68131. Letter 8 stickers from Sam Curley, Asst. Pgr. Mgr. in 10 days. (Combs)  
 NE KXNP 103.5 North Platte, Box 1231, zip 69103. Letter in 3 weeks from Neil Nelkin, Mrg. (Ross)  
 MI WLTI 93.1 Detroit, 20300 Civic Center Drive, Suite 300, Southfield, MI zip 48076-4167. Letter in 3 weeks from Mark Phelps, CE. (Ross)  
 OH WLCO 100.9 Clyde, 1859 W. McPherson, zip 43410. Letter from unreadable chief engineer in 3 weeks. (Ross)  
 NE KTCH 104.9 Wayne, Box 413, zip 68787. Letter from Mark Ahmann, Gen. Mgr. in 5 weeks. (Ross)  
 ND KMPR 88.9 Minot, 1844 N. 15th St., zip 58507. QSL CARD from Barry Stegnikler, CE in 3 weeks. (Ross)  
 FL WMEZ 94.1 Pensacola, Box 8057, no zip given / Letter from Fred Brewer, Pres. in 3 weeks. (Ross)  
 CO K05HE 5 Glenwood Springs, 1/2 KMGH-TV 2, Box 5222, Englewood, CO 80155. Prepared card signed by Peter Douglas. This is a 12 watt vhf-tv translator of KMGH-TV ch. 2 in Denver, CO. Seen on bang up skip opening of 8-2-87. My best tvdx dx'd to date. (Ross)  
 FL WXBM 102.5 Milton, 1687 Quintet Rd., zip 32570. Letter from Jeffery Mahacek, in 1 month. (Ross)  
 OH WOIO 93.7 Mt. Vernon, Box 348, zip 43050. Lette from Mike Hayward, CE in 3 weeks. (Ross)  
 TX KMJQ 102.1 Houston, Box 22900, zip 77227. Letter in 1 month from Daryl McOwinn, CE. (Ross)  
 PA WFBG 98.1 Altoona, Box 2005, zip 16603. Card back signed by unreadable person in 3 weeks. (Ross)  
 PA WOHQ 102.1 DuBois, 80 N. Park Place, zip 15801. Card in 3 weeks from Garry Fisher, Ce. (Ross)  
 IA KGLI 95.5 Sioux City, Box 1737, zip 51102. Letter from Glenn Miller, Music Director (?). (Ross)  
 ON CJEZ 97.3 Toronto, 40 Eglinton Ave. East, zip M4P 3B6. Letter from I. Jay Stinson, Promo. Mgr. in 3 weeks. (Ross)  
 LA KCIL 107.5 Houma, Gen'l Del'y, no zip given, Send back a folder card in 1 month from Jan Jackson, Prog. Dir. (Ross)  
 NY WHTT 104.1 Buffalo, Hicton Church 8 Terrace, zip 14202. Letter in 3 weeks from e. Michael, CE. (Ross)  
 FL MJST 94.5 Panama City, Box 880, zip 32402. Letter in 1 month from Mark Johnson, CE. (Ross)  
 PA MLTJ 92.9 Pittsburgh, 1051 Brinton Rd., zip 15221. Letter in 2 weeks from Roy Humphrey, CE. (Ross)  
 ON CHEQ 101.1 Smith Falls, Box 1200, zip K7A 4T4. Letter in 2 weeks from Brian Perkin, Prog. Dir. (Ross)  
 NY WCRZ 107.9 Flint, Box 1080, zip 48501. Letter in 2 weeks from William Sanderson, CE. (Ross)  
 NE KSDZ 95.5 Gordon, Box 390, zip 69343. Letter in 1 month from Craig Nelson, G.M. (Ross)  
 ON CFLV 98.3 Kingston, 99 Brock St., zip K7L 4V5. Letter in 2 weeks from Albert Auflger. (Ross)  
 OH WGGN 97.7 Castalia, P. O. Box 247, zip 44824. Letter in 2 weeks from Bill Pounders, Mgr. (Ross)

# VHF-UHF DIGEST

the official publication of the  
Worldwide TV-FM DX Association



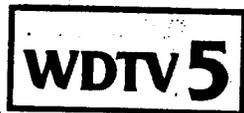
WNBC-TV4 4 WNBC TV4



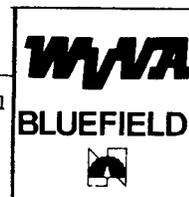
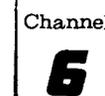
KFYR CHANNEL 5



KREX Channel 5



a part of the Spirit



WCIX-TV, CH 6



PBS Channel 6

Tucson-KUAT



SAN DIEGO'S MOVIE STATION

# NORTHERN FM-DX

GREG CONIGLIO  
5100 GLENWOOD DRIVE  
WILLIAMSVILLE, NEW YORK 14221

MAY 1988

DEADLINE: THE 5TH

A short column this month, with only three reporters (Dave Nieman, Fred Nordquist, and me), all residents of New York State. Hopefully things will pick up next month as the DX season approaches.

FRED NORDQUIST - 7945 BOXFORD ROAD - CLAY, NEW YORK 13041 (ELT)

**EQUIPMENT:** Receiver: Carver TX-11a  
Antenna: CM Stereo Probe 9 at 30' AGL

## SEPTEMBER 1987

9 Tr  
2200 WHR 88.1 CT Monroe CI/ID 194

29 Tr  
2034 WOLC 91.7 PA Clarion wx/ID 213

## DECEMBER 1987

11 Tr  
0930 WBRR 100.1 PA Bradford NX/ID r 151

13 MS  
0000 WQXP 95.7 IN Jeffersonville "QMF" (prev Tr) 604  
2359 WFFX 95.7 AL Tuscaloosa "FOX 96 FM" 924

15MS  
0059 WMLT 95.7 FL Clearwater ID + "Lite Rock" 15 sec. burst (prev via Es) 1112

22 ES 1835-1900 FL/GA  
1841 WJIS 86.1 FL Bradenton "Joy 88" 1140  
1837 WHEW 101.9 FL Ft. Myers ED/NX (?-sc) 1187  
1859 WOLS 88.9 FL Ft. Pierce 1109  
1921 WRWA 88.7 GA Dothan SID, "Way-FM" (It's Dothan, AL-sc) 968

23 ES 2134-2206 AR/MS  
2127 KFXE 92.3 AR Pine Bluff FOXy 92 k/ID 1055  
2154 WNAO 90.9 MS Greenwood PRN/network IDs 1010

## JANUARY 1988

3 MS  
2205 KRAJ 95.7 OK Ardmore wx ck/ID (?-sc) 1091

## FEBRUARY 1988

6' GW  
1953 WFRG 96.1 NY Utica (ex-95.9 WKAL) k, "91-Fros" (Fred: did they change city of license from Rome to Utica?-sc) 24

29 GW  
2202 WAGX 95.7 NY Manlius (ex-95.3) (There goes my prime MS channel, although it's good to hear CKDS again) "The Home of Rock and Roll-95X" 11

## MARCH 1988

3 GW  
1818 WMHN 89.3 NY Webster 9 // WMR 102.9 65

4 GW  
2200 WAGS 103.5 NY Dobleskill back on w/adult rock (ex-WITU) 89

**WDOX**  
Oneonta's first station  
AM 730

NEWS, INFORMATION  
& ENTERTAINMENT

**WSRK**  
Beautiful  
FM 104

ALL MUSIC,  
ALL OF THE TIME

DAVE NIEMAN - AKRON, NEW YORK 14001-9308

**EQUIPMENT:** unchanged

Stations new to log are underlined; WXXK new mode.

## MARCH 1988

2 GW  
0100 WAGX 95.7 NY Manlius, ID, r# (ex 95.3) still "95-X", IDs with AM station, no mention of Manlius or Syracuse 110

8 GW  
0100 WMHN 89.3 NY Webster, ID, 9#, MBN nx: UPI & IMS, 24 hrs (MARS HILL NET) // WMR Syracuse 50

## MARCH 1988

3 GW, Tr & TrS  
0849 WSRG 89.3 NY Binghamton, call: c# 142  
0900 WOSU 85.3 NY Geneseo, ID, r#, "the voice of the valley" 40  
0926 WPFW 85.3 DC Washington, call: c# 296  
0930 WGED 89.3 PA Pittsburgh, call: c# 197

15 MS  
0042 WJPD 92.3 MI Ishpeming, call: k (prev Tr) 510

NORTHERN FM DX

MAY 1988

DAVE NIEMAN'S REPORT--continued

## MARCH 1988

16 Tr or TrS  
frequency setting from approx  
0600-0930: antenna heading SSE.  
0800 WIOV 105.1 PA Ephrata, call: k#, "I-105" 225  
+ WAVA 105.1 VA Arlington, call: r# 297  
WIOV 105.1 NY De Ruyter, ID, 9#, // WQIV-AM 128  
CKDM 105.1 ON Peterborough, call: k#, "DM-FM" 91  
WIL0 105.1 PA Williamsport, ID: k# 146  
antenna heading SW:  
0930 WQXN 105.1 OH Salem, call: k# 195  
WORS 105.1 MI Detroit, call: c# 244

Dave



COONEY COMMUNICATIONS CORP.  
14 SOUTH BROAD STREET • NORWICH, NEW YORK 13815

GREG CONIGLIO - 5100 GLENWOOD DRIVE - WILLIAMSVILLE, NEW YORK 14221

**EQUIPMENT:** same as last month

## MARCH 1988

2 TrS  
2100 WAOX 95.7 NY Manlius, AcR, "95X", ex-95.3. Poor signal here, even w/WEBF off. WAEK-88.3 is stronger 137

5 TrS  
0144 WOSE 94.5 OH Port Clinton, ID, r#, QRM from MS bursts 240

12 GW  
1800 WMHN 89.3 NY Webster, 9, ID with Mars Hill Net. (WMHR-102.9) 65

15 Tr  
1600 WNCD 101.3 OH Ashland, k, Mutual News 238  
1606 unID 88.5 ?? "88-5 FM", phone number: 885-8850

19 Tr  
1100 WPST 97.5 NJ Trenton, ad, heavy CHTZ/CJEZ splatter 280  
1732 WNPR 95.5 NY New York, r, DJ talk, "POWER 95", no legal ID at 1800 287

22 Tr  
2133 CBEG 90.3 ON Sarnia, CBC EE network // CBL AM 740 186  
2151 WCTL 106.3 PA Union City, 9 100  
2154 WOLC 91.7 PA Clarion, r, ID 132  
2201 CFMU 93.3 ON Hamilton, local events calendar, 50 watts 54  
2215 GIXX 106.9 ON London, talk about jazz, "E-X" 123

25 TrS  
LOCAL WBVR 107.7 OFF AIR  
1830 unID 107.7 ?? big bands to the SE. 2nd time I've noted this.  
1900 WGTY 107.7 PA Gettysburg, k 239

26 Au  
1530 WXRI 105.3 VA Norfolk, talk 448  
1600 WCTS 91.9 MD Tacoma Park, 9 290  
1611 WPGC 95.5 MD Morningside, r 310  
1647 WRQX 107.3 DC Washington, r, "Q-107" 287  
1650 WRDR 104.9 NJ Egg Harbor City, FM 105, big bands 332  
1708 WVTE 89.1 VA Roanoke, NPR 403

GREG CONIGLIO'S REPORT--CONTINUED

MARCH 27 Trs

LOCAL WBFO 88.7	OFF AIR		
1127 <u>CJOM</u> 88.7	ON	Windsor, r. "Lazer Rock Dnm-FM 88.7"	221
1131 <u>CIRV</u> 88.7	ON	Toronto, e (Italian prog); "Serve-FM"	57
1139 <u>CBQF9</u> 88.7	PD	Chapleau, FF	217

31 Tr

0830 WGMR 101.1	PA	Tyrone, k; LOUD	170
0834 WKYN 97.5	PA	St. Mary's, r. "97-KYN"	113
0842 unID 107.3	??	to SE, r. "All Music 107"; not WRCK	

DXing in PITTSBURGH, PENNSYLVANIA

EQUIPMENT: JVC RC-W44J stereo cassette recorder ("boombox")

4/9 Tr

2212 CJBC4 99.3	ON	London, hockey game in FF	187
2217 WRRN 92.3	PA	Warren, b	105
2221 WYHT 105.3	OH	Mansfield	135

4/10 Tr

0751 WNCI 97.9	OH	Columbus, r	160
0809 WPHR 107.9	OH	Cleveland, r. POWER 108, o/local WDSY Pittsburgh	113

\*\*\*\*\*

The reason for the early deadline for this VUD was my being in Myrtle Beach, S.C. over Easter. The Pittsburgh DX was done on the way back. Some excellent tropes were noted down in South Carolina, on April 5th and 6th.

\*\*\*\*\*

WMHN 89.3 save a list of translators broadcasting the Mars Hill Network, most of which translate WMRH Syracuse. The ones given were:

- Copenhagen - 95.9
- Gouverneur - 100.1
- unID city - 101.7 (WMHN faded briefly)
- Norwich - 97.7
- Watertown - 104.9

\*\*\*\*\*

As you probably noticed, I used two different formats for reports this month. I did this because I realize the small font can be hard to read. The drawback is that I can only fit one column with the bigger font. I would greatly appreciate comments from members on which format you like better, and if you have any other suggestions, please send me them to me.

\*\*\*\*\*

Northern FM DXers: Please send your DX trivia to Fred Nordquist of Clay, NY, as "Personal Bests", as part of his FM Statistics column.

\*\*\*\*\*

DX conditions should be picking up soon, so keep your ears glued to your radio! Hopefully by the time you read this, the first E-skip will have arrived!

\*\*\*\*\*



Eaton Studio-100 E. Somers St., Eaton, Ohio 45320-(513) 456-4200  
Dayton Office-717 E. David Rd., Dayton, Ohio 45429-(513) 294-2136

73s

Greg

# NEWS



Matt Sittel  
220 Brookfield Drive  
Kingsport, TN 37663-9777  
(615)239-9186

Deadline: 6/1/88 for  
7/88 VUD (although some  
late reports may be used)

A LOOK AT WHAT'S NEWS FOLLOWS THE WEATHER: Best and cold best describes the weather during the last week or so. From the 5th to the 8th, the highs were 83,66,45, and 60, in that order. The low this morning (the 9th) was 32. So, it's been way above and way below normal in the last week. One thing that's been way below normal is the DX activity. Nothing much is out on the dials to be received except locals! I keep thinking I see E-skip on channel 3, but it turns out to be CBN cable. WGM is in color right now on channel 4! Maybe these delusions of E-skip will be replaced by confirmed sightings of E-skip! Where is it hiding? If you're hiding the DX somewhere, please share it with the rest of us! Hopefully Es activity is hot as we speak-is it? Go check! Go on, now, check! What? It isn't? Don't blame me, it's not my fault! Wait! What are you doing? Stop! Aargh! ..... Just kidding! Now, on to NWS NEWS! Charles Gauthier, 3260 Beaulieu, Brossard, J4Z 2P7 Canada

Good news for the month! The complete list of Weather Radio Canada stations and repeaters in NF, NB, and NS. Concerning the frequency for Gander, NF I found .400 in one brochure and .550 in another, so I'm not sure about that one. As for local news, I listed over and over again to the calls from the NWS station in Burlington, VT. They ID like this: "This is the voice of the NWS, KIG-60..." I read in your column KIB-60 and also in a Popular Communications article, February 1988, about VHF-UHF weather links, it's listed as KIB-60. Would you know if they recently changed it? (Seems kind of strange that an NWS station would change their calls, unless it was KIG-60 to begin with. Anyone out there know? -mcs) One more thing about KIG-60, they now give their full ID on the hour. That's it for this month (I'm still working on finding a list of Coast Guard Radio stations). 73 Charles.

Here's the rest of the information Charles sent. Thankyou very much, Charles! It's always appreciated when someone sends in information on NWS stations.

Gander, NF: XLM-616, .400 (or .550) 48°56'45"N 54°34'34"W range: 65 km from each repeater. Repeater: .400-St-Anthony, Portland Creek, Pents Cove, Birchy, Codroy Pond, Marystown, St-Johns. .550-Mount St-Margaret, Conche, Watsons Brook, Rose Blanche, Botwood, Hermitage, Trepassy, Port Rexton. All locations are in NF.  
Halifax, NS: XLK-473, .550 44°39'01"N 63°39'11"W transmitter on Geizer's Hill. Range: 65 km from each repeater. Repeater: .400-Bridgetown, Nuttby Mtn., Melrose, Sydney, in NS. Also, Bear River and Hazelgrove, PEI. All the other listings for XLK-473 are in NS. .475-Oak Park, Cheticamp, Ben Eoin. .550-Shelburne, New Tusk, Aylesford, River Denys, Cape North.  
Moncton, NB: XLM-466, .550 46°06'22"N 64°40'11"W transmitter: Indian Mtn. range: 65 km from each repeater. Repeater: All in NB unless noted. .400-Scotch Hill, Cameron, St-Isidore. .475-Bethel, Fredericton, O'Leary, PEI. .550-Bellville, Dalhousie.

FR CITY	CALLS	FREQ.	RANGE	TR	SMITTER SITE
PQ Quebec City	XLM-369	.550	65km	Mo	Belair
PQ Montreal	XLM-300	.550	65km	Mo	Royal
ON Ottawa	XLJ-696	.400	80km	Ca	Fortune, PQ
ON Toronto	XMJ-225	.475	80km	Ca	lower
MB Winnipeg	XLM-538	.550	65km	Wi	ipeg!
SA Regina	XLM-537	.550	65km	Lu	iden, SA
SA Saskatoon	XLF-322	.550	65km	8	th east of Saskatoon
AB Calgary	XLF-339	.400	65km	Ca	gary!
AB Edmonton	XLM-572	.400	65km	Lo	ca, AB
BC Vancouver	CFA-240	.400	100km	Tu	thn Mtn., Saltspring Island, BC

Victoria  
Me, the Editor, address above.

KIH-40 Hazard, KY on .475 has been received at the following dates and times: 1/12!, 1/26, 1/39, 2/6, 09/4, 2/13, 2332, 3/16, 0628, 3/17, 0624. Also, on 3/11 at 2130, I noticed WXX-47 was off the air. I logged an unID on .550, which I found fading in very briefly, weakly. WXX-47 came back on at 2144, who knows how long it was off the air? I wish I could have ID'ed it; WXX-47 is rarely off the air. Incidentally, WXX-47 was on low power, with the beep, for about 12 hours after it came back on. I forgot to note that my unID .550 had a very southern-accented voice; I wonder where it was? It was fading in very weakly. I'd guess about 100-200 miles away. But in which direction?

Can you imagine all-DX game shows? Here's what they might look like!



The channel 6 w/ the highest HAAT is this P.S., in which its calls abbreviate its college location



**OTHER NWS NOTES:** While there were not many reports of DX'ers NWS DX, there were quite a few articles concerning NWS stations. Thanks to all who sent those. A brief summary of them follows station identification: "The voice of the National Weather Service in the WTFDA region is Matt Sittel, broadcasting on top of Mount VUD, which continuous weather information." Alright, now here's the reports:

**-Frank Aden** sent an article from the 3/11/88 "Portland Oregonian" about a survey being run by KEB-97 on 162.550 there. It said that their coverage area extended from Mount Hood to the top of the Coast Range and from the Longview-Kelso area in Washington to Salem. Their address is NWS, Weather Radio Survey, 5420 N. Marine Drive, Portland, OR 97218. Decalcomania member **Tim Noonan** sent me an article on the NWS in Wisconsin, from the "Milwaukee Journal". Milwaukee's NWS is KEC-60 on 162.400. The 1,000 watt signal broadcasts from the WHAD-FM tower in Delafield. The station went on the air in 1971. It is programmed from the NWS office at Mitchell Field there. It said that other weather stations that could be heard in Wisconsin were: Chicago, .550, Madison, .550, Dubuque, .400, La Crosse, .550, Menomonie, .400, Duluth, .550, Wausau, .475, and Green Bay, .550. It also tells of a weather station that was on the air for a few months in Park Falls on .500, but ceased operation at the end of 1987 (I guess it was '87, it said "the end of the year", and since the article has no date on it, I am assuming it's '87) It also said that weather forecasts can be received five to ten minutes before the media does on weatheradio. KEC-60 also conducted a survey; they found that the strongest listening times were from 4-6AM and 7-11PM, the most popular feature is the immediate and extended forecasts, and most people use Radio Shack receivers, and most found out about weatheradio from relatives or received them as gifts. Few people heard about them through the media. "It's one of the government's best-kept secrets", meteorologist **Cris Garcia** said. **John Marx** sent another article from the "Milwaukee Journal", dated 1/20/88, about a goof-up at Mitchell Field that predicted 8 inches of snow, that instead resulted in 1.67 inches of rain. He also sent a very interesting article from the February 1988 "Popular Communications" entitled "Monitoring VHF/UHF Weather Links" that has a long list of UHF and a few VHF links. If anyone would like a copy of this very informative article, just drop me a line. Another piece of info Tim sent was that KEC-60 had some transmitter troubles when a wind storm blew through October 1, which damaged the antenna. Some repairs had been made, but a complete correction of the problem would probably take some time. Another NWS that has had some antenna problems is KIH-20 on 162.400 in Huntsville, AL, according to new NWS NEWS reporter **Keith Pugh**. He says "They were on very low power from February 1988 till the last of March due to a lightning bolt that got the antenna and transmitter. Their signal at the time was almost unreadable here. KIH-20 just got the new transmitter this week." Keith also noted that KIH-20 is the only station he's able to receive. Keep us posted, Keith, you never know what DX can bring in sometimes!

Thanks to everyone who sent in information. I always enjoy reading articles about weather of any kind, not just NWS-related articles. I plan to major in meteorology this fall at WCSU. So, if you do send in an article, I'll try to give it a brief summary here in NWS NEWS. Now, here's my I-40 bandscan information.

**CALIFORNIA:** I've only been on a little bit of I-40 near Needles, and there wasn't anything there. You might be able to get Las Vegas or Coachella, possibly.

**ARIZONA:** Only 1 NWS you can get on I-40, Flagstaff. Has quite a large coverage area. I've got my best recording of it from Gray Mountain, AZ, about 35 miles northeast of Flagstaff. Back in 1983 they spoke of their limited schedule, from 6:30AM-9PM. The current NWS brochure says they have a 24-hour schedule now. Talk about different forecasts; their coverage area's terrain is so varied that they have forecasts for Kingman, Prescott, the Grand Canyon, Williams, McNary, Winslow, then the Flagstaff and vicinity forecast, then Sedona, and Page-9 different forecasts! Does anyone know of an NWS that tops that? A very good station. Also, while in Gray Mountain, I got WWL-4 and KTVI-2 via Es on 6/18/84. The hotel's TV was by antenna and the E-skip was tearing up KNAZ-2 to pieces. I remember my parents got mad because the picture was horrible! Horrible to some, but beautiful to others!

**NEW MEXICO:** Not much NWS activity; just Albuquerque and Santa Fe; both have very strong signals just west of Albuquerque. I remember hearing a tornado watch for eastern NM when there in 1983; nothing ever surfaced of it. We were in Santa Fe, and I brought the weatheradio along. The tape recorder was in the hotel room in Albuquerque, though. The watch ended at 7pm, and when I got back to the room at 7:05 pm they were running a message stating the watch was no longer in effect. They also tell you the exact barometric pressure at that altitude; in 1984 when I was there it was 24.73 inches!

Also, they run 2 different forecasts, without temperatures, then say the predicted temps for 6 different locations: Albuquerque, Espanola, Taos, Los Alamos, Tucumcari, and Santa Fe.

**TEXAS:** Just one you can receive on I-40 in Texas, Amarillo. Pretty strong signal, too. They speak of the "5 state area" a lot, those 5 being TX, NM, OK, KS and CO.

**OKLAHOMA:** NWS stations are plentiful here. Of the 6 in the state, you can receive 5 of them. Clinton in the west, with Lawton in weakly. Oklahoma City in the midstate, and in Henryetta, where we stayed, McAlester came in fair, and Tulsa very weak. McAlester comes in fair along the eastern third of I-40 in Oklahoma. Only Enid cannot be received on I-40. (At least I couldn't get it!) In 1984 I was lucky enough to hear a severe thunderstorm warning. Very interesting ID's, too. One I liked was: "With an eye to the sky, this is WXX-86 in Lawton, and WXX-87 in Clinton, originating from the National Weather Service in Oklahoma City." They also

have very precise radar summaries, including highest thunderstorm tops altitudes! Of course, that sort of information is necessary in that part of the country, where severe weather is more frequent.

**ARKANSAS:** I could only receive 2 stations: Fort Smith and Little Rock. Fort Smith was strong in eastern Oklahoma, and forecasts for that area are run on it. Little Rock, I remember, had a rather short loop. It may have just been the time of day, but they didn't have much more than the basic forecast, extended forecast, and hourly conditions, plus their travelers' forecast. Overall a below-average station.

**TENNESSEE:** All 9 of Tennessee's NWS stations can be heard at one place or another on I-40. Not only that, but you can hear Sikeston, MO near Jackson and Asheville, NC, near the border with NC, and Chatsworth, GA between miles 340-345 on I-40, going over the Cumberland Plateau. I've even gotten Asheville, NC up there! Nashville runs the programming for itself, and Waverly, Cookeville, and Shelbyville. They used to run Jackson as well, but I was just through there March 18th and 20th, (on the way to Memphis, where I was March 18th, 19th, and 20th) and now it is just an exact rebroadcast of Memphis NWS. Memphis now just adds a forecast and hourly conditions and climatological information for Jackson. The NWS stations are fair to good, with Knoxville being probably the worst, and Memphis the best. Also, there isn't a dot for Chatawath, GA weatheradio on the 3/88 column's map, I forgot to put it in.

**NORTH CAROLINA:** The easternmost state that I-40 passes through has 3 and possibly up to 5 NWS's that you can receive on it. Asheville is a dominant force in western and west-central portions, with a bit of Charlotte, I believe, mixed in at times, most likely. I can't remember if I was able to receive it or not. Winston-Salem is strong in the Piedmont region, and Raleigh is strong in Durham but not strong at all in Raleigh. I remember I had a hard time getting much better than a weak signal out of it. On the last piece of I-40 east of Raleigh (not sure if it goes to Smithfield or just ends in Raleigh; most of my maps say it ends in Raleigh) if it exists, you probably can get Rocky Mount NWS. If that part east of Raleigh is not included, then Rocky Mount is not included, because I couldn't receive it in Raleigh.

Now, here's a complete listing of the information on all the different NWS's that you can hear on I-40:

CITY	CALIS	FREQ.	POWER	LATITUDE	LONGITUDE	MSL	HAG	COMMENTS
FLAGSTAFF, AZ	WXX-76	.400	100	35.14'	111.36'	9017	15	
ALBUQUERQUE, NM	WXX-34	.400	100	35.03'	106.47'	5770	70	
SANTA FE, NM	WXJ-33	.550	100	35.47'	105.46'	12070	50	// to WXJ-34
AMARILLO, TX	WXX-38	.550	1000	35.22'	101.52'	3925	500	
CLINTON, OK	WXX-87	.475	500	35.34'	98.59'	2360	280	// to WXX-86, dual ID
LAWTON, OK	WXX-86	.550	1000	34.35'	98.29'	1480	280	
OKLAHOMA CITY, OK	WXX-85	.400	1000	35.34'	97.29'	1546	400	
McALESTER, OK	WXL-49	.475	1000	34.58'	95.43'	1270	360	
TULSA, OK	KIH-27	.550	500	36.01'	95.39'	1170	370	
FORT SMITH, AR	WXJ-50	.400	1000	35.17'	94.18'	690	190	
LITTLE ROCK, AR	WXJ-55	.550	300	34.47'	92.20'	1180	150	
MEMPHIS, TN	WXX-49	.475	1000	35.10'	89.49'	575	300	
JACKSON, TN	WXX-60	.550	1000	35.34'	88.48'	605	245	// to WXX-49
SIKESTON, MO	WXL-47	.400	1000	36.52'	89.51'	665	240	
WAVERLY, TN	WXX-62	.400	1000	36.06'	87.40'	951	113	1/2 // to KIG-79
NASHVILLE, TN	KIG-79	.550	1000	36.09'	86.47'	988	452	
SHELBYVILLE, TN	WXX-63	.475	200	35.42'	86.11'	1438	69	1/2 // to KIG-79
COOKEVILLE, TN	WXX-61	.400	200	36.10'	85.13'	2064	64	1/2 // to KIG-79
CHATTAHOOGA, TN	WXX-48	.550	1000	35.09'	85.19'	2180	100	
CHATSORTH, GA	WXX-52	.400	200	34.45'	84.42'	2866	150	
KNOXVILLE, TN	WXX-46	.475	1000	36.00'	83.56'	1505	150	
BRISTOL, TN	WXX-47	.550	500	36.26'	82.06'	4425	120	
ASHEVILLE, NC	WXL-56	.400	250	35.25'	82.45'	5751	30	
CHARLOTTE, NC	WXL-70	.475	200	35.17'	81.06'	1550	250	
WINSTON-SALEM, NC	WXL-42	.400	100	36.22'	80.22'	3248	150	
RALEIGH, NC	WXL-58	.550	1000	36.02'	78.57'	675	120	

And that's the I-40 bandscan! I thought it would take more than one column for the entire list, but it didn't! Also, my THE ID TAPE III is finished, and as the last tape, you can get it by trading an ID tape, sending a tape and \$1 for return postage, or \$3 for tape and return postage. An index, as always, is included with the tape. This tape is all trip ID's, featuring my trip to Canada and various other shorter trips to places like Nashville. Get in touch if you're interested. Also, I'm working on a catalog of all the NWS stations I have on tape. It will list all the ones I have on tapes, the length of the recording and the date recorded. Then you can choose the ones you want to hear and then I'll dub them onto a tape. So, there won't be a THE NWS TAPE, but instead a tape of the ones you want to hear. I'll say here in NWS NEWS when it's complete, so stay tuned. It will also need updating whenever I get new tapes, so it will likely be updated whenever conditions warrant, as they say on the weatheradio! And, if you see an article on the NWS somewhere, please send it in! Thanks to all the reporters this month for contributing to NWS NEWS! **NEXT TIME:** Hopefully some good NWS DX, your info, my info, and a lot more! *Bill*

# SOUTHERN FM DX

Danny Buntin  
1312 N. Skyline  
Stillwater, Ok 74075

MAY 1988  
For FM DX reporters from: AL, AR, AZ, CA, CO, DE, FL, GA, KS, KY, LA, MD, MO, NC, NM, MS, NV, OK, SC, TN, UT, VA & WV. Also DC.

DEADLINE: 10th

## MORE TUNER COMMENTS

Gus Mancuso, 5615 Inwood St., Cheverly, MD 20785  
From Bartow, FL, used slightly inferior(selectivity wise)Pioneer set this trip. Picked up mostly new stations until last day.

3/7 tr  
1400 WAYJ 88.7 FL Ft. Myers  
3/18 tr local WHAN off )  
0100 WWFR 91.7 FL Okeechobee  
1945 WHAN 91.9 FL Lakeland  
2000 WRXK 96.1 FL Bonita Springs, xWLEQ 95.9  
3/20 tr  
2100 unID 97.3 "97-G.T.R." "CTR"  
possible short for Florida Gators??

3/21 tr  
0100 WJAD 97.3 GA Bainbridge  
0130 WFYV 104.5 FL Atlantic Beach  
0152 WPFM 107.9 FL Panama City  
0158 WCRJ 107.3 FL Jacksonville, over  
WWBA St. Pete by putting rabbit ears in  
worst position for WWBA.

I noticed you told a DC DXer that he should get "better equip." You really have to work this area to appreciate the adj. ch. problem, as well as dial crowding in general. He lives within 1,2 or 3 miles of these locals 88.5, 94.7, 96.3, 97.1, 93.9, 103.5, and 107.3 plus 99.5, 89.3, 90.1, and 101.1 are 5-8 miles away. If you check the FM scoreboard you'll see that in 10 years an E. Brunswick, NJ DXer has picked up 252 stations while 50 miles from NYC. Another DXer(Names with held,DB) has gotten 541 in 10 years, more than double. He lives 65 miles from NYC. I'd say the extra distance, 15 miles, makes a difference. I live 5 miles from the nearest transmitter and 9 miles from the mess the DC dxer is near. I have 202 versus 48 of his(picked up from his house). [Editor's note: But better equip. properly selected can work wonders in large urban areas. May I share comments made in a past VUD(11/85)by one FM dxer from the New York City area, of all places, fortunately, who switched to something better. To quote him, "I can't rave enough about the Onkyo. I can personally vouch for ADJACENT channel rejection of over 30 db. In addition to all the Philadelphia PA & Hartford, CT adjacents, WHOM 94.9 NH, WHP 97.3 PA, WHMP 99.3 PA, WJZR 100.1 NJ & other Long Island, & semis from CT & MA have become regulars. Boston comes in if cx are anything but totally dead. I wish I could've caught some Es to see how many stations I could have picked off with this amazing machine. I'm happiest about the image rejection (stated 100 db)which has totally wiped out the worst problem of FM DXing in N.Y.C." And in this month's column a dxer makes a good case for better equipment by stating hardly any of his loggings would have been possible without it.]

I'm planning a "super bandscan" from Bellafontaine, Ohio this summer or next. Will stay in a high rese motel moving from side to side each night. Steel structure well screen off signals on one side and allow deeper reception on other. In's near the highest point in Ohio and Indiana combined. I'm shooting for 200 stations total. Look on a map. It may be the best spot in world! Only one 1,400 watt station in town, about 10 low(10 watt)power stations 10-50 miles away and a total of hundreds of stns. within 100 miles. Terrain is quite flat, especially to east and west. Furthest away are the 100 w monsters in central Mich. and Kentucky. Most closer stations(10-30 miles)are 3,000 watters. So adj. chan. int. should be minimal. Flat terrain should allow at least 150 mile range if not further. [Editor's note: And then on the opposite end of the scale you have Presidio, TX by the Mexican border, one of the most FM starved towns in America, what with only one FM station to be found within 100 miles, and only a class A at that. During an Es opening running all the way up to 107.9, one would be off in DX heaven. More stations could probably be heard during the summer in Presidio than back in Bellafontaine.]

Matt Sittel, 220 Brookfield Dr, kingsport, TN 37663

3/2 tr		3/17 tr	
2203 WNGC 95.5 GA Athens	175	2308 WDEF 92.3 TN Chattanooga	186
3/6 tr		2310 WSKZ 106.5 TN Chattanooga	186
2244 WWMY 94.5 NC Eden, "MY 94.5"			
3/17 tr		3/28 tr	
2308 WUSY 100.7 TN Cleveland	168	0858 WMQX 93.1 NC Winston-Salem	130

DX has sunk to a new low here. Almost nonexistent activity on bands. Hopefully the skip season will make up for the lack of tropo. Hope Es is in at your place right now! Hope this postcard reaches you on time! Our post office is very slow. (The post offices between you and me had their acts together this time. It only took your card two days to reach me. IE)

Keith D. Pugh, 227 Martin St., New Hope, AL 35760  
Equip: Onkyo T-9090, Stereo Probe 9 at 30'  
3/3 tr 349  
0953 WEAS 93.1 GA Savannah, ID, "Ace 93"  
1121 WTCR 103.3 WV Huntington, k, ads, ID 230  
3/4 tr  
1436 WQGL 93.5 AL Butler, wx, ID 200  
ms?  
1445 unID 93.5 W..ZK?  
tr  
1500 WEGN 93.5 AL Evergreen, r, ID 219  
1509 WRJN 93.5 AL Geneva, m, 245  
"Classic 93"  
3/11 tr  
1201 WBLH 91.3 AL Florence, g, new to air,  
testing. On from 0600 to 2300 now. 73

3/12 ms  
1320 unID 99.9 "...big country Ford-Subaru"  
3/13 tr 230  
2029 WXXL 103.1 KY Manchester, ads,XL-103  
3/26 tr  
2015 unID 88.3 \$, album by Neil Young, left  
the air at 2038. Same 15 db sig. as on 2/27.  
3/30 ms  
1342 unID 98.7 .."Tidewater Dodge has the  
best prices in Tidewater"  
tr  
1358 WKSI 98.7 NC Greensboro, r, ID 387  
4/3 ms (prev. Es)  
1345 KATX 97.3 TX Plainview, "Plain-  
view's only 100,000 wat stereo station,KATX"  
870

Still no real trop here. Just minor enhancement. Most, if not any of these stations, would never be heard on my old J.C. penny boom box cause the Onkyo had to dig to pull them in DX can only get better with Es on the way, I hope! 73's.

Eric Fader, 64 Wild Birch Farms, Peekskill, NY 10566

Dxing from Destin, Florida, between Pensacola and Panama City. 3/7-14-88  
Good general tropo on 3/7 evening to 0200+ 3/8, and LA/TX gulf tropo on 3/11. 1800+.  
Times CST. Better catches only(locals and regulars excluded):  
92.5 WQST MS Forest "Country 92"  
92.9 WAAC GA Valdosta, u/local WBLX-AL  
93.1 KQID LA Alexandria  
93.3 WQUE LA New Orleans, "Q93"  
95.5 WLIN MS Jackson, under local WTVY-AL  
95.7 WBYU LA New Orleans, "Bayou"  
96.3 WYNN MS "Jackson's Class"  
WJIZ GA Albany  
96.5 WMJJ AL Birmingham  
97.1 WEZB LA New Orleans  
99.1 KDEA LA New Iberia  
99.5 WRNO LA New Orleans  
99.9 KTDY LA Lafayette  
100.3 KILT TX Houston, 1835 on 3/11  
KRRV LA Alexandria, later on 3/11  
WSGY GA Tifton, same evening  
WNLS MS Laurel, ditto

100.7 WGIG GA Brunswick, thru local  
101.1 WNOB LA New Orleans, semi-regular  
101/5 WYNK LA Baton Rouge, thru local  
101.9 WHHY AL Montgomery  
102.9 WMSI MS Jackson, "Miss 103"  
WNKS GA Columbus, "Kiss FM"  
KAJN LA Crowley  
103.3 WKJT LA Hammond  
103.7 WRUF FL Gainesville, "Rock 104"  
WHER MS Hattiesburg  
104.1 KHOM LA Houma, over local WIZD-AL  
and WCLF-FL  
104.5 WHSY MS Hattiesburg  
104.7 WZZK AL Birmingham

(No decent catches above 104.7)

Also lots of unIDs, all on little Sony portable ICF-2002. Regulars included southern AL, GA and MS. Also Tallahassee at about 140 miles. Overall, DX was not as spectacular to me as LA from Key West a couple of years ago, but Houston from Destin is still fun. I envy Gulf coast DXers! 73.

**KREK**

Featuring:

- Paul Harvey News 7:30 A.M. & 12 Noon
- Paul Harvey "Rest of the Story" 2:05 P.M. & 5:05 P.M.
- ABC/Oklahoma News
- OU Football
- Weather

**STEREO COUNTRY 105**

# FM NEWS

**New FM Station, Translator Grants**  
Selected translators only, see F-  
edial which is back in publication,  
for others

**AK Bethel 107.9 3000 h.v.; 31 m**  
**CA Avalon \*88.7 100 h.v.; 49 m, \$, g, Family**  
**Stations, Inc. [Santa Rosa]**  
**CA Fremont K265CV \*100.9 (KCLB 91.9/**  
**FL Century WZJR 105.1 3000 h.v.; 100 m**  
**FL New Smyrna Beach \*89.7 1000 h.v.; 58 m, g,**  
**Cornestone Com. Radio**  
**GA Byron \*90.5 71000 h.v.; 122 m, g, GA Radio**  
**Fellowship**  
**GA Statesboro \*90.3 3000 h.v.; 100 m, g, Bible**  
**Baptist Christian School [all Public R]**  
**HI Honolulu \*89.3 10000 h.v.; 379 m, Haw-/**  
**HI Kaneohe 104.3 66000 h.v.; 649 m, K. Radio**  
**HI Waimea 99.1 34000 h.v.; 953 m**  
**ID Challis K209AQ \*89.3 (KBSU 90.3 Boise)**  
**ID Coeur d'Alene K285DX \*104.9 (KRFA 91.7**  
**Moscow)**  
**ID New Meadows K288CZ \*93.5 (KBSU 90.3)**  
**ID Sandpoint 102.5 3000 h.v.; 54 m, Jis. Powers**  
**ID Stanley K292EK \*106.3 (KRFA \*91.7)**  
**of St. Francis**  
**IL Joliet WCFB \*88.7 330 h.v.; 39 m, College/**  
**KS Eureka 93.5 3000 h.v.; 100 m**  
**KS Salina 104.9 3000 h.v.; 100 m, United**  
**American Broadcasting**  
**KY Cave City 106.7 3000 h.v.; 100 m, S.W.**  
**Newberry**  
**MD Baltimore \*96.7 19 h.v.; 23 m, PCA**  
**Communications Group, to share time with**  
**WBYQ \*96.7 Baltimore**  
**W261CD 100.1 (WGRX 100.7 Westminster), on**  
**air from "World Trade Center in downtown**  
**Baltimore"**  
**MD Westport 92.7 3000 h.v.; 165 m, Ernest**  
**Santmyre**  
**MA Truro (North Cape Cod) 102.3 3000 h.v.; 100**  
**m, Primo Communications**  
**MA Northampton 106.3 3000 h.v.; 91 m, Cutter**  
**MI Hancock 98.7 47000 h.v.; 154 m, T. M.**  
**McNamara**  
**MN La Crescent K292EL 106.3 (WKBH-FM**  
**105.5 Holmen WI)**  
**MN Sleepy Eye 107.3 3000 h.v.; 100 m**  
**MS Greenwood WGNL 104.3 3000 h.v.; 98 m,**  
**Team Bcsts.**  
**MO Eldon KBMX 101.9 3000 h.v.; 100 m, Lake**  
**Bcsts. [Radio, Inc.]**  
**MO Macon 99.9 3000 h.v.; 52 m, K.L.T.M./**  
**MO Versailles 95.1 3000 h.v.; 100 m**  
**MT Kalspell 109.3 3000 h.v.; 47 m, KOFI, Inc.**  
**NV Panaca \*91.7 100 h.v.; 1044 m, NV Public**  
**Radio**  
**NJ Wayne WYSP-FM \*88.7 200 h.v.; 79 m, Wm.**  
**Peterson State College; WYSP-AM are the**  
**calls for a commercial station in Pageland SC.**  
**To interfere with WRRH \*88.7 Franklin**  
**Lakes NJ is WRRH still operating?**  
**NC Warrington 97.3 3000 h.v.; 100 m**  
**ND Wahpeton 107.1 3000 h.v.; 100 m, Guderian**  
**Bcsts. [100 m, Video Services Bcsts.]**  
**OH Grove City (Columbus) 101.1 3000 h.v./**  
**OR Altamont (Klamath Falls) 101.3 10000 h.v.;**  
**93.2 m, Pater Monroe [State Higher Ed. Bd.]**  
**OR Coos Bay KSBK \*88.5 2200 h.v.; 162 m, OR/**  
**OR La Grande 100.1 3000 h.v.; 144 m, Blue**  
**Mtn. Bcsts. [G. A. M. Communications**  
**PA Edinboro 97.9 3000 h.v.; 100 m, g,**  
**PA Philadelphia 105.9 1900 h.v.; 128 m**  
**SD Redfield 103.7 10000 h.v.; 142 m**  
**TX Brenham 94.1 3000 h.v.; 100 m**  
**TX Marshall KEEP 92.3 3000 h.v.; 100 m**  
**TX Pittsburg 96.9 3000 h.v.; 92 m**

**TX Tutia 104.9 3000 h.v.; 95 m**  
**UT Moab 96.7 3000 h.v.; 161 m [Falls ID]**  
**UT Ogden K208BL \*89.5 (KCLR 90.7 Twin/**  
**VA Charlottesville \*89.3 1600 h, 1300 v.; 359**  
**m, VA Tech. Foundation [v; 100 m**  
**VA Churchville (Buffalo Gap) 106.7 3000 h./**  
**VA Richmond WCVE-FM \*88.9 5200 h.v.; 78 m,**  
**\$, Central VA ETV Corp., paving the way for**  
**WRFK \*106.5 to go commercial**  
**WV Dunbar (Charleston) 94.5 3000 h.v.; 100 m**  
**PR Mayaguez WZAR-1 101.9 10 wvts, and I**  
**wonder if it will replace translator W296AE**  
**107.1 Mayaguez?**  
**VI Charlotte Amalie 96.1 2400 h.v.; 457 m,**  
**Bantam Bcsts. [Croix Wireless**  
**VI Christiansted 94.3 3000 h.v.; 233 m, St./**  
**VI Cruz Bay (18-20-59; 64-44-23) 92.3 50000**  
**h.v.; 363 m, David Condon**  
**BC Clearwater, frequency, power not announced,**  
**for a relay for CFJC Kamloops**  
**PQ La Malbaie 195.5 100 wvts, rebroadcasting**  
**CIHO 96.3 St. Hilairon PQ, with an m format**  
**SK La Loche 103.1 10, CFMI 101.1 New**  
**Westminster BC relay and local**

## Call Letters Assigned

**AL Atmore 104.1 WIZD "FM" (WIZD-FM; AM**  
**has new call)**  
**AR Ashdown 103.9 KMLA-FM (KMLA)**  
**AR Osceola 98.1 KMPZ (KWLN)**  
**CA Bakersfield 107.9 KUZZ-FM (KKXX), now k**  
**CA Carpinteria 101.7 KLIT-FM (KGFT); AM is**  
**in Meridian ID**  
**CA Colusa 96.5 KRCC (KWBF)**  
**CA Kerman 94.3 KTAQ**  
**CA McFarland 102.9 KXEM-FM**  
**CA Palo Colorado \*89.7 K209AR**  
**CA Sacramento 100.5 KOPT (KEBR)**  
**CA San Francisco 98.9 KHIT (KHIT-FM), rs,**  
**"pop hits and urban," "Gorilla"; sale to**  
**Pacific FM may soon go forward.**  
**CA Taft 103.9 KLVK (KTLM)**  
**CO Pueblo 107.1 KCSJ-FM (KUSN)**  
**CT Salisbury 98.1 WKZE-FM (AM is in Sharon**  
**CT); 1270 h.v. (154 m)**  
**FL Callaway 103.5 WWFG**  
**FL Fort Walton Beach 99.5 WKSM (WFTW-FM)**  
**GA Albany 96.3 WJIZ-FM (WJIZ)**  
**GA Statesboro 102.9 WUUF**  
**GA Swainsboro 98.3 WJAT-FM (WGKS)**  
**GA Thomasville 107.1 WLOR-FM (WHMJ)**  
**ID Emmett 101.7 KJHY (KKIC-AM and FM**  
**exchange calls; AM is in Meridian ID); mj,**  
**"PMN-new age"**  
**IL Granite City 106.5 WKBQ (KWK), still r,**  
**"Q.106.5" (strict)**  
**IL Pekin \*88.5 WBNH**  
**IN Huntington 102.9 (moving from 103.1)**  
**WOWO-FM (WIOE); ID with Fort Wayne, rt**  
**format, AM-FM simulcast, "except for a**  
**couple hours on Sunday mornings. Regular**  
**programming consists of a sort of loose top**  
**40 format with some oldies here and there**  
**during the day and talk shows at night,**  
**including the Larry King Show. This move**  
**was an effort to get back some of the listeners**  
**that this once ratings-leading AM station had**  
**lost to more popular FM stations in recent**  
**years. Both stations are owned by Price**  
**Communications."**  
**IA Atlantic 103.7 KOMJ (KJAN-FM)**  
**KY Burkesville 98.5 WKYR-FM (WKYI "FM")**  
**ME Bar Harbor 99.1 WPRG**  
**NE Brunswick 98.9 WCLZ-FM (WCLZ), rj, "new**

**Bruce F. Elving, Ph.D., Editor**  
**241 Anderson Road**  
**Esko MN 55733-9413**

age/ac daytime; jazz after 7 p. m.; "Z-99,  
Portland's Quality Rock"  
**MD Baltimore \*96.7 WHVY (sharing time with**  
**WBQY)**  
**MI Harbor Springs 103.9 WFGI**  
**MI Rockford \*91.9 WGRF (WFSJ)**  
**MN Duluth 94.9 KQDS-FM (KQDS), no "KQ"**  
**noID; now simulcast on AM-1490 (hits),**  
**now AM-FM simulcast**  
**MO Marshfield 104.9 KGBY (KTOZ-FM)**  
**MO Seligman 95.3 KJEM (KHHC)**  
**MT Billings 102.9 KCTR-FM (K00K), k**  
**103.7 K00K (K0H2)**  
**NE West Point 107.9 KWPN-FM**  
**NM Armijo 107.1 KMYI (KLOS)**  
**NY Babylon 102.3 WBAB-FM (WBAB; AM in**  
**Freeport NY now mainly simulcasts FM,**  
**except for a 4-hour morning block)**  
**NY Clifton Park 96.7 WVKZ-FM (WVKZ); AM is**  
**in Schenectady**  
**NY Jeffersonville \*90.5 WJFF**  
**NC Lexington 94.1 WWGL (WKOO)**  
**ND Grand Forks 94.7 KRRK "FM" (KNOX-FM)**  
**OK Edmond 97.7 KTNT "FM" (KKLR)**  
**OK Lawton \*89.3 KCCU**  
**PA Grantham \*90.7 WVMW**  
**PA Muncy 103.9 WHTO-FM (WHTO)**  
**PA Smethport 106.3 WDRM ["Warm-103"**  
**PA York 103.3 WARM-FM (WSBA "FM"), still/r**  
**RI Bristol \*88.3 WRBI**  
**RI Woonsocket 106.3 WVVX (WVNC)**  
**SC Hilton Head Island 106.3 WHHR-FM (WHHR)**  
**SC Marion 94.3 WWPQ (WVXS), s, "Power-94"**  
**SD Aberdeen 106.7 KGIM-FM**  
**TN Dickson 102.5 (from 102.3) WQZQ-FM**  
**(WQZQ), 50000 h.v.; 150 m (AM is in**  
**Lebanon TN)**  
**TN McKinnon 101.5 WTLW**  
**TN Murfreesboro 96.3 WRMX (WTMG), "W-Mix"**  
**(strict)**  
**TX Beaumont \*91.7 KTXB**  
**TX Hutto 92.1 KOJO (KRGT)**  
**TX Lubbock \*90.1 KCEI**  
**UT Salt Lake City 93.3 KLZX (KLTQ-FM)**  
**WA Everett \*90.7 KSER**  
**WV Miami (to ID with Charleston) 107.3 WLZT**  
**(WVCM), rm format**  
**WI Holmen 105.5 WKBH-FM (WKBH)**  
**PQ Gatineau 104.1 CKTF (city of license change**  
**from Hull PQ)**

## Facilities Changes Granted

**AL Auburn WEGL \*91.1 3000 h.v.; 65 m**  
**AL Decatur WDRM 102.1 2900 m (100000 h.v)**  
**AL Mobile WKRK-FM 99.9 535 m (100000 h.v)**  
**AZ Globe KGRX 100.3 25000 h.v.; 920 m**  
**AR Jonesboro KJBR 101.9 323 m (100000 h.v)**  
**AR Mammoth Springs KAMS 95.1 100000 h.v.**  
**198 m [h.v.; 910 m]**  
**CA Carmelina Bay HZT 103.7 6000/**  
**CA Rosamond KAVC 105.5 2900 h.v.; 94 m**  
**CA San Fernando KGIL-FM 94.3 26 m (3000**  
**h.v)**  
**CO Pueblo KATM-FM 100.7 13500 h.v.; 626 m**  
**FL Englewood WSEB \*91.3 6200 h.v., d-a (88 m)**  
**FL Lakeland WWOL \*91.9 1000 vertical only**  
**(48 m)**  
**FL St. Petersburg WFTI \*91.7 86 m (3000 h.v)**  
**WKS 101.5 414 m (100000 h.v., reduces**  
**coverage)**  
**FL Tampa WFLZ 93.3 100000 h.v.; 414 m**  
**GA Baxley WBYZ 94.5 311 m (100000 h.v)**  
**HI Honolulu KHHR 98.5 -90 m (100000 h.v)**  
**IL Aurora WKCF-FM 95.9 2900 h.v.; 103 m**  
**IL Chicago WYD-C (Loop area) \*88.7 (from 90.5)**  
**8 wvts h, 22 m, "request for replacement CP**  
**for move to 90.5 denied"; assumed to be**  
**staying on 88.7, and tolerating interference**

## FCC-FM

from WLWU \*88.7 north of Chicago's Loop  
**IN Danville WGR-TM 107.1 1100 h.v. (169 m)**  
**IN Seymour WJCD-FM 93.7 50000 h.v.; 150 m**  
**IA Ankeny-Des Moines KJYJ 92.5 (from 106.3)**  
**41000 h.v.; 165 m**  
**IA Sioux City KGLI 95.5 300 m (100000 h.v)**  
**KS Wichita KLZS 97.9 303 m (100000 h.v)**  
**KY Central City WKYA 101.9 302 m (100000**  
**h.v)**  
**KY Hodgenville WKMO 106.3 2000 h.v. (122 m)**  
**KY Pikeville WJSO \*90.1 3800 h.v.; 139 m**  
**LA New Orleans WWOZ \*90.7 4000 h.v.; 155 m**  
**LA New Roads KQXL 106.5 (from 106.3)**  
**50000 h.v.; 148 m**  
**MD Baltimore MYST-FM 92.3 37000 h.v.; 174 m,**  
**d-a (directional antenna)**  
**MO Havre de Grace WHDG 103.7 50000 h.v.**  
**46000 v, 104 m, d-a**  
**MA Worcester WICN \*90.5 12600 h.v.; 89 m, d-a**  
**MI St. Ignace WMKC 102.9 316 m (100000 h.v)**  
**MI Pinnington WLF5 100.9 1300 h.v.; 151 m**  
**MI Traverse City WLDL 101.9 100000 h.v.; 134 m**  
**MN Detroit Lakes KDDL 95.1 (from 95.3)**  
**100000 h.v.; 296 m (90.0 h.v)**  
**MN Moorhead KVXQ-FM 99.9 315 m (100-/**  
**MN Virginia W221AT 92.1 (from W261BW**  
**100.1), "These are temporary calls given us**  
**by the FCC; this translator gets out very well,**  
**just like 100.1 did, even though we are using**  
**an antenna cut for 100.1"**  
**MS Magee WJMJ 107.5 299 m (100000 h.v.)**  
**transmitter 8 km S. of Palahatchie MS**  
**MO Cape Girardeau KGMO 100.7 302 m**  
**(100000 h.v)**  
**MO West Plains KSPQ 93.9 100000 h.v.; 198 m**  
**MO Willow Springs KUKU-FM 100.3 50000 h.v.;**  
**150 m, changes town name from "Willow," p.**  
**159 FM Atlas, 11th edition**  
**NE Lincoln KHAT-FM 106.3 2400 h.v.; 113 m**  
**NM Gallup KONM 93.7 100000 h.v.; 382 m**  
**NM Las Vegas KLVF 100.7 (from 100.9) 10000**  
**h.v.; 23 m**  
**NC Elkin WIFM 100.9 770 h.v.; 195 m, adds**  
**vertical 1000 h.v.; 63 m, Class C2**  
**NC Manteo WVOD 99.1 (from 99.3) 50-/**  
**NC Morehead City WRHT 96.3 (from 95.9)**  
**50000 h.v.; 150 m, Class C2**  
**NC Shallotte WPGO 106.3 99 m (3000 h.v.)**  
**OH Cleveland Heights WRCC 92.3 41000 h.v.;**  
**167 m, d-a**  
**OH Dayton WDRP \*89.5 6000 h.v.; 64 m;**  
**sharetime WDRP apparently unaffected**  
**OH Springfield WECC 100.7 50000 h.v.; 143 m**  
**OK Durant KLBC 107.1 2000 h.v.; 108 m**  
**OR Portland KGOB 92.3 387 m (100000 h.v)**  
**PA Central City WYSN 101.7 700 h.v.; 227 m**  
**PA Erie WJET 102.3 800 h.v.; 187 m**  
**PA Kane WLM1 103.9 88 m (3000 h.v)**  
**PA Hershey WRKZ 106.7 14000 h.v.; 283 m**  
**SC St. George WKQB 107.5 300 m (100000 h.v)**  
**TX Harker Heights KIXS 105.5 2250 h.v. (116 m)**  
**TX Lake Jackson KZFX 107.9 94500 h.v.; 601 m**  
**TX Midland KNFM 92.3 300 m (100000 h.v)**  
**TX Odessa KKKK 99.1 302 m (100000 h.v)**  
**TX Waco WACD-FM 99.9 339 m (100000 h.v)**  
**TX Whitehouse KEYP-FM 107.3 (from 99.3)**  
**50000 h.v.; 178 m, Class C2**  
**UT Roosevelt KBWL 98.5 2650 h.v.; 565 m**  
**UT Windsor WYPR \*89.5 1800 h.v. (658 m)**  
**VA Yorktown WYCS \*91.5 19000 h (dropping**  
**vertical), 48 m**  
**WI La Crosse W249-97.7 (from W292AB 106.3;**  
**see also La Cressent MN, above, "New")**  
**WI Sauk City WMLI 96.3 (from 96.7) 5600 h.v.;**  
**211 m, Class B1**  
**WI Waupun WGGQ 99.3 2500 h.v.; 110 m**  
**WY Powell 104.1 (no calls; was KNWY), changes**  
**to 587 m (100000 h.v.); grant to MNC5**  
**Broadcast, Inc.**  
**PR Carolina WVDZ 107.7 50000 h (dropping**  
**vertical), 499 m**  
**AB Edmonton CIRK 97.3 100000 h, at a new,**  
**unannounced height, and "change transmitter**  
**site to enhance station's coverage of Edmon-**  
**ton"**

## WHSK Students Confused about c Format

**PO Oka 101.7 11 wvts h, broadcasting in**  
**Mohawk (55%), English (40%) and French**  
**(5%). On air in \$; call letters not assigned,**  
**"Kanehsatake Radio"**  
**Stereo**  
**AL Florence WBHL \*91.3, to be g, "Heard**  
**testing Mar. 2nd and 14th. Strong 44 dB**  
**signal. Gave full ID before sign off."**  
**MO St. Louis KDXH \*88.1, and no nonID**

**Format Changes**  
Formats are the same as in the "FM Atlas"

**AL Fort Mitchell WFGH 98.3, new station on air**  
**with kr (country and rock mixed), Columbus**  
**GA-Phenix City AL market**  
**AL Geneva WRJM 93.5 m, and "Classic 93"**  
**AL Roanoke WELR-FM 102.3 k(ountry)**  
**CA Prunedale KCLM \*89.7 gr, "now simulcasts**  
**with KCLB 91.9 Santa Rosa"**  
**CA Shafter KKBH 97.7 r, "B-Rock 97.7"**  
**FL Daytona Beach-Orlando WORZ 101.9 s,**  
**"102-Jams"**  
**GA Atlanta WFRG \*89.3 ej, "would be more**  
**accurate than jf, which I reported a few**  
**months ago"**  
**GA Griffin WKEU-FM 97.7 k**  
**HI Wailuku KKUA \*90.7 c, \$ assumed, on air**  
**IL Chicago WCRX \*88.1 s, "urban/dance"; "The**  
**Source"**  
**WOUI \*88.9 rp (when it operates)**  
**WKKC \*89.3 sr, "rhythm and blues/contemporary"**  
**(Or is the next one really on 90.5? -**  
**WGYC \*88.7 sr, "urban contemporary"**  
**WBEZ \*91.5 tj, news, talk, jazz, etc.**  
**IL Downers Grove WDGC \*88.3 r, "DGC"**  
**IL Edwardsville WSEI \*88.7 jn**  
**IL Elmhurst WRSE \*88.7 p, [educational]**  
**IL Glenview WMMW \*88.5 cr, "classical"**  
**IN Kokomo WHSK \*88.9 jr, mono, with one**  
**hour of classical music at noon. "The d-jt talk**  
**through the opening of the classical selections,**  
**and they are confused about what they are**  
**playing."**  
**KS Kansas City KUOL 98.1 r, "AC-oldies"**  
**MN Ada KRJB 106.3 kr (one hour daily rock**  
**show; otherwise country and polkas), \$,**  
**"B-106" (not strict) ["JUY-FM"]**  
**OH Cleveland Heights WRCC 92.3 41000 h.v.;**  
**167 m, d-a**  
**OH Dayton WDRP \*89.5 6000 h.v.; 64 m;**  
**sharetime WDRP apparently unaffected**  
**OH Springfield WECC 100.7 50000 h.v.; 143 m**  
**OK Durant KLBC 107.1 2000 h.v.; 108 m**  
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**PA Hershey WRKZ 106.7 14000 h.v.; 283 m**  
**SC St. George WKQB 107.5 300 m (100000 h.v)**  
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**AB Edmonton CIRK 97.3 100000 h, at a new,**  
**unannounced height, and "change transmitter**  
**site to enhance station's coverage of Edmon-**  
**ton"**

## May, 1988

**MN Fergus Falls KBRF-FM 103.3 FM-103 (from**  
**"B-103") [no "K-Dog"]**  
**MN North Mankato KDOG 96.7 no nonID; /**  
**MS Kosciusko WBKZ 105.1 K-105**  
**MO Florissant-St. Louis KLTH 97.1 K-Lite and**  
**similar versions: Lite FM-97, K-Lite's Breeze-**  
**97**  
**NH Rochester WKOS 96.7 KOST. "They use the**  
**WKOS call letters, but you really have to**  
**listen closely. The announcers say K-O-S-T;**  
**they also have jingles that spell out KOST."**  
**NJ Trenton WKWX 101.5 Kicks 101% (from**  
**"Meggation")**  
**NM Los Alamos KKBK 98.5 K-Bear, still ID with**  
**Albuquerque, but on half hour with Espanola-**  
**Santa Fe-Albuquerque**  
**WY Cody KTAG 97.9 The Rock (not "Tag 99")**  
**VI Christiansted WJKC 95.1 Isle-95**  
**WVIO 99.5 The All-New Caribbean O**

**Multi-City IDs In Use**  
**CA Salinas KDOM-FM 102.5 with Santa Cruz**  
**"and the Monterey Bay"; retains 67 kHz TM**  
**CA Columbus WYFK \*89.5 adds Phenix City AL**  
**NC Asheville WYSF 99.9 adds Hendersonville;**  
**now saying Asheville-Hendersonville-Green-**  
**ville (SC) Spartanburg (SC)**  
**NC Hendersonville WMY1 102.5 adds Greenville**  
**(SC) Spartanburg (SC)-Asheville**  
**OR Lincoln City KCRF 96.7 with Newport**  
**OR Portland KXSN-FM 97.1 with Vancouver**  
**WA, "Kissin' FM" (strict), r**  
**SC Cheraw WPOZ 103.1 adds Florence**

**On Air and DJ Ready (selected)**  
**IA Eldridge K274AA \*102.7 (KUNI relay)**  
**IA Mason City KUNY \*91.5 vertical only, and**  
**"I received it on 3-11-88." Carries program-**  
**ming of KUNI \*90.9 Cedar Falls, including**  
**Michael Feldman's 'Whad'ya Know?' 6 to 7**  
**p. m. Sundays**  
**MN Virginia WCDK 99.9 (from 107.1), ID with**  
**Duluth-Superior (WI), "K-100" (strict), k**  
**OR Hood River K122CK 102.3, but then-**  
**headed on to Goldendale WA and did not**  
**hear KVIS 102.3. I would guess it's not**  
**going on the air"**

**Off Air or Not Yet On**  
**CA Corning KCEZ 100.7**  
**CA Fort Bragg K5AY 97.7, but expected to be**  
**on the air this month (April)**  
**ID Payette KORIF-FM 100.3**  
**ID Soda Springs KFIS 100.1**  
**IN Gaston WDH5 \*90.9 (moving from 91.1).**  
**"Hasn't been on air all year."**  
**OR Baker KCM6 104.7, but expected on in**  
**mid-May, and cover a region from John Day**  
**OR to Walla Walla WA, and the first station to**  
**give primary service to both Baker and La**  
**Grande. Staff expected to be six to 10**  
**persons, and a 24-hour-day schedule is**  
**envisaged. A music format hasn't been**  
**decided on, and no stereo plans have been**  
**announced. "We are in the process of making**  
**a decision. It's likely to be a mix of things."**  
**OR McMinnville K224BW \*92.7 not on, "but**  
**coming"**  
**OR The Dalles K224X \*92.7 not on, "but coming"**  
**WI Sparta K232AZ \*94.3, a KLSX \*91.7**  
**Rochester MN translator. "I am new here at**  
**Minnesota Public Radio, and just yesterday I**  
**asked the same question. When I find out**  
**their status, I will let you know"**

**Deletions**  
**CA Santa Rosa KCRN \*91.1, "denied request for**  
**extension of time (second), c-p forfeited and**  
**cancelled"**  
**MO Thayer KLHO 99.3, "application denied for**  
**ext. of time, 2nd request. Call letters are**  
**herby forfeited and cancelled"**  
**SD Milbank KBCEV 104.3. FCC announces**  
**window for applications for this channel until**  
**4-29-88**



**FM mistakes, FM Atlas, 11th Edition, and April VUD column**

- CA Los Gatos p. 76 FM Atlas add city dot, lower right hand corner. Other Los Gatos map reference has call letters wrong. For 95.3 are KATD, not "KRVE"
- CA Saratoga K261AR 100.1. Delete, p. 129 (replaced by K261BW 100.1 Los Gatos)
- IA Keokuk KOKX-FM is 95.3, not 102.3, p. 55
- LA Houma K285DA 104.9 KAJN 102.9, not on p. 131
- MI Gulliver WT10-FM 94.7. AM is in Manistique (not "Manistee," VUD, p. 13, col. 2.
- TN Chattanooga 106.5 WSKZ (not "WZKZ"), FM Atlas, p. 171

**AM Happenings Most Likely Caused by FM**

- GA Griffin WGRI, license revoked by FCC. "Silent since a reported fire in 1985."
  - NY Freeport WGBB 1240, replaced by W8AB-AM (see "Calls" above, under Babylon NY). It "died in January. . . Due to its close proximity to New York city and its small coverage, its ratings were low."
  - NY Patchogue WALK AM never mentioned during the air (except at hourly ID intervals), only its simulcast FM frequency.
  - TN Lingsport WPRO 870 remains at 5 kw daytime, as "it can't afford to go to 10 kw"
- The National Association of Broadcasters is asking for proposals for research studies which deal with the degree to which different types of interference to AM reception affect "the acceptability of these signals to the listening public. . . dramatic changes in the listening habits of the public have occurred since the Commission's AM allocation policies and protection ratio specifications were first established. . . Presumably, the public's expectations of signal quality have changed over time with the greater availability of high quality audio programming from a number of sources."

**See Also April VUD For:**

- IL Mount Carmel WYER 94.9 95-Lite-Rock nonID, Nollman, p. 9
- NY Elmira WLVY 94.3 94-Rock, Coniglio, p. 12
- NY Lowville WLLG 99.3 m format (and S), Nieman, p. 10
- NY Manlius WAQX-FM 95.7 still "95-X," even though moving closer to "96," Coniglio, p. 12
- NY Wellsville WJQZ 93.5 Magic-93, Coniglio, p. 11
- PA Harrisburg WHIT-FM 99.3 99-Hit-FM nonID, Nieman, p. 10
- VT Springfield WMKS 93.5 Kiss-93.5 nonID, Nollman, p. 9

**Readers' Reports**

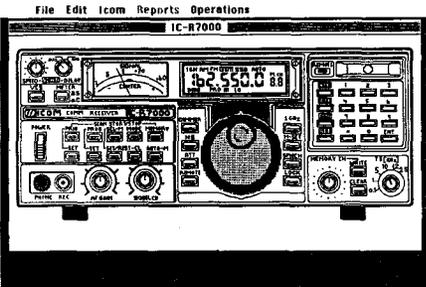
Water Patton adds this, which is continued from his report of March on the fate of community radio in Canada. His report was lost in the computer during the month when my computer was down. The computer has since been replaced with a new one, which cost less than repairing the old computer; it is now plugged into a surge suppressor, so hopefully any a-c power surges will not blow out its power supply. "The CRTX has been very strict in requiring that community stations adhere to their promise of performance. The Rimouski and Riviere du Loup stations fell victim to the policy. With the reduction of funding of community stations by the province of Quebec others may follow."

Alain Pepin writes, and yes, I appreciated the French-English dictionary in the VUD. On SCA, he noticed sports play-by-play on WGF6 99.9 Plattsburgh NY. It was a Peru Indians basketball game, as carried on WEAV 960, "but

without the ads. We'll be back in 30 seconds", then just the stuff the mike picks up. There could be interesting 'off-air' comments on that SCA if they don't figure anybody is listening!"

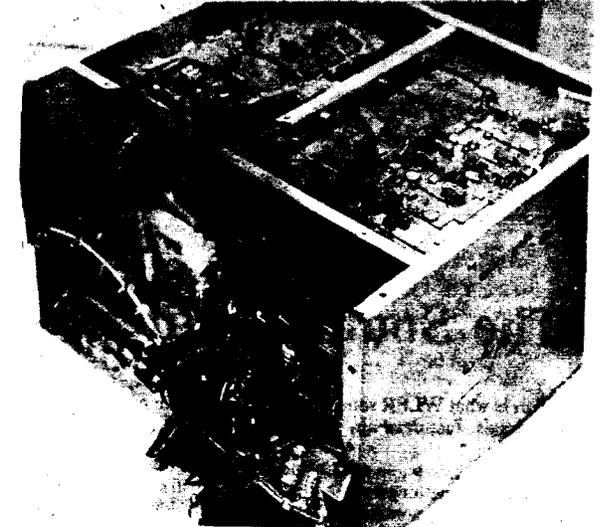
Greg Coniglio DXes in mono, but now many stereo receivers have a blend circuit that gives S indication but no (or poor) separation until the signal builds. Makes for excellent DXing. Such a tuner is the new Magnum FT-11, which I am returning because of its poor selectivity. It has three pushbuttons, in the \$300-range, and Magnum tells me they are thinking of a modification to make it more selective. Greg writes that the only station in his area without stereo is WBNY #91.3 Buffalo, and "I have heard rumors that they will go stereo."

Now that I've finished information meant for March's VUD, here's what is new on May - Two readers wrote in with late news that SC ETV won the bid for '89.1 in Aiken SC. T. K. Wood says their transmitter will be on the WJBF-TV (6) antenna in Beech Island SC, with their radiations displayed on the WJBF antenna. Also at that site is WACG #90.7 Augusta. FCC data show it as having 10000 h.v.; 378 m, and it will simulcast SC's educational network, with its talking book for the blind at 67 kHz SCS. Color it \$, c, j T. How it will achieve vertical polarity, using the WJBF antenna is hard to imagine, unless WJBF itself uses both polarizations. Walter Garrett sent a story that was in the Augusta "Chronicle." Wood reports that in Portland OR KGW-FM was on with 250 watts, and should have been listed in the 1951 column, 100.3 (VUD May, 1987, p. 29). Already on the air is a new translator, unreported above (but in FMedia), WZ96AS 107.1, carrying WYFA 100.9 Waynesboro. It covers most of the Augusta area with two directional antennae, from near the WMTZ tower site. No sign yet of the W296AJ #107.1 North Augusta SC, a WMHK relay. WRXR 96.3 Aiken is moving its studio to Augusta. "Their AM 1300 outlet is irregular at best. It's low powered and irregular schedule suggest its days are numbered." There's an "outstanding article on FM translators in the March 28, 1988, issue of Broadcasting." In response to comments about AFRTS stations on FM here are my additional comments (see April VUD, p. 15, col. 3, Clark): I suspect that these stations are not licensed but rather 'regulated' with the FCC. They are likely free to move about and adjust antenna patterns/power as seen fit as long as harmful interference is avoided. As an aside, does WFGG #88.3 Fort Gordon GA appear in any of the federal lists? They might fall under the same category." (I checked, and WFGG does not appear on the NTIS list, which is strange-b.e.) He also sent an article on possible computer applications for DX, with government agencies interfacing Icom R-7000s to the



MacIntosh computer. "A Mac screen display has been designed for the remote control scanning system by Systems and Software International. The system is used by civilian, military and intelligence agencies to remotely monitor radio receivers and transmitters from the Mac screen display." So remote, or automated DX might be possible, but I'd be afraid of DXing near a computer because of the r-f energy that computers generate.

James Lyons, Bound Brook NJ, sent word that WLFR #91.7 Pomona NJ (it is still "Lake Fred Radio") is silent, following a transmitter fire. If it is determined that a new transmitter is needed, that would be a \$10,000 expense. Here's a picture of the burned-out transmitter. "WLFR is Atlantic City and Cape May



county's only progressive station. . . Hopefully, WLFR will resume broadcasting before the end of the semester."

Philip Michael Martin, No. 1 Market Airchecks, PO Box 568, E. Hanover NJ 07936, sent his newest catalog. Get a copy, and you'll find items like the best of Howard Stern tapes at \$5. He's also interested in getting airchecks from where you might be. James Laccetti in Doraville GA said last year was a good one for skip, getting MT and Jamaica. He's heard the new WFGH 98.3 Fort Mitchell AL, and I wrote back to him asking if WFGH is \$, and if it IDs with Columbus-Phenix City, Alain Pepin says WACS 103.5 Cobleskill NY now "Wax-103" and giving ID with Schenectady. He has yet to hear CKTF 104.1 Gattineau PQ, now on the air in \$, having changed city of licence from Hull. "CHAI 101.9 Chateaugay has English language country program Sunday from 3 p. m."

Nick Lombardi, "As of Monday, March 28, I had not yet received the March FMedia! I wonder if you are running late this month, or if my copy might have been lost in the mail. I hope the new Atlas is ready soon." Well, production has resumed on the newsletter (subscribing rate \$18/year from P. O. Box 24, Adolph MN 55701), and the Atlas is now ready. Order that at the same address. Eleventh edition, \$10.50 with postage, now 176 pages. Robert Baker has his new Atlas: "New edition very good. I tried to get the FM translator in Fort Dodge (K276BE 103.1) but couldn't. Must be off the air (I am 26 km away with Carver receiver and 10-element antenna)." FCC lists it as a construction permit to carry KJJG 104.9 Spencer. You might try calling or writing KJJG about their plans regarding that translator.

Ted Fleischaker: "The Atlas as always is another triumph and I wonder from year to year how you can top yourself, but it always seems to happen. Of course, I take GREAT exception to the one change you have made, while complimenting all others—the exception is that since the U. S. did away with the metric board and since few people know what a kilometer is (.62 mile, of course!) and few certainly know what exactly constitutes a meter (39.37 inches, certainly!) then I resent and find great fault with your stating that the old system is dead and that it won't return [in the "Atlas"]... The reason I am upset is really that I find the Atlas is a super travel book, as intended, and since the U. S. has almost no metric road signs, that means when one starts to get near Chicago and sees a sign that says 'Chicago 76' that means it's 76 miles away, to then refer to the Atlas and see what stations have ranges to get them to that point means converting the kilometers in the book to miles or vice versa—confusing and silly, since the U. S. isn't converting right now. I am man enough to admit that it will happen some day, but 'til it does, how about a second coverage column for us die-hards? and, no, as you quote the other reader stating, it's not wimping out, it's staying with what the rest of the country wants."

"Also, I tend to agree on your comments on AM, but there will always be some AM. I guess it's personal, and hope you will call and argue with me on it, as I have a new job in AM radio. I have my own show on WHAS-840 (Louisville KY). Since we have 50,000 watts and a clear channel I trust you get us from 10 p. m. to 1 a. m. Friday nights (Eastern time) with a call-in show. We even do WATS (800/444-8484) and we discuss most things and have do call-in votes, so maybe I'll mention the book and ask if people think we should try metric and see what the total is! At any rate, with the Louisville ratings putting WHAS as No. 1 with a 17.6 share and the only close thing being WAMZ, our sister co-owned FM, I don't think AM is dead—it just has to put out the signal and then the money to be a service, and not just a juke box. Too many stations feel they can play a satellite feed, plug into some out-of-town DJ and then go as a local station, and people are giving up. They are heading to FM for fidelity, but mostly because that's where the innovative programmes are. If FMs were to go all satellite and all automation (as they did in the early days when most all FMs were automated and were mostly easy listening and classical) I dare say the audience would shift again. In other words, I don't think that the loss of AM audience is entirely credited to FM, any more than the loss of AM buyers of LPs can be credited to CDs. Sure people buy CDs more now, but not because they don't want an LP, but because the record firms don't print LPs any more—just a CD and cassette. You can't buy what's not out there! You can't listen to a product that's not on AM if it's not there. Does this make any sense?" WTFDAers will remember Ted as host of the club convention a few years ago. He and the Louisville gang plan to host the IRCA convention in July.

Eric Fader tries to clarify me about formats. "The satellite-delivered music service of light jazz, soft pop, and instrumentals is known as 'The Wave'. The format is sometimes called 'New age', as in 'music for a new age'. 'The Wave' should never be called, or confused with, 'new wave', which is progressive rock. I thought we cleared this up!" His rule is that a new-age station is mr, jm, mj or mjr, but "if it's New Wave, it can only be 'p'. The twin should never meet!"

John Ebeling sent an "AM Happening Caused by FM." WCCO AM Minneapolis getting broadcast rights for the MN Vikings for the next three years, wresting them from KSTP-FM 94.5. WCCO figures showed listening had declined in the three years the games had been on FM, compared to when they had been on WCCO AM. WLTE 102.9 will carry Vikings games at times when WCCO has to also carry the MN Twins. Gus Mancuso said WFVA-FM 101.5 Fredricksburg VA now on with higher power (30000 h, 29000 v, 118 m). "Last semblance of an open frequency in the DC-Baltimore area. Re dial history: WPGC-FM 95.5 should be listed in 1958 and 1961 column. Footnotes not adequately explain things. Is WUST-FM same as WJMD? [I think so: 103.1 was WCCO-FM Bethesda 1950-53—b.e.] Did WINX AM sell FM to WTOP? [I doubt it—b.e.] Did WEAM-FM become WUST-FM? No, WEAM-FM was listed as an off-air c-p, and probably never operated."

Not an unfriendly publication at all, *Broadcaster* came to me, a complimentary issue, with a note from Canada post saying their mail to me was burned in an Oct. 17 fire in a Toronto postal depot, with arson suspected. You can subscribe to that monthly Canadian magazine at \$23 U. S. from 7 Labatt Ave., Toronto ON M5A 3P2 CANADA.

Ralph Strobel is again teaching music appreciation at Ball State. "I asked my class of 45 students how many sometimes listen to the AM radio band. Four hands went up this time—all male. This is the last year Ball State will be on the quarter system. Next September semesters start." He sent an article on Emmis Broadcasting, buying five NBC stations, and having started in IN, with the first station being WENS 97.1 Shelbyville in 1981, moving its studios to Indianapolis. Another item was about "Decency in Broadcasting" keeping up the attack against the *Bob and Tom Show* on WFBO 94.7. It placed an ad claiming the show had repetitive use of material dwelling on sexual activities and 6,429 other items that were found to be "objectionable," and went on to call the FCC to "protect the children and citizens of Indiana from persons who profit from talking dirty on the radio!"

Bill Burrows, Gloucester City NJ, sent a tape showing multipath-affected reception of WSNJ 107.7 Bridgeton NJ. He's outside their primary, trying to hear a signal that is horizontally-polarized (in a mixed polarized world!), and gives these reasons why AM will always be around: 1) No FM news-talk stations; 2) AM has longer range—at least for the clear channel stations; 3) better local sports, news coverage on AM; 4) AM DX more of a challenge than FM. FM skip is fairly rare; takes a good system for tropo. "AM and FM both have their places. Don't hammer away at AM. I can always get WNBC AM, for example, in the Philadelphia area," but no NY FM normally. New York's WFAN 1050 "used to be a decent station. [Their going to sports-talk] is the kind of thing that's killing AM." He thinks the FM Atlas is a "well-written book."

Greg Hardison: "In reply to Tom Kneittel's complaints about 'getting up in the middle of the night' (March VUD, p. 19): I suggest that Tom talk his publisher into showing enough interest in some free publicity, to send him to CA to join us in the studio for next year's Ray Briem Special, tentatively scheduled for Saturday morning, Jan. 7, 1989. We would be more than happy to have him join us at the mike, for the entire length of the program. . . Thank you, Bruce, for joining us that morning. . . Keep up the outstanding flow of information, and we'll talk again soon."

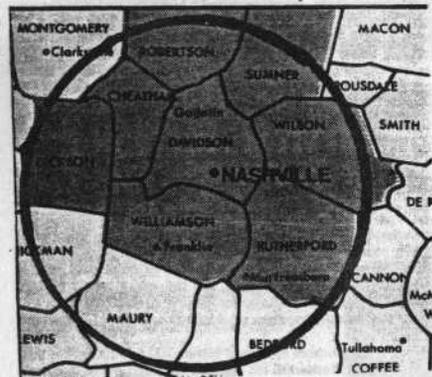
One of the applicants for Grand Marais 100.5 is asking the MN Dept. of Natural Resources for approval to build a 190-m tower on Lima Mountain, north of town. Applicant is Four Seasons Communications, probably hoping to get into Thunder Bay ON. Alain Pepin said CKOI 96.9 Verdun got its 307000 power because of a clerical error. It should have been 37 kw, but since the error was made, they decided to go ahead with the more power. CIEL Longueuil 98.5 is on a new tower, 100000 h.v.; 195 m. Eugene Cooper sent an article from the *Washington Post*, "Dialing For Dollars on AM Radio," mentioning ways the "commercial broadcasting pioneer is trying to find new ways to fight FM." Discussed are WFAN NY with its sports, full service stations like WMAL Washington, and some formats that failed: WHRS Winchester KY had an all-horse format but it dropped it for beautiful music. KPAL near Little Rock AR has tried children's programs, and KRNV Lexington NE has fame as a farm station.

Eric Buenaman corrects on "AM Happenings." IL Chicago, "There are still two AM music holdouts there—WLS 890 rt (still 60% music) and WLUP 1000, rp (classic rock)." [But as you'll see below, under "Sirvoy," there could be format changes at "The Loop"—b.e.] "AM changes most likely caused by programmer confusion: MO St. Louis KXOK 630 to all talk. KXOK has changed format five times since 1979. From CHR to ad con, then ad con to oldies. Oldies to talk (ABC/NBC), talk to oldies/CHR

mix, then the latest change, to Sun Network talk! Fortunately, KXOK and KLTH (97.1 Florissant MO) are up for sale. KXOK's asking price is \$1,000,000. KLTH's price "about \$4,000,000." [I can recall DXing a KXOK-FM 93.7 St. Louis, in the '50s, with a transit-radio format--b.e.]

"In the January VUD, Robert Grant presented a lot of inaccurate facts concerning the 108-132 as MF-FM 'dial settings'. I gave a very good reason for this plan not to be implemented. A majority of American radio listeners have at least heard of the existence of the VHF aviation band. If MF-FM is to be in place, the present 530-1700 numbers should be used. If 108-132 were used, the FCC would be flooded with complaints from the Federal Aviation Administration and members of the Air Line Pilots Association, as well as licensed pilots. About NRSC AM: I've heard a lot of comments about NRSC AM from radio engineers, and practically all of them are favorable. About AM stereo: The FCC's 'hands-off' policy is wrong. I feel that the FCC should fight Leonard Kahn and go with C-Quam as the de facto standard, as many radio manufacturers and AM stations have gone with. I feel that AM has a fighting chance going into the next decade. Here's my prediction: AM's decline with the implementation of the NRSC pre-emphasis curve and better radios around the corner, will level off, most likely by 1991. By 1997, when Dr. Elving predicts 'total FM saturation', that is, 100% FM listenership, the FM numbers should most realistically be as low as 55%, but no higher than what it is now, about 75%. I feel that AM radio is worth saving, even if it has to include reallocating the 120 and 90 meter shortwave bands. On the other hand, if AM was eliminated, as Robert Grant suggested, there would be a new threat--the International SWBC bands. The time is now to save AM radio. Write the FCC today. And, Dr. Elving, thanks for the comment that my pro-AM comments 'keep the debate lively'."

Ned Horton, station manager WWRB 100.1, "Rebel 100," sent a coverage map, giving its location as Brentwood TN, in the northern part of Williamson County. "As with any FM signal, terrain factors can affect the strength in any given area. The WWRB signal has extraordinary strength for a Class A station. The signal is very strong, clear and loud!"



James J. Nahirniak "heard a wild, unsubstantiated rumor that a Detroit FM station might switch to a country music format," and he feels that country listenership is so low in that market one of the existing k stations would have to change format. "W-4 (106.7) could be vulnerable to such a plan. They are music-oriented, with little emphasis on personalities. Plus, former Detroit morning country personality Deano Day has recently been let go from WUSN Chicago."

Ed Janusz, Bricktown NJ, sent a bandscan. He likes AM, and lives in NJ, where he can follow Boston Red Sox on WTIC 1080 Hartford CT.

Dr. Ulrich Onken, Mishawaka IN, has not been able to tune in the two listed WBMX 102.7 Oak Park IL translators on 98.3 in South Bend, still listed as c-os. He comments on the FM performance of two Sony receivers with shortwaves for this column: "The ICF-2002 performs reasonably on FM, though adjacent channel selectivity is insufficient and overloading occurs on some occasions...I was hoping to achieve some improvement when buying the ICF-2010, which tunes in 50 kHz steps. Though this is excellent on shortwave, it is a 'dog' on FM, as Ian McFarland of Radio Canada International put it. Overloading is

much more a problem than it is with the ICF-2002, making it virtually impossible to listen to weak DX signals when you live a few km away from the local FM transmitters. One may ask why Sony hasn't dropped the AIR band (which is useless to most listeners) and added a tuned RF stage for FM instead. As far as I can see (Sony has refused to sell me a circuit diagram) there are no tuned circuits in the FM front end, which explains the overloading and bad image rejection. Selectivity of the ICF-2010 is not better than with the ICF-2002, but the 50 kHz (rather than 100 kHz tuning in the other set) increments allow 'off-tuning' to reduce adjacent channel interference. The ceramic filter in the FM IF stage is easily accessible and could be replaced with a better filter. A recommendable FM tuner is the Kenwood KT-3300D, which replaces the KT-1100. I use this set in Germany and wrote a test report for REFLEXION. Selectivity is excellent, sensitivity very good and no overloading could be observed. The only drawbacks for DXers are the tuning increments of 50 kHz (which is too wide in Europe but might be appropriate for North America) and the muting activated when the tuning knob is moved."

Keith Pugh has heard an unidentified station in a WNW direction from New Hope AL on \*88.3, testing with \$, once with an unmodulated signal and once with rock music. He's heard WRJM 93.5 Geneva AL, now with an m format. Has WRJM, under its new call letters, embraced stereo? He's rejoined the WTFDA and looks forward to the new Atlas. Al Grover of Orlando sent an item about the reading service from Tampa going over to the Orlando market, via WMFE-FM \*90.7. Trouble is, they'll have to dump either paging or foreground music, and "they're not too happy about that," as the folks at Tampa's reading service tell me.

DXer Ed Sirovy sent clippings about the "beautiful music" team of WLOO 100.3 Chicago and WCZE 820 (former WAIT) having an in-house dispute. Turmoil could lead to more up-tempo programming at W-100, Chicago's last b formatted station. WLUP-AM 1000 and FM 97.9 are for sale, and the expectation is they'll go to different buyers. "WCZE's 5 kw signal carried well from its tall daylight omnidirectional tower beyond the metropolitan area, but the four tower (one of which fell over) night pattern misses 1/3 of the city and suburban market due to poor location (it passes to the north of the city with most of the suburbs to the rear)."

From the Netherlands, Peter Woldering has just joined the WTFDA, "because I'm interested in the American situation of VHF-FM broadcasting." He lives 10 km from the German border and is a member of the ADDX (Germany) radio club. Enclosed was a map showing FM transmitters in the Benelux countries, indicating a density of stations every 50 km in a regular pattern.

Ben Bradley sent word that KPAC \*90.9 and unbuilt KSTX \*89.1 will merge, pending FCC approval. This will give San Antonio its first public radio station. KPAC went on the air in 1982 with an all-classical format, while KSTX should be more diversified, with lots of talk. If everything goes as expected, KSTX could sign on by the end of the year.

Tim Benko, "Windy City Air Checks," "enjoyed reading your column in WTFDA, but since I don't subscribe to it any more, I can't read it any more! Well, one of the reasons I let the subscription run out was the 'cut back' in your column. Not to discriminate, I also let my subscriptions in NRC and IRCA also run out, since most of their members usually liked to talk about anything but the subject of radio, be it AM or FM. Good luck with the FM Atlas."

Another nonmember, and a former publisher of the VUD, Ferdie Dombrowski, Milwaukee, is heard from. His new address is 2548 S. 5th Place, ZIP 53207. He's bought a house, still interested in cheesecake, and does some DX, particularly TV. He sent a "Milwaukee Sentinel" article by Duane Dudek mentioning the local Arbitron ratings. WTMJ AM and WKTI 94.5 dipped, but both top the survey, while WEZW 103.7 and WOKY AM are third and fourth.

KLSE \*91.7 Rochester MN has boosted its 101.7 translator K269BK, La Crescent MN, serving La Crosse WI, from one to 10 watts. KLSE is petitioning the FCC to secure a license for a full-powered station in La Crosse, according to information sent by Robert Baker. "Translator frequency users must defer to full power stations. Another station could take over the 101.7 FM frequency at any time. By building a Class A station to eventually take the place of our translator, we would secure a place for Minnesota Public Radio programming in the La Crosse market," said Claudia Daly, KLSE manager. KLSE now publishes its newsletter, a separate publication from MN Public Radio's *Minnesota Monthly*. Also KSUI \*91.7 Iowa City now on 24 hours, along with its talk-formatted AM, WSUI. KSUI, still classical, once operated only 3-9 p. m. M-F. 73ily. *Bruce*

# PHOTO-NEWS

Column layout by:  
David J. Nieman  
12284 Nice Road  
Akron, New York  
14001-9529

MAY

1988

You ask for DX fotos, and the guys in WTFDA come thru for you!!! 23 excellent DX shoots arrived on the same day (5 days after sending in the April VUD column). Thankx much guys....so with no farther ado, on with the fotos.

Carlton Howington of St. Petersburg, Florida checks in with more of that unbelievable strong tropo across the Gulf of Mexico.



KETH-14  
Houston/Galveston, TX  
750 mile tropo  
seen Dec. 11, 1987



XHGO-7  
Tampico, Tam  
1000 mile tropo  
seen Dec. 12, 1987

on to page 2 of Carlton's "Tampa Bay DX Bonanza".....



**KVEO-23**  
Brownsville/Harlingen/McAllen, TX  
920 mile tropo  
seen Dec. 12, 1987  
at 0050 EDT

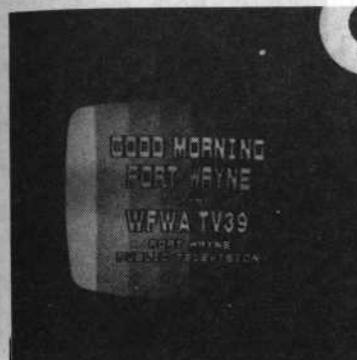


**KPLC-7**  
Lake Charles/Lafayette, LA  
650 mile tropo  
seen Feb. 16, 1988

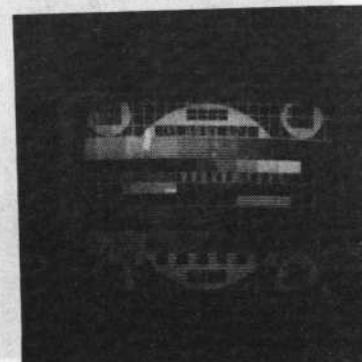


**WVLA-33**  
Baton Rouge, LA  
500 mile tropo  
seen March 1, 1988

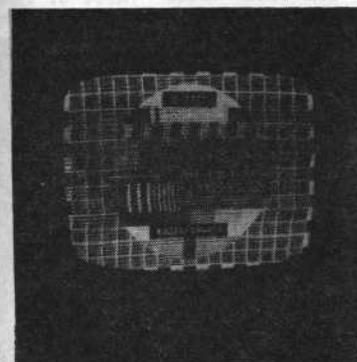
from tropo southern style to a propagation mixed bag from, Bill Eckberg - Dixon, Illinois.....



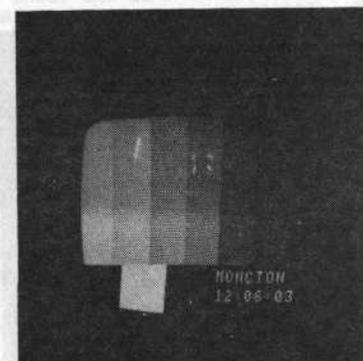
**WFWA-39**  
Ft. Wayne, IN  
224 mile tropo  
seen Feb. 19, 1987  
at 0450 CST  
"new on air"



**ICRT-6**  
Habana, Cuba  
1340 mile E-skip  
seen April 28, 1987  
at 1335 CDT



**CBVT2-3**  
La Tuque, PQ  
888 mile E-skip  
seen June 3, 1987  
at 0155 CDT  
"Quebec" "Radio Canada"  
"repeats channel 11 Quebec City, PQ"



**CBAFT1-5**  
Fredricton/St. John, NB  
1141 mile E-skip  
seen June 3, 1987  
at 1006 CDT  
"repeats channel 11 Moncton, NB"

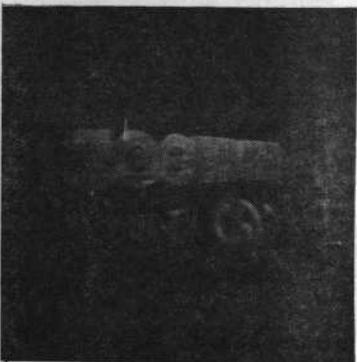
on to the forth and final page with more DX from Bill Eckberg.....



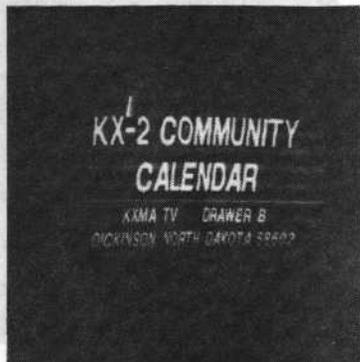
CKCK-2  
Regina, SA  
918 mile E-skip  
seen June 3, 1987  
at 1833 CDT  
non-ID "CKTV"



CFSS-3  
Estevan/Warmley SA  
811 mile E-skip  
seen June 3, 1987  
at 1840 CDT  
"ID's CKOS cable 11"  
repeats CKOS-5 Yorkton, SA



KIII-3  
Corpus Christi, TX  
1072 mile E-skip  
seen June 29, 1987  
at 2235 CDT  
non-ID "K triple I"



KXMA-2  
Dickinson, ND  
732 mile E-skip  
seen Aug. 3, 1987  
at 2315 CDT  
non-ID "KX-2"

DAVE

# Decalomania

The Club for Fans of Broadcasting  
since 1982

c/o Mark Strickert — 3852 N Oconto — Chicago IL 60634  
(new club address)

Thanks for your interest in DECALCOMANIA! This is the club for people interested in radio & TV! We discuss stations and programming, collect and trade stickers, T-shirts and other station promotional materials, and we even swap station "airchecks" (recordings). Club members share their information and opinions through the DECALCOMANIA newsletter, issued 10 times a year. Far as we know, this is the only club that serves collectors/traders of station tapes and paraphernalia. Information is available for a 25¢ SASE, and sample bulletins may be purchased for the price below:

= > Dues < =

	Member	Subscriber*	Trial <sup>†</sup>	Sample§
New US	\$13.00	\$24.00	\$ 7.00	\$1.00
CANADA (US\$)	\$14.00	\$25.00	\$ 8.00	\$1.30
ETC. (US\$)	\$24.00	\$30.00	\$13.00	5 IRCs

\* - If you choose not to help the club with information, pay this amount  
<sup>†</sup> - One-time, 6mo. trial membership (inc \$1 credit for full member renewal)  
 § - Unused US postage stamps OK

# Decalomania

WANT TO JOIN? Good! Fill out the rest of this sheet and send it in, with the appropriate amount, to the club headquarters address above.

Name ..... (#\_\_\_)  
 Add ..... Apt .....  
 City ..... STATE/PROV .....  
 Code ..... PHONE ( ... ) .....

I do [ ] do not [ ] wish to appear on the published club member's list  
 (this will be only for club and members' use - not to be sold or lent out)

INTERESTS (check any or all that apply)

Collector: [ ] Aircheck [ ] Sticker [ ] T-Shirt [ ] Cov. Map  
 [ ] Music Playlist [ ] SW Pennant [ ] QSL [ ] ALL!  
 Trader: [ ] All checked above [ ] None of the above  
 ONLY (list): \_\_\_\_\_  
 [ ] Broadcaster [ ] DXer [ ] Radio-enthusiast [ ] Social  
 [ ] All Four

OTHER:

From who/where did you hear about DECALCOMANIA:

Thanks for joining!

See you soon in the DECALCOMANIA bulletins!

# STATION BREAK

WTFDA H.Q.  
P.O. Box 514  
Buffalo, NY 14205-0514

WTFDA member ads only. Items may be edited to conserve space.

**NOW AVAILABLE** - Current air checks of Nashville-area FM and TV stations. See the nationally-honored "Scene At Six"--the same newscast on which Pat Sajak was once weatherman. Send 75 cents for complete details.  
Erich Schulman, KTN4CA - P.O. Box 9439 - Murfreesboro TN 37132

**FOR SALE** - Onkyo T-9090 digital FM tuner, mint condition, \$400.00. Pickup only (from Peekskill or Manhattan).  
Eric Fader - 64 Wild Birch Farms - Peekskill NY 10566

**FOR SALE** - Antennacraft P-7's \$66.95; P-5's 46.95; RG-6U coaxial cable \$0.14 a foot; F-56 connectors 2/\$0.75; .500 hardline-to-male F's 2/\$6.00. RG-11U coax cable \$0.25 a foot; F-11 connectors 2/\$1.00. Much, much more; write with SASE or call after 5 P.M.:  
Rich Wertman - 6150 Crosby Road - Lockport NY 14094 (716) 433-0805

**FOR SALE** - Pioneer AM/FM Stereo Tuner Model TX-9500II and Kenwood AM/FM Stereo Tuner Model KT-8300. Both tuners have narrow/wide IF band selectors for excellent adjacent channel reception. \$99 each.  
Mel Murray - 9038 Brook Ford Road - Burke VA 22015 (703) 569-4435

**FOR SALE** - Technics "Wing" tunable indoor FM antenna, mint condition. \$40.00 plus shipping.  
Eric Fader - 64 Wild Birch Farms - Peekskill NY 10566

**WANTED** - I am an electronics engineer and a TV DXer at Madras Telephone...I have constructed several yagis and several types of amplifiers...I am very much interested in weak signal techniques. I have received SRI LANKA, BANGLADESH, DUBAI, and several "local" Indian stations...also interested in receiving the USSR ORBITA satellite program (714 MHz in UHF band) with a helical antenna...would like to know what other TV DXers around the world are doing.  
J. Prabhakaran - 54, Chengalvaraya Maistry Street, Ramalingapuram - Madras - 600 012, - South India - INDIA

**FOR SALE** - Winegard AC-9250 ch 2-6 low band only amps. Brand new. Discontinued, limited supply. \$30.00 each.  
Rich Wertman - 6150 Crosby Road - Lockport NY 14094 (716) 433-0805

**YOUR non-commercial ad can appear in the VUD free of charge!** Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK. This feature appears on a space available basis. WTFDA and the VHF-UHF DIGEST assume no responsibility for any claims made by advertisers--our trust is implicit, as fellow DXers.

# Television news

Bill Fahber, editor  
336 Atlantic Street  
Bridgeton NJ 08302

## ABBREVIATIONS USED IN THIS COLUMN:

AAT	Antenna height above average terrain
AG	Antenna height above ground
ASL	Antenna height above sea level
AZ	Azimuth (North=0°)
BT	Beam Tilt
CIR	Circular polarization
CP	Construction permit
CRTC	Canadian Radio-television and Telecommunications Commission
DA	Directional antenna
ELL	Elliptical polarization
ERP	Effective Radiated Power
FCC	Federal Communications Commission (USA)
HOR	measured along a horizontal plane
MAX	In the direction or elevation of maximum signal strength
MP	Construction permit modification
TL	Transmitter or tower location
+	carrier frequency offset 10 kHz above standard
-	carrier frequency offset 10 kHz below standard
z	carrier frequency not offset

## APPLICATIONS FOR NEW TELEVISION STATIONS

ST	CH	ERP	HAAT	CITY/APPLICANT
IL	59	5000	2023	Peoria; Peoria Broadcasting Services Inc.
NC	14	5000	1499	Greenville; Karl Holbrook Stoll (amended)
PR	50	3388	784	Aguada; Aguada Television Company (amended)
PR	34	50	2877	Fajardo; Damaris DeJesus
PR	34	98	797	Fajardo; East Coast Telcasters Co.
TX	47	415	420	Greenville; Bill Richard Wright (amended)
TX	16	5000	469	Lubbock; Lubbock TV 16 Broadcasting (amended)

## APPLICATIONS DISMISSED

CA	San Luis Obispo; ch.33; Obispo Television; Pacific Television Ltd.
CO	Grand Junction; ch.18; Brightness Ministries Inc. (returned).
FL	Key West; ch.8; DelMar Communications Inc.
FL	Miami; ch.35; Miami Broadcasting Inc.
FL	Panama City; ch.62; James Sharp (returned).
KS	Fort Scott; ch.20; Hefty Communications Ltd.; Courtney Jackson.
MT	Billings; ch.6 Comanche Enterprises
NE	Omaha; ch.54; Omaha Channel 54 Inc. (Review Board decision)
NV	Ely; ch.3; Darryl Madlock; Mountlake Productions Ltd.
OH	Columbus; ch.56; Brightness Ministries Inc. (returned).
TN	Memphis; ch.14; Brightness Ministries Inc. (returned).

TX	Fredericksburg; ch.2; Fredericksburg Community Television Inc.; Telemundo Group Inc. (at their request).
VA	Danville; ch.24; Danville Broadcasting; Overview Communications Ltd.
WV	Charleston; ch.49; Brightness Ministries Inc. (returned).
WV	Parkersburg; ch.39; Brightness Ministries Inc. (returned).
WI	Janesville; ch.57; Blackhawk Broadcasting Corp. (in agreement with remaining applicant Tri-M Communications Ltd.); Channel 47 Limited Partnership (at its request).

## CONSTRUCTION PERMITS GRANTED

ST	CH	ERP	HAAT	CITY/APPLICANT
CA	33	100	1482	San Luis Obispo; Community Media Corporation
FL	64	2750	426	Destin; Emerald Coast Broadcasting (summary decision)
ID	35	96	537	Twin Falls; Western Telcasting Co.
KS	20	5000	765	Fort Scott; Family Broadcasting Co.
KY	38	426	497	Murray; WML LPTV Co.
NE	54	5000	1335	Omaha; Omaha Telecasters Inc. (Review Board decision)
MI	5	100	582	Calumet; WHTA (reinstated)
TN	42	1094	773	Nashville (noncommercial); Three Angels Broadcasting Network of Tennessee
VA	24	5000	100	Danville; Danville Communications
WV	40	1000	1992	Bluefield; Living Faith Ministries
WI	57	641	403	Janesville; Tri-M Communications Ltd. (summary decision)
WI	16	10.7	423	Manitowoc; Tony C.G. Henry

## CONSTRUCTION PERMITS CANCELLED

ST	CH	CALLS	CITY
CA	28	KCEO	Oroville
NM	21	KRBW	Roswell
UT	16	KZAR-TV	Provo

## APPLICATIONS TO MODIFY CONSTRUCTION PERMITS

ST	CH	ERP	HAAT	CALLS	CITY
AK	5	100	879	KYES	Anchorage
CO	20	3148	1814	KT20-TV	Denver
FL	61	2399	922	WGBZ	Gainesville (amended)
FL	9	316	327	WIEB-TV	Islamorada
FL	13	316	449	WETV	Key West
FL	61	5000	1453	WFGC	Palm Beach (amended)
IN	29	3090	774	WTTK	Kokomo
IA	63	3460	1805	KBTW	Des Moines
KY	24	400	648	WKYU-TV	Bowling Green
MI	5	100	423	WHTA	Calumet (reinstated)
MI	8	2	510	W11M-TV	Iron Mountain
NE	17	620	721	KTVC	Grand Island
NV	33	1294	1158	KFBT	Las Vegas
OR	32	5000	1786	KUTF	Salem
TX	2	100	1315	KACV TV	Amarillo (amended)
TX	2	100	1509	KDTN	Denton
UT	14	15	344	KX1V	Salt Lake City (ex-KGBS; as amended)
VA	68	1140	2504	WLF6	Grundy

**CONSTRUCTION PERMIT MODIFICATIONS GRANTED**

ST	CH	ERP	HAAT	CALLS	CITY
FL	46	5000	1192	WNPL-TV	Naples
FL	49	5000	1023	WRXY-TV	Tiemo
IN	62	3000	741	WJVS	Hammond
LA	49	5000	889	WCCL-TV	New Orleans
TX	2	100	1315	KACV-TV	Amarillo
TX	44	4207	1811	KWKT	Waco
VA	65	824	860	WZKX	Ashland
WI	55	741	449	WHKE	Kenosha

**APPLICATIONS TO CHANGE EXISTING FACILITIES**

ST	CH	ERP	HAAT	CALLS	CITY
AZ	10	316	1829	KTSP-TV	Phoenix (cp)
CA	5	44.7	3202	KTLA	Los Angeles (mp)
MI	4	100	1004	WDIV	Detroit (cp)
NM	48	5000	1073	KASK-TV	Las Cruces (cp)
PA	66	567	889	WETG	Erie (mp)
SC	57	5000	633	WCCT-TV	Columbia (cp)
TX	11	316	1435	KHOU-TV	Houston (cp)
TX	45	2173	1440	KXLN-TV	Rosenberg (mp)

**CHANGES GRANTED STATIONS ON THE AIR**

AL Birmingham; WBRC-TV, ch.6; granted CP to reduce ERP from 100 kw to 53 kw max; reduce antenna height 76' to 1086' AAT/ 719' AG/1726' ASL; same TL; HOR. Weaker DX, obviously, and even for E-skip, although weaker stations still get out by skip at times.

FL Miami; WPLG, ch.10; granted license to cover changes (evidently the application from early 1987 was granted, of which I have no record); ERP reduced from 316 kw to 117.6 kw max; same TL; antenna height reduced 511' to 545' AAT/534' AG/538' ASL (which means the average terrain is 7' below sea level, whereas it used to be 46' ASL. Sinkholes? Nah, just incompetent applicants and FCC employees who just don't care about accuracy. WPLG's old license and other stations with transmitters in the same area put average terrain at about 34' to 46' ASL. To be consistent with the 511' reduction, WPLG's HAAT should be changed from 1003' to 492'.) Change probably took place from last December. Expect substantial reduction in coverage area and DX potential. They probably got tired of all those reception reports.

FL New Smyrna Beach; WCEU, ch.15; went on the air three months ago, so this data probably represents as-built conditions, superceding the data printed last month. Granted cp (?) for 674.5 kw max ERP; 1447' AAT/1425' AG/1479' ASL; TL 2 miles southwest of Orange City (Volusia County, about 28 miles north of Orlando); coordinates 28°55'16"/81°19'09"; DA BT HOR.

FL Tampa; WPLG, ch. 8; inconsistent references are in conflict here: Television Digest reports a licensing with technical data from an application dating back to 4/85, which it never reported until 12/86, whose two modifications and subsequent grant, around 1/87, it never reported. Instead, Television Digest reported an altogether different cp grant (see 6/87 VUD) for which it never reported an application, and of which the data base from Larry Fuss has no record. Fortunately, however,

the data base and Television Digest are in agreement with the current data for a license grant, reflecting transmitter changes which probably took place around 12/87. 316 kw max ERP (formerly 302 or 316 kw, depending on references); 1536' AAT/1545' AG/1612' ASL (482' higher ASL); coordinates 27°50'32"/82°15'46" (about 600' north of former TL, depending on coordinate accuracy); TL 5.5 miles north of Balm, or 14 miles southeast of Tampa; BT CIR.

ND Dickinson; KDSE, ch.9; granted license to cover CP for changes; ERP reduced from 265.5 kw to 214 kw max; same TL; 789' AAT/52' AG/3391' ASL (52' lower AG, 118' lower ASL; another masterpiece of inconsistency); HOR; change probably took place in January, but should be barely evident.

ND Fargo; KVRK, ch.15; granted license for changes; see 3/88 VUD; changes probably took place last December.

OH Chillicothe; WWAT, ch.53; granted CP to raise antenna height by 536' to 1190' AAT/1189' AG/1929' ASL; coordinates 39°35'28"/83°06'40" (or ESE about 0.2 mile from present TL); DA BT HOR; added height should give that 5000 kw more punch to reach out on those good tropo nights in the Ohio Valley. Maybe it can reach out to the east coast on a really hot night.

VT Rutland; WVER, ch.28; granted license to cover for changes: ERP raised from 40.7 kw to 247 kw max/ 206 kw hor; antenna lowered 23' to 1402' AAT/274' AG/2250' ASL; same TL; BT HOR; change probably took place in January, and should have been evidenced by increased coverage area, but this area is not too good for DX anyway.

WA Spokane; KAYU-TV, ch.28; granted CP to raise (?) antenna to 1998' AAT/794' AG/4469' ASL; supposedly same TL, but how can an increase of 70' ASL cause a lowering of 29' AG? Also, no change of ERP reported, but I still would like to know what happened to its permit four years ago to raise ERP from 1198 kw to 2400 kw. Neither Television Digest or the data base from Larry Fuss reports that change as having been reflected in its license, and the data base still shows it as an active permit, which wouldn't make sense if this new application were a CP instead of an MP.

**CALL LETTER APPLICATIONS: NEW TELEVISION STATIONS**

ST	CH	CALLS	CITY/APPLICANT
GA	64	WGMM	Macon; Good News Television
FL	25	WJPB	Tequesta; Tequesta Television Inc.

**CALL LETTER GRANTS: NEW STATIONS**

ST	CH	CALLS	CITY/APPLICANT
AL	55	WHHW	Gulf Shores; WHIS Unlimited Inc.
AL	63	WTSU-TV	Montgomery; Troy State University
AL	34	WSDW	Ozark; Samuel Durwood Judah Sr.
GA	63	WHSG	Monroe; Monroe Television Inc.
HI	14	KHIK	Hilo; King Broadcasting Company
KY	57	WMMH	Madisonville; Madisonville Media Inc.
ME	62	WJRP	Presque Isle; John R. Powley
MN	21	KRBR	Duluth; Robin C. Brandt
NC	35	WJAE	Jacksonville; Jacksonville Broadcasting Co.
ND	7	KJRR	Jamestown; Red River Broadcast Corporation
OR	40	KCVF	Portland; Cascade Video of Oregon

SC	32	WCRD	Myrtle Beach; Coastal Carolina Broadcasting Co.
UT	14	KXIV	Salt Lake City; KGBS
WA	51	KBEH	Bellevue; Bellevue Broadcasting Company Ltd.
WI	16	WTHX-TV	Manitowoc; Tony C.G. Hendey

**CALL LETTER GRANTS: EXISTING STATIONS**

ST	CH	CALLS	CITY/APPLICANT
KY	23	WKZT-TV	Elizabethtown; WKZT
NV	13	KTNV	Las Vegas; KTNV-TV

**NEW STATIONS ON THE AIR**

FL Tampa; WBHS, ch.502, went on the air 3/1/1988; 4170 kw max ERP; 1522' AAT/775' AG/1447' ASL (Wow! Didn't know they had mountains in Tampa!); coordinates 27°50'32"/82°15'46"; TL 1.4 mile southeast of Tampa (scales more like 16 miles), 4.5 miles southeast of Riverview; BT HOR; Home Shopping Network; address: Silver King Broadcasting of Tampa Inc.; 15001 Boyette Road, Riverview FL 33569.

GA Rome; WANA-TV, ch.14+, went on the air 2/29/1988; 1450 kw max ERP; 820' AAT/210' AG/1535' ASL; TL Horseleg Mountain, 4.5 miles southwest of Rome; coordinates 34°14'07"/85°13'45"; DA BT HOR; independent station; address: Sudbrink Broadcasting Co. of Georgia, 713 Shorter Avenue, Rome GA 30161.

HI Honolulu; KFVE, ch.5z, went on the air 2/7/1988; 51.9 kw max ERP; 2064' AAT/161' AG/2641' ASL; coordinates 21°24'03"/158°06'10" (Unlike all the other television stations which have transmitters in Honolulu District, this set of coordinates puts it near the top of the northern slope of Puu Manawahuak, about 15 miles west of the District); DA BT HOR; independent station; address: Ka'kena Lani TV Corporation, 315 Sand Island Road, Honolulu HI 96819-2295.

IN Gary; WYIN, ch.56+, went on the air 11/15/1987; 1355 kw max ERP; 1003' AAT/975' AG/1695' ASL; TL 0.6 mile east of Reeder Road (about 2 miles east of Cedar Lake); coordinates 41°20'56"/87°24'02"; BT HOR; PBS affiliate; address: Northwest Indiana Public Broadcasting Inc., 8625 Indiana Pl., Merrillville IN 46410.

IA Cedar Rapids; KOCC, ch.28+, went on the air 2/1/88; 4328 kw max ERP; 1110' AAT (other antenna height data not available); coordinates 42°06'25"/92°08'05" (about 20 miles WNW of Cedar Rapids); DA BT HOR; FBC affiliate; address: Metro Program Network Inc., 605 Boyson Road NE, Cedar Rapids IA 52402.

KS Lawrence; KMCI, ch.38z; went on the air 2/1/1988; coordinates 38°53'46"/95°10'29"; Home Shopping Network affiliate; address: Miller Broadcasting Inc., 9191 Barton, Overland Park KS 66214.

TX Galveston; KJMD, ch.48-, went on the air 2/1/1988; 1618 kw max/1062 kw hor ERP; 1161' AAT/1199' AG/1235' ASL; TL Alvin-Friendswood Road, 3 miles NNE of Alvin; coordinates 29°27'57"/95°13'23"; BT HOR; Telemundo affiliate (Spanish); address: Bluebonnet Broadcasting Company, 3903 Stoneybrook, Houston TX 77063.

TX Waco; KWKT, ch.44-; went on the air 3/13/1988; 5000 kw max ERP; 960' AAT/190' AG/7710' ASL; TL 1.5 miles northeast of Moody TX; coordinates 31°18'52"/97°19'37"; DA BT HOR; FBC affiliate; address: SWMM/Waco Corporation, 8003 Woodway Drive, Waco TX 76712.

**CONSOLIDATED HEARINGS**

FL Fort Walton Beach; ch.58; Jerome Swain; Clement S. Ross.

IL Chicago; ch.2; CBS Inc. (for license renewal of WBBM-TV); Center City Communications Ltd. Partnership.

IN Salem; ch.5; J.R. Broadcasting; James T. Ledford; Family Group Broadcasting Ltd.

IA Newton; ch.39; Robin C. Brandt; Meuton Broadcasting Company.

NY Corning; ch.48; Coyle Communications Ltd.; Rural New York Broadcasting.

OK Lawton; ch. 45; Day Broadcasting; Barton W. Ratliff.

UT St. George; ch.12; Red Mountain Broadcasting Co.; KUTV Inc. (owner of ch. 2 in Salt Lake City).

WI Fond du Lac; ch.68; Church of Christ Ministry Inc.; Skyducm Inc.

**CHANGES IN THE TABLE OF CHANNEL ASSIGNMENTS**

NM Albuquerque: add 50z

**FORUM**

Larry Fuss wrote that he would no longer be able to send me the television data base printouts that he has been for the past few years. It seems that there has been no television business for him lately, which is not surprising, considering the freeze on certain vacant channels, the high cost of syndicated programs and the current unprofitability of UHF stations.

That information has been valuable in correcting other reference material (particularly incorrect offsets) and supplying information often missing elsewhere (permit and license amendments and modifications, license status) and giving technical information (such as DA, BT, HOR/CIR/ELL). This means that future columns won't have the accuracy as in the past, and that there may be mistakes in other references which go unnoticed.

This type of data base is still available on microfiche through the NTIS (National Technical Information Service) at about \$25. but with the difficulty of reading microfiche and at that price, I will probably limit purchase of it to just before each future edition of the NATVDB.

This month's FORUM will be about as short as last months, due to a small amount of mail from WTFDA members. It seemed as if mail suddenly slowed down two months ago. Also, some of the largest contributors to this column haven't sent anything in the last few months.

JOHN COMBS (Jacksonville FL) sent an article from the 3/9 Variety on a broadcasting war between Switzerland and Italy: "Swiss TV finally turned the tables on private Italian networks and local station broadcasters when a new transmitter in the southern zone of Italian-language Switzerland blocked out ... major commercial networks ... and a handful of independent stations. Swiss retaliated ... after Italian-speaking Swiss transmissions almost were obliterated by high-frequency programming from Milan.

"Until 1976, debut year of commercial tv in Italy, the two broadcasting areas were at peace. In fact, Italian Swiss TV and other Swiss border stations were authorized by Italian law to beam programs south into heavy urban regions like Lombardy (Milan) and Piedmont (Turin). Swiss found a ready Italian audience for non-

politicized news programs and special events, until private tv, with its early emphasis on films and late-night strip shows, took over." Exactly what do they mean by strip shows?

"From 1979-82, the Intl. Telecommunications Board (UIT) assigned new frequencies to the adjacent areas - approved by telcom ministers in both countries. ...but Italian private tv remained unlegislated (and still is), with no frequency control whatsoever. ...Since 1982 ...the Italo-language Swiss were invaded by something like 120 radio signals and 22 private tv stations. Gradually, some 150,000 Swiss viewers in the Lugano area faced problems in watching Swiss programs. Since 1982, the Swiss telcom minister either has protested or attempted to mediate with his counterpart in Rome. The latter, unable to cope with unregulated commercial tv, met protests and proposals with unrelieved silence. Finally, the telcom chiefs went ahead to construct a powerful transmitter almost on the Italian border. Retaliating broadcasting in Italy became a threat and Italy's northern commercial webs/stations asked the ministry to mediate with the Swiss government in Berne. For awhile, Italian private tv interests lambasted RAI for encouraging the Swiss to retaliate.

"Swiss authorities demanded full use of all frequencies allocated to them by the UIT for three national channels (networks -wbf) and a possible fourth private tv channel. Meeting took place, [Swiss TV director Marco] Blazer noted, 'in a cordial atmosphere of mutual comprehension, but the Italian government was unable to recommend legal solutions.'

"Hope on both sides was to limit frequency strength of transmission (do what? -wbf) so the Swiss could eye their own programs and the new mountain transmitter on the Italo border would not effect (sic) broadcasting in northern Italy. Pacification got nowhere and the Swiss transmitter blasted away (Feb. 24). Canale-5 shifted to another of its several frequencies, but Rete-4 and some indie stations were affected.... Milan broadcasters now want telcom minister Oscar Mammi to protect them in European courts and the European parliament."

I just received a postcard from John. He writes, "W59BC (Jacksonville FL -wbf) is back on since 3/28. Still occasionally supering 'program test,' but have been on steadily since that date. Heard a preacher on the stn. (WCLF-22) ment. new xtr in Perry, Live Oak, Ft. Pierce, & Ft. Myers FL, as well as Valdosta GA & others. He referred to them as 'low power stations' but prob. straight xtrs like W59BC is. Will check for these others if I can in the cited areas.

"Have not seen WCEU-15 (reported 'on' in April VUD) (New Smyrna Beach FL -wbf) even when UHF is up. Then again, WANS-30 (Jacksonville FL -wbf) puts quite an image on 15. I'll check for this one next time I go to Orlando area. WTLV-12 (Jacksonville FL -wbf) running ads explaining difference between net, local & syndie shows in advance of their switch to NBC pon 4/3. Most viewers will prob. still be confused!"

**BILL DRAEB** (Kewaunee WI) comments on the power increase on WTV-18 (Milwaukee WI) from 2510 kw max/1020 kw hor to 5000 kw max. I had questioned if there would be much of an improvement, since the station was already rather powerful. Bill's observation: "It did make a little difference but not much. Their average strength here is just on the verge of snow-free, just a little fuzzy, but not much. Often, it's difficult to tell which of the 4 Milwaukee U's (18,24,30,36) is strongest because of lake inver-

sion which makes them stronger than they actually are, but this is mostly a summertime phenomenon. If I didn't know how much power the above channels were running, 18 & 24 are comparable in strength to one another, 30 is just a tad weaker and 36 is a little weaker than 30.

"Changing the subject; I'm still skeptical of WLLA-64's (Kalamazoo MI -wbf) power output (in other words, I think it's much less than what was quoted in the VUD). Example: right now W6VC-35 (Grand Rapids, 1320 max/1000 hor -wbf), WUHQ-41 (-TV, Battle Creek MI, 2000 max/891 hor -wbf), WTLU-54 (Muskegon MI, 4395 kw -wbf), WXMI-17 (Grand Rapids, 1300 kw -wbf) & S. Bend U's are snow free but WLLA-64 and W6VK-52 (Kalamazoo, 44.36 kw -wbf) are also in but with considerable snow. I know it isn't my tuner because all Chicago U's are in snowfree including those on 26, 32 & 38 overriding Green Bay & Appleton stations on those channels and 60 and 66 are equally as good. WLLA-64 must also run a very abbreviated schedule say, like 2 or 3 days a week only and only a few hours a day because many times W6VK-52 is in but no sign of them. I wrote them once (to the station) but no response." They probably couldn't afford the stamp. And now that letters cost 25 cents, there's probably less chance. WLLA is a Christian television station, probably dependent on contributions to operate, and the recent religious scandals have hurt the income of all Christian broadcast stations as well as the TV evangelists. WLLA is probably riding the storm with reduced power, short schedule, and small staff until the money comes in.

"I notice that ch.42 in Sturgeon Bay, WI. already has call letters assigned. Do you have any more info on them? If they ever come on ... I doubt they'll survive long. Unemployment in Door County is 15.4%; Kewaunee County 11.5%; Manitowoc County 9.6% and Brown County 6.5%. If they depend on local support I doubt if they'll survive unless they have enough power to cover Brown County (Green Bay). Within the last month 1500+ workers were laid off at Bay Shipbuilding (the major employer in Sturgeon Bay)." Sounds to me like ch.42 will have a lot of viewers sitting all day in front of the set, waiting to be called back to work.

One final report: "WXGZ-32 (-TV, Appleton WI -wbf) filed for bankruptcy a few weeks ago (about 2/88. -wbf) because of debts incurred when the station was first constructed. They're still on the air though."

From **W.R. McINTOSH** (Granada Hills CA): "Sorry to see that KVCR TV 42 San Bernardino-Riverside has now joined the ranks of Beg-a-thon PBS stations with interrupting pledge breaks. They used to have what they called 'silent appeals' or 'quiet appeals' or something like that. They would show a card on screen for a minute or two, give a very low key appeal and then get right back to their programming. Ah - then were the days!"

"KDDE/KEEF TV 68 Los Angeles is apparently in money troubles. Haven't even been testing (showing the flag?). KVEA TV 52 Los Angeles (Spanish) has recently announced that for some programming they are reaching a viewer level as high as KMEX TV 34 Los Angeles (Spanish - longer time on air)."

**BILL DULMAGE** (Colborne, Ontario), who recently rejoined the WTFDA after a ten-year absence, reports, "Since I was last involved with WTFDA, I've gone to college (Fanshawe in London Ont.) and have entered broadcasting. I'm presently working at CHUC-AM in Cobourg, Ont. I started out at CFBK AM Huntsville, Ont., moved to CHVO-AM in Newfoundland and then

CJBQ-AM Belleville, Ont. and then on to Cobourg (my home area) where I've been since '84.

"CIII-TV (Global) channel 41 Toronto, officially went on the air during the 5:30 pm news on October 22, 1987. They had been testing for a few weeks prior to that date.

"Last week I was talking to the C.E. for CFMX-FM Cobourg ...and he was telling me that construction is underway for Global's channel 27. CFMX owns the property. Global will own the new tower. CFMX will move from its present tower on the same site to the new Global tower. Global expects to have channel 27 on air late May or early June.

"Finally, I've been putting together some station histories for my own files, and would like to know if anyone keeps track of call letters, frequency, power, studio & transmitter location change dates, especially for FM & TV stations in southern Ontario and northern New York?"

I don't know how much information WTFDA members would have, but I would suggest you try some university libraries or libraries from a large city or county. Look up back issues of the Canada Gazette, for example. I don't know what your chances are of finding old copies of Television Factbook or Broadcasting Yearbook. Or maybe even old copies of Vane Jones' North American Radio-TV Station Guide. If you find a library with old periodicals either bound or on microfiche, you could look up White's Radio Log, which contained United States and Canadian AM, FM and TV stations, listed in order by frequency/channel, state, city, or by city, state/province, or by call letters. It appeared in Communications World, an annual magazine until its last issue in 1981. It also appeared in a monthly radio magazine in the sixties and seventies. Only a portion of the complete list was published each month. There was another magazine called Radio News, which later became Radio & Television News sometime in the forties. This magazine often reported on new television stations as they went on the air.

**FRANK ADEN** (Boise ID) sent a clipping from the 3/30 *Oregonian*, reporting that KNDD (ch.23, Yakima WA) and KNDU (ch.25, Richland WA) were sold to Farragut Communications Inc.

And some updates on Canadian stations from **WALIER PATTON** (Willowdale Ont.):

**ERP CHANGES GRANTED:**

PR	CH	CALLSIGN	FROM	TO	CITY
BC	69	CBUBT-6	.093	0.93	Spillimacheen
ON	25	CBLFT	1827	1760	Toronto
PQ	35	CJFF-TV	566	697	Montreal

**ERP CHANGE APPLICATION**

SA	9	CIPA-TV	27	145	Prince Albert
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**NEW CALL LETTERS**

PR	CH	CALLSIGN	ERP	CITY
NS	2	CJCH-TV-5	0.48	Sheer Harbour
PE	5	CKCW-TV-2	0.47	St. Edward
PQ	38	CBMT-TV	1.10	Rouyn-Noranda
PQ	44	CBVA-TV	1.58	Stoneham
PQ	24	CBVH-TV	0.10	Wakeham

Another letter, with information on European television stations and test patterns, from **HANS V.D. HEIJEN** (Oss, Netherlands). The following are national abbreviations adopted by the ITU (International Telecommunications Union), followed by networks referred to in the letter:

ALB	Albania
AUT	Austria
BEL	Belgium; RTBF (Radio Television Belge de la Communauté Culturelle Française)
BUL	Bulgaria
CNR	Canary Islands
D	West Germany (Deutschland); BR (Bayerischer Rundfunk); HR (Hessischer Rundfunk); NDR (NDR-Fernsehen); SR (Saarlandischer Rundfunk-Fernsehen); SWF (Sudwestfunk)
DDR	East Germany (Deutsche Demokratische Republik)
DNK	Denmark; DR (Danmarks Radio)
E	Spain (España); TVE (Televisión Española)
F	France; Canal+ (Canal Plus)
FNL	Finland
HNG	Hungary
HOL	Netherlands (Holland); NOS (Nederlandse Omroep Stichting)
I	Italy; RAI (Radiotelevisione Italiana)
IRL	Ireland; RTE (Radio Telefís Éireann)
ISL	Iceland (Ísland); RUV (Ríkisutvarpisdjónvarp)
NOR	Norway; NRK (Norsk Rikskringkasting-Television)
POL	Poland
POR	Portugal; RTP (Radiotevisao Portuguesa S.A.R.L.)
ROU	Romania
S	Sweden; SVT (Sveriges Television Ab)
SUI	Switzerland (Suisse); SRG (Schweizerische Radio- und Fernsehgesellschaft)
TCH	Czechoslovakia
TUN	Tunisia
URS	? (is this U.S.S.R.); TSS

"Most TV dx-ers here do not know what is active in N-America on the low channels. And if you don't know it, you won't look for it. A lot of dx-ers here would ignore weak interfering signals as some uninteresting carrier, while in fact it could be a N-American station, waiting for the 'vertical hold' control to be readjusted! And the WNW direction is seldom used. Although F2 or Es propagation may sometimes extend further inland to the west, the major part, and the strongest signals, will arrive from eastcoast stations."

"Of course the broadcasting situation in Europe is not uniform like in North America. Call signs, like W... or K... are never seen. Instead, a station usually identifies with the name of the broadcasting organization.... In some countries, like Norway, the transmitter location is mentioned in the test picture." "More and more stations use one of the two most popular test card generators: the 'round' PM5544 or the square FuBK. In brief, I will now describe the most-used test cards of Western European broadcasting organisations that make a chance to be seen in N-America."

**NAT NET CARD DETAILS**

BEL	RTBF	PM5544 top: LIEGE CANAL 3 (small) bottom: RTBF 1 (large)
CNR	TVE	varies seldom with xmtr location
D	BR	FuBK ch.2 center: GRUNTEN ch.3 center: KREUZBERG
D	HR	FuBK center: hr 1 B bottom: digital clock
D	NDR	FuBK center: NDRI SH
D	SR	FuBK center: SAARL,RUNDF or SRI SAAR
D	SWF	FuBK center: SWFI RBG
DNK	DR	PM5544 top: DR. bottom: DANMARK
E	TVE	varies seldom with xmtr location

F Ca+ PM5544 top: ?  
bottom: CANAL +

HOL NOS PM5544 top: empty  
bottom: PTT-NED.1 (large)

I RAI PM5544 top: RAI 1  
bottom: empty

IRL RTE PM5544 top: empty  
bottom: RTE 1 (small)

ISL RUV PM5544 top: R.U.V.  
bottom: ISLAND

NOR NRK PM5544 top: NORGE  
center-right: digital time  
bottom: xmtr location

POR RTP FuBK center: RTP-PORTO(usually)

S SVT PM5544 top: KANAL 1  
center-right: digital time  
bottom: SVERIGE

SUI SRG FuBK center: +PTT SRG1

URS TSS varies many types

"This info is all subject to change. Also remember that there are many stations with daytime programming nowadays, like Spain and Italy. The Scandinavians however have more test-picture time.

"So in all it's hard to easily identify an unknown reception. Add to that the total absence of reliable information on Soviet TV stations... Indeed some people within the BDXC specialize in Eastern Europeans and are able to translate and read cyrillic texts. I myself am mainly interested in the various propagation modes that appear in the VHF spectrum, rather than hunting with a camera for as many stations as possible! Therefore the help of other club members may be needed if I can't resolve an UNID. I'm quite sure the editor of the television column would be willing to help by publishing it."

Hans sent a list of selected European stations which are most likely to be received from North America through multiple-hop E-skip or F2. "The enclosed list may have some faults, although I have just updated it with WRTM '88. But some stations only give outdated or no information." "So now we will have to wait and see if Es will bring some surprises this year, and who knows the solar maximum will be good enough to produce F2 on TV frequencies. TEP (Trans-equatorial propagation, -wbf) has occurred already during the past autumn, so that's not a bad start! As soon as European UNID's are noted by members of your club, I hope to hear from it, and likewise we will send our UNID's."

In the following list, the first column is the ITU code for the country, the second column is the network, the third column is the ERP, and last is the city.

- SYSTEM B**  
**ChE2** (vis=48.25 mHz; aur=53.75 mHz)
- D HR 100 Biedenkopf
  - SR 100 Gottliebner Hohe
  - BR 100 Grunten
  - SUI SRG 48 Bantiger
  - NOR NRK 60 Greipstad
  - 30 Gulen
  - 100 Melhus
  - 60 Steigen
  - 30 Varanger
  - S Kanall 60 Orebro
  - 60 Vannas
  - E TVE 250 Madrid
  - TVE2 40 Santiago
  - POR RTP 40 Muro

- ChE2A** (vis=49.75 mHz; aur=55.25 mHz)
- AUT ORF 60 Jauerling
  - ChLA** (vis.=53.75 mHz; aur=59.25 mHz)
  - I RAI 34 Monte Nerone
  - 34 Monte Caccia
  - 35 Monte Cammarata
  - ChE3** (vis=55.25 mHz; aur=60.75 mHz)
  - BEL RTBF 100 Liege
  - D BR 100 Kreuzberg
  - SUI SRG 56 Uerliberg
  - S Kanall 60 Skovde
  - 60 Sveg
  - NOR NRK 10 Bagn
  - 60 Gamlem
  - 60 Hennes
  - 60 Tervola
  - FNL YLE 20 Stykkisholmur
  - ISL RUV 90 Kum
  - YUG JRT-Lju 50 Kapaonik
  - JRT-Beo 50 La Muela
  - E TVE 50 Gamoniteiro
  - 79 Aitana
  - POR RTP 60 Lousa
  - CNR TEC 350 Izana (Tenerife)
  - ChE4** (vis=62.25 mHz; aur=67.76 mHz)
  - HOL NOS 100 Lopik
  - D NDR 50 Flensburg
  - SWF 100 Raichberg
  - BR 100 Ochsenkopf
  - SIU SSR 264 La Dole
  - DDR SKF 100 Cottbus
  - DNK DR 50 Kobenhavn
  - AUT ORF 60 Patscherkofel
  - I RAI 100 Monte Penice
  - NOR NRK 100 Kongsberg
  - 30 Bremanger
  - 30 Hadsel
  - S Kanall 60 Stockholm
  - 100 Ostersund
  - 60 Alvsbyn
  - FNL YLE 40 Vuokatti
  - ISL RUV 80 Gagnheidi
  - 300 Skalahell
  - YUG JRT-Zag100 Psunj
  - JRT-Sko 30 Pelister
  - I RAI 40 Monte Faito
  - E TVE 60 Sollube
  - 150 Tibidabo
  - 120 Santiago
  - 120 Guadalcanal
  - 32 Remada
  - TUN RTT 32 Remada
  - ChLC** (vis=82.25 mHz; aur=87.75 mHz)
  - I RAI 16 Torino
  - ALB RTS 100 Tirana
- SYSTEM I**  
**ChIB** (vis=53.75 mHz; aur=59.75 mHz)
- IRL RTE 80 Gort
- SYSTEM L**  
**ChL3** (vis=54.00 mHz; aur=60.50 mHz)
- F Canal+ 30 Besancon
  - 100 Carcassone
  - ChL4** (vis=57.25 mHz; aur=63.75 mHz)
    - F Canal+ 20 Serres

That's it for this month. Just a few more stations left from Hans' list for next month. And I'm still waiting to hear responses from Ontario to Ben Wilkie's comments.

# IT'S MAY... TIME FOR E-SKIP DX!!

E-skip season is about to get underway for another year. Of the several different major modes of long distance propagation available to the FM and TV DX enthusiast, this is the one that tends to be most dramatic. It's also the one that tends to be most unpredictable. However, even using simple equipment, with late Spring or early Summer E-skip, you can have fair DX results even when using good old "rabbit ears," or perhaps the "ribbon" type twin lead dipole that comes with most FM tuners. It's even possible to log E-skip signals, often snowfree, or fully quieted, with just the monopole (single-rod) antenna often found on a cheap portable TV or receiver.

Can we make predictions about how much E-skip we're going to see or hear in a given season? Not very effectively. In fact, the unpredictable nature of it is what seems to make it even more interesting to the VHF DXer. Of course, we do know what time of the year to look for it, and we also know the best times of the day for E-skip, within that time of the year. Over the last few decades, E-skip has indeed shown us some fantastic openings, but one thing must be stressed: NO TWO SEASONS ARE EXACTLY THE SAME. In other words, each E-skip season tends to exhibit its own individual character. You'll see it in comments to the report columns in this bulletin every year. Comments like "more Maritime E-skip this year than I've ever seen," or "I've seen Tulsa ch 2 more often this year than previous seasons," and so forth. The variation in the Es seasons applies to quality as well as quantity of signals. It can be fascinating to watch how the same season that can prove to be a "dud" for a Northeastern FM DXer can sometimes also be called "one of the best ever" by a Southwestern TV DX enthusiast. There are also years during which the Es season seems to be "good" or "lousy" for most everyone making reports to the VUD.

There are some who insist that what we DXers commonly refer to as "the E-skip season" actually begins in April. However, what seems to mark the beginning of the period of most intense activity really begins in late May. This is, of course, the time when the openings seem to "connect," they become daily in nature, almost to the point of becoming routine. You may well see some scattered activity from April to mid-May, but these tend to be southerly in nature. Late May brings the true "mid-continent" E-skip sessions, which will be stronger and longer lasting than early activity. This is the time of the year when FM DX possibilities open up--that's when things really start to get interesting.

May has arrived. You can expect to see E-skip on TV very soon now, so you should be preparing yourself. Perhaps a good way to start is to mark a calendar. Take the last ten days of May, the entire months of June and July, and the first five days of August, and make some kind of notation for to remind you--it could be something as simple as drawing a line. This is the period that will contain the summer Es "season" as TV and FM enthusiasts have come to know it. The season itself often seems to have a clearly defined beginning, middle, and end.

June E-skip tends to be the most interesting, and almost always, the most memorable openings of the year take place during that month. Mid-June is notable for such events as double-hop E-skip and high maximum usable frequencies. If you see any sign of the rare, elusive high band (ch 7 to ch 13) E-skip, it will likely be during an unusually intense mid-to-late-June opening. There is no guarantee that E-skip of interest to VHF DXers will take place on every one of these days, but there WILL be a number of interesting openings during the period. As the month ends, we often find the best E-skip days of the year. It often pays not to stray too far from the DX dials during the last few days of the month, because this is often when massive E-skip sessions take place, sometimes opening the frequencies above TV channel 2 as much as eighteen (or more) hours a day for a few days in a row. There have even been E-skip openings continuing straight through the night at this time of year, running right into the next day's developing skip activity.

The E-skip season will often "mature" a bit by July, and the space between openings becomes greater. Usually, July will not feature as many days of E-skip at ch 2 and above as June did (some years have been memorable exceptions), but most enthusiasts tend to welcome it, because (1.) it gives them a bit of time to catch up on things they put off in June, such as mowing the lawn, going to work or school, personal hygiene, etc., and (2.) July E-skip can be much more stable--and therefore "IDable"--in nature, something producing a greater number of identified DX stations versus the number of minutes in the E-skip event.

Unlike F2 layer skip, the other major form of ionospheric propagation that can produce DX (much, much more rarely and never with frequencies as high as E-skip can propagate), E-skip has never been conclusively proven to be directly tied to the 11-year solar cycle. There are more convincing theories linking E-skip to intense thunderstorm activity, which is common across our continent every summer. No-one can really say how good or bad the upcoming season will be--it's called "sporadic" for good reason!

We've got a whole E-skip season ahead of us, and it starts soon. Here's your chance to get a look at TV signals on channels 2 thru 6 from 500 to 1300 miles away (and if conditions are exceptional, from slightly shorter to very longer distances). They may come snowfree for a time, perhaps even stronger than your local stations. If the maximum usable frequency of the opening goes above 88 MHz, you'll be able to hear FM stations from the same distance as if they were in your own town. Is it any wonder why E-skip DXing on TV and FM, even if only short-lived, is so exciting? It will never really be reliable, like satellite television or your locals, but it will give you a quick "pipeline" to stations you'll never see or hear otherwise!

# OBSERVING PATCHES OF SPORADIC-E IONIZATION

by Bill Fahber

I read with interest the article on noctilucent clouds in the 7/87 issue of ASTRONOMY, not just because of my interest in the subject, but also because certain things mentioned in it seemed relevant to the DX hobby. Many characteristics of these clouds were identical to characteristics of E-skip.

Noctilucent clouds, or NLCs, are very high altitude clouds, which can be seen only after sunset. At sunset, you may notice that cumulus clouds are still lit by the sun. Shortly after sunset, the shadow of the earth covers cumulus clouds, but upper layer cirrus, cirrostratus and cirrocumulus clouds still glow a brilliant red, but soon even they fade out. Noctilucent clouds are high enough (50 miles up), that even after cirrus clouds turn dark and the sky is still a deep purple, as much as 30 to 90 minutes after sunset, they can be seen. But notice the altitude, about the same altitude as E-skip clouds. Coincidence?

Let's go on with the article. "The clouds are visible from middle to high latitudes during the summer months as the observer's hemisphere is tilted toward the sun. Hence NLCs can be seen from May to August in the Northern Hemisphere, from November to February in the Southern Hemisphere, and occasionally outside these periods. The peak time is around, and preferably just after the summer solstice: June 21 in the Northern Hemisphere and December 21 in the Southern Hemisphere.

It seems that the upper portion of the mesosphere is coldest at that time, dropping down to  $-140^{\circ}$  C. Trying to determine the nature of these clouds, scientists launched probes which picked up traces of water vapor and meteor dust, suggesting that ice could condense on the particles. But that theory was dismissed in 1967 when a rocket failed to detect any significant amount of solid particles in a cloud. "Instead of meteor dust, ions could be the condensation nuclei on which ice is deposited. Ions - electrically charged atoms or molecules - form the ionosphere, a region within the mesosphere and thermosphere where the reflection of radio waves takes place. Since there is an ample supply of nitrogen, oxygen and heavier ions, including those of iron, at the mesopause, the new theory postulated that NLCs result from the clustering and freezing of water molecules around these ions when the temperature is about  $-140^{\circ}$  C and there was a high concentration of water vapor."

There's more. You probably have noticed that E-skip seasons are better during sunspot minima, and worse during sunspot peaks. You probably also remember the 1984 season, that just about vanished in early July. That was around a sunspot peak. The article related sunspot cycles to NLCs. "Rocket measurements taken during the International Geophysical Year showed that the high latitude average

summer temperatures at the mesopause were  $-108^{\circ}$  C. This is considerably warmer than the  $-143^{\circ}$  C. recorded during the following solar minimum around 1964 and suggests there is also an inverse relationship between NLCs and solar activity."

One area where the similarities between NLCs and E-skip diverge. NLCs are more frequent at latitudes of  $50^{\circ}$  to  $60^{\circ}$  north. And the Solar Mesosphere Explorer, launched by NASA in 1981, observed that NLCs were even more frequent at higher latitudes. It is difficult to visually observe NLCs at higher latitudes during the summer because the sun seldom drops low enough below the horizon for the sky to become dark enough. But E-skip measurements seem to suggest the peak latitude to be around  $40^{\circ}$ .

But is there a connection? The only way to determine that would be to make a connection between visual observations of NLCs and E-skip loggings. But there's a catch: the person visually observing the NLC will not log a skip opening, and the person logging the skip opening will not be able to see the patch of cloud that would be reflecting the signal. The E-skip reflection comes from the horizon, where the atmosphere would be too dense to see the NLC, and the NLC, which would have to be several degrees above the horizon, making it unusable for E-skip. The only exception would be if there were a massive cloud spreading to the horizon, associated with one of those skip openings that seem to draw signals from many directions.

That means that to make a connection, there would have to be individuals making NLC observations, taking note of their direction and angle above the horizon, while records of observations are kept and compared with DX reports.

## OBSERVING NOCTILUCENT CLOUDS

There are four basic structural types of NLCs. Type 1 is described as a veil or a structureless sheet. Type 2 consists of bands or streaks, either parallel or at small angles. Type 3 NLCs are waves or billows, or closely-spaced short parallel streaks, or a fine herring-bone structure resembling sand ripples on a beach at low tide. Type 4 consists of whirls, large-scale looped or twisted structures. Often, the cloud will contain two or more of these for types of structures. "NLCs are never seen against either a black nighttime sky or a bright blue daytime sky: they are visible only against a twilight sky ranging from pale to dark blue. They are usually transparent enough to allow bright stars to shine through. Binoculars or a telescope at low power will darken the sky and thereby increase contrast, which offers observers a chance to see the clouds up to half an hour earlier than they would with their eyes alone."

Anybody interested in seeing photographs of these clouds should look up the following: ASTRONOMY, July 1987, pp.43-45; SKY & TELESCOPE, November 1986, p.

545; and SKY & TELESCOPE, July 1987 (page number missing, but see "News Notes"). These references also have text relating to NLCs.

Although NLCs have been seen at the same time as aurorae, there has been a tendency for NLCs to fade out. "The relationship between noctilucent clouds and aurorae seems to be an inverse one, which implies the two phenomena do not occur together for any significant time. Even though they have been observed at the same time from the same place, the NLCs usually suffer a reduction in brightness, extent, and structure soon after the onset of an aurora. Researchers believe this effect is caused by a heating of the mesopause by auroral electric currents. A warming of just  $10^{\circ}$  C to  $20^{\circ}$  C may be sufficient to disperse the NLCs."

## TYPES OF SKIP AND TYPES OF NLC

In the several years that I have been observing distant television images from E-skip, I have noticed different types of skip openings, which could be related to the four different types of NLCs mentioned above. This is only conjecture on my part, and not to be taken as any definite connection. The most frequent type of skip opening seems to be one that lasts seldom more than 15 minutes, with a MUF that seldom goes beyond 60 MHz. Often I receive the video of a channel 2, and sometimes the audio. This would seem to indicate an ionized patch of low density into which radio waves can penetrate about 100 feet. I would associate this with the veil type NLC.

Certain skip openings would show multiple reflections, indicated by ghosting to the right or left of objects on the television picture. The spacing between the images would indicate multiple paths varying by as much as two miles. One occasion, there were as many as four distinct reflections, slowly phasing in and out with one another. This would be produced by an uneven skip patch causing multiple points of reflection, unlike the veil. The wave pattern could cause this, just as waves on an ocean cause multiple reflections of the sun.

Then there's that opening where, as the MUF rises, several stations from the same city can be received. Then it spreads until you are able to log several states at the same time. This could be produced by nonparallel bands of NLC, each reflecting signals in a different direction.

Then there's that intense opening, where the FM band and everything below it is totally useless for DX. Several stations are coming in on each channel, so that you see no clear picture, and hear nothing but buzzing and other noises. This sounds like the large-scale whirls and loops of the type 4 NLC.

## MAKING A CONNECTION

Until the nature of NLCs are established, the only way to make a connection between NLCs and

sporadic-E would be by observation, and as said before, the person observing the cloud would probably not be the person reporting a DX opening. But if cloud observations can be correlated with DX reports published in the VUD, perhaps a definite connection can be made, not only time and location, but also a connection with cloud types and the above mentioned characteristics of skip openings. In short, we need DXers to do more than just log stations: we need you to help the scientific community by determining if there is such a relationship. This information could help determine the nature of NLCs and increase our knowledge of the mechanics of sporadic-E ionization.

The following is a list of information needed to be included in NLC reports. It is from a publication by the British Astronomical Association, but with a few modifications.

1. Place of observation with latitude and longitude to the nearest half-degree.
2. Date. Always use the "double-date" for a single night. Thus "June 13/14" means the night of the 13th and the early morning of the 14th.
3. Time. State local zone, standard or daylight time, or if using UT.
4. Azimuth. Try to measure the left-hand and right-hand azimuths of the total limits of the display, but azimuths of the individual bits of it are not necessary. If you use prismatic compass correct the magnetic bearings to true bearings. Use the 0 - 360 convention, i.e. 000 is north, 090 east, 180 south, 270 west.
4. Elevation. Measure, if you can, the elevation of the upper border and, if there is one, that of the lower border. There are various kinds of simple alidade you can make for this.
5. Brightness. If the NLC is faint or visible only with binoculars write "1", if intensely bright and vivid call it "3", otherwise write "2".
6. Structure. Veil, bands, waves, or whirls, or any combination of the four.
7. Observing conditions. It helps to describe these very briefly, e.g. cloud cover, haze, bright moon.
8. Aurora. If you see an aurora please describe it in detail, because the simultaneous occurrence of the two upper atmosphere phenomena is unusual and is of great theoretical interest.

It would also be useful for DXers to keep record of some of the different characteristics of skip openings mentioned earlier in this article, in the event that a connection can be made between types of NLCs and E-skip characteristics.

Send your observations to:  
Bill Fahber  
336 Atlantic St.  
Bridgeton NJ 08302.

# PROPOSAL TO REALLOCATE THE 120 AND 90 METER SHORTWAVE BANDS AND 225-230 MHz TO BROADCASTING IN THE U.S AND CANADA

PROPOSAL

May 1988

WWV-2500 and CHU-3300 should operate with a power of 50,000 watts each, using non-directional antennas, while WWVH in Kekaha, Hawaii, on the island of Kauai, on 2500 kHz, should operate with 50,000 watts using a North-South directional antenna to protect WWV Fort Collins and JJY in Tokyo, Japan. Secondary stations of 5,000 watts or less should be allowed only on 3330 kHz, all protecting CHU's signal. In addition, Class I-B Clear channel primary stations should operate at power levels no higher than 25,000 watts, using non-directional antennas by day and directional antennas by night. Secondary stations should operate at power levels of no more than 5,000 watts, cutting back to no less than 250 watts if interference conditions make this necessary. This rule also applies to Class III Regional stations in the AM2 and AM3 bands. Class IV Local stations on the AM2 and AM3 bands should be given the same power levels as on the current Class IV Local AM channels (1230, 1240, 1340, 1400, 1450, and 1490 kHz), 1,000 watts day and night, with power reductions if necessary to combat interference. No more than 125 stations should be on each of the Class IV Local channels. Class A Educational stations in the FM2 service should operate at an effective radiated power of no more than 25,000 watts at no more than 330 feet above the average surrounding terrain, as Class B Educational FM2 stations in FM Zones 1 and 1A should operate at an ERP of no more than 150,000 watts at 500 feet above average terrain, and Class C Educational FM2 stations in FM Zone 2 should operate at an ERP of no more than 300,000 watts at 2,000 feet above average terrain.

This proposal, as outlined here, is designed to alleviate congestion on the AM and FM Broadcast Bands (530-1600 kHz and 88-108 MHz) in the U.S. and Canada. The expansion of the AM broadcast band to 1700 kHz is seen as only a short-term solution to the band congestion problem brought forth by the deregulation policies of the Federal Communications Commission, which has done nothing but increase interference on the AM broadcast band and the educational FM band (88-92 MHz) in the United States. Thus, the need to establish new broadcast bands becomes necessary. This proposal calls for the reallocation of the 120 and 90 meter shortwave radio bands and the 225-230 MHz portion of the UHF Aviation Band to broadcasting in the United States and Canada. The proposal should also be seen as a plan for growth of broadcasting in Canada. There is also a need for a Table of Assignments for all AM broadcasting in the United States.

The Federal Communications Commission's deregulatory policies have done nothing but hurt AM radio, which has suffered a 23% loss in listenership since 1979, with much of it coming over the last six years. Much of this is due to the F.C.C.'s failure to establish a Table of Assignments for AM radio, which must be done in order for AM radio to be viable into the twenty-first century. A Table of Assignments is one of the reasons why FM is "where it's at" in radio, and this is what could make AM radio a viable choice going into the year 2000. The proposed establishment of the AM2 and AM3 (120 and 90 meter) bands for broadcasting in the U.S. and Canada can not only alleviate AM band congestion, but also promote growth in AM band congestion, but also promote growth in AM broadcasting. The proposed FM2 band (225-230 MHz), rejected by the F.C.C., would have eliminated about one-fourth of all AM stations, many of them restricted to broadcasting during daylight hours only. This proposal, if implemented, would create about 1,200 to 1,500 AM2 and AM3 assignments, while eliminating about 2,500 to 3,000 AM assignments. The FM2 band would also be created as a non-commercial broadcast service, alleviating congestion on the 88-92 MHz portion of the FM band.

The AM2 (120 meter) band should be in the band between 2300 and 2500 kHz, with 2500 kHz set aside as a U.S. class I-A Clear channel, with WWV in Fort Collins, Colorado being the primary station. The frequency is also an internationally allocated Standard Carrier Frequency. The AM3 (90 meter) band should be in the band between 3200 and 3400 kHz, with 3300 kHz set aside as a Canadian class I-A Clear Channel, with CHU in Ottawa, Ontario being the primary station. The FM2 band, as stated before, should be in the band between 225 and 230 MHz, with twelve Class A Educational and thirteen Class B-C Educational channels allocated.

## PROPOSED ALLOCATION OF THE AM2 SERVICE

U.S. Class I-A Clear: 2500 kHz.  
Canadian Class I-B Clear: 2460 kHz.  
U.S. Class I-B Clear: 2310 kHz, 2400 kHz.  
Class III Regional: 2300 kHz, 2320-2330 kHz, 2350-2390 kHz,  
2410-2440 kHz, 2470-2490 kHz.  
Class IV Local: 2340 kHz, 2450 kHz.

## PROPOSED ALLOCATION OF THE AM3 SERVICE

Canadian Class I-A Clear: 3330 kHz.  
Canadian Class I-B Clear: 3210 kHz.  
U.S. Class I-B Clear: 3200 kHz, 3400 kHz.  
Class III Regional: 3220 kHz, 3250-3320 kHz.  
Class IV Local: 3230 kHz, 3240 kHz.

## PROPOSED ALLOCATION OF THE FM2 SERVICE

Class A Educational: 225.1 MHz, 225.7 MHz, 226.1 MHz, 226.5 MHz,  
227.1 MHz, 227.5 MHz, 227.9 MHz, 228.3 MHz,  
228.7 MHz, 229.1 MHz, 229.5 MHz, 229.9 MHz.  
Class B-C Educational: 225.3 MHz, 225.5 MHz, 225.9 MHz,  
226.3 MHz, 226.5 MHz, 226.9 MHz,  
227.3 MHz, 227.7 MHz, 228.1 MHz,  
228.5 MHz, 228.9 MHz, 229.3 MHz,  
229.7 MHz.

## NOTES ON THIS PROPOSAL

This proposal was submitted by Eric Bueneman, WDX Monitor Station KDX0STL in Hazelwood, Missouri.

This proposal was written in March 1988.

# 1988: LEAP YEAR FOR FM TUNER DX PERFORMANCE

If you've been paying attention to the audio magazines during the past several months, you may have read some FM tuner reviews that make it sound as if the industry is really starting to pay attention to the specifications that most interest the FM DXer. That's absolutely correct; something is going on in the FM tuner business, and by a lucky accident, it's a great boon to FM DXing. Band conditions, particularly in and around the large urban areas in North America, are becoming very crowded. It's not just because of new stations on the air. Obviously, this is the dark side of FM broadcasting's current success, from the DXer's point of view. Now that most people listen primarily to FM, the band is crammed with signals. More DX possibilities to be sure, but also, more interfering locals in the DXer's own backyard. With the possibility of "LPFM" broadcasting, things may get even MORE crowded.

Something similar to this happened in the early days of AM radio. As the band grew more crowded, manufacturers had to greatly improve specs--sometimes just to keep up with each other. Now, in the late 1980's, FM tuner manufacturers are starting to offer the kind of performance that DXers used to dream about--and what's even more incredible is that they also seem to be trying very hard to top each other in the selectivity and overload rejection specifications. So far, no FM DXers have submitted reviews of any of the new units to the VUD. That may change soon, as WTFDA's more avid tuner freaks are now visiting their local audio shops and seeking "hands on" demonstrations. What follows is a brief rundown of the tuners that have FM DXers very excited this year.

**TANDBERG 3001-A** The new standard of reference. It may become to the 1990's what the McIntosh MR78 was to the 80's. This tuner is simply incredible; it's in a class by itself. The specs may make you drool--and they've been verified by renowned tuner reviewer Len Feldman in the March 1988 edition of Audio magazine. Best mono sensitivity was measured at about a very low 8.5 dBf. Signal-to-noise ratio was the best Feldman ever encountered on a tuner. Alternate channel selectivity was 95 dB; adjacent channel selectivity is claimed to be 40 dB, but measured at 38 dB. But the really incredible thing about the unit is the overload rejection: 135 dB of spurious rejection, and 135 dB of image rejection. Absolutely incredible--truly, this sounds like a tuner that can be used in the most crowded contemporary local FM band environments (such as the New York, Chicago, and L.A. areas) with a good rooftop FM antenna and very little or no resulting unwanted images and mixing products across the dial. While some tuners can claim slightly better adjacent channel specs, what's more important is the overall shape of the "selectivity skirt" versus sensitivity and the now all-important overload rejection characteristics. The price is about \$2000.

**ONKYO T-9090 Mark II** - This is the eagerly-awaited redesign of the T-9090, one of Onkyo's Integra components, loaded with features and great DX-related control options--such as a built-in A/B antenna switch. They claim 95 dB of alternate channel and 80 dB adjacent channel rejection in recent high-end audio magazine ads. The 95 dB spec sounds right, considering Onkyo's track record, but 80 (EIGHTY!) dB of adjacent channel sounds like either science fiction or an advertising copywriting error. We'll see, but we're still willing to bet that the Onkyo's adjacent channel rejection is pretty close to the best available. The original T-9090 is a super DX machine, and definitely the best new tuner for FM DX in its price range during the past few years. We can't wait to see how this one, priced in the \$700 range, rates for FM DX tuning.

**HARMON KARDON TU-920** Like the TANBERG 3001-A, an analog tuner. Former NFM editor Joe Fela spotted this one reviewed in the March High Fidelity issue, and we have to agree with his first impression: "apparently we have a new player in the outstanding selectivity field." This one features claimed adjacent channel selectivity of 41.5 dB in the narrow mode. This may well be the highest adjacent channel selectivity available in its price range. Alternate channel selectivity is only about 68 dB in this mode, still deep enough--when considered together with adjacent channel--to make it a great DX tuner. Sensitivity is rated to be very good, but remember this spec is now far from being the most important to the FM DXer. Overload rejection and selectivity specs have to be looked at first before sensitivity is even considered. Some of the worst tuners for FM DXing you'll ever see are also among the most sensitive. The price is only \$350!

**AND OTHERS** Harmon Kardon also introduced Citation-23 recently, and it also features very good measured selectivity (Audio's Feldman measured it at 32 dB adjacent and 78 dB alternate) and a claimed spurious response rejection of 115 dB and a new approach to selectivity that uses a phase-locked loop as a bandpass filter instead of conventional filtering approaches. The Citation-23 is about \$600. Then there's the Creek 3140, a British import with claimed alternate channel specs of 100 dB--and it's only \$375. We hope to find out more about these "others" soon! In the meantime, sit back and enjoy what's happening this year. It's becoming a buyer's market for great FM DXing tuners. There may be more surprises to come this year!

## \* \* \* PUBLISHER'S NOTES \* \* \*

**E-SKIP SEASON IS HERE!** MAY BRINGS THE ANNUAL RETURN OF MID-LATITUDE E-SKIP ACTIVITY. THIS IS THE TIME OF THE YEAR WHEN YOU CAN ADD MANY NEW TV AND FM STATIONS TO YOUR DX LOG, IF YOU PAY CLOSE ATTENTION TO CONDITIONS. SPORADIC E-SKIP IS, OF COURSE, A SPRING/SUMMER SOURCE OF INTERFERENCE TO TV AND FM BROADCASTERS, AND THE PROPAGATION MODE THAT HAM RADIO OPERATORS OFTEN REFER TO AS "SHORT SKIP". E-SKIP, WHICH MOST TV AND FM DX ENTHUSIASTS LIKE TO REFER TO AS "Es," OFTEN STARTS QUITE SUDDENLY, WITH SIGNALS BECOMING VERY STRONG IN A MATTER OF MINUTES. REMEMBER, TOO THAT Es OPENINGS ARE FAMOUS FOR BEING UNPREDICTABLE--THE EARLY SEASON ACTIVITY OFTEN DISAPPEARS AS QUICKLY AS IT SHOWS UP. BEST ADVICE: BE PREPARED, AND MONITOR THE LOWER FREQUENCIES. A PSB SCANNER TUNED TO THE 30 TO 50 MHZ RANGE CAN BE A GREAT EARLY WARNING DEVICE, PARTICULARLY IF YOU USE IT TO CHECK FOR 35 AND 43 MHZ RADIO PAGING TRANSMITTERS COMING FROM AN AREA OF A POTENTIAL TV/FM Es OPENING. GOING BELOW 30 MHZ, THE 27 MHZ CB AND 28-29.7 MHZ 10 METER HAM BANDS ALSO SERVE AS EFFECTIVE EARLY WARNING BANDS FOR E-SKIP. THE AVERAGE Es LOGGING IS JUST OVER 1000 MILES, AND YOU'LL NOTE MANY SINGLE HOP LOGGINGS IN THE 500 TO 1500 MILE RANGE, WITH FADING CHARACTERISTICS THAT ARE UNIQUE TO THE E-SKIP MODE. YOU'LL NOTE MOST EARLY ACTIVITY IN THE MORNINGS AND LATE AFTERNOONS; PAY ATTENTION TO OPEN LOWBAND TV (CHANNELS 2 THRU 6) IN THE 10 A.M.-TO-NOON AND 6 P.M.-TO-8 P.M. PERIODS.

**CONVENTION SEASON IS COMING TOO!** AND IT WILL SOON BE SUMMER, WHICH BRINGS THE VARIOUS DX CLUB CONVENTIONS, AS WELL AS THE BEST WEATHER AND TV/FM DX CONDITIONS OF THE YEAR. IT ALL HAPPENS VERY FAST, OR SO IT SEEMS, SO START TO THINK ABOUT YOUR TRAVEL PLANS. WE HOPE TO SEE MANY WTFDAERS AT THESE ANNUAL GETTOGETHERS...AND, BE WATCHING JOHN BRODMALL'S FEATURE COLUMN FOR MORE ABOUT THIS YEAR'S WTFDA MEETING IN NORTHERN GEORGIA. IN THE MEANTIME, GET YOURSELF "PSYCHED UP" FOR IT SUMMERTIME TROPO AND SKIP AS THE WEEKEND OF THE ANNUAL EVENT APPROACHES!

**GOOD READING FOR WTFDAERS** BE SURE TO GET A COPY OF THE MAY ISSUE OF MONITORING TIMES. WTFDA'S JOHN COMBS HAS AN ARTICLE IN THAT ISSUE CALLED "A TV DX PRIMER." IF YOU CAN'T FIND MT ON YOUR LOCAL NEWSSTAND, THEIR ADDRESS IS: P.O. BOX 98, BRASSTOWN NC 28902. COVER PRICE IS \$2.50, AND MT IS A GREAT MAGAZINE, WITH COVERAGE OF ALL ASPECTS OF DXING FROM SHORTWAVE TO PSB SCANNERS. MT HAS RECENTLY CHANGED TO A MAGAZINE FORMAT, AND IT CAN BE FOUND ON DISPLAY NOW NEXT TO THE ELECTRONICS AND AUDIO MAGAZINES. BOTH MT AND POPULAR COMMUNICATIONS DEFINITELY DESERVE YOUR ATTENTION, AND ARE THE ONLY MAGAZINES ON THE MAGAZINE RACKS FEATURING REGULAR COVERAGE OF OUR HOBBY...ALSO, QST, THE MONTHLY PUBLICATION OF THE AMERICAN RADIO RELAY LEAGUE, FEATURES AN EXCELLENT ARTICLE ABOUT E-SKIP IN THEIR APRIL ISSUE CALLED "SPORADIC-E PROPAGATION AT VHF: A REVIEW OF PROGRESS AND PROSPECTS," WRITTEN BY EMIL POCOCK, WHICH USES SOME CLASSIC DATA PROVIDED BY WTFDAER PAT DYER (WAS1YX). QST ALSO FEATURES AN ARTICLE BY MICHAEL OWEN IN THEIR MAY ISSUE ABOUT LAST YEAR'S RECORD-BREAKING JUNE 14TH OPENING, WHICH SAW E-SKIP CONTACTS MADE AT 220 MHZ, AND SOME CROSS-CONTINENT 144 MHZ DOUBLE-HOP E-SKIP. YOU CAN FIND QST AT MANY LOCAL AND UNIVERSITY LIBRARIES.

**COLUMN HAPPENINGS** FRED MCCORMACK, WESTERN TV-DX SECTION EDITOR, SENDS WORD THAT THERE HAVEN'T BEEN ENOUGH REPORTS OVER THE PAST COUPLE OF MONTHS TO GET TOGETHER FOR A COLUMN. SIMILARLY, EASTERN TV-DX DOES NOT APPEAR IN THE MAY ISSUE, WITH EDITOR JOHN COMBS GETTING JUST ONE REPORT OF TWO LOGGINGS. IF YOU HAVEN'T NOTICED BY NOW, IT'S BEEN AN EXCEPTIONALLY BAD FEBRUARY-MARCH PERIOD FOR QUITE A FEW TV AND FM DXERS IN WTFDA. ACCORDING TO RECENT COMMENTS FROM MEMBERS, THIS MAY BE ONE OF THE SLOWEST SUCH PERIODS IN A DECADE. EXPECT THINGS TO CHANGE SOON, WITH SPRING NOW WELL UNDERWAY AND THE SKIP SEASON ABOUT TO COMMENCE SHORTLY!

--BILL THOMPSON



**WORLDWIDE TV-FM DX ASSOCIATION**  
THE CLUB FOR LONG DISTANCE FM AND TV RECEPTION ENTHUSIASTS!