

VHF UTILITY DX

DONALD L. BLEVINS
3615 EAST LOMBARD STREET, BALTIMORE, MD 21224-2408
PHONE # 301-522-2089

VHF UTILITY DX...will feature AAA and associated auto clubs. You will note that there are a few non-auto club listings that are included. This list includes large scale towing operations in metropolitan areas. Individual garages were not included in this list, as the list goes on for about 25 pages or so. Maryland, as you may know, is a smaller state and such has a good page and a half. Although there are more licenses on the other auto emergency frequencies, there is less traffic due to the smaller number of units assigned each license. Also note that only a small number of tows are carried out over the radio. AAA is the exception as one central dispatch handles a number of member stations.

-150.92-

KCR-615	AAA of Southern Cal	Alhambra	CA
KCY-898	AAA of Southern Cal	Culver City	CA
KCY-898	AAA of Southern Cal	Gardena	CA
WKF-950	Cal State Auto Assoc	Glen Ellen	CA
KQS-687	Cal State Auto Assoc	Hayward	CA
KMK-619	AAA of Southern Cal	Los Angeles	CA
KVI-488	Cal State Auto Assoc	Monterey	CA
KMJ-323	Cal State Auto Assoc	Sacramento	CA
KAU-987	AAA of Southern Cal	San Diego	CA
KAU-987	AAA of Southern Cal	Solana Beach	CA
WSH-565	Rocky Mountain Motorists Inc	Lakewood	CO
KCF-583	Connecticut Motor Club	Waterbury	CT
KTB-289	Auto Emerg Radio Serv Corp	Daytona Beach	FL
WSD-792	Auto Emerg Radio Serv Corp	North Fort Myers	FL
KBG-389	Auto Emerg Radio Serv Corp	West Palm Beach	FL
KEF-946	Georgia Motor Club	Atlanta	GA
WMT-687	Blue Grass Auto Club	Ashland	KY
KQW-361	M & W Tire Service	Bowling Green	KY
KGW-374	M & W Tire Service	Franklin	KY
KQB-465	Blue Grass Auto Club	Lexington	KY
KGW-377	M & W Tire Service	Russellville	KY
KCT-862	AAA of Maryland	Baltimore	MD
KCT-862	AAA of Maryland	Catonsville	MD
KLE-659	AAA of Maryland	Columbia	MD
KFR-425	AAA of Maryland	Vienna	MD
WRQ-684	Jauion & Sams 24 Hour Towing	Detroit	MI
KSI-789	Official Towing Company	Warren	MI
WRE-649	Mason Automotive	Webberville	MI
KEG-834	AAA of Rochester	Rochester	NY
WRM-204	AAA of Rochester	Rochester	NY
KXZ-773	Miami Valley Auto Club	Dayton	OH
WRQ-246	AAA of Central Penn Auto Club	Harrisburg	PA
WKF-843	Mid State Auto Club	Johnstown	PA
KGC-297	West Penn Motor Club	Pittsburg	PA
KBB-314	AAA of Washington	Bremerton	WA
KBB-314	AAA of Washington	Issaquah	WA
KUE-679	AAA of Washington	Spokane	WA

150.935

KVA-370	Arkansas Auto Club Inc	Little Rock	AR
KOL-575	Arizona Auto Assoc	Phoenix	AZ
KEX-506	Auto Club of South Cal	Lancaster	CA
KXM-619	Auto Club of South Cal	Los Angeles	CA
KRZ-849	Cal State Auto Assoc	Modesto	CA
KCY-898	Auto Club of South Cal	Palos Verdes Estates	CA
WRB-374	Cal State Auto Assoc	Port Costa	CA
KCY-898	Auto Club of South Cal	Rancho Palos Verdes	CA
KUY-548	Cal State Auto Assoc	South Lake Tahoe	CA
KAL-496	Rocky Mountain Motorists	Denver	CO
KCC-665	Auto Club of Hartford	West Hartford	CT
KCF-583	Connecticut Motor Club	Wilton	CT
KXQ-908	AAA	Coral Gables	FL
KGI-447	St Petersburg Auto Club	Saint Petersburg	FL
WRG-341	AAA of Iowa	Souix City	IA
KNM-876	Chicago Motor Club	Chicago	IL
KLJ-232	Trentman Service	St Libory	IL
KCV-919	Edwin S Camp DBA	Springfield	IL
WRD-543	Hazel Dell Service	Springfield	IL
WSI-981	Ressler Truck Service	Marion	IN
KJN-719	Louisville Auto Club	Louisville	KY
KLL-553	AAA	Metarie	LA
KCJ-261	AAA of Maryland	Baltimore	MD
WRR-694	AAA of Maryland	Fredrick	MD
WKP-951	AAA of Maryland	Hagerstown	MD
WYG-385	AAA of Maryland	Salisbury	MD
KXF-701	AAA of Maryland	Taneytown	MD
KCC-244	Maine Auto Assoc	Falmouth	ME
WSJ-489	Moore's Auto Tire Service	Wayndotte	MI
KAA-719	Auto Club of Minneapolis	Bloomington	MN
KYK-568	AAA	Concord	NH
KLU-366	Auto Emergency Radio Service	Manchester	NH
KRE-525	Auto Emergency Radio Serv	Nashua	NH
KTI-626	Auto Emergency Radio Service	Portsmouth	NH
KEH-228	North Jersey Auto Club	Jersey City	NJ
KUU-593	Auto Emergency Radio Service	Albuquerque	NM
WZV-981	AAA	Las Cruces	NM
KES-964	Albany Auto Club	Albany	NY
KED-382	Auto Club of Western NY	Buffalo	NY
KBL-227	Auto Club of Syracuse	Syracuse	NY
KQE-560	Columbus Auto Club	Columbus	OH
KUH-918	Boutwell Garage	Sherwood	OH
KVT-581	Auto Club of Oklahoma	Tulsa	OK
KZF-809	Jack's Auto Service & Towing	Eugene	OR
KOM-720	Auto Club of Oregon	Portland	OR
KGW-682	Jack's Auto Service & Towing	Springfield	OR
KGE-671	Erie County Auto Club	Erie	PA
WSC-472	Jordens Sunoco Service	Mars	PA
KGF-675	Keystone Auto Club	Philadelphia	PA
KGC-297	West Penn Auto Club	Pittsburg	PA
KJC-265	White Rose Motor Club	York	PA
KAT-627	AAA	Fort Worth	TX
WRM-469	Auto Club of Virginia	Lynchburg	VA
KIL-634	Auto Club of Virginia	Richmond	VA
KDW-840	Auto Club of Virginia	Roanoke	VA
KBB-314	Auto Club of Washington	Bremerton	WA
KBB-314	Auto Club of Washington	Issaquah	WA
KBI-982	Inland Auto Assoc	Spokane	WA
KUE-679	Inland Auto Assoc	Spokane	WA

URL-869	Auto Club of South Cal	Costa Mesa	CA
URL-989	Auto Club of South Cal	Laguna Hills	CA
KMK-619	Auto Club of South Cal	Los Angeles	CA
KUI-488	Cal State Auto Assoc	Monterey	CA
URL-989	Auto Club of South Cal	Newport Beach	CA
KMF-828	Cal State Auto Assoc	Santa Clara	CA
KWD-492	Cal State Auto Assoc	Santa Cruz	CA
URL-989	Auto Club of South Cal	South Laguna	CA
KGU-645	Cal State Auto Assoc	Walnut Creek	CA
KUZ-748	Rocky Mountain Motorists	Colorado Springs	CO
KCF-583	Connecticut Motor Club	Hamden	CT
WGI-233	Connecticut Motor Club	Wilton	CT
WSN-391	AAA Delaware Motor Club	Newark	DE
KBO-287	Peninsula Motor Club	Sarasota	FL
KTB-260	Peninsula Motor Club	Winter Park	FL
KEF-946	Georgia Motor Club	Atlanta	GA
KWD-414	Fredrickson AAA	Idaho Falls	ID
KZA-262	Euclid & 53 Service Inc	Rolling Meadows	IL
KIM-974	Eugene De Bartolo DBA	Wheeling	IL
KON-843	AAA	Brookline	MA
KLW-284	Tri-County AAA	Holyoke	MA
KLK-673	AAA	Somerville	MA
KNAE-733	Maine Auto Assoc	Manchester	ME
WZC-610	Skip's Towing	St Clair Shores	MI
WRE-338	Twelve & Shoenherr Towing	Warren	MI
KAA-484	Auto Club of Western NY	Buffalo	NY
KSC-774	Auto Club of New York	New York	NY
KCZ-805	Cincinnati Auto Club	Cincinnati	OH
KBC-297	West Penn Motor Club	Monroeville	PA
WQG-759	Reading Berks Auto Club	Mount Penn	PA
KNAG-247	Reading Berks Auto Club	Reading	PA
WQG-764	Reading Berks Auto Club	Reading	PA
WQG-848	Reading Berks Auto Club	Reading	PA
WQG-760	Reading Berks Auto Club	Shillington	PA
WQG-763	Reading Berks Auto Club	Sinking Springs	PA
WQG-761	Reading Berks Auto Club	Wernersville	PA
WQJ-849	Reading Berks Auto Club	Wyomissing	PA

15095

KOL-575	Arizona Auto Association	Phoenix	AZ
URL-989	Auto Assoc of South Cal	Anahiem	CA
WRM-989	Auto Assoc of South Cal	Fullerton	CA
KMK-619	Auto Assoc of South Cal	Los Angeles	CA
URL-989	Auto Assoc of South Cal	Norwalk	CA
KAS-350	Cal State Auto Assoc	San Rafael	CA
KMF-828	Cal State Auto Assoc	San Rafael	CA
KTK-689	Rocky Mountain Motorists	Denver	CO
KJI-591	Auto Club of Hartford	West Hartford	CT
WZT-846	AAA	Washington	DC
KTM-975	Auto Emergency Radio Serv	Fort Lauderdale	FL
WYK-577	Jack's Gulf	Fort Myers	FL
KTB-253	Auto Emergency Radio Serv	Jacksonville	FL
KGI-447	St Petersburg Motor Club	Saint Petersburg	FL
KFO-611	Authur P. Neitzel DBA	Lincoln	IL
KGL-973	Grave's Towing	South Holland	IL
KBJ-279	Robin Hayes DBA	Springfield	IL
KNCC-262	Smith's Service	Forest	IN
KVJ-418	Hoosier Motor Club	Indianapolis	IN
KJN-719	Louisville Motor Club	Louisville	KY
KLL-553	AAA	Metairie	LA
KCS-690	AAA of Rhode Island	Fall River	MA
KAV-255	Bancroft Auto Club	Worcester	MA
WGV-731	Eastbrook Standard Serv	Grand Rapids	MI
KNBG-292	D & R Towing	Midland	MI
WRE-337	Novi Standard Service	Novi	MI
KAA-719	Auto Club of Minneapolis	Minneapolis	MN
KJD-417	Auto Club of Missouri	Clayton	MO
WSX-585	Carolina Motor Club	Charlotte	NC
KGW-278	New Bern Ave Exxon Wrecker	Raleigh	NC
KZC-594	New Bern Ave Exxon Wrecker	Raleigh	NC
KWT-702	Cal State Auto Assoc	Las Vegas	NV
WRM-204	Auto Club of Rochester	Rochester	NY
KED-706	Auto Club of Syracuse	Syracuse	NY
KED-364	Albany Auto Club	Troy	NY
KOV-608	Alliance Auto Club	Alliance	OH
KGV-805	Marion Service	Marion	OH
KFY-558	AAA	Springfield	OH

150965

150965

KWR-714	Auto Emergency Radio Serv	Oklahoma City	OK
KOM-720	Auto Club of Portland	Portland	OR
KGC-297	West Penn Motor Club	Pittsburg	PA
KGG-684	Keystone Auto Club	Wyanocote	PA
KJC-265	White Rose Motor Club	York	PA
KMA-729	White Rose Motor Club	York	PA
KMA-730	White Rose Motor Club	York	PA
KMA-731	White Rose Motor Club	York	PA
KMA-732	White Rose Motor Club	York	PA
WSH-562	B & D Body Shop	Travelers Rest	SC
KJF-543	Southwest Motor Club	Dallas	TX
KDC-883	Broadway & Roy Towing Ser	Seattle	WA
KNBJ-790	Eugene Rabas Emerg Wreck	Maribel	WI
WZT-987	Doug's Motor Sales & Wrec	Man	WV

Pat Dyer son Antonio Reports:

01-14	1739	HC2FG	50.99	Guayaquil, Ecuador	Beacon
02-06	1516		31.35	Argentina	Medical Pager
02-07	1514		40.45		
02-08	1307	PJ2DEW	50.11	Curuco, N.A.	Amatuer
02-08	1557	WAZVUN	50.11	New York, NY	Amatuer
02-08	1728	HC2FG			
02-08	1822	KHGIAA	50.113	Hilo, HI	Amatuer
02-08	1848	KHGIIJ	50.109	Honolulu, HI	Amatuer
02-08	1918	HC2FG			
02-08	2014	HC5KA	50.103	Ecuador	Amatuer
02-08	2256	HC2FG			
02-09	1430	KDA-282	33.90		
02-09	1507	KUE-698	33.70	Eagleville, PA	Montgomery County Fire
02-09	1533		35.28	Argentina	Medical Pager
02-10	1517		35.28	Argentina	Medical Pager
02-11	1603		35.28	Argentina	Medical Pager
02-12	1240		35.28	Argentina	Medical Pager
02-13	1320		37.62	Argentina	Medical Pager
02-14	1220		35.28	Argentina	Medical Pager
02-15	1318		31.35	Argentina	Medical Pager
02-21	1345		31.35	Argentina	Medical Pager
02-22	1022		32.68	Argentina	Medical Pager
02-23	1105		32.68	Argentina	Medical Pager
02-24	1517		32.68	Argentina	Medical Pager
02-25	1515		32.96	Argentina	Medical Pager
02-26	1329		32.96	Argentina	Medical Pager
02-28	1559		31.35	Argentina	Medical Pager
03-01	1400		35.28	Argentina	Medical Pager
03-02	1407		37.62	Argentina	Medical Pager
03-03	1527		32.96	Argentina	Medical Pager
03-04	1425		35.28	Argentina	Medical Pager
03-05	1339		35.28	Argentina	Medical Pager
03-06	1436		35.28	Argentina	Medical Pager
03-07	1147		39.64	Argentina	Medical Pager
03-08	1238		39.64	Argentina	Medical Pager
03-09	1154		35.28	Argentina	Medical Pager
03-10	1410		35.28	Argentina	Medical Pager

TECHNICAL TOPIX: all about S-meters, part 2

Last time, this article explained in some detail how the AFC and AGC voltages are derived in TV and radio receivers. As a review, and to summarize, here is a quick discussion about the FM detector. Later on, the practical uses for S-meters will be covered. A few words will also be given to the design of a simple meter circuit.

The discriminator, or FM detector, is a frequency-to-voltage converting circuit and an integral part of all FM receivers commonly used for DX. There are three basic forms, viz. the envelope detector, the ratio detector, and the Foster-Seely type detector. (These were shown in Fig. 3 of Part I of this article.) All those circuits produce an AC voltage that is proportional to the frequency of the incoming signal, as illustrated in Figure 1. Remember that the carrier frequency of an FM signal varies with the audio program, so if the circuit can produce a voltage change (which can be amplified and fed to a speaker) that corresponds to an input frequency change, it should serve as an acceptable FM demodulator.

Figure 1 is the "s-curve," or response characteristic of the detector, with frequency on the horizontal axis and voltage along the vertical axis. As an example, imagine that WIPF broadcasts a 1000 Hz tone. WIPF is at 92.5 MHz on the dial, so the radio is tuned to 92.5. (The local oscillator is tuned at the same time to 92.5 + 10.7 = 103.2 MHz, and the output from the mixer is at 10.7 MHz. But for simplicity, pretend that the detector operates at the tuned channel rather than at 10.7 MHz.) WIPF's carrier is centered at 92.5, but is actually varying from 92.4995 to 92.5005 MHz since a 1 kHz tone is broadcast. This is entered on Fig. 1(a) as a change in carrier frequency, $\Delta\omega_c$, and labeled "A." This is projected on to the curve and read at "B" as a voltage, ΔV , which corresponds exactly to the changing frequency. Thus, the 1000 Hz tone is recovered from the broadcast, as ΔV can be amplified and applied to a loudspeaker somewhere in Philadelphia.

Now imagine the detector is set permanently to 92.5 MHz. (It is in reality set at the I.F. of your receiver: 10.7 MHz for FM and 45 MHz for TV.) If the receiver is detuned upward, say, to 92.55 MHz, notice in Fig. 1(b) how the audio voltage appears again at "B," but is now riding on a positive DC level. This DC is useless for the audio system, but it can be used for AFC and to operate a center-tune meter. The distortion shown is quite audible in a loudspeaker.

Apparently the best place to tune the radio is to that part of the s-curve that is the most linear, which is also where the AFC voltage is zero. One can imagine from Fig. 1 that as the tuner is tuned farther away from center, the detector will not be operated in the linear part of its curve, and the audio voltage out sounds distorted.

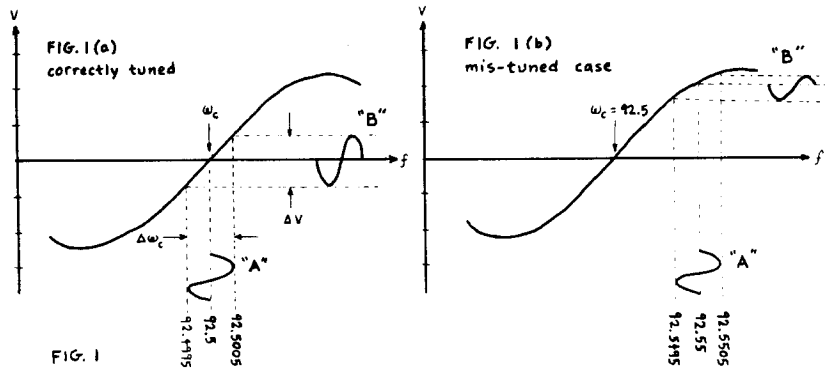
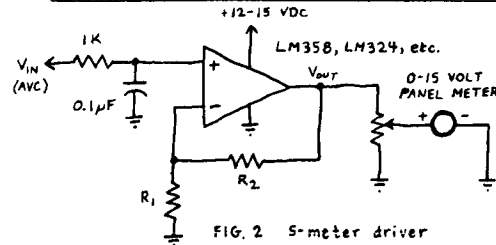


FIG. 1
FM detector "s-curve" response and the need for correct tuning of a station.

In Part I of this article, some general but universal guidelines were offered for finding the AFC and AGC voltages in a radio or TV set. The simple process of probing around the parts and transistors (or tubes) labeled as "detector," "AVC," "discriminator," "limiter," or some combination of those terms, will quickly yield the voltages needed for S-meters and tuning meters.

It was mentioned that direct connection of a panel meter to a point inside your receiver where these voltages are available will probably upset the operation of same. Thus, a circuit must be wired up to enable the low impedance of a panel meter to interface with the receiver. Figure 2 shows one of many possible ways to accomplish this. (...this method being considered the most foolproof and simple.)



- POWER CAN BE TAKEN FROM RECEIVER'S POWER SUPPLY, OR BATTERIES.
- ADJUST POTENTIOMETER TO AVOID SLAMMING METER'S NEEDLE.
- PARTS VALUES ARE NOT CRITICAL. MEASURE VOLTAGE FROM RADIO FOR STRONGEST SIGNAL, CALCULATE R_1 & R_2 :

$$V_{OUT} = V_{IN} \left(1 + \frac{R_2}{R_1}\right)$$

- ANY PANEL METER WILL DO, I.E. RADIO SHACK #270-1754

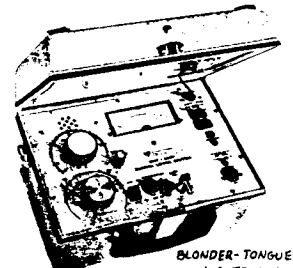
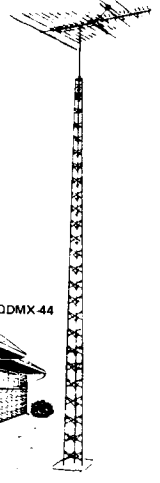
Once your homemade S-meter is connected and operational, some type of calibration is in order. Here is where those who already have Signal meters can join the discussion. A calibration procedure will be described, and then some words concerning the limitations of signal indicators.

Of course, if you have access to a professional, big-time, whizgig field strength meter, it would be nice to calibrate your own S-meter in actual measured microvolts. Slightly more likely will be the chances of knowing of a lab where you can hook up a good RF generator. If the generator has a calibrated output level, then it is a simple matter to draw a graph of generator output voltages versus S-meter readings.

Most likely, though, will be that one has, or has access to, some attenuators. In the October, 1977 VUD, Dave Janowiak outlines a method of calibration using in-line attenuators. This is recommended because it is the most accessible to DX'ers and because, while having an S-meter scaled off in μV is nice, it is really the changes of signal, or the relative readings that are most useful.

The way to do this is to start with the TV on a strong, local signal. Record your meter reading or measured voltage. Now insert a 3dB attenuator and record the reading. Repeat with 6, 12, and 20 dB attenuators (or whatever is available). Label all of this "trial 1," change the TV to a somewhat weaker, semi-local channel, and repeat the experiment. It may be worthwhile to repeat the experiment again on a 3rd channel. The results of these experiments are a table from which one can figure relative signal changes. Use the formula $\text{dB} = 20 \log V$. For example, the AGC voltage may have dropped from 3.1 volts with a 3 dB attenuator to 1.4 volts with the 12 dB attenuator. This implies that when the S-meter reading drops 1.7 V, the incoming signal is 9 dB less, or 1/2.82 as strong. A 6 dB increase is a doubling of signal; a 6 dB loss is a halving. It is a very useful exercise to draw a graphical version of your table.

Now a word is in order about the accuracy of the typical S-meter. Ideally, the home-built S-meter will be measuring a circuit voltage which varies proportionally with RF level. But remember...a tuner or TV must process a wide variety of signal strengths. That far away, low-powered station may only show up as 5 μV at your antenna terminals, while the local powerhouse may induce 50,000 μV or more of signal in your antenna. That's five orders of magnitude difference, meaning that if the S-meter's needle responds to the local signal, then the far-off signal which is 10,000 times weaker won't cause any perceptible movement of the needle on a linear S-meter. Thus, the meters built into equipment are usually logarithmic, or at least sort of logarithmic. Professional field strength meters usually have some means of selecting the range of measurement so that meaningful readings can be made. The circuit voltage monitored by a homemade S-meter as described in this article will almost always be logarithmic, and quite useful without further scaling.



BLONDER-TONGUE
model FSM-8

An S-meter provides a neat visual display of propagation conditions. The signal bounced off an ionospheric patch will cause an S-meter to swing wildly back and forth during an Es opening. The distinctive flutter of other types of scatter heard in the speaker are soon associated with behaviour of the meter. The relative strengths of tropo openings can be observed on the S-meter.

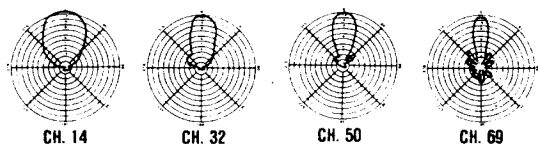
KJBR-101.9 is 105 miles to my NW in Jonesboro, AR, with 100 kW power and 150 ft. HAAT. My own antenna is a Finco FM-5 at 20 feet. Between here and there is very flat land crossed by the Mississippi River. I can usually see the effects of ground thermals on my S-meter. They cause the normally stable signal of KJBR to flutter between zero and several hundred μ V, almost like E skip.

Preamp gain of your system is quite easily calculated, assuming your S-meter has a linear scale. (If it doesn't, and you did not make up a graph as described in the calibration paragraphs, your home-brew or factory meter can still provide very useful information on a comparison basis.) Simply take a reading of a reliable station with the preamp ON and connected, and another reading with the preamp OFF or bypassed. The preamp gain may be calculated by:

$$\text{GAIN} = 20 \log \frac{\text{reading with amp ON}}{\text{reading with amp OFF}}$$

if the reading is made on a linear scale. Using an S-meter to judge preamp performance is best suited for making comparison between different models given the same TV channel or radio station, and for observing the deterioration of performance of one preamp over time (as it ages out of adjustment, etc.).

Another useful use of the S-meter is that of checking the response of an antenna. The object here is to produce a pickup pattern chart such as is supplied in antenna literature and advertisements.



CHARTS FOR WINEGARD
"PROSTAR" TV ANTENNA,
MODEL PR-960.
Best Gain: 14.5 dB (ch. 50)
Beamwidth: 21° (ch. 69)
F/B ratio: 20dB (ch. 14-50)

On the next page the reader will find reproduced a polar chart I drew up for the purpose of gauging my antennae performance using a rotor and a home-brew S-meter installed in a Pioneer F-5 tuner, with a scale of 1 to 10. There are ten concentric circles for the S-meter readings, and radials for every 15 degrees around the compass. Start by choosing a station your antenna is capable of bringing in at clear, consistent strength AND capable of nulling when rotated to the appropriate location. Then, starting at some point on the compass, read the level of signal according to your S-meter and draw this on the chart. Rotate the antenna 5 or 10 degrees and record the S-meter reading. Repeat this procedure all the way around back to your starting point, connect the dots on your graph, and (voila!) you have a polar plot.

Besides the basic pickup pattern, this plot tells you the front-back ratio, front-side ratio, and the directivity (or more technically the "half-power beamwidth") of the antenna. If the antenna pickup 180 from the station is very small (as it should be!), the antenna has a good F/B ratio, which is calculated simply enough by dividing the signal reading 180 off into the maximum (head-on) signal reading. To express this ratio in dB, just take the log and multiply by 20, as before. The relative fatness of the main "lobe" gives you a feel for the beamwidth. Here the normal convention in the literature is to measure the angle (on this plot) between the points where the measured signal level is 0.707 times its maximum (that is, 3 dB down). If you really want a surprise, make three plots--one each for three stations located far apart in frequency. Choose a station close to midband and one at each end and notice how antenna performance changes with frequency.

It is possible to check the actual gain of an antenna system in the same way the manufacturers do it by comparing your antenna to a "reference dipole." This is a simple, half-wave dipole antenna of the same impedance as your DX antenna. Take a signal reading of a non-fading station at or close to the frequency for which the reference dipole was cut. Then connect the DX antenna and take a signal reading on the same station. The gain equation used before can then be used to figure antenna gain. If one repeats this experiment for different stations one will find that gain also varies with frequency. When the manufacturer claims a 12 dB gain, he is saying that at the BEST frequency, the antenna intercepts 4 times as much signal as a reference dipole at that frequency.

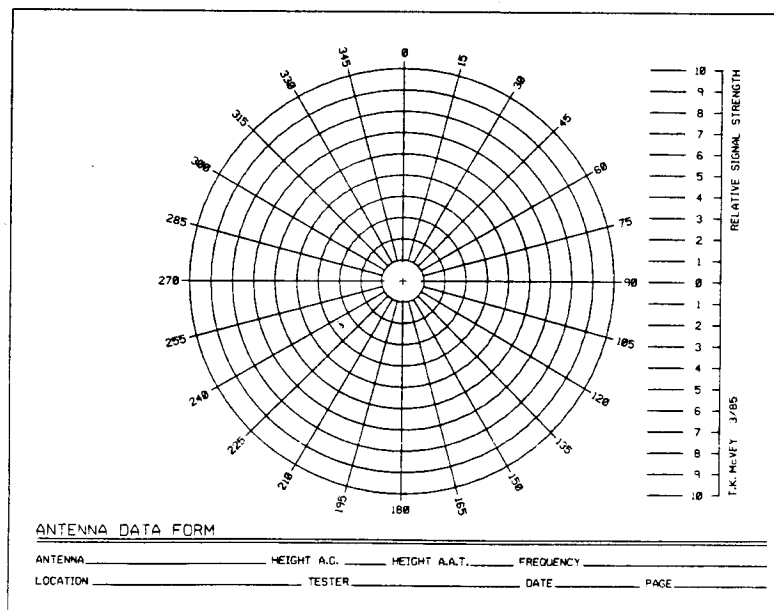
Thus a UHF TV antenna with a "super" 18 dB gain at channel 20 may be weak at channel 30, and have no gain at all at channel 40. Some antennas may actually be found to have a loss, or negative value of gain, at some frequencies. The famous Co-Tanger Antenna for All Bands exhibits this kind of performance, as do some notorious makes of "indoor amplified" antennas and "rabbit ears."

The limitations of the polar plot experiment are, again, going to come up if a non-linear S-meter scale is used. The limitation is that your plot will be a bit distorted compared with the plot which would be obtained using a field strength meter. This will also cause a small disagreement in values of beamwidth and F/B ratio calculated compared to professional measurement. But again, it is the RELATIVE merits which we are interested in 90 per cent of the time, and for this, our S-meter will be quite sufficient, if not quite accurate.

No doubt the reader can come up with more uses for the signal meter than appear in this article. In one magazine I found there was a list of twenty uses that read as follows: 1 - Orienting an antenna; 2 - Measuring relative signal levels; 3 - Balancing channels out of CATV headends; 4 - AGC settings and measurements; 5 - Setting tap isolation, splitters, amplifiers, etc.; 6 - Measuring insertion loss; 7 - Measuring gain of amplifier; 8 - Determining the tilt compensator and line-amp location; 9 - Measuring total signal input to prevent overload or cross-modulation; 10 - Identifying interfering signals; 11 - Tuning taps; 12 - Monitoring relative field strength; 13 - Visual observation of carrier modulation; 14 - Measuring direct signal pickup; 15 - Stacking and phasing antennas; 16 - Measuring subchannel signals in institutional TV systems; 17 - Measuring frequency response; 18 - Measuring SWR; 19 - Locating cable faults; 20 - Measuring noise figure.


Hopefully the reader is by now aware of some of the uses of S-meters, how to wire one into a TV set or radio, what exactly they do, and what their limitations are. Of course, most of the better tuners used in DX'ing already have S-meters which serve our purposes quite well. On the other hand, there is a lot of DX'ing on TV sets and stereo-hi/hi equipment that offer good DX performance but crummy or non-existent signal meters. Folks with traps, attenuators, tunable preamps, and such will no doubt improve their ability to catch signals with some thought and a good S-meter.

73...Tim McVey
Route 3, Box 568
Bolivar, TN 38008-9556




continued from May
William Eckberg - Dixon IL


Equip.: 1966 Zenith b&w tube receiver ch 14N22, modified Zenith 175-1953 detented tuner.
Channel Master (CM) 1110 VHF antenna. CM 7' UHF parabolic antenna w/t
Winogard PA4975 pre-amp on a 40 foot tower.



KLRT-16
Little Rock, AR
503 mile tropo
seen Jul 19, 1985
"relatively new to the air"
rece 2-7-86 [9-wel]



WBMG-42
Birmingham, AL
582 mile tropo
seen Aug 21, 1985
rece 2-7-86 [11-wel]




WCFT-33
Tuscaloosa, AL
593 mile tropo
seen Aug 21, 1985
"relatively new to the air"
rece 2-7-86 [10-wel]

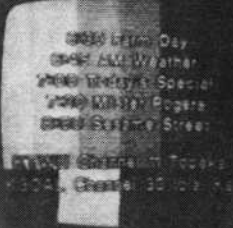


KHNE-29
Hastings, NE
464 mile tropo
seen Aug 27, 1985
"unusual slide"
rece 2-7-86 [12-wel]

Bill Eckberg's photo file continues.....



WUTV-29
Buffalo, NY
537 mile tropo
seen Sep 1, 1985
rece 2-7-86 [13-wel]



K30AL
(KTULU-11)
Topeka, KS
408 mile tropo
seen Sep 9, 1985
"new on air"
rece 2-7-86 [15-wel]



WYTV-33
Youngstown, OH
450 mile tropo
seen Sep 1, 1985
"T.P. rare now"
rece 2-7-86 [14-wel]

Our next reporter is Ed Frye (ex of Poughkeepsie, NY). Ed has since moved to sunny California. "as you might recall reading in the VUD, I am moving to Los Angeles this month (letter received 3-7-86). Account the substantial investment I made in the UHF /FM system, I will be taking it with me to California. The CH-5200 VHF system will remain with my home's new occupants, who, to my pleasure, expressed considerable interest in antennas! During our first six months in L.A., my wife, son, and I will rent an apartment while we shop for a house. The antenna equipment will be stored for the duration of those six months.

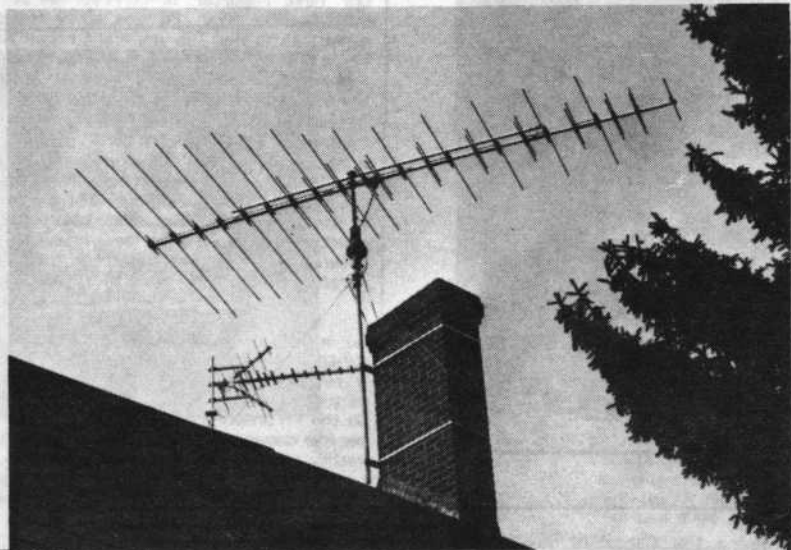
An interesting side note regarding the CH-6065M: it will be going to California in a radically different form from what is pictured herein! When I attempted to fold up the FM antenna's elements, several became damaged (better than my fingers!). Rather than discard the entire assembly, I stripped the antenna of all serviceable parts down to the oom and built a "new" antenna of my own design

(retaining the Chromstar preamp housing and electrical connections). Freshly repainted in Rustoleum Royal Blue against the silver elements, it will be interesting to see (hear??) if this re-designed antenna performs as well as it looks!"

Now on to Ed's equipment photos.....

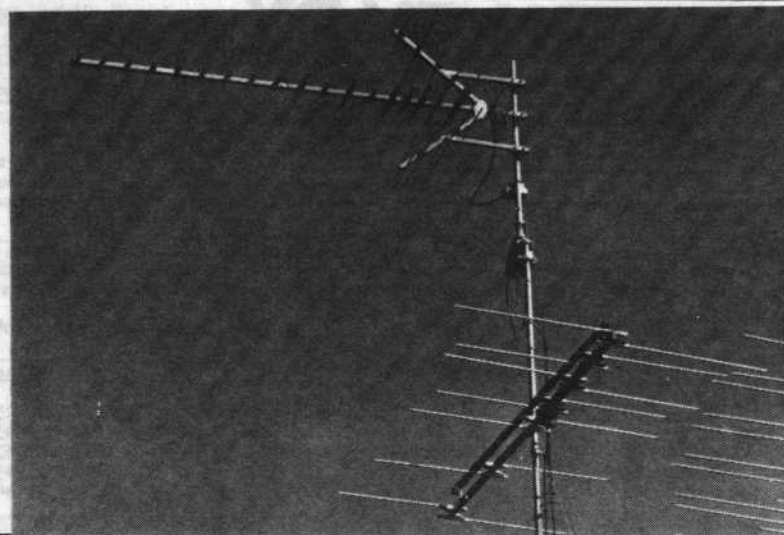


High performance Channel Master MATV preamplifier 7477A is mated with Winegard's top-of-the-line Chromstar UHF antenna, CS-9095. The 7477A's 300-ohm inputs and 75-ohm output eliminates the need for an antenna-mounted balun. Power supply and preamp housings are constructed of heavy-gauge metal.

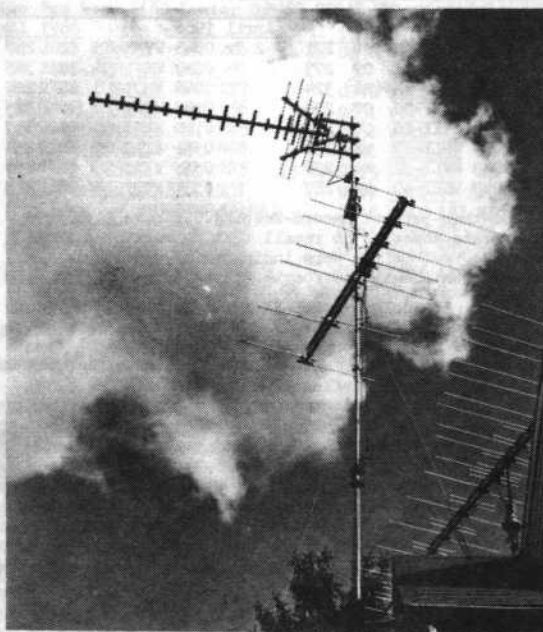


Winegard VHF CH-5200 (40 feet above ground) with Cornell-Dubilier AR22XL rotator. Channel Master 0065 Antenna Systems amplifier and Q227 CB trap are mounted on roof eave, out-of-view. In the background, winegard UHF CS-9095.

Ed
Faye
conn.



Winegard Chromstar array atop 40-foot Channel Master 1040 Duratube telescoping mast: UHF model CS-9095 and FM model CH-6065M (Modified; boom shortened account manufactured defect). Channel Master 7477A Super Titan preamp is fed with Belden 8285 foam-encased twinlead; CM 9510 rotator directs CS-9095 antenna. CH-6065M antenna is permanently oriented northward for reception of Albany, New York FM stations; preamp is Winegard AC-2950. Further down the mast, a Channel Master MATV Systems notch trap 0503, tuned to 101.5 mhz, controls overload from nearby WPDH transmitter.



Winegard CS-9095/ Channel Master 9510 rotator/Winegard CH-6065M array in a ground-up installation employing a Channel Master 1040 Duratube telescoping mast. Preamplifiers are CM MATV Super Titan 7477A (UHF) and Winegard Chromstar AC-2950 (FM). In the background, Winegard CH-5200 VHF antenna is atop a Cornell-Dubilier AR22XL rotator.

If anyone out there in VUD land has any recent equipment, DX or shack pictures and **want** to see them in the July issue; get them in real soon. dave

ANARC UPDATE

VACATION TIME

A few months before, I said I was planning a trip to Italy. Well, the plans were changed, but not for the reason everyone expects. I am not afraid to fly to or travel around Europe. It is still much safer than the street I walk down to get to work. Our plans were changed because we realized the house was much more comfortable in the winter with a heating system that worked.

So now you may ask, where are we going now? Well, by the time you read this, the question should be, where did you go? Cape Cod, Cape Ann and Portsmouth N.H. With the usual clothes, tooth brush and radio, I'll be packing a new toy. For my birthday, my wife got me a 5 inch portable TV set. It is great. I can TV DX from anywhere. No longer will I be hampered by motel TV's connected to the Cable or lacking a UHF antenna. I can survey the local TV stations while at a rest stop. I can search for LPTV's while my wife drives. The possible uses while on vacation are endless. It is much better than a TV sound radio and not much more expensive.

If you go on vacation this summer, please report what you've heard or seen. Maybe, while you are 300 miles away from home, you might have a good opening that doesn't exist at home. Or, you could log a station or LPTV that has just gone on the air. Even a survey of conditions in the area you have visit will be of interest to many. If you are going abroad, I know many members would be interested in a report on radio and television in the countries you visit. Let us enjoy a piece of your vacation.

Do you want something interesting for the weekend of July 18, 19, and 20? How about attending ANARCON '86. This year's convention will take place at the Holiday Inn, Place Dupuis, in Montreal. There is a \$20 registration fee. The room rate is \$65 a night for a single or a double, and \$70 or \$75 for a triple or a quad. If you do not have a partner or you want to be in a triple or a quad, they will find you a roomie. The annual ANARC Awards banquet is \$25 a person. There will also be a bus tour of Montreal and a Harbor Sunset Cruise.

Some of the things on this year's agenda include the usual club, equipment and station displays, an Opening wine and cheese reception, and the ANARC auction. Several special programs are planned. These include the taping of two Radio Canada International programs, seminars on Shortwave jamming, WARC 1984 and WARC 1987. Special guests include Jonathan Marks of Radio Netherlands, and Andy Sennitt of the World Radio-TV Handbook. The guest speaker at the banquet will be Arthur Cushen. Arthur is a well known Shortwave monitor, and a frequent contributor to Radio Netherland's Media Network Show.

Looking at the Convention Program, it looks like one of the best conventions yet. I hope to see many WFFDA members there this year. For more info, write to: ANARCON '86, c/o Radio Canada International, P.O. Box 6000, Montreal, CANADA, H3C 3A8. Write today, your reservation must be in by June 25th.

I heard from Glenn Hauser, who gave me the latest schedule of his program World Of Radio. It is one of the best DX programs on the air. It is a show that I never miss. Glenn often uses the VUD as a source of information on his show. He is heard on several stations around the country. Here is the latest schedule: WHUS 91.7 Storrs CT-Thurs 9:30 am, KCBI Dallas 11735 kHz-Fri 2 pm CDT, WRNO Worldwide New Orleans 6185 kHz-Fri 10 pm CDT, WPKN 89.5 Bridgeport CT-Sat 3:30 pm, WRNO Worldwide 9852.5 kHz-Sat 6:30 pm CDT, KUWR 91.9 Laramie WY (and translators in CO and WY)-Sat 9 pm, WRNO Worldwide 9715 kHz- Sun 8am CDT, and finally, KCBI Dallas (National radio of Texas)

11735 kHz- Sun 12:30 pm CDT. This schedule may change without notice.

Well, that is it for another month. Best of DX this summer.

73's

STEVEN P. SPRACHMAN

WESTERN TV-DX

Fred McCormack
Box 5221
State University Sta.
Fargo, ND 58105

June 1986

Deadline: 7-10-86

Hopefully as you read this, we have been experiencing an active E skip season, and you have a log book full of DX to submit. E skip was first noted here in Fargo today, the 10th of May. This was preceded by a number of days of auroral activity. In fact, I may be missing DX as I prepare this column!

This month we welcome Frank Merrill to the column with his lengthy report detailing his catches since moving to Macomb, Illinois last fall. Jeff Kadet, the other Macomb DX'er, also submits his loggings since last fall. Rounding out the column is Pat Dyer's report from Texas where E skip began in earnest the last week of April.

New _____ New Mode _____ Tent. - t Unidentified - unid S/On - + S/Off - -
ID Color Bars - @ _____ Unid Color Bars - % IHTP - ¢ Misc. Test Patterns - &
CH - Chihuahua NL - Nuevo Leon PU - Puebla TA - Tamaulipas

Pat Dyer, 5315 Silvertip Drive, San Antonio, TX 78228 (WA5IYX)

CST

Equipment: 1980 model Penncrest 9" black and white, Archer V-100 and eight bay bow tie UHF array at 20 feet with rotor.

April 1986

7 tr 2200	KCBF 11 TX 340	14 tr 0457	WGNO 26 LA 510	25 tr 1433	WCIVT 4 SC
	KOSA 7 TX 275	18 tr 0025	XXH t 10 NL	1457	WUNCT 4 NC
	2201 KMID 2 TX 280	23 tr 2152	KADN 15 LA 395	1459	WUNO 2 NC 1360
	2346 KLBK 13 TX 340		2158 KVHP 29 LA 325		WPMY 2 NC 1175
8 tr 0045	KTPX 9 TX 295		2202 KLFY 10 LA 395		WWAY 3 NC 1250
	KBIM 10 NM 440			1505	WRALT 5 NC
	0140 WAFBt 9 LA	2208	KPLC 7 LA 325		(MUF 98.9-1521)
	0203 WGN0t 26 LA	2227	KLPBT 24 LA	1613	WBTW 3 NC 1105
	0323 KADN 15 LA 395		KLTL 18 LA 325	1626	WCBD 2 SC 1120
	0356 WNOL 38 LA 510	2325	WLPBT 27 LA	1645	fade/outs
	0444 KATC 3 LA 395	24 tr 0103	KLMG 51 TX 310	1900	unids chs 2 brief
	0445 WYES 12 LA 510	0128	WAFB 9 LA 450	2015-2025	unids chs 2 east
	0708 WMAUT 17 MS	0139	WGN0t 26 LA	27 Es	1517-1522 KCBSt 2 CA
	KLPBT 24 LA	0206	KSLA 12 LA 350		1535-KNAZ 2 AZ
	KVHPT 29 LA	0340	KARDt 14 LA		1558 unids 2 w Mexico
	0726 unids chs 30, 40	0645	KETSt 2 AR		1820 unids 2-5 w Mex
	0728 WAPTT 16 MS	0650	WRBTt 33 LA		1900 XHP 3 PU 735
	0812 WLAE 32 LA 510	0729	KLRT 16 AR 515		1940 unids 2-5 s Mex
	0813 WPANT 53 FL		KMSS 33 LA 350		2045 fade/outs
	0815 WRBT 33 LA 450	2202	KPLC 7 LA 325	28 Es	1320-1330 unid 2 west
	WLPBT 27 LA		KLFY 10 LA 395		1458-1526 unids 2 s/sw
13 tr 0320	KLFY 10 LA 395		KBMTt 12 TX		1600-1800 unids 2-4 s
	2220 KLTLt 18 LA	2204	KVHPT 29 LA		(Above - Mexico)
	KLPBT 24 LA		KADNt 15 LA		1703 WFWO 2 IN 935
	2225 KADN 15 LA 395	2250	KLTLt 18 LA		1745 unids chs 2,3 ne
	2229 KVHP 29 LA 325		KLPBT 24 LA	29 Es	1550-1700+ unids 2,3 s
	2239 KMSS 33 LA 350	25 tr 0023	KTRE 9 TX 265		(Mexico)
14 tr 0000	KTHt 67 TX 200	Es 1059	WPBT 2 FL 1150		1600 XHP 3 PU 735
	KARDt 14 LA	1102	WTVJt 4 FL	30 Es	0859 WDTN 2 OH 1075
	0009 KALBt 5 LA	1110	WCIXt 6 FL		0903 WAVET 3 KY
	0047 WAFB 9 LA 450		(MUF 101.5-1123)		0908 WCMHt 4 OH
	0059 KLMG 51 TX 310	1127	WEDU 3 FL 985		WLW t 5 OH
	0127 KPLC 7 LA 325		WPTVt 5 FL		(MUF 89.7-0910)
	0235 WNOL 38 LA 510	1144	WCPX 6 FL 1035	0959	WJWB 2 MI 1225
	0257 KLFY 10 LA 395	1200	WESH 2 FL 1055		soon fade/outs
	0429 KATC 3 LA 395	1325	fade/outs	1100	unids 2 s Span
	0455 WBRZ 2 LA 450	1433	unids chs 2-5		(Brief)

Well, the E skip season has started - rather suddenly and with a high MUF on April 25. Before then, just a lot of tropo, some of it a bit rare (like Arkansas).

As I write this, WWV is indicating that a major geomagnetic storm is in progress -but no effects down here on the TV yet from it.

73, Pat, WA5IYX

Jeff Kadet, W3CRH, Box 20, Macomb, IL 61455 (309)-833-1809

CST/CDT

Equipment: Zenith N1310 color, Channel Master 1110 with CP 3800 preamp, RG-11 at 50', Channel Master 7' dish with PA 4975 preamp, .500 cable at 55', Zenith 9" black and white, Winegard 5 element low band vertically polarized at 20'

Table of TV reception logs for Jeff Kadet, listing dates from October 1985 to April 1986, channels, and program details.

All of the above were seen on a new Zenith Y1310. My beloved N1310 is away at Zenith where they are trying to repair the fine tuning on the UHF knob.

Frank Merrill, P.O. Box 669, Macomb, IL 61455

CST/CDT

Equipment: Channel Master 3617 "Super Crossfire" VHF (top-of-the-line), Channel Master seven foot UHF dish, Alliance rotor and Winegard preamplifiers on a seventy foot Rohn tower.

Table of TV reception logs for Frank Merrill, listing dates from September 1985 to November 1986, channels, and program details.

Frank Merrill (continued)

Table of TV reception logs for Frank Merrill (continued), listing dates from January 1986 to April 1986, channels, and program details.

Frank Merrill (continued) Hi to all! Plenty of notes and circumstances on all this strange stuff. One final addition to my Toledo, Ohio log was on October 23, 1985 at 2100 with WUPW-36 OH (20 miles) via ground wave using standard indoor loop. Ironically this was logged first in Macomb!

The move to Macomb was unofficially completed on 26 August, but was officially finished on 26 October when I left the house for the last time at noon, after having sold it on 21 October. With totals now at 328, not all loggings are shown. I've generally omitted full-service stations within 300 miles, and have also omitted most translators within 200 miles.

Some notes on some of these DX catches:

- (1) This is the furthest daily reception noted here. It is seldom identifiable, but its beat bars are faintly detectable against a weak KDNL-30 when the antenna is pointed toward Toledo; even during snowy winter weather. Second furthest is WTVQ-36 (trace) or KSNF-16 when WTJR-16 is off (360 miles).
- (2) I suspect that all of these were from Iron Mountain as they tended to fade up and down in unison with channels 59 and 72. Fahber's WTFDA Guide shows these channels without call letters or assured locations.
- (3) These ID's round out my "skip clock" where I have now logged E skip, at one time or another, during all of the 24 hours of my local standard or daylight time. I had previously had E skip as late as 0510 and as early as 09-something.
- (4) A strange one! This was zero beat to KTVO-3, Missouri, and it was a sign on. I have it on videotape, and it sounds like their given call letters were "X-H-E-gree", but there is no letter that sounds like "gree." Around 1730, I was almost sure I had an XEZ ID (which would be nice), but I could have easily been "hearing things" and decided not to count it.
- (5) This is counted on the basis of Dr. Gene Scott fading up briefly on channel 11. He is carried by all the KSN stations including Joplin 16 (and maybe Superior NE channel 47). The network stops carrying him at 0230. KSNW-3 was a sign/off.
- (6) November 14-15 was one of the strangest tropo openings I have ever noted! Almost always, when rain comes in, the tropo goes out. I have had only a handful of good rain tropo in the past, even on light rainy or drizzly days. This was different though! Between nightfall and dawn, Macomb had about 1½ or 2 inches of torrential rain during this intense "all nighter!" WVAH-23 was awesome, totally demolishing WFHL-23, Illinois (same direction), in the evening and staying in until after 0730 (bedtime), often nearly snow free! Strange deep fades (almost like E skip) appeared on some of the stuff like WPBY-33 (the most noticeable example) and WPBO-42. Why and how did this tropo even exist?
- (7) This logging was shortly after seeing it snow free on Liberty Cable (Macomb's system). The cable logging around 0030 was my first indication that there was DX to be had. Normally KIIN-12 would be there, but they had signed off.
- (8) The scrambled video was an obvious movie while the audio barker channel was totally unrelated! In fact, it sounded similar to a different station or service. This faded and peaked in unison with other St. James ones.
- (9) Their erp had to be 100 Watts or less during this time! I tried to call them April 28th but wasn't able to talk to anybody who knew. Their glitch allowed me to finally log 92 Watt K13MN which was usually on top whenever it faded in at all. It took me half an hour to find them with local ads as on channel 2.
- (10) This was noted at 0310 and during two or three other fade-in's as late as 0700. Jeff Kadet mentioned seeing somebody report a new Sioux Falls LPTV here, format unknown. At 0700, I was finally able to identify "Hit Video USA" as the service carried by this station. Anybody know more?
- (11) The western IPBN's had their early morning slates on a few minutes before the eastern IPBN's did, so while Sibley had the IPBN slate, Ottumwa was still translating WISN-12 from an otherwise blank channel 12. In fact, Ottumwa can be DEPENDENT on to be all night with WISN during almost any "halfway decent tropo." They're obviously using a very low signal threshold because of their distance from KIIN-12. IPBN's sign/on lists no KDIN-11 translators, and a telephone call to KDIN April 28th confirms that Mt. Ayr channel 25 and Centerville channel 31 do not exist. Neither, presumably, do High Point channel 14, Clarinda channel 54, or Carroll channel 72, but I forgot to ask about them. I do find it rather astounding that K25AA was able to override WEEK-25 (a snowfree local) without WEEK-25 being nulled. The KDIN-11 engineer said that K25AA actually has about 4000 Watts erp; the listed 1000 Watts is transmitter power.
- (12) I believe this one started on March 22 or March 23. They're 24 hours, seven days, and religious. They identify at least once an hour with a very utilitarian (read - plain) ID slide with huge call letters. Probably about 200 Watts erp as they're somewhat weaker than same-town K44AB.

Frank Merrill (continued)

- (13) I believe this was absolutely brand new too, probably no more than two or three days old. I would estimate about a million Watts erp from its strength - another 24 hour religious one.

If all goes right, I'll do so poorly this year that I will add NOTHING to my Macomb totals all summer! I've gone out of my mind, you say? Yeah, it is hard to DX from Macomb if you're visiting places like Regina, Fairbanks, and Terrace! I'm seriously hoping to go for nearly four months and do probably the closest thing I'll ever be able to do, as a "bum." Next year, I will again be keeping a house up. Right now, I'm living with the people who did some help in my move, and most of the DX setup is my former Toledo antennas and tower. Not having my own house right now makes it easier to travel, without utilities and large mortgage payments to keep up. Therefore, I can't make it to Jamestown, because it's too close to Macomb, Hi! I hope for a great time there, and a fine DX'able summer for all. 73.

(Welcome to Western TV DX, Frank. I'm sorry to hear you don't expect to be reporting much this year, but that sounds like a fine trip you are planning. Be sure to observe the status of the multitudes of television relays in the Canadian west. fm)

(With regard to your suspicions about your loggings of November 5 having been from the Iron Mountain facility, it would certainly seem so. I know of no other group of translators operating in the scrambled mode and matching the channels you reported seeing. Maybe someday they will all be operating under standard licenses and we will know what to call them. Incidentally, the FCC has finally reported a construction report for one them, that being the channel 63 operation, and assigned the call letters K63AW to it. I indicated that in your loggings. fm)

(The STV operation from K48AA at St. James, Minnesota is just as you describe. They do indeed have independent audio, and it was Country Music Television when I first logged it last year. fm)

(Your logging on channel 34 while tropo was out to the Sioux Falls area was very likely K34AJ. When I logged them last year, they were carrying Odyssey, which of course is no longer operational, but was also a music service. During my reception of them, I also noted no local identifications. fm)

(I think you may be assuming too much when you suggest that channel 64, Clarinda, and channel 72, Carroll, are not operational. Unlike the construction permits which you listed, K64AH at Clarinda and K72CP at Carroll are not assigned to IPBN, but are assigned to those two cities and licenses have been issued. fm)

(With regard to your observations on the apparent power differences between K44AB at Keokuk and the new K60CL, the FCC data base indicates that K44AB is authorized for 0.439 kW, while K60CL is authorized for 1.75 kW. I wonder if that is accurate? fm)

Fred McCormack, 135 Prairiewood Drive, Fargo, ND 58103

CDT

Equipment: VHF: Broadmoor 9" black & white, Winegard CS-4053; UHF: Teknika 6510 tuner, Winegard CH-9095, Blonder-Tongue CMA-Uc pre-amp; Alliance rotor.

May 1986	2 tr 0828	KDSM 17 IA 385	10 Es 1258	WAGA 5 GA 1115
		0859	KPTM 42 NE 400	(MUF 107.7 @ 1323- NC)
	2 tr 0827	KXNE 19 NE 320	10 Es	(MUF 107.9-1256) 1426 WPSxt 3 PA

It is great to have some DX to report again. The new Omaha independent is an easy station to identify with large call letters and numerous program promotions. In fact, during the time I watched them, there were no paid commercials. Hopefully, that will change.

The May 10th E skip caught me by surprise as it was already high in the FM band before I noted it. The channels were a complete jumble (including channel 5), making ID's next to impossible. Locals KXJB-4 and WDAY-6 were experiencing heavy CCI with a zero beat picture floating over KXJB-4. Hopefully more ID's will be made in the coming weeks.

KDLH-TV
DULUTH

TV 6
KBJR

TELEVISION NEWS

Bill Fabber, editor
336 Atlantic Street
Bridgeton, NJ, 08302

APPLICATIONS FOR NEW TELEVISION STATIONS

CH ERP HAAT STATE/CITY/APPLICANT

47 413 1013 TX Greenville; Bill R. Wright

62 5000 1945 TX Killeen; Eula Lee Beck

6 100 1477 MT Billings; Mark L. Wodlinger (amended)

66 5000 522 NJ West Milford; New Jersey Hispanic ETV Corporation Inc.

40 1000 380 OH Toledo; Paul T. Lambert Bc'g

15 2588 1670 TN Knoxville; Knoxville Community Broadcasting Inc.

15 5000 1690 TN Knoxville; Lincoln Memorial U

58 468 303 FL Bunnell; Meredith Corporation

35 1140 870 NC Jacksonville; Jacksonville Broadcasting Company

8 316 468 NC Morehead City; James E. & Rachel J. McManus

8 316 1982 NC Morehead City; Morehead City TV Ltd.

8 316 1965 NC Morehead City; Wander Broadcasting of Morehead City

57 5000 1088 FL Live Oak; Frank A. Baker

57 1000 417 FL Live Oak; Cardwell-Bussey

8 316 1009 NC Morehead City; Dr. James E. Carson

8 316 1990 NC Morehead City; Crystal Coast Communications

8 316 2000 NC Morehead City; Pine Cone Communications Ltd. Partnership

60 5000 850 WV Martinsburg; Ivan Lambert Bcg

54 5000 1235 CA Avalon; Avalon Broadcasting (amended)

54 5000 1246 CA Avalon; Catalina Broadcasters (amended)

54 5000 1734 CA Avalon; Catalina Broadcasting Ltd. (amended)

54 5000 1222 CA Avalon; Es Possible Minority Telecommunications Ins. (amended)

54 5000 1201 CA Avalon; Island Broadcasting Ltd. Partnership (amended)

54 5000 1633 CA Avalon; Christine E. Shaw (amended)

66 5000 n.c. NJ West Milford; New Jersey Public Bc'g Authority (amended)

62 5000 422 NJ Atlantic City; ACTB Inc.

62 5000 590 NJ Atlantic City; Boardwalk Broadcast Associates Inc.

62 5000 466 NJ Atlantic City; Garden State Communications

62 1000 287 NJ Atlantic City; Surf City Broadcasting Associates

64 3182 1389 VA Charlottesville; Achnernar Broadcasting Company

64 3720 1143 VA Charlottesville; Commonwealth Broadcasting Corporation

64 2500 422 VA Charlottesville; Evangel Communications Inc.

64 2500 422 VA Charlottesville; George Walton Lindsay

40 1110 2504 WV Bluefield; Interface Product.

15 8.13 1100 VI Christiansted; Cabarrus Television Corporation.

APPLICATIONS DISMISSED

NC Raleigh; ch. 50; Brant Cotton (initial decision).

ME Lewiston; ch. 55; Ashley Communications; John R. Powley.

NJ Newton; ch. 63; Oneida Television Ltd.

SC Rock Hill; ch. 55; Faye Daye Corporation; Beverly Hills Hotel Corporation.

TX Conroe; ch. 49; Brokinrod Broadcasting Company Inc.; Luis y Nelida Castaneda; Jack Clarke III.

WI Chippewa Falls; ch. 48; Patrick L. Bushland.

FL Venice; ch. 62; Holiday Group Ltd. (initial decision; Venice Broadcasting was preferred because of integration of management and ownership).

TN Nashville; ch. 58; Dove Broadcasting (initial decision; Ruth Payne Carmen was given preference due to her long time residence and civic activities).

TX Lake Dallas; ch. 55; Opal Thornton (initial decision, finding applicant financially disqualified).

AZ Tolleson; ch. 51; Lifestyle Broadcasting Corporation.

AR Little Rock; ch. 42; Maumelle TV.

NV Las Vegas; ch. 33; Lucky 33 TV. (Lucky?)

NV Reno; ch. 11; David Moose.

NJ Vineland; ch. 59; Rita Wyse (settlement agreement).

SC Charleston; ch. 36; R.G. Brown Communications Inc.

AL Troy; ch. 67; Lynn W. Baker (settlement agreement).

FL Islamorada; ch. 18; Florida ETV Inc.

FL Sebring; ch. 60; Channel 60 Inc.; Hunt Partnership; Ridge Broadcasting Company.

LA New Orleans; ch. 49; Lloyd Allen.

TX El Paso; ch. 65; Josie Moore.

VA Danville; ch. 24; Danville Broadcasting.

CA Venture; ch. 16; California Broadcasting Corporation (Supplemental initial decision, reversing initial decision. This assignment had been contested for over seven yrs)

AL Birmingham; ch. 62; Lawson State Community College.

TX Denton; ch. 2; Denton Channel Two Foundation.

KY Hopkinsville; ch. 51; Christian County Television Ltd. (initial decision; part owner of Christian County also owns the local Hopkinsville newspaper).

CA Novato; ch. 68; Novato Broadcasting Corp.

HI Honolulu; ch. 5; Channel 5 Broadcasting Associates; Polynesian Services Corporation; TV 5 of Honolulu.

NV Reno; ch. 11; Reno Television Broadcasters.

NJ Newton; ch. 63; John R. Powley.

NY Syracuse; ch. 56; Flomaton Communications.

SC Myrtle Beach; ch. 32; Coastal Carolina Communications Corporation; Myrtle Communications Inc.

TN Memphis; ch. 50; Dorothy B. Evans.

CO Pueblo; ch. 32; PEM Broadcasting Inc.; Pueblo Family Television (Review Board, upholding initial decision).

CONSTRUCTION PERMITS GRANTED: NEW STATIONS

69 2980 910 FL Sebring; Focus Broadcast Communications Inc.

49 2000 322 TX Conroe; San Jacinto TV Corp.

50 5000 1306 NC Raleigh; The L Broadcasting Corporation (initial decis'n)

17 1670 861 NE Grand Island; Family Broadcastg

59 5000 952 NJ Vineland; Family Television Network (Only 9.1 miles away from me! Wow!)

62 5000 1009 FL Venice; VeniceBroadcasting Corp. (initial decision)

55 4989 927 TX Lake Dallas; Women's Media Investors of Dallas, Inc. (initial decision)

60 2980 910 FL Sebring; Focus Broadcast Communications Inc.

18 619 292 FL Islamorada; Islamorada Educators Broadcasting Inc. (Average terrain 16' below sea level. Interesting.)

67 100 1000 AL Troy; Shelley Broadcasting Co. (summary decision)

2 100 1682 TX Denton; North Texas Public Broadcasting Inc. (settlement agreement)

5 100 -57 HI Honolulu; Ka'Ikena Lani TV.

51 1618 459 KY Hopkinsville; Green River Group Ltd. (initial decis'n)

32 3715 2355 CO Pueblo; tvUSA/Pueblo Ltd. (Review Board, upholding initial decision)

CONSTRUCTION PERMITS CANCELLED

TX Marshall; ch. 35; KMLT-TV

AK Fairbanks; ch. 7; KSEV

TX Paris; ch. 42; KLPB-TV

KS Salina; ch. 18; KYYE

KY Paintsville; ch. 69; WEKT

MO St. Louis; ch. 40; KUCU-TV

APPLICATIONS TO MODIFY CONSTRUCTION PERMIT

44 2741 965 AL Gadsden; WVAL-TV

64 3228 1572 CA Barstow; KWVT

65 5000 1527 FL Orlando; Rainbow Broadcastg

54 4395 966 MI Muskegon; WKMT

14 4594 986 TX Tyler; KOKU

25 501 995 WI LaCrosse; WLAJ

38 5000 1945 AR Pine Bluff; KJTM-TV

56 5000 1786 TX Jacksonville; KTRG

43 5000 979 VA Virginia Beach; WVBT

61 5000 1425 HI Bay City; WICI (amended)

CONSTRUCTION PERMIT MODIFICATIONS GRANTED

49 2150 2738 CA Visalia; KNXT

27 5000 456 IL Urbana; WCCU

42 5000 1559 NE Omaha; KPTM (now on the air)

20 100 849 PR Ponce; WKPV (reported to be on the air 10/85, but unconfirmed)

36 515 290 TX Odessa; KOCV-TV

38 5000 1101 KS Lawrence; KNCI

35 324 558 PA Philadelphia; WYBE

14 4457 1437 TX Houston; KHBU-TV

44 2741 965 AL Gadsden; WVAL-TV

64 3228 n.c. CA Barstow; KWVT

APPLICATIONS TO CHANGE EXISTING FACILITIES

15 5000 1088 GA Cochran; WCCO-TV (CP)

20 5000 1414 GA Wrens; WCCS-TV (CP)

53 12.2 280 NJ Atlantic City; WMAC-TV (CP)

22 2945 1657 PA Scranton; WDAU-TV (CP)

10 316 2000 AR El Dorado; KIVE (CP)

45 1589 1056 MD Baltimore; WBFF (CP)

28 5000 2000 NC Durham; WPTF-TV (CP)

18 547 652 CT Hartford; WHCT-TV (CP amended)

27 5000 1688 NC Springfield; KDSB-TV (MP)

FACILITIES CHANGES GRANTED: STATIONS ON AIR

KY Hazard; WYMT-TV, ch. 57; granted MP to raise ERP from 214 kw max to 2630 kw max; 1560' AAT/1005' AG/2925' ASL (760' higher AAT; 807' ASL); coordinates 37°11'38"/83°10'52" (Az. 186°, 4.29 miles from present TL) TL atop Buffalo Mountain. Should be a big increase in coverage area.

MO St. Louis; KNLC, ch. 24; granted license to cover CP for changes: ERP raised from 1466.7 kw to 3090 kw max; 1000' AAT/706' AG/1621' ASL (2' higher AAT; 26' lower AG and ASL at same TL. Further example of inconsistent data).

NH Keene; WEMK-TV, ch. 52; granted CP to raise ERP from 37.5 kw to 60 kw max. Wow!

FL Pensacola; WSRB, ch. 23; granted license to cover CP for changes; raise ERP from 38 kw to 3045 kw max; 481' AAT/481' AG/561' ASL (9' lower AAT; 17' higher AG and ASL at same TL).

GA Atlanta; WGNX-TV, ch. 46. Finally granted a license to broadcast after being on the air for fifteen years!!!

LA Alexandria; KLAX-TV, ch. 31; granted CP to reduce ERP from 1619.8 kw max to 1216 kw max; 1357' AAT/1292' AG/1517' ASL (a whopping 1153' higher AAT and 1187' higher ASL!); TL 1.5 mile SW of Dry Prong; coordinates 31°33'54"/92°33'00" (Az. 357°, or nearly due north, 17.58 miles from present TL).

NJ New Brunswick; WNBZ, ch. 58; granted CP to raise ERP from 498.75 kw max to 1231 max.

NC Charlotte; WBTB, ch. 3; granted license to cover CP for changes; see 1/84 VUD

NC Charlotte; WGOG-TV, ch. 9; granted CP to change antenna height to 1179' AAT/1034' AG/1890' ASL (11' lower AAT; 39' lower AG ASL; same TL).

TN Nashville; WSMV, ch. 4; Granted CP to change ERP from 93.63 kw to 100 kw max; 1425' AAT/1325' AG/2006' ASL (15' higher AAT; 44' lower AG and 41' lower ASL); same TL.

NJ Atlantic City; WMAC-TV, ch. 53, which has been off the air for several years now; recently bought by Pennsylvania Pay TV, which owned WMSG-57 in Philadelphia when it operated as a TV station. Granted CP to reduce ERP from 2570 kw to 12.2 kw max; 280' AAT/280' AG/290' ASL. Signal will barely cover Atlantic City.

CA Cotati; KRCB-TV, ch. 22; granted MP to change ERP from 51.65 kw to 68.229 kw max; 2034' AAT/196' AG/2632' ASL (106' higher AAT. 120' higher AG; 112' higher ASL at the same TL).

NY New York; WNYC-TV, ch. 31; granted MP to raise ERP from 890 kw to 2800 kw max; 1560' AAT/1584' AG/1596' ASL (266' higher AAT and ASL; 304' higher AG at same TL; must be a conspiracy going on.) Look for improvement in coverage area as well as major seismic disturbances.

WV Huntington; WBY-TV, ch. 33; granted CP to raise ERP from 1057kw max/398 kw hor to

two compatible systems, the French Antiope and Canada's Telidon. The other system's name is no less presumptuous: Britain's World System Teletext (WST). As long as there is a potential for one of these systems to lose the battle, broadcasters and decoder manufacturers have not been too eager to promote the product. NABTS has excellent graphics capabilities, but is much more expensive than WST. WST is limited to alphanumerics, and sells decoders for as little as \$300, but the public simply isn't buying them.

New efforts are under way to promote WST. Taft Broadcasting has been producing Electra, its teletext service, for several years now, and Tempo Enterprises has been supplying that service to WTBS in Atlanta, which makes it available to cable subscribers all over the country through its satellite relay. Taft is now planning to have all twelve of its television stations pick up the teletext codes from the WTBS signal off the satellite, and transmit them over their Vertical Blanking Interval. Meanwhile, Zenith is selling top-of-the-line television sets with decoders built in them.

DIRECT BROADCAST SATELLITE

Here's another ghost from the past. As it stands, there are only four companies remaining that have construction permits to build DBS satellites. They are: Dominion Video Satellite Inc., Hughes Communications, Satellite Television Corporation (STC, owned by Comsat), and United States Satellite Broadcasting (owned by Hubbard). STC is no longer interested in DBS. Dominion is in the process of purchasing two high-powered DBS satellites from STC.

Speaking of ghosts from the past, the FCC is seeking comments from the broadcasting industry on whether or not to classify DBS and Subscription Television (STV) as broadcast services or as point-to-multipoint nonbroadcast video services, in which case DBS and STV would be free from statutory broadcast regulations. With only two STV stations remaining and no DBS in the near future, I wonder why the FCC is bothering. USBS wants DBS to be considered broadcast. I'm sure Captain Midnight would agree on that over against HBO, which wants it to be considered point-to-multipoint. SPACe, the outfit that opposes CBS's plans to scramble its satellite signal, also wants DBS to be considered a broadcast service.

But back to DBS. The financial outlook is dim. You remember how United States Communications Inc. jumped the gun with a 5-channel DBS service on an existing satellite, but lasted less than two years when it couldn't get enough subscribers. Hubbard and Dominion, two of the permittees mentioned above, don't have the finances to get their DBS system started.

"MUST-CARRY" RULE UPDATE

The National Association of Broadcasters, the Association of Independent Television Stations, and the National Cable Television Association presented their compromise agreement to the FCC, proposing that cable systems

with more than 20 channels be required to carry some local television stations. But there is little agreement among others in the industry. Too many special interest groups, as usual. Howard University told the FCC that all minority-owned television stations be required on cable systems. Educational broadcasters feel that all educational stations should be required. Capital Cities/ABC and their affiliates argue that cable systems should not create unfair advantages of one network over another (another being, of course, ABC).

STEREO TELEVISION UPDATE

Not all recent technological ideas have died. Stereo television, for one, is still going strong. Since stereo broadcasting began nearly two years ago, there are now more than 220 stations in the United States with stereo. Another 100 stations are almost ready to begin stereo broadcasts.

SPECTRUM SHARING UPDATE

As if the UHF band in the big cities wasn't getting cluttered already with new broadcast stations, translators, low power stations and land-mobile assignments, the FCC decided last May (1985) to look into the possibility of land mobile and UHF television sharing the UHF band. The FCC proposed the allocation of 28 UHF channel assignments to land mobile. It then established a technical advisory committee to determine what amounts of interference from land mobile radio would be tolerated by the viewing public in the Grade B contour of a broadcast station's signal. The experiments are being conducted at the CBS Technology Center in Stamford, CT. Mobile radio interests, however, insist that no more experiments are necessary because a consulting engineer had already provided enough data for the FCC to adopt standards.

COMPETITION FOR SPANISH INTERNATIONAL NETWORK

Radio Caracas Television, a Spanish TV network from Venezuela, will be providing programming to independent television stations and cable systems in the United States.

FORUM

News from my area: WTGI-TV, ch. 61 in Wilmington, DE, is still not on the air. Now the station says it will be on the air around June 3. W08CC in Hammonton, NJ is on the air and one person told me he has a friend who visually confirmed it. The Camden Courier Post is still listing ancient movies for it. In fact, if the movies get any older the station will be able to shut down its audio signal. W61AN, the Newark DE translator that rebroadcasts WGCB-49 in Red Lion, PA, has been changed to ch. 14 in preparation for the coming of WTGI-61. Its signal seems to be much stronger now.

Several articles from W.T. McIntosh. KSCI-TV (ch. 18, San Bernardino, CA), "the country's largest foreign-language TV station - it broadcasts programs in 15 languages...." now has a new program, "Linea Abierta," a daily block of call-in talk programs with psychological, medical, legal and other topics for the Spanish community. (L.A. Times, 4/15/86).

The Justice Department took the opportunity to file its own opinions to the FCC with regard to the proposed overhaul of the "must-carry" rule. It recommended that the FCC reject the cable-broadcaster industry proposal (discussed earlier) that cable systems with more than 20 channels carry a certain number of local stations, contending that the rule, if adopted, would restrict cable operators' programming decisions and compromise his ability to respond to subscriber demand. (Los Angeles Times, 4/26)

The Los Angeles Board of Telecommunications Commissioners decided to fine United Cable Television for failing to install 270 miles of cable in the San Fernando Valley by its January 31 deadline. The fine is \$186,200. The Board is willing to allow United to pay \$86,200 in cash and provide the city with \$100,000 in equipment, which United can obtain at a lower price. United will appeal the decision to the City Council, objecting that the penalty is unfair, since it did everything in its power to meet the deadline. (Times, 4/26)

The merger of Capital Cities and ABC has resulted in massive layoffs at four ABC-owned stations: 165 layoffs in KABC (Los Angeles), KGO (San Francisco), WLS (Chicago) and WABC (New York). Rumors of additional layoffs proved to be false. (Times, 4/16)

One of the main topics of concern at the meeting of PBS and its affiliates at its annual convention is commercial advertising by noncommercial stations. About two dozen stations are doing it and PBS is concerned about its effect on PBS. Some broadcasters at the meeting suggested that some of their long time national underwriters may be reluctant to invest your gasoline dollars in programs that contain commercials for Cap's Comic Cavalcade. There's also that long time concern that reliance on local advertising money could pervert the purpose of educational television: to bring high-quality programming to the public. Besides, it's more fun to pay for Tenko, The Fugitive, or Star Trek at the gas pump or the Tax Office. (Los Angeles Times, 4/29. Snide comments mine)

Can you imagine the fun British educational stations could have airing some of our American syndicated trash under the guise of "culture"!!! I mean, I'll be the first to admit I enjoy Doctor Who but what kind of quality programming is it if they can't even afford to reshoot a scene where a fly was crawling around an actor's forehead?

Oh yes, Captain Midnight! I knew at least one WFTDA member would send me a clipping on this hero of something-for-nothing advocates. Officials are sure that his signal must have come from a professional satellite transmission station, and there are only about 100 facilities in the USA with the ability to break into HBO's signal. One of the greatest fears is that he has the facilities to break into any satellite communications and disrupt business or financial institutions, or even government communications. (Times, 4/29)

Financial problems for Christian Broadcasting Network. Due to a lack of expected donations, CBS is being forced to lay off 41 employees and sell its three television stations: WYAH in Portsmouth, VA, WXNE-TV in Boston, and KXTX in Dallas. (4/4/86)

The PBS convention mentioned earlier was held April 28-30. Three areas of concern were discussed at the meetings: (1) The FCC's proposal to adopt softer "must-carry" rules, (2) The federal government's plans to phase out its support of public broadcasting by 1992, and (3) commercialism of PBS, including commercial advertising and the establishment of the PBS Home Video Service that plans to market videocassettes later this year. (Los Angeles Times, 5/1/86)

Another situation that had been discussed some months ago was the case of Preferred Communications, the cable TV company that accused the City of Los Angeles of violating its constitutional rights. Way back when the city opened up the opportunity for cable TV, several companies made their bids. Preferred Communications was not one of them. The franchise was granted to Sun Cable Inc. But Preferred came along later on and asked the city to lease space on city-owned poles for Preferred to run its cable. The city refused, naturally. Preferred then went to the San Francisco U.S. 9th Circuit Court of Appeals, claiming that the poles had the ability to carry more than one cable company, and that there was no justification in the city's allowing only one cable system. It also claimed that its First Amendment rights of freedom of speech were being violated. The appeals court ruled in favor of Preferred and, as a result, ruled that no city can grant a franchise to one cable operator when it had the capacity to support more than one. The City of Los Angeles took the case to the Supreme Court, arguing that the city's right to grant exclusive franchises does not violate the constitutional guarantee of free speech. Preferred argued to the court that the city was licensing speech. The city argues that there is no constitutional right for a cable TV company to construct cable lines on government property without permission from that government. The Supreme Court is expected to rule on the case in July. (Los Angeles Times, 4/30/86)

Lastly, W.R. McIntosh writes, "Concerning your April 86 WUD column... SelectTV is still being broadcast by KWHY TV22 in the Los Angeles, CA area. They are regular commercial TV weekdays until 5 pm specializing in financial and business news and features, then on weekdays after 5pm and nearly all day Sat & Sun they broadcast SelecTV over the air." So that makes two STV stations still in existence (not counting LPTV), despite what recent articles have said. And I suspect that if Pennsylvania Pay TV gets WAC-TV ch. 53 in Atlantic City back on the air with its 12 kw, it will provide an STV service for the city.

Robert Baker sent in a clipping from the 4/6/86 Des Moines Sunday Register about

new station KPTM, ch. 42 in Omaha, NE. It signed on the air 4/6 with independent programming, specializing in kids' programs, movies (3,000 in their library), and syndicated programs. Being an Iowa newspaper, the Register reports that 25% of the viewers will be from Iowa, and that its signal will cover most of Iowa's southwest counties. There will be no regular news programs, but will have news updates throughout the day. With the only Omaha UHF station being a PBS outlet, many area residents will have to learn how to get in UHF to receive it. (I wouldn't be surprised if many residents don't bother with UHF antennas if all they get is PBS.)

For Sports fans, or maybe even DX'ers who get in a skip station playing baseball and would like to know what station they have, Bob Timmerman got a list from the 4/14/86 Sporting News. The paper also included AM and FM stations, but I will limit this to TV: Orioles/WMAR-2; Red Sox/WBKB-38; Angels/KTLA-5; White Sox/WFLD-32; Indians/WUAB-43; Tigers/WDIV-4; Royals/WDAF-4; Brewers/WTVT-18; Twins/KMSP-9; Yankees/WPIX-11; A's/KPIX-5; Mariners/KIRO-7; Rangers/KTVT-11; Blue Jays/CFTO-9; Braves/WFBS-17; Cubs/WGN-9; Reds/WLWT-5; Astros/KTXH-20; Dodgers/KFTV-11; Expos/CBEF (English network) & CBEF (French network); Mets/WOR-9; Phillies/WTAF-29; Pirates/KDKA-2; Cardinals/KSDK-5; Padres/KCST-39; Giants/KTVU-2.

Nate Ely sent an article from the 4/11 Isthmus. It describes a plan by New Yorker John Reilly to start up a series of unusual LPTV stations. The article also makes a few references to WMSN, which will be coming on the air soon in Madison, WI. Reilly is proposing an LPTV on ch. 59 in Madison, which will cater to the tastes of "educated, sophisticated viewers." The article also gives us some insight into programming strategies in order to describe Reilly's unusual strategy. "In TV, there are two predominant programming strategies: imitation, where network affiliates all run soap operas, national news, etc., at exactly the same time; and counterprogramming, where a station runs game and kids' shows against the prime-time sitcoms and cop shows. Counterprogramming is what we'll get from WMSN when it starts up in late spring. Reilly, however, plans a third strategy for TV59 and three other LPTV stations he'll be building in upscale college towns. Part of his 24-hour schedule will imitate the pay-cable channels Cinemax and Bravo, combining foreign, classic and offbeat movies that were not box-office smashes. Another part will have a music-video format featuring a lot of local musicians and clubs interspersed with features on fashion and comedy, along with shorter pieces for which there is no direct analogy on TV. Unlike WMSN, TV59 will produce local news programming, but unlike WMTV, WISC & WKOW, it won't run a traditional 6 and 10 p.m. happy-talk news format. Rather, Reilly plans to have in-depth, investigative video reportage that will concentrate on a subject for a week or two."

Glenn Hauser clears the air on Miami chan-

nel 2. "WTMS-2 Miami has been gone for years, with WPBT fulltime on 2. Let's lay this one to rest once and for all! 'Revised 3/2/86???' (referring to the list in the May VUD). A recent TV Guide sent to Tom Yingling from John Combs suggests that Hauser is right. However, even current data lists report that WTMS still has a license, even if it isn't broadcasting. The purpose of the lists I am compiling is to list all licenses, construction permits and construction permit modifications, even if they are not broadcasting. I am not listing what is broadcasting, but rather what is authorized to broadcast. Glenn also writes, "I'm still baffled by the ch 35 CP for Miami. WHERE ELSE are UHF stns licensed to one city only 2 channels apart?? Fullpower (sic) ones??" Actually, neither 33 nor 35 are licensed yet. There is actually no problem with a city having two television stations on second adjacent channels as long as their transmitters are at least 20 miles apart. This situation can exist with both stations still covering the entire city within its city grade contour. Actually, the proposed transmitters for 33 and 35 are 33.59 miles apart, based on their coordinates. There are other areas, mainly California, where a community has assigned channels that are required to be separated by certain mileages. For example, Fresno has channels 43 and 47. Modesto has 19 and 23. Sacramento has 29 and 31. Orlando, FL, has 24, 27 and 35 (IF taboo!). Glenn also corrects me on my reference to WJXT in the 5/86 VUD: That should be Jacksonville, not Miami. He also writes, "The Key West xtrs are finally on the air around April 1, per local press and signs of them on portable TV there; people no longer cable-or-else. But entire Keys xltr system is threatened due to multiple off-air feed, since new Fullpower stns further up in FL can disrupt, e.g. ch 35 if it actually comes on. I'd think 30 & 36 on the west coast would mess it up already."

Bruce Ely sent in an article from the 4/17 News-Tribune & Herald. It seems that communities along the northern shore of Thunder Bay in Ontario have been receiving Duluth MN television stations on cable via a series of microwave relay towers. But because of maintenance costs for those towers one community's cable company decided to pick up the Detroit network stations off satellite instead. Now the Duluth stations are offering to help out in the maintenance costs before they lose coverage in the other communities.

Articles from Paul Gaines: The 11/13/85 Detroit Free Press profiled Michael Gurdus, an Israeli who monitors Soviet television for ABC and other news agencies. He uses a satellite dish to pick up transmissions from the Soviet Union, as well as European nations. He spends 18 hours a day monitoring television and radio transmissions over nearly a dozen radios. Imagine, making DX a lifetime job! WDIV-4 in Detroit was off the air one morning when striking technicians walked off their jobs back in November. Supervisors had to restore transmission. Local news programs were able to proceed as usual.

Lots of news from John Combs. One article says, "It took nearly 40 years, but the southernmost tip of the United States finally has free television. The rest of the country had had it that long, even the rest of Monroe County already has it. 'Key West was the last place in the county to get free TV,' said Monroe County mayor Wilhelmina Harvey." "Harvey argued to have television towers financed by taxes placed throughout the Keys. The March 27 opening of a 170-foot signal relay tower in Key West's Sigsbee Park allows Key West residents free access to Miami channels 2, 4, 6, 7 and 10. The cost of the transmitter, \$800,000, was borne entirely by Key West taxpayers."

From another article, "Outlet Communications Inc. - in the midst of a leveraged buy out from the Rockefeller Group Inc. - is betting much of its financial future on the Atlanta television market. More specifically, Outlet's management expects to turn around the negative cash flow at its 'infant' station, WATL-TV Channel 36, and make the station a major player in the market." "Outlet bought WATL in 1984 for about .29 million from Silverman-Morrow Broadcasting and an investment group headed by Atlanta Attorney D.R. Jones with the intent of getting in on the ground floor of rapid growth in Atlanta's broadcast market." "Running next to last (ahead of only WVEU-TV Channel 69) in the sign-on to sign-off ratings race with a 3 percent share of the audience, WATL captured \$8.6 million of the market's revenues last year."

A third article has Ted Turner telling the Africa Travel Association that he is trying to get a satellite transponder available to transmit his Cable News Network to Africa. John writes, "Apparently they finally got the Key West xtrs on the air. They had to keep changing the proposed tower site after objections by the FAA, the Navy, and others. At one time, Key West (and the Keys in general) might have been a DXers paradise - no locals. Now, with the 5 xtrs, CPs for 16 and 22 and applications for 3 and 13...well, guess it just won't be the same." "Some other translator observations: on a brief trip up to the Carolinas and back, I passed through Brevard NC. I noted W59AR while there, but noticed that the direct signal from parent WUNF-33 was superior in most parts of town! Also noted that W22AC in Hartwell/Royston GA suffers from the strong signal of WMSB-21 from Paris Mountain...." "Several FL xtrs' days are numbered. WCIX-6 already lost W33AA when WFBS-33 came on. Now there are CPs for full-power UHF's on each of the 3 channels their xtrs occupy: 61, 64, and 69. WCIX-6 already has suffered in coverage and ratings due to their Homestead allocation necessitating too southerly of a transmitter site to cover the populous areas to the north of Miami." "WTOG-44's Ft. Pierce xltr W21AB will have to move or decrease when the new educational Ch. 21 there comes on. And WESH-2 will soon lose Melbourne/Palm Bay xltr W56BG to the new WYXK-56. W56BG has been very popular, especially in non-cabled areas of Palm Bay

where the off-air signal of WESH-2 left something to be desired." "By the way, am I correct in believing that they used to assign those 1000-watt xtrs only to channels actually allocated to the city in question?" They used to. That was one of the FCC's rules. I don't know if it still is or not, but they have allowed many translators on unassigned channels to operate 1000 watts TPO. "Speaking of LPTVs, Tallahassee's W17AB is listed in the newspaper there, but almost ignored by TVG. They do run a little blurb under the channel listing that says 'Tallahassee's Ch. 17, a low-power station, offers movies, syndicated shows and other programs of general interest, seven days a week.' Great. They just described every station in the country." Not quite, John: That doesn't describe ch. 30 in San Bernardino, CA.

A card just in from John, "...on 4-26-86 I logged the new WTMV-32 Lakeland FL with music videos. They have not been seen since, even when tropo to Orlando or Tampa is up, so it's possible that what I saw was part of a test. I had written them a while back for information and they are to be 24-hour music videos.

John asks while studying the 1986 TV Factbook, "Why has the FCC given CPs to one group (Mountain TV Network) for anyone from 3 to 7 different LPTVs IN THE SAME TOWN?? Talk about monopoly! That is kind of strange." The FCC isn't concerned about the extent of a licensee's influence with respect to LPTV apparently. As far as monopoly, the channels were up for competing applications for some time before the permits were granted. Maybe the FCC felt it was in the community's interest to grant them if nobody else was interested. "Also strange are two CPs in particular: K37AA in Baker OR (I thought 37 was verboten - there was NO OTHER channel that would work?) and K78AH Chester MT (I thought 70-83 were gone, kaput, lost to TV)." The ch. 37 grant puzzles me also. As for CPs outstanding above ch. 69, there are lots of them still around that haven't gone on the air yet. I haven't heard of the FCC still granting them for those channels. "Odd, too, that some cities have CPs on adjacent channels. Perhaps the powers are so low, and the xtrs so far apart...that they can do that??" Apparently. I seem to recall cases where a community had more than one on the same channel when I did the 1984 XLTR/LPTV List.

"I wrote to the permittee of WLOAX here in Jax, a firm called ATO Communications in Willoughby, Ohio. I received back a letter from an entirely different firm in Virginia asking very suspicious questions about what company I represented and why I wanted to know about WLOAX and where I had heard about it. They insisted that they could not possibly send me any information until I answered their questions!! Wonder why all the secrecy? There has been zilch publicity about the LPTV here in the media, and probably only a few broadcasting professionals...are even dimly aware of it, so they may have been flabbergasted that someone would write for info on it!"

will have a satellite-delivered data network on its SCA "with the aim of selling data to resident retiree-investors and to tourists who need to track the markets." I checked the WRTVH '86 for information on ZGM, but found nothing, such as what frequency this potential skip target is on.

WHOM has been using the claim that they have the

WHOM FM STEREO

765 Congress St., Portland, ME 04102

largest land coverage of any FM station in North America. "This claim was made from a letter from you to prior management," but this year the claim is challenged by KSFI Salt Lake City UT. "If there has been a change in positioning, please let me know," writes Bernie LaCroix, general manager. I pointed out that KSFI's claim lies in their use of translators, but did mention some CA stations that have greater computed coverages than WHOM. I suggested that they claim to have the widest land coverage of any FM station in the eastern United States. Just came on: KNYD 90.5 Broken Arrow OK. No information on its format or its stereo status. It's a mighty 50000 h.v at 1065 feet.

WFGG #88.3 Fort Gordon GA should be on the air, effective May, 1986, with a 100 watt transmitter scaled back to 10 watts to "keep the signal inside post boundaries." Nevertheless, this should make an interesting DX target, mainly because of its quasi-legality.

Much of the Las Vegas SCA news is from John Lentz, who took his specially-equipped Panasonic RF-2600 there. He reports hearing many strange signals, such as 88.7, replaying local 89.5. It seems that some of the outlying translators are finding their way into Las Vegas.

One article I sent from Los Angeles is about the ratings gain for 105.9 after its calls were changed to KPWR, "Power 106." The station has carved out a niche between such stations as KIIS, the market leader, and KJLH. He sent an article from the "Los Angeles Times" on drive-time radio, with all of the Los Angeles-area stations summarized. "Superlative stations" include KCRW 89.9 as best for its comedy, rock, classical, reggae, drama, news and documentary. Most consistent is KRTH 101.1, KUSC 91.5 for classical, KLON 88.1 for jazz and KXLU 88.7, the hippest: "Cited by Rolling Stone magazine a couple of years ago as the best college station in the country, this is L. A.'s home of outrage rock. If it's getting airplay on KROQ, it was taken off this Loyola Marymount station's playlist last month."

Mc writes: "What? No column in the April '86 VUD? Hope everything is OK with you and the family." It is! I took the month off to finish the "FM Atlas," and to have last month's news coincide with the Atlas' deadline. Nick Lombardi suggested I take a month off, and he wondered how long it has been since I missed a month. Anybody care to research that? Mc also sent articles on the FCC ending its ban on AM-FM simulcasting among stations in cities of over 25,000 population. And rock station KMET Los Angeles and six others owned by Metromedia will be sold, as that group ends its involvement in broadcasting. Other articles Mc sent include one mentioning a \$45 million price for KROQ 106.7, which would be a record price for an FM station. Buyer would be New York-based Infinity Broadcasting. And KFAC-AM-FM Los Angeles are being sold for \$33.5 million, with no change in programming contemplated. Stations have not done well in ratings in recent years, with much of the classical audience defecting to KUSC #91.5, and to some extent KXLU 88.9, which has c from 6 p. m. to 11 p. m. weekdays.

John Jefferson confirms as on KRQR-1 97.3 San Ramon, KJAZ-1 92.7 Orinda and KINO-1 92.1 Berkeley, and he says KTLN 103.9 Taft expects to be on July 1 with stereo k, co-owned with local AM. Also on and DX ready, as of early March—KRPO 104.9 Rohnert Park, \$, k. John has yet to log it, but expects it will emerge if KBRG Fremont ever goes off for a few minutes.

WDET #101.9 Detroit was recently off the air or at low power for repairs, but should be back to normal now, according to Paul L. Gaines. The Detroit ratings give WJLB 97.9 the lead, followed closely by WJR AM, WJOI 97.1 and WCZY-FM 95.5. Makes me wonder if having an FM station in the middle of the dial enhances your ratings—because of more people potentially tuning by your frequency. Northwestern College writes me that they have no plans to embrace a music or instructional service on any of their SCAs, but in three markets they do have SCA—mostly Multicomm on 92 kHz, as at KTIS-FM #98.5 Minneapolis.

David A. Sinclair sent several items concerning Canadian regulations. These include modifications to the Canadian content rules for FM stations, which represent a general easing of restrictions (such as eliminating the hourly limits on commercial content and making it easier to carry alcoholic beverage ads).

Pete Nolan writes with news of stations rimshotting markets other than their cities of license. These include KZZE-FM Poteau OK, getting into Fort Smith AR and KXAR-FM 101.7 Hope AR into Texarkana. He says the latter does so via a translator (96.7) in Texarkana. "There are actually a whole bunch of obscure Class As in the area trying to program to Texarkana—including Ashdown AR (103.9), Gurdon AR (92.7), Stamps AR (100.1) and Atlanta TX (99.3), and Hope AR. Each of them either specifically mentions Texarkana or uses some sort of neutral identifier like "South Arkansas Country". Meanwhile, the Class C 98.1 in Texarkana is ignoring its city of license and trying to program to Shreveport. And, of course, all of the Shreveport Class Cs get into Texarkana just fine. What a mess!" And Dave Nieman sent pictures of WKSE Jamestown NY's tower and the Skylon tower in Niagara Falls, showing no FM antennae on top.

Eric Bueneman sent information on his area, including what WMRV 101.1 East Saint Louis is up to (see "Formats/Networks"). WLCA #89.9 Godfrey IL has been "running some commercials from Alton-Wood River IL; KBFL #90.3 doing the same for Buffalo MO." Commercials or enhanced underwriting?—ed. "In order for KCFV #89.5 Ferguson MO to increase power, WRTE #89.5 Cahokia IL must move to an open frequency. Another thing KCFV doesn't touch on is public affairs programming. All they ever carry is Stardate and Family Health. . . . KCFV still has plans to apply for #88.1, now that the CP for KTAD has expired." That is news to me about K TAD; it still is mentioned in my several-months-old FCC dattalst, but the longer it stays off the air the greater are the chances it will never make it on the air. He sent a letter from Robert Grant on AM-FM simulcasting, calling the practice a waste. "I do not know of a single AM-FM simulcast pair where the AM has better coverage than the FM! An AM simulcast er is not listened to by anybody, but unlike a station going silent, it does not open the channel to new applications. . . ."

Pat Durkin of MN has been traveling to Los Angeles lately and found the same article Mc sent on Los Angeles radio programming; it was in the Sunday, April 6 "Times." John Lapp, inspired by Len Feldman's article in the May "Audio," says I ought to make a business of installing FM decoders into people's radios, perhaps a combination of that and an SCA adapter!

Roger Winsor says "If you hear the basketball Boston Celtics on 99.9— it's WTHI-FM Terre Haute." He picked up a classical radio program guide put out by WFMT 98.7 Chicago. Sources for the station listings are "Broadcasting Yearbook" and the Ninth edition "FM Atlas and Station Directory." Wonder if I should write them and try to collect royalties for use of my information?

In FCC news, they propose allowing FM translators to be fed by satellite or terrestrial microwave. This will help religious broadcasters like Family Radio and Moody. It could mean more cluttering of the FM band, especially the 88-92 MHz portion, but it might mean less attention to developing primary FM stations, and more attention to translators. Family Radio has been circumventing the rules by applying for about 50 educational FM stations around the country, when perhaps translators might do the job for them. More than satellite feed for translators, I believe some relaxing of the rules is needed so that translators can originate programming and do some local public service, as well as sell time. Both of these ideas are opposed by the

National Association of Broadcasters, which wants the translator rules made more restrictive, so that it is harder for third parties to come in and establish translators that might compete with full-power stations. SunGroup of Nashville announces an agreement to buy KESY-FM 104.5 and KESY AM Omaha from MediaOmaha, a limited partnership. No purchase price mentioned in the news release.

"I don't know how you manage to keep track of the thousands of FM stations across North America," writes W. R. Hepburn, "but you're doing a great job. Your column is my sole source of info on new FM stations. I'm looking forward to the next FM Atlas. Hopefully some day all of your Canadian maps will be of the same scale and format as your American ones,"— which they are with the Tenth edition, ed. Bill then supplies several Canada Post official provincial abbreviations. Thus AB is for Alberta (not AT), SK for Saskatchewan (not SA), and NT for Northwest Territories (not NW). Canada Post also authorizes the use of LB for Labrador. "(The official name of Newfoundland is the Province of Newfoundland and Labrador.) . . . Have a good DX season (if you ever find any time!)"

WEVE-FM 97.9 Eveleth has been causing interference to TV sets in the area, and local TV showed an irate group of people who were told they'd have to pay for and install interference filters themselves. The meeting ended with a call for an advertiser boycott. Writes owner Lew Latto to the Duluth "News-Tribune": "Recent TV news coverage has blown out of proportion a problem of TV interference. . . . WEVE has provided at no charge to these people FM filters. . . . The problem is further complicated by booster amplifiers and old antenna systems, some of which have not been updated since television first went on the air in the mid-1950s."

Ratings for the Winston-Salem area were sent by Allen Lloyd. Top honors went to WTQR 104.1, followed by WOJY 100.3, WMAG 99.5 and WKZL 107.5, and then WSJS AM. Keith Pugh on translators: "One thing about that translator, it can pack a heck of a signal! It (W253AA Birmingham) was much stronger than WJSR #91.1 Birmingham, which has never been quiet here. Are you sure that W253AA is only a one-watt translator? The April VUD seemed very empty since your column wasn't in it."

Supplying many of the east-coast station nonIDs was Bill Nollman, who took note of what he heard on a trip from Florida, and sent in the report, which is appreciated. He wondered about a Wav 104, which must have been WYAV 104.1 Conway SC. Ralph Strobel says WFOF #90.3 Covington IN on air with IMS news, which is Moody's G network, headed by former Mutual announcer Forrest Boyd. If space permits, I'll print Forrest's picture, from the

International Media Service

News is the pioneer of Christian news networks, and is now 140 stations strong. According to a Gallup Poll of the media over 80% of the people who bring you the news don't even believe there is a God. You would be even more shocked at what they believe about sexuality, abortion, evolution, Communism, the Bible, the Church, etc. IMS reports the news "as it is, not as we would like to see it." Forrest Boyd is the president and founder of IMS and is a veteran news reporter and a Christian. . . . "Pray for Forrest and his other reporters as they work to make IMS News better on a very limited budget. IMS News—more of what you listen to a radio for!"

program guide of WCGN 101.5 Ortonville MN. WFOF, which Ralph pulled in over nearby WBCL Fort Wayne, has no SCA, but is stereo. WFCI Franklin IN writes that "If all goes as planned we hope to be stereo within two years." No sign yet of WCNA 98.3 Columbia SC, writes Tracy Wood.

Walter Patton again supplied much Canadian FM news, and he says "From your March '86 column: Mirabel 104.9 CQO-FM must either be an illegal or low-power info station for the airport. The calls CQ— would belong to Portuguese Overseas Provinces. Besides, it would be very near CIME-1 Val Morin, which despite its puny 4 watts must sit on a decent hill as it could be heard on occasion in Montreal in stereo. The 103.1 Bas Laurentides would be CFOU-FM St. Therese. The permitted transmitter power of very low power FM (mostly the CANCOM rebroadcasters) has been raised from 2 to 10 watts. Some are already more. The percentage of French-language vocals required of French-language stations has been cut from 65% to 55% amid protests that this sounds the death knell for French language record producers in Canada. French language stations have been complaining for years that suitable material has not been available to fill their needs. I misspelled the name of the CRTS secretary in my last letter. It should be Fernand Belsise. You should ask Steve Tuura of St. Catharines where he gets his information. It's not at all inaccurate and runs well ahead of the published CRTS data, which has yet not published Toronto and Niagara decisions." Walter, I think the Toronto information is correct (with exceptions pointed out last month), but doubt that anything yet has been decided about Niagara Falls. At least, not to the point where a station is likely to immediately start broadcasting on 104.9, as Steve alleged—b.e.

CONTRIBUTORS THIS ISSUE

Waldo F. Bishop, Tallahassee FL; Eric Bueneman, Ferguson MO; Mrs. M. J. Coleman, Homer City PA; Marc DeLorenzo, Holliston MA; Patrick Durkin, Jr., Woodbury MN; Richard T. Eddle, St. Louis MO; Joseph Fela, South Plainfield NJ; Paul L. Gaines, Detroit MI; Ron Green, Joplin MO; Glenn Hauser, Fort Lauderdale FL; Harry Hendrickson, Roseville MN; W. R. Hepburn, Toronto ON; John M. Jefferson, Pleasanton CA; Bernie LaCroix, general manager, WHOM Portland ME (mailing address); John Lapp, Lakemont GA; John Lentz, Muskego WI; Jim Lewis OK (town not available); Allen Lloyd, High Point NC; Nick Lombardi, Atlanta GA; W. R. McIntosh, Granada Hills CA; Tim McVey, Bolivar TN; Paul R. Mount, Teaneck NJ; E. Nelson, Landisville PA; Bill Nienajdy, Clifton NJ; Pete Nolan, Houston TX; Bill Nollman, Borrah CT; Walter Patton, Willowdale ON; Richard Porter, Wood Dale IL; Keith D. Pugh, New Hope AL; Richard Reese, Jersey Shore PA; Mike Reid, North York ON; Henry Ruh, president, WOVV Versailles IN; David J. Nieman, Akron NY; David Searls, Palo Alto CA; David A. Sinclair, Vancouver BC; Lexington E. Smith, New York NY; Ralph Strobel, Muncie IN; Brian A. Tabor, Rochester NY; Jeff Walker, WRAS, Atlanta GA; Edward M. Warner, Franklin NC; Richard Weirick, Kalamazoo MI; Ben Wilkie, York ME; Roger Winsor, Champaign IL; Tracy Wood, Hephzibah GA.

NEW ZENITH

With Armstrong 2

A regal beauty featuring the Cobra SHORTWAVE and T organ and large Concert ord space in mahogany tubes plus phono tube indicator plus rectifier



From Hartford CT paper, 1948. Radio, of course, had FM.

I ♥ JAMESTOWN, NY CONVENTIONS

COMING TO

THE 1986 W.T.F.D.A.
CONVENTION ?

FOR AREA VACATION INFORMATION
CALL TOLL FREE FROM ANYWHERE
IN THE US 24 HOURS A DAY
1-800-524-2466

(FROM CANADA: 1-800-524-3507)

ask for
information on
Chautauqua-Allegheny (S)

I ♥ NY. VACATIONS

Call our toll free number or fill out the coupon and we'll
send you our New York State Vacation Guides free.

Write: New York State Centennial Vacation
P.O. Box 808, Latham, New York 12110

Name _____

Address _____ Apt. # _____

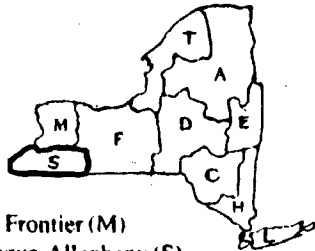
City _____

State/Province _____ Zip/Postal Code _____

056 _____ 007 _____

I am interested in additional information on these
specific regions (select up to 3).

- Adirondacks (A)
- Catskills (C)
- Central-
Leatherstocking (D)
- Capital-Saratoga (E)
- Finger Lakes (F)
- Hudson Valley (H)
- Long Island (L)
- Niagara Frontier (M)
- Chautauqua-Allegheny (S)
- 1000 Islands-Seaway (T)



I am also interested in camping and hiking. (061)

CALL TOLL FREE-1-800-524-2466

1986 W.T.F.D.A. CLUB CONVENTION AUGUST 1 · 2 · 3

HOST: Mike Lapinski
RD#2 2478 Palm Rd.
Jamestown, N.Y. 14701
716-665-6581

GOAL: To log at least 150 stations on television
Last convention log this location 172 television stations

LOCATION: Hillside at 1710 feet above sea level, 470 feet above valley
Top of hill at 1746 feet above sea level

EQUIPHENT: UHF - 7 foot dish on top of 70 foot crankup tower, max center of dish 83.5 ft.
high VHF - Horizontal stack on top of 70 foot crankup tower, 10 foot under dish
low VHF - Horizontal stack at 40 ft.
FM - Stereo probe 9 at 50 ft, 10 feet above low VHF

TOURS: Channel 17 WNED translator system at Fredonia State College
Tony Pilato will host tour
Board of Co-op Educational Services - Fredonia Video Duplication of
Educational Materials
WWSE/WJTN Jamestown N.Y. tentative
Group W Cable head end - top of hill- tentative

LODGING: Economy Heritage House
2 E. Main Street Falconer Exit Rt 17 on Rt 394
Falconer, N.Y. 14733
716-665-4410
rates Single \$24 Double \$28 2 beds 2 people \$31

National Comfort Inn
chain N. North Main St. Jamestown Exit intersection Rt 17 and Rt 60
Jamestown, New York 14701
716-664-5920 800-228-5750
rates Single \$39.95 Double \$44.95

Premium Holiday Inn Indoor Pool etc.
150 W 4th Street Downtown Jamestown
Jamestown N.Y. 14701
716-664-3400 800-465-4329
rates Single \$58 Double \$62 Reservations as soon as possible

Note: the Comfort Inn is the closest, at least 500 feet closer than the
Heritage house in different directions at the base of the hill.

MEALS: On Friday -Lunch and Binner, on Satur day Lunch and Dinner
Buffet style catering by Ulla-Lunch and Dinner
Same Dinner Menu as last convention

COST: \$5 Registration fee for rental of chairs, tent, tables plus soda and beer
\$20 for four provided meals
\$25 Total for meals and registration
Please note I must give the caterer at least 2 weeks notice of number

PLEASE NOTE: EACH PERSON IS RESPONSIBLE FOR THEIR OWN MOTEL RESERVATION

SOUTHERN FM DX

Eric Bueneman
836 Lamplight Lane
Hazelwood, MO 63042-3407

PUBLISHER'S NOTES

HELLO FROM THE PUBLISHER. PUBLISHER'S NOTES WILL APPEAR ON AN AS-NEEDED BASIS, SORT OF A REPLACEMENT FOR "FROM THE STAFF," WHICH WAS A COMPILATION OF ITEMS AND ANNOUNCEMENTS FROM OUR VUD CONTRIBUTORS AND EDITORS. WHEN WE FIND A NEW EDITOR-IN-CHIEF, FTS SHOULD RETURN.

DON'T MISS WTFDA'S CONVENTION THIS YEAR! THE 1986 CONVENTION IS JUST A COUPLE OF MONTHS AWAY, AND YOU'LL FIND FURTHER INFO ABOUT IT ELSEWHERE IN THIS ISSUE. THOSE THINKING ABOUT ATTENDING SHOULD REMEMBER THAT IT'S NECESSARY TO MAKE YOUR OWN MOTEL RESERVATIONS; THERE ARE THREE DIFFERENT HOTELS TO CHOOSE FROM, AND TWO OF THEM ARE PART OF MAJOR CHAINS, OFFERING TOLL-FREE TELEPHONE RESERVATION NUMBERS. BETWEEN THE THREE HOTELS SUGGESTED, THERE IS A WIDE RANGE OF REASONABLE RATES, SO NO SPECIAL DISCOUNT FOR THE DURATION OF THE CONVENTION HAS BEEN SOUGHT. JUST REMEMBER THAT IT'S UP TO YOU TO MAKE YOUR OWN RESERVATIONS. YOUR HOST, MIKE LAPINSKI, IS PLANNING A VERY INTERESTING PROGRAM. JUST ASK ANYONE WHO ATTENDED THE LAST JAMESTOWN CONVENTION! WE'RE HOPING TO MEET YOU AT JAMESTOWN, AN EASY DRIVE FROM MOST OF THE NORTHERN MIDWEST AND NORTHEAST. MAKE YOUR MOTEL RESERVATIONS NOW, AND WATCH FOR A REGISTRATION FORM IN THE NEXT ISSUE.

A TINY APRIL EDITION. NOTICE HOW SMALL THE APRIL VUD TURNED OUT TO BE? SO DID WE. AS IT TURNS OUT, THIS WAS DUE TO SEVERAL UNRELATED REASONS. IT'S RARE TO HAVE THREE KEY EXPECTED COLUMNS NOT APPEAR IN THE VUD IN THE SAME MONTH, BUT IT DOES HAPPEN ONCE IN A WHILE. OUR COLUMN EDITORS OFTEN HAVE THE LEAST AMOUNT OF MATERIAL FOR THE YEAR IN APRIL (REFLECTS THE FEBRUARY-MARCH USUAL TV/FM DX "SLUMP"). IN ADDITION, BRUCE ELVING TOOK THE MONTH OFF TO PREPARE FOR HIS NEW FM ATLAS EDITION, AND LAYOUT ASSOCIATES, THE PEOPLE WHO ASSEMBLE OUR "PASTE-UP" BEFORE IT'S TAKEN TO THE PRINTER, APPARENTLY RETURNED ERIC BUENEMAN'S SOUTHERN FM-DX COLUMN FOR RE-TYPING DUE TO THEIR PAGE SIZE REQUIREMENTS, AND SOL CHERNOS' NORTHERN FM-DX DID NOT APPEAR BECAUSE HE WAS BUSY MOVING INTO A NEW RESIDENCE. OTHERWISE, THE APRIL VUD WOULD PROBABLY HAVE RUN CLOSER TO THE USUAL NUMBER OF PAGES.

EDITORS, PLEASE NOTE: WE HOPE YOU'VE ALL BEEN ABLE TO ADJUST TO THE NEW PAGE LAYOUT SPECIFICATIONS. IF NOT, LAYOUT ASSOCIATES WON'T USE YOUR COPY, AND WILL PROBABLY RETURN IT TO YOU. IF YOU ARE HAVING ANY DIFFICULTIES WITH THE NEW PROCEDURE, DROP WTFDA HQ A LINE ABOUT IT. REMEMBER, THE VUD CURRENTLY DOES NOT HAVE AN EDITOR-IN-CHIEF TO DO LAYOUT WORK, SO YOUR COLUMNS SHOULD NOT BE SENT TO CLUB HEADQUARTERS, OR TO ANYONE ELSE BUT LAYOUT ASSOCIATES, (ATTN: UHF UHF DIGEST PROJECT), PO BOX 155, CLARENCE, NY 14031. WE WILL SEND THEM ANY FEATURE MATERIAL SUBMITTED TO WTFDA HEADQUARTERS FOR PRINTING IN THE UHF-UHF DIGEST, BUT IF IT DOES NOT MEET THEIR SPECIFICATIONS, WE'LL HAVE TO GET A VOLUNTEER TO RE-TYPE IT. IF YOU NEED FURTHER INFO, WRITE HEADQUARTERS.

REPRINTS, ANYONE (PLEASE???) WE'VE BEEN ASKED ABOUT AN ARTICLE REPRINT SERVICE. WE DO NOT CURRENTLY HAVE ONE, AS WE HAVE NO VOLUNTEER FOR IT AT THE PRESENT TIME. IF YOU HAVE ACCESS TO LOW-COST PHOTOCOPI EQUIPMENT AND AN EXTENSIVE VUD COLLECTION, YOU COULD HELP US OUT. ANY VOLUNTEERS???

SPEAKING OF VOLUNTEERS MANY THANKS GO OUT TO THOSE MEMBERS WHO HAVE BEEN ANSWERING THE CALL FOR MORE TECHNICAL MATERIAL, EQUIPMENT REVIEWS, COVERS, ETC., IN THE VUD. THIS MONTH, A BIG THANKS TO DAN BARTEK JR., WAHOO, NEBRASKA FOR THE COVERAGE MAP ON THIS ISSUE'S COVER.

Report to this column if you are from: AL, AZ, AR, CA, CO, DC, DE, FL, GA, HI, KS, KY, LA, MD, MO, NC, NH, NV, OK, SC, TN, TX, UT, VA and WV.

Alternate Address: c/o KCFV 89.5 FM, 3400 Pershall Rd., St. Louis, MO 63135

JIM PIZZI, P.O. Box 1778, Lovington, New Mexico 88260 (ALL TIMES MST)

(PLEASE LIST EQUIPMENT, ANTENNA'S HEIGHT ABOVE GROUND AND SEA LEVEL!)

NOVEMBER 1985

07	Es	1904	KDVS	90.3	CA	1107
		1906	KXPR	90.9	CA	1071
		1906	KBBF	89.1	CA	1143
		1908	KCLB	91.9	CA	1143
		1931	KPFK	90.7	CA	855
		2006	*KCBX	90.1	CA	????
12	tr	2137	KHCB	105.7	TX	520
		2141	KUHF	88.7	TX	520
		2246	KSRR	96.5	TX	520
13	tr	0936	KILT	100.3	TX	520
		0938	KRBE	104.1	TX	520
		0941	KPFT	90.1	TX	520
		0952	KGOL	107.5	TX	539
16	tr	0834	KIJN	92.3	TX	95
29	tr	2310	KKKK	99.1	TX	???
		2314	KPSM	99.3	TX	265

NOVEMBER 1985 (Contd.)

29	tr	2330	KKKX	106.5	TX	580
		2331	KHCB	105.7	TX	520
		2333	KFLZ	107.1	TX	510
		2338	KKED	90.3	TX	520

DECEMBER 1985

09	tr	0758	KJOJ	106.9	TX	490
		2121	KHCB	105.7	TX	530 (NOT 520)
		2123	KRBE	104.1	TX	530
25	tr	1433	KUFO	104.7	TX	(x-KIOP)
		1435	KODM	97.9	TX	(ALL-NEW FM98)

JANUARY 1986

31	tr	0115	KINB	107.3	OK	526
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MARCH 1986 (on car rx)

06	ms	0951	WNSL	100.3	MS	835
		0956	KJWB	100.3	CA	657

Jim noted that KKKK-99.1 was on 98.9 on 11/29/85.

Not much DX in six months. Should pick up in a while-at least enough to report more often. 73's, Jim.

YOUR EDITOR, WORLD CLASS DISC JOCKEY, INXS FAN, CODE 5150, FAN OF JOHN COUGAR MELLENCAMP, and anything you can think of about ERIC BUENEMAN, 836 LAMPLIGHT LANE, HAZELWOOD, MISSOURI 63042-3407 (mucho radios).

Receivers: Sears Model 91867 AM/FM/FM Stereo, Realistic DX-400 LW/AM/FM/SW
Antenna: 30' longwire, amplified rabbit ears Height: 540 feet above sea level

MAY 1986

09	tr	1140	WMC	99.7	TN	250
		1155	WKYA	101.9	KY	205
		1204	WVEZ	106.9	KY	250
10	Es	1025	WEAS	93.1	GA	700
		1025	WIXV	95.5	GA	700
		1031	WZAT	102.1	GA	700
		1037	WSSX	95.1	SC	710

MAY 1986 (contd.)

10	Es	1039	WCHY	94.1	GA	700
					(Over WMIX-FM)	
		1045	WTCQ	97.7	GA	640
		1051	WSBF	88.1	SC	500
		1059	WTEB	89.5	NC	850

First Es opening on May 10 reached 105.7 MHz to GA, NC, SC and FL, reaching CT two hours later (but MUF only reached Channel 4). The DX opening to Central America only reached Channel 3. 73, E.B.

NEW PD AT KCFV: Mike O'Neil, afternoon DJ and assistant PD, has been named program director at KCFV-89.5 FM. He succeeds Timothy Board, who becomes news director, succeeding Laurie Nelson. Your editor had applied for the position, and is being considered the top candidate to succeed O'Neil when that opening comes up again.

KCFV DOES IT AGAIN: KCFV extended its winning streak to thirteen games with a 19-8 victory over the student newspaper. Bill Smith was the winner, with Buzz Sennett picking up the save. Garon Holman homered twice and Tim Board had three sacrifice RBIs (two on one sacrifice!).

Alternate Address: c/o KCFV 89.5 FM, 3400 Pershall Rd., Ferguson, MO 63135

DEADLINES: Last Day of the month/CALLS: KXKXSTL, KMOGON, WLS5MO, Kalya

ERIC BUENEMAN, 836 Lamplight Lane, Hazelwood, Missouri 63042-3407 OR
c/o KCFV 89.5 FM, 3400 Pershall Rd., Ferguson, Missouri 63135

PHONE NUMBERS: (314) 895-1436 (home) UNTIL 11:00 P.M. CENTRAL LOCAL TIME
(314) 595-4480, 595-4478, 595-4472, 595-4463 or 524-8311 (work)

Location Key: H-Hazelwood L-Lake of The Ozarks (Osage Beach, MO)

MARCH 1986

14 tr(L) 2026 KBKC 94.9 MO 120
2031 KMAJ 107.7 KS 175
2036 KKKD 95.3 MO 65
2042 KUDL 98.1 KS 125
gw(L) 2300 unID 96.7 MO loc
(new xltr)
tr(L) 2301 KKCI 106.5 MO 115
2303 KOPN 89.5 MO 60
2309 KWRW 95.7 MO 80
2313 KLZR 105.9 KS 155
2314 KFRS 103.3 MO 120
2320 KTJJ 98.5 MO 125
2321 KZZC 98.9 KS 140
2323 KADI 96.3 MO 135
2325 KWOZ 103.3 AR 160
2327 KYOO 106.3 MO 55
2329 KWPM 93.9 MO 110
2330 KEKF 94.1 KS 125
2336 KSFT 105.1 MO 160
2338 KKUZ 102.5 MO 125
2340 WQCY 99.5 IL 140

15 tr(L) 0915 KHTR 103.3 MO 135
2014 KMJM 107.7 MO 135
2015 KMZU 101.1 MO 100
2030 KLTH 97.1 MO 130
2041 KEZA 107.9 AR 160
2113 KGUZ 89.3 MO 120
2138 KSOZ 91.7 MO 60
2147 KXTR 96.5 MO 120

APRIL 1986

7 tr(H) 1830 KSGM 105.7 MO 65
1830 WGGT 105.7 IL 140
1842 WDD 107.3 IL 110
1843 WEBQ 99.9 IL 130
1844 WDZQ 95.1 IL 110
1845 WSOY 102.9 IL 110

(THIS SPACE FOR RENT)
(Equipment: Realistic DA-400 w/whip)

LOCAL FM DIAL IN OSAGE BEACH: *90.7 KCVO Camdenton (g), 92.7 KLAN Eldon (k), 93.5 KYLG Osage Beach (r-Ad Con/CHR), 96.7 new xltr (rp), 97.7 KFBD Waynesville (rp), 102.3 KJFW-FM Waynesville (r-CHR), and 103.7 KLRK Lebanon (k). Semi-locals are: *88.9 KLUK Jefferson City (sr), 92.1 KLWT-FM Lebanon (r-CHR), 94.3 KZMO California (k), 100.1 KJMO Jefferson City (r-Ad Con/CHR), 105.5 KLUK Knob Noster (r-CHR), and 106.9 KEXY Jefferson City (r-CHR). PRIME DX AREA, about the best DX location in Missouri. If you're ever out there, bring your radios and TVs!

PAT DYER (WAS1YX), 5315 Silvertip Drive, San Antonio, Texas 78228

Equipment: Realistic TM-1001 tuner into Allied 426
Archer six-element beam with rotor at 20' AG/870' ASL

Pat starts out 1986 with another excellent report, all times Central.

FEBRUARY 1986 *tentative
15 tr 2236 KSMB 94.5 LA 395
16 tr 0028 KNUE 101.5 TX 280
0036 KTDY 99.9 LA 395
0039 KVNE* 89.5 TX 280
0216 WCKW 92.3 LA 495
0226 KDNT 94.5 TX 300

FEBRUARY 1986 (continuado)
16 tr 0320 KFKB 92.3 AR 505
0326 KQXY* 94.1 TX 275
0328 WTYX 94.7 MS 525
0359 KTIZ 96.9 LA 385
0407 KVKI 96.5 LA 350
18 tr 0715 KSMB 94.5 LA 395

(MORE ON THE NEXT PAGE)

FEBRUARY 1986 (continued)

20 tr 1024 KSMB 94.5 LA 395
1953 WCKW 92.3 LA 495
2014 KQXY* 94.1 TX 275
2024 WGGZ 98.1 LA 450
2031 KHYS 98.5 TX 280
2056 KIOC 106.1 TX 295
2225 KAYD 97.5 TX 275
2339 KYKR 93.3 TX 280
2350 WWNO 89.9 LA 510
21 tr 0000 WPGS 89.3 FL 685
0001 WMAU 88.9 MS 470
0100 XHSRO* 92.5 NL 275
0158 KSMB 94.5 LA 395
0221 KTDY 99.9 LA 395
0232 KTIZ 96.9 LA 385
0234 WCKW 92.3 LA 495
0254 WGGZ 98.1 LA 450
0311 WPAP 92.5 FL 785
0321 WYKX 101.5 LA 450
24 tr 0118 WCKW 92.3 LA 495
0120 KTDY 99.9 LA 395
26 tr 0815 KSMB 94.5 LA 395
0824 WCKW 92.3 LA 495
2107 KSMB 94.5 LA 395
2120 WPAP 92.5 FL 785

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26 tr 2128 WGGZ 98.1 LA 450
2144 KHYS 98.5 TX 280
2230 KDEA 99.1 LA 405
2232 WRKF* 89.3 LA 450
27 tr 0053 KYKR 93.3 TX 280
0054 WRBH 88.3 LA 510
0114 KAYD 97.5 TX 275
0118 WGGZ 98.1 LA 450
0119 KSMB 94.5 LA 395
0130 KQXY 94.1 TX 275
0159 KTDY 99.9 LA 395
Mar. 7 tr 2126 KSMB 94.5 LA 395
2144 KHYS 98.5 TX 280
2159 KJEF 92.7 LA 360
2359 WCKW 92.3 LA 495
8 tr 0203 KJCS 103.3 TX 275
0310 WGGZ 98.1 LA 450
0325 KQID 93.1 LA 385
0326 KYKR 93.3 TX 280
0331 WRKF 89.3 LA 450
10 tr 2355 XHSRO* 92.5 NL 275
2358 XHRK* 95.7 NL 275
11 tr 0000 XET* 94.1 NL 275
17 tr 0758 WCKW 92.3 LA 495
0859 WRKF 89.3 LA 450

3/18 tr Monterrey, NL FMs* 275
(92.5, 94.1, 95.7, 98.9)
0050 KXEW 97.7 IM 255
26 tr 0000 KQXY 94.1 TX 275

Comments: Nothing but tropo this time (a lot of it due to the 90-degree temperatures in late February). The last FM Es was in mid-January, so this was the first February without it since 1983.

Local 104.5 just changed calls again; now KZEP. That's about three sets in five years. (One set was used by AM 1250 (KVAR), which is now KUKA-eb).

73, Pat-WAS1YX (Where and when can I hear your amateur audio xmsnsy-eb)

WHERE WAS SFM IN APRIL: SFM was cut out of April's WUD. All there was was TV columns and VHF Utility DX, plus the WARC Update. I'd better not hope to see another puny WUD again like in April!

KTAD IS DEAD: The CP for *88.1 KTAD St. Louis, MO has expired. Double helix, the CP holder, neither had the money or the technology to put it on the air. The CP for KUCU-40 is also lapsed. *89.5 KCFV Ferguson, MO is the most likely candidate for the frequency.

FREEDOM OF CHOICE: You now can send your logs to either the Hazelwood or Ferguson addresses. The only time the Ferguson address will not be used is at Christmas or Thanksgiving.

Until next month,
Eric Bueneman
Eric Bueneman/L.B. Stevenson
World Glass Disc Jockey-KCFV

"I'm so sorry, sir. We opened our new digital Compact Disc department just two days ago, and we seem to have misplaced it. But if you'll leave your telephone number, we'll call you the minute we find it..."



New Music 89 KCFV-FM

This section is back--once again. With Doug Dornbos' ANTENNA NEWS column on the "back burners" due to his business responsibilities, I thought that the VUD might benefit from a new series of VIDEO LINES, to fill the gap. Many thanks to those WTFDAers who supported this idea. I must admit that I was also inspired by Morrie Goldman's FEEDBACK on page 17 of the February issue. I'm thrilled to be doing a regular column for the VUD again!

Briefly, the idea here is to comment on commercially available equipment--some of it coming from the home video boom--that can be especially useful to the video DXer. We promise not to get too technically involved in this section, since we also have Tim McVey's TECHNICAL TOPIX (one of my favorite VUD features) to deal with theory. Your ideas and comments on such gear are welcome here--drop me a line if you know of such new products that could aid DXing. Anything, from enhancers to video effects generators, can be an unexpected aid to the TV DX hobby; please let me know if you've had success with such accessories in your DX den. Incidentally, if you've got a good quality black-and-white snapshot of your gear, I'm sure Dave Nieman would love to use it in his PHOTO NEWS column, and I'd like to see it there, too!

MORE ON THE TEKNIKA 6510

First off this month, I would like to expand upon Rich Wertman's fine review of the Teknika 6510 tuner/converter in the May VHF-UHF DIGEST. Pure and simple, this unit IS a real gem on certain UHF channels, and that's its best feature from my own point of view. I cannot go so far as to say that the Teknika is THE TV tuner to own; however, it is just about the best tuner I have ever seen when it comes to weak signal performance on the newer translator channels in the ch 50 to 69 range; and I've tried a "few," hi.

Early in 1984, the Teknika created something of stir among TV DXing enthusiasts. I first heard about it from one of our most technically competent members; he was skeptical about the "hype" that surrounded the unit on display at a major trade show. Teknika was claiming average noise figures of something on the order of 9 dB on UHF, and 7 dB at VHF. That would be considerably better than the NFs for most TV and VCR tuners, which often fall in the 11 to 13 dB range on UHF. A 2 dB improvement in noise figure, even without using a pre-amp, means much improvement in your DXing results; signals normally barely frame-bars would become synced-in stable. After a few of the club's top TV DXers acquired 6510's, they wrote to WTFDA club HQ raving about them--it sounded like a real TV DX machine.

I got my first look at the 6510 at the 1984 Jamestown WTFDA convention, and was equally impressed. About that time, a couple of members in RF-congested urban areas got Teknikas--and then the controversy started.

The problem stems almost exclusively from the Teknika's AGC setting, a control that is located on the bottom of the unit and is not intended to be accessed by the user. Sound like a familiar problem? Teknika doesn't want the average user to touch this control; any DXer who has tinkered with AGC controls will know why. As supplied by the manufacturer, the 6510 is not intended to be used for TV DXing, especially not in a strong signal area. With the AGC set up for normal viewing, you may not be able to "A-B compare" the Teknika to another receiver--the normal AGC action of the unit, together with the automatic tuning response (it's microprocessor-controlled synthesizer tries to tune to the exact video/audio carrier frequencies) may not allow you to see the best weak signal performance from the Teknika.

I recently acquired a 6510, and personally haven't yet adjusted the AGC for optimum DX signal performance; however, those DXers who live in super strong signal overload areas, such as the shadows of the World Trade Center in New York or the Sears Tower in Chicago will probably have to do so. Despite the excellent selectivity and very good overload response exhibited, signal traps will probably still be a necessity for people in that kind of tough DXing location. For these reasons, the 6510 is not for everyone--though there are some who absolutely swear by them, saying that no tuner is better.

However, even without "peaking" the AGC on the Teknika for best weak signal performance, it gives noticeably better results on certain channels. I've

noted that it will lock into color on some very weak UHF translator signals; I have compared it with a 17-inch Sony (1982-vintage), varactor tuned, that had gained a reputation for excellent weak-signal performance in some TV DX circles, and it ran rings around the Sony. The UHF performance on the Teknika, especially on the hard-to-find weak translator signals, is what really sold me on the unit. When used in conjunction with a hot black & white TV receiver, results are very impressive. I have found that much will depend upon the performance characteristics of the set you are using as a monitor with the Teknika. A very "hot" early 70's vintage Zenith black & white portable with 4 IFs, narrow bandwidth, and good fine tuning range will give far better results with the Teknika than a contemporary Korean-import bargain store color portable with automatic fine tuning, for example.

Word from some DXers using this tuner is that its VHF performance is very good--I agree--but not particularly outstanding compared to the "classic" hot DX tuners found on many older model sets, particularly Zeniths. Some of these sets, near-legendary among TV DX buffs, featured very good memory fine tuning on each channel, but unfortunately, moving parts in their turret-type tuners. These seemed to age rapidly, getting dirty and therefore often intermittent, ultimately turning into very poor performers. This was avoidable IF you were handy at tuner maintenance, but for those who are not, or can not devote the time to such tasks, such an outboard tuner works well.

If you choose a Teknika though, remember that your results with it will be directly related to whatever set you are using as a monitor. I've found that the direct video output of the 6510 into a video-only monitor does not give the same kind of good DX performance as using its channel 3 or 4 RF output into a TV or VCR with good VHF sensitivity, selectivity and fine tuning. For those who want a superior UHF tuner, especially on the highest UHF channels, and for those who DX using a VCR to record their results though, the Teknika is highly recommended. With the mediocre DX performance of many mid- and low-priced VCRs on the market now (and even a few of the high-end models), the Teknika far outperforms anything else in its class, even the highly disappointing Pioneer TVXs.

One feature of the 6510 is considered a drawback by some WTFDA members, such as engineer Joe Gragg. The UHF TV input is 300 ohms, rather than the 75-ohm F-type inputs for VHF TV and CATV. This means that you'll have to choose a good low-loss balun to use along with the 6510, but it does not pose a major problem. It would be nice if a 75-ohm UHF input had been provided, since most of the serious TV DX enthusiasts use low-loss 75 ohm coaxial cable as lead-in from low-noise mast mounted pre-amps these days.

There is something else about the 6510 that turns out to be quite an added bonus to the TV DXer. You may be able to tune ham-TV (ATV) signals. In the CATV mode, this unit tunes cable channel "XX" (some cable system converters will call it "ch 62") on 439.25 MHz video/443.75 MHz audio. This happens to also be the main channel for fast-scan 525-line ham TV signals! It also hits channel "UU" or "cable 59" on 421.25/425.75, and channel "VV" ("60" to the cable TV people) at 427.25/431.75. If you check Mike Stone's article on page 2 of the May VUD, you'll see how popular these ham-TV frequencies are becoming--there may be activity in your area, and the Teknika may allow you to see it. Noise figure of the 6510 in the CATV mode is at least as good as it is at the standard UHF channels. Assuming the local hams are fairly close to you, all that may be needed is the right antenna fed into the 75-ohm CATV input side of the converter. 4-bay bowties, many of which do not lose gain drastically below 470 MHz, may be useful to watch the hams.

I tend to agree with Rich Wertman and many other users of the 6510--it does turn out to be an outstanding value for the money. With the possible exception of shortwave communications receivers, no consumer equipment is really intended to be used for DXing purposes. Therefore, it's rare to come across a piece of home entertainment equipment that works so well for our own peculiar applications. Most avid UHF TV DXers should consider trying this hot tuner/converter--especially those who have cable-TV drops coming into their DX shack, and those who like low-power DX above ch 60.

That's it for this month. Many thanks to Morrie Goldman, Glenn Jacobs, Mike Lapinski, and Dave Nieman for their comments on their DXing experience with 6510s, and to Rich Wertman for his review. 73 and good DXing!