

V.U.D. INDEX & REPRINT SERVICE, 1979-86

Greetings!

This is the TECHNICAL ARTICLE INDEX for the VHF-UHF DIGEST, covering every edition from June, 1979 until the present. Now, it should be possible to locate information about 'most any topic of interest to DX'ers. (To conserve space, the categories on beer, football, and modern poker techniques have been omitted.) There has been some superb talent contributed to the WTFDA club over the past several years, and there's no reason for those efforts to go unrecognized and unused.

This index is organized by topic, with separate categories for the "Technical Topics" column of Bill Thompson, the "Antenna News" column of Doug Dornbos, and some of Bill Fahber's "Television News" columns. Each entry has its own reference number, title, author, page number, number of pages, and VUD edition. For example:

038 LOOPS, EARS, AND DX - Grant, 22 Dec 81 (1)

This article, written by Robert Grant, appears on page 22 of the December, 1981 VUD, and is one page in length. Titles are in all-capital letters, and quick descriptions are given when the title does not explicitly say what the article is about. I have made every effort to make this index complete and accurate. It has been double-checked so that, hopefully, no articles have been overlooked or misprinted. I do welcome any comments or suggestions on this index, as well as hearing about any errors or omissions. This index will be updated each year at this time, but it may not necessarily be printed in its entirety in the VUD. Updates will be published every January, and copies of the entire index are always available from me. Again, your comments are welcome on this matter.

Most importantly of all, this serves notice that the WTFDA now has a REPRINT SERVICE! You asked for it, and, by gosh, you eventually got it. This very index can be used to order reprints--and that is what that 3-digit number with each entry is for. The numbers rank the articles in chronological order, and can be used to order reprints. (If an article has more than one part, the date the first part appeared is used.)

TO GET REPRINTS...just order as you would from any mail-order catalog. Send me a note with the numbers of all the articles you want, plus ten cents per page. Add up the total number of pages (as given in parenthesis), divide by two (since two VUD pages can be Xeroxed at once), and multiply by ten cents. Easy, huh? You are welcome to make reimbursement in unused U.S. postage stamps of any denomination, or by personal check payable to TIM McVEY. Please note that I am NOT able to cash checks payable to WTFDA.

The club has no central headquarters or fancy office building in Manhattan for this kind of service. I am doing it because I am such a nice guy, and because I have a complete set of VUD's from mid-79 on. Also, because, as I said before, some great work has been done by WTFDA members, and it shouldn't go unrecognized and/or unused. Anyway, I make copies for 5 cents per page (at places like Kinko's) and pay 22 cents per ounce for postage like everyone else does. Figuring that four pages plus envelope makes an ounce, that comes to about 5 cents per page to mail. So, the 10c does not make me a profit; it merely covers expenses. Mail your requests to my address below for best results. They should be sent to me rather than club HQ to save forwarding time.

Hope this index/reprint service is useful and helpful! 73's...

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- 031 UNDERSTANDING FM ANTENNA SPECS - Thompson, 32 Jly 81 (1)
- 038 LOOPS, EARS, AND DX - Grant, 22 Dec 81 (1)
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- 045 STAGGER STACKING ANTENNAS - Thompson, 24 Jun 82 (5)
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- 059 EXPERIMENTS WITH A HOMEBREW YAGI ANTENNA - Thompson, 26 Mar 83 (1);
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- 006 HOME-BREW CONVERTOR FOR F2 TV DX - Pulice, 8 Sep 79 (3)
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- 015 TRANSATLANTIC F2 TV DX TIPS - Pulice, 40 Aug 80 (3)
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- XXX SEE ALSO RECEPTION REPORTS

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- 001 SCA: RADIO THE FCC DOESN'T WANT YOU TO OWN - Elving, 25 Jly 77 (5);
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- 065 SCA PAGING - Elving, 28 Nov 83 (2)
- XXX SEE ALSO "Technical Topics" Column

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- 012 DX AROUND THE WORLD - Taylor, 22 June 80 (3)
the author describes FM in Egypt, S. Africa, Hong Kong, & China
- 017 FM AND TV IN FIVE EUROPEAN CITIES - Strobel, 12 Oct 80 (3)
the author visits Vienna, Salzburg, Paris, London, & Edinburgh
- 028 A LOOK AT EUROPEAN TV TEST PATTERNS - Thompson, 28 Jun 81 (2);
- Luman, 44 Oct 81 (2)
- 056 FM IN ARGENTINA - Thompson, 32 Nov 82 (1)
- 058 REPORT FROM THE CARIBBEAN - Hauser, 24 Mar 83 (3)
an abbreviated list of FM stations in the Caribbean
- 081 CUBAN TV TEST PATTERNS - Nieman, 22 Aug 86 (1)
- XXX SEE ALSO RECEPTION REPORTS

METEOR SCATTER PROPAGATION

- 024 THE PHYSICS OF METEOR SCATTER - Fahber, 8 Apr 81 (5); 36 Mar 82 (6)
good intro. to MS theory, equipment, when and where to look, etc.
- 043 METEOR SCATTER INSIGHTS - Fahber, 5 Apr 82 (1)
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- 049 METEOR SCATTER INSIGHTS - Fahber, 52 Aug 82 (2)
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- 054 METEOR SCATTER INSIGHTS - Fahber, 28 Nov 82 (1)
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 019 HOW TO TAPE (audio) DX - Elving, 30 Dec 80 (2)
 020 TV DX PHOTO TIPS - Weeks, 33 Feb 81 (1)
 040 VIDEO TAPE YOUR DX - Grant, 25 Jan 82 (1)

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- 030 CLOSE ENCOUNTER WITH AN FM PIRATE - Strobel, 4 Jly 81 (2)
 the author interviews a pirate operator in Muncie, IN
 033 EUROPEAN FM PIRATES - Thompson, 5 Sep 81 (1)
 XXX SEE ALSO RECEPTION REPORTS

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- 003 EDUCATIONAL FM UPDATE - Dorner, 12 Jun 79 (3); 5 Jly 79 (2)
 laws, power, etc. for stations in the non-commercial segment
 036 WTFDA OFFICIAL CLUB STANDARDS - WTFDA HQ, 41 Oct 81 (1)
 052 DIRECT BROADCAST SATELLITE REGULATIONS - Fahber, 4 Oct 82 (5)
 057 FCC L.P.TV STANDARDS - Fahber, in TV NEWS, 8 Nov 81 (2); 7 Feb 83 (3)

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- 023 WILL L.P. TV FILL THE BANDS WITH CCI? - Thompson, 6 Apr 81 (3)
 026 NEW KID IN TOWN - Fahber, 11 Jun 81 (3)
 all about low power television (L.P.TV); laws & standards
 035 UHF TV PROBLEMS - Fahber, in TV NEWS, 5 Oct 81 (2)
 037 THE VERTICAL BLANKING INTERVAL - Fahber, in TV NEWS, 4 Dec 81 (1)
 053 STV STATION LIST - Sullivan, 48 Oct 82 (4)
 the basics of scrambling; TV stations using those techniques
 055 STV UPDATE - Thompson, 29 Nov 82 (1)
 072 CABLE TV INTERFERENCE - Sirovy, 21 Dec 84 (3)
 XXX SEE ALSO "TV News" Column

MISCELLANEOUS TECHNICAL TOPICS

- 002 AGC AND HOW IT AFFECTS TV DX - Thompson, 8 Jun 79 (3).
 007 USING THE 6m BAND AS A DX "BAROMETER" - Thompson, 47 Nov 79 (1)
 010 OVERLOAD FILTERS FOR CAR FM - Weeks, 7 Feb 80 (3); 32 Dec 80 (2)
 how to build simple traps and filters
 011 NPR'S SATELLITE INTERCONNECTION SYSTEM - Monti, 28 Apr 82 (3); 6 Apr 80 (3)
 013 AURORAL DX TIPS - Thompson, 25 Jun 80 (1)
 014 F(50,90) INVENTED - Elving, 40 Jly 80 (2)
 whether or not to expect DX based on station contours
 021 CANADIAN CONTINUOUS MARINE BROADCASTS - Hepburn, 20 Mar 81 (3)
 025 CHOOSING A PREAMP FOR UHF TV DX - Thompson, 30 Apr 81 (2)
 039 A LOOK AT THE FM BAND (via a spectrum analyzer) - Monti, 26 Dec 81 (1)
 046 FINDING BEARINGS AND HEADINGS - Wilson, 32 Jun 82 (2)
 061 WEATHER SYSTEMS AND TROPO DX - Pearlringi, 38 Jly 83 (1)
 063 VHF POLICE/UTILITY FREQUENCY TABLE - Blevins, 8 Sep 83 (2)
 064 THE NONIMPORTANCE OF CAPTURE RATIO IN FM DX - Elving, 20 Oct 83 (2)
 066 General information on UHF PREAMPS - Thompson, 31 Nov 83 (1); 26 Feb 84 (1)
 067 TUNE IN ON STS-9 (Space Shuttle Communications) - Van Horn, 32 Nov 83 (1)
 068 MEL WILSON ON E-SKIP - Wilson, 37 May 84 (2); 32 Jun 84 (2)
 069 USE A COMPUTER TO MEASURE YOUR DX DISTANCES - Combs, 40 Aug 84 (2)
 070 A DX DISTANCE & BEARING PROGRAM - Fuss, 22 Sep 84 (2); 50 Oct 84 (1)
 XXX SEE ALSO "Technical Topics" Column

RECEPTION REPORTS

- RR1 F2 TV DX RECEPTION REPORTS from Pat Dyer, San Antonio:
 21 Jun 79 (1); 24 Jan 82 (1); 46 Mar 82 (1); 3 Apr 83 (1);
 32 May 83 (1); 3 Jly 83 (1); 24 Sep 84 (1)
 RR2 SOUTH AMERICAN FM REC. REPORTS from A. Roccaforte, LA Plata ARGENTINA
 48 Sep 85 (1); 22 Feb 86 (2); 43 Aug 86 (1)
 RR3 PIRATE RECEPTIONS
 1. In "Mailbox" Column, 3 Apr 85 (1)
 2. In "Northern FM DX" Column, 31 Nov 85; 27 Feb 86; 13 Aug 86 (3)
 RR4 SUPER DX SEASON REPORTS (62 pages)
 The Summer 1980 season was one of the best for DX at any time before
 or since. All the FM, TV, & PSB DX reports from the Sep and Nov
 VUD's are available as a package. They illustrate just how the
 long-distance propagation modes behave: areas covered and movement
 of ducts, MUF changes, duration of openings, distances, etc.
 RR5 INFORMATIVE DX RECEPTION REPORTS PACKAGE (44 pages)
 Various "super" DX reports selected from the years 1979 to 1986
 that, as above, illustrate important features of Es and tropo,
 two-hop skip, close-in skip, equipment & weather comments, etc.

TECHNICAL TOPICS

- TT1 THE WTFDA "DX'ERS ENCYCLOPEDIA" (36 pages)
 The "Technical Topics" columns that ran before April, 1983, were
 written in a Q and A format, using questions actually submitted by
 members. They are not full articles, but brief discussions about
 specific topics of interest to DX'ers. This package serves as a
 good, quick-reference to the most often asked questions.
 TT2 8 Jly 79 (3)
 Is M.S. possible on rabbit ears? Is M.S. seen on UHF? Lightning
 scatter. 300-ohm vs. 75-ohm lead-in; using F-connectors. Why
 RG-59 is poor for UHF. Good cable to use for PSB frequencies.
 TT3 25 Sep 79 (1)
 FM tuner specifications. Is it possible to hear 10W by E-skip?
 TT4 44 Nov 79 (2)
 Horiz. & Vert. polarization. Circular pol'ion. What is E-skip?
 TT5 28 Jan 80 (2)
 What is a log-periodic antenna? What does "50dB quieting" mean?
 Problems with a UHF TV preamp. Specific-channel vs. broadband ants.
 TT6 25 Mar 80 (1)
 Min. height for a good antenna. How ant. height affects UHF & VHF.
 TT7 34 Apr 80 (1)
 Explanation of CCI patterns. About TV offsets. Can 10kHz look like
 20 kHz CCI?
 TT8 27 May 80 (2)
 Simple, homemade indoor antenna (quad loop). Are preamps useful
 during E-skip openings? How to be warned of a potential opening.
 TT9 26 Jun 80 (1)
 Problems with interaction between antennas.
 TT10 39 Aug 80 (1)
 UHF antennas for DX'ing. Comparison of Finco P-5 & P-7 dishes.
 TT11 50 Sep 80 (1)
 All about S-meters. Can an FM antenna be used for TV? Preamps.
 TT12 27 Oct 80 (1)
 The Discone antenna. Can a UHF TV antenna be used for PSB?
 TT13 13 Dec 80 (2)
 Indoor UHF antennas for DX'ing. How to stack antennas.
 TT14 6 Jan 81 (1)
 Is it possible to have good mid-winter tropo DX?
 TT15 34 Feb 81 (1)
 Log. vs. Yagi FM antennas. What is a "wedge" test pattern?
 Does tropo occur on the 30-50 MHz band? Likely times to look for Es.
 TT16 24 Mar 81 (2)
 Why antenna preamps work best located at antenna. About UHF traps.
 Disadvantages of preamps. Losses from baluns and cables.
 Why don't antenna nulls occur where expected?
 TT17 23 May 81 (1)
 The connection of E-skip and thunderstorms.
 TT18 25 Jun 81 (1)
 Are omnidirectional antennas useful? Discount antenna imitations.
 TT19 34 Jly 81 (1)
 Coax cable losses; general information about coax.
 TT20 46 Aug 81 (1)
 Info. about the Persiads meteor shower. When to look for M.S.
 TT21 43 Sep 81 (1)
 Picket-fencing & multipath effects on car FM radio reception.
 TT22 23 Oct 81 (1)
 The most common VHF TV antenna used by club members.
 TT23 31 Jan 82 (1)
 Are tuners or receivers better DX performers?
 TT24 30 Feb 82 (1)
 Advantages of vertically mounting a TV antenna for DX'ing.
 How well a vertical antenna will work for PSB DX'ing.
 TT25 45 Mar 82 (1)
 How to best use UHF preamps and traps.
 TT26 27 Apr 82 (1)
 About auroral DX. What it looks like when seen on TV.
 TT27 38 Jly 82 (1)
 Best all-channel TV DX antenna. How height affects performance.
 TT28 30 Nov 82 (2)
 Information about coax and twin-lead; installation.
 TT29 29 Dec 82 (1)
 Where to locate and how to use a preamp for TV DX.
 TT30 3 Feb 83 (1)
 Comparison between the Finco FM-4G and FM-5 antennas.
 TT31 27 Mar 83 (1)
 Auroral DX tips.

- Technical Topics columns are now written as full articles. (McVey)
- 080 21 Oct 84 (2)
Servicing antenna rotators.
- 081 40 Nov 84 (2); 20 Apr 85 (2)
All about selectivity: theory and specifications.
- 082 22 Feb 85 (2); 29 Mar 85 (2)
Notes on building and installing a home-built SCA decoder.
- 083 32 Sep 85 (2)
NASA's Skylab ionospheric experiments.
- 084 19 Oct 85 (1)
All about FM broadcast pre- and de-emphasis.
- 085 31 Feb 86 (2)
Project: a home-built stereo headphone amp for tuners.
- 086 23 Mar 86 (5); 6 Jun 86 (4)
All about signal and tuning meters: theory and practice.
- 087 2 Aug 86 (3)
The use of polarization in broadcasting.
- 088 2 Sep 86 (3)
All about coaxial cable.

ANTENNA NEWS Column (Dornbos)

- AN1 13 Jun 83 (3)
(BIB. 1935-1945) Antennas & Reflectors; theory. Antenna mounts.
- AN2 25 Jly 83 (3)
(BIB. 1945-1947) Tripods as ant. mounts. When & how to buy DX gear.
- AN3 35 Aug 83 (3)
(BIB. 1948-1952) All about antenna mast pipe.
- AN4 4 Sep 83 (4)
(BIB. 1953-1956) All about towers.
- AN5 19 Nov 83 (3)
(BIB. 1957-1960) All about antenna rotors.
- AN6 15 Dec 83 (4)
(BIB. 1961-1963) Transmission line theory: balanced vs. unbal.; coax
- AN7 16 Jan 84 (3)
(BIB. 1964-1968) Transmission line theory: impedance.
- AN8 12 Feb 84 (3)
(BIB. 1968-1971) Trans. line tricks & hints: 39c trap; baluns.
- AN9 21 Mar 84 (4)
(BIB. 1971-1974) Transmission line product comparison; what to buy.
- AN10 14 Apr 84 (2)
(BIB. 1974-1976) Traps and filters.
- AN11 18 May 84 (4)
(BIB. 1977-1978) Preamps and preamp theory; noise figure.
- AN12 14 Jun 84 (3)
(BIB. 1978-1980) Preamp bandpass theory; product comparisons.
- AN13 40 Jly 84 (2)
(BIB. 1979-1982) More on preamps.
- AN14 3 Aug 84 (4)
(BIB. 1983-1984) Consumer Elect'ics Show report; the Decibel
- AN15 13 Sep 84 (2)
Automobile/R.V. antennas.
- AN16 32 Nov 84 (3)
All about automobile FM antennas: theory and practice.
- AN17 8 Dec 84 (3)
List of addresses of antenna and hardware manufacturers.
- AN18 28 Feb 85 (3)
Antennas for scanners: theory and practice.
- AN19 28 Apr 85 (4)
All about indoor FM antennas; product comparisons.
- AN20 22 Jun 85 (3)
All about outdoor FM antennas.
- AN21 38 Aug 85 (4)
More on outdoor FM antennas. The Consumer Electronics Show.

Note: a complete bibliography covering almost every magazine article published from 1935 to 1984 on antennas or related topics, was supplied in several installments. "BIB." indicates the years covered each month.

TELEVISION NEWS Column (Fahber)

- 041 TELEVISION HISTORY PACKAGE (17 pages)
The author ran in seventeen columns a "Retrospect" - good, brief history of the development of TV. Topics include: pre-FCC days, early experiments and DX, early equipment, development of laws and standards, What happened to Channel 1, radioastronomy and Channel 37, the KLEE?KPRC bogus DX story, early repeaters, etc.
DATES: 6 Jan 82; 6 Feb 82; 4 Mar 82; 8 Apr 82; 6 May 82;
6 Jun 82; 6 Jly 82; 10 Dec 82; 9 Jan 83; 6 Apr 83; 4 May 83;
3 Jun 83; 5 Jly 83; 3 Aug 83; 50 Sep 83; 4 Nov 83; 19 Dec 83.

ADVANCED TELEVISION SYSTEMS
COMMITTEE
BROADCAST DEMONSTRATION

Greg Monti
October 1986

The Advanced Television Systems Committee is a joint effort of the broadcast television and receiver manufacturing businesses charged with coming up with one or more possible systems that would allow home viewers to watch a new, significantly-improved kind of television, generically called High Definition Television (HDTV). It is generally assumed that HDTV pictures will use 1,050 or 1,125 scanning lines, roughly double the 525 lines that NTSC television uses in the US, Canada and Mexico. In addition, proponents want the resolution of each line to be higher than on current TV systems, i.e., there will be more horizontal detail as well as more vertical detail in every frame. In addition, HDTV proponents want the aspect ratio of the picture, the ratio of its horizontal to its vertical dimension, to be about 5:3, similar to the proportion of a Panavision film projection. NTSC's aspect ratio is 4:3. It is also generally assumed that HDTV will have digitally-transmitted stereo sound and possibly other features.

HDTV cameras and recorders have been developed, but there is no standard way that HDTV signals can be transmitted from one place to another. The main problem is bandwidth. With double the number of scan lines and maybe double the amount of resolution in each line, an HDTV picture would take six times the bandwidth of an NTSC signal. Instead of the 4 MHz or so video bandwidth of an NTSC signal, 24 MHz would be required. Assuming that it might take 1 MHz of bandwidth to transmit digitally two 15 kHz audio channels and assuming that a vestigial-sideband AM transmission technique were used to transmit both video and audio as a radio frequency signal, one HDTV station could take up 30 MHz of bandwidth! In order for that signal to be of any use, it would have to be received by the general public on a new type of television set that would be totally incompatible with current NTSC sets. Also, the FCC would have to allocate enough bandwidth so that a dozen or more HDTV stations could compete in the same city as NTSC stations do now.

If the bandwidth can be reduced, it's possible that a terrestrial (non-satellite) RF system could be used. A reasonable number of 30 MHz wide channels probably couldn't be allocated without kicking a lot of other RF services into new bands. So development work has centered on ways to reduce the bandwidth of the HDTV video signal without noticeably compromising picture quality. Some development work on bandwidth compression has been done in Japan. A possible standard, called MUSE, compresses a 24 MHz HDTV video signal plus two channels of digitized audio in a bandwidth of 8.1 MHz. A digital-computer-driven device makes use of the repetitive nature of the scanning lines and frames in the HDTV signal to send out an encoded version of the video with some of the repetitive parts left out. Then a receiver with another computer in it uses the encoded video signal to reconstruct by calculation each HDTV frame. These calculations are done as fast as the signal comes in and as fast as it is displayed.

The idea is to get the bandwidth-compressed HDTV signal, combined with sound and modulated onto a radio frequency carrier, to fit into a channel 12 MHz wide. This presents several possibilities for transmission. Since 12 MHz is exactly twice the bandwidth of the 6 MHz NTSC RF signal, it may be possible to use channels heretofore unused in the NTSC spectrum in pairs so that 12 MHz is made available to one HDTV station. For example, in the New York area, channels 63 through 66 are not used in the UHF band because of allocations requirements. If better TV sets could be produced that would reject interference from certain "taboo" UHF channels, then two of those channels might suddenly become available for the HDTV service. An HDTV station could be assigned channels 64 and 65 and could transmit the double-channel-width, bandwidth-compressed HDTV signal to the public on those two channels (which would be "seen" as one "channel" by both the station and the public -- when using the proper HDTV set). The signal would be

unviewable on an ordinary NTSC receiver, but those who buy the new type of receiver would be rewarded with superior picture quality.

But what would they watch? There would be a big problem for the new HDTV broadcasters. The NTSC stations would have all the money, all the talent, all the advertisers and all the home receivers. The HDTV stations couldn't even buy old network reruns from syndicators since they'd be in the old NTSC format. Maybe some further compromising would have to be done to make HDTV financially viable. Here's a possible solution: Suppose each NTSC broadcaster were allowed to get into the HDTV business by using its current NTSC channel plus a second channel to get the 12 MHz of total bandwidth that would likely be needed. Program production houses, networks and TV stations could use their current profits to help develop HDTV programming. After a while, all programming would be produced in HDTV format. At each TV station, the HDTV videotape playbacks would be sent through a "standards converter" that would convert them to the old NTSC format for broadcast. This would allow a library of good HDTV programs to be "in the can." Then, the new type of HDTV transmission could begin. The standards converters at TV stations would be replaced with HDTV "channel splitters." The channel splitter would take the HDTV playback signal and create two outputs from it. One would be a standard NTSC signal with 525 scan lines that would be sent to the existing TV transmitter. The second signal would have the "missing" information, an additional 525 scan lines of video information. The two channels would neither have to be adjacent nor numerically related. Folks with the old NTSC sets would still be able to watch the signal by tuning in the station's old transmitter as they always did before. Unless they were told, they'd never know that there was a second channel with the extra information on it to construct an HDTV picture. People who bought the new HDTV sets would be able to see the programs they're already familiar with, but now in HDTV, as soon as they get the set home.

Example: In Washington DC, WUSA, channel 9 could be authorized to build a second transmitter, to operate on, say channel 59. The old channel 9 transmitter would continue to send out a normal NTSC-compatible picture, in color, with stereo sound, with 525 scan lines and 30 frames per second. The channel 59 transmitter would send out the "augmentation channel," the extra 525 lines of detail, possibly bandwidth-compressed to allow transmission of greater detail in the limited 6 MHz wide channel. The new HDTV sets, when you tuned them to channel 9, would check the vertical interval of the channel 9 signal for a special code that tells HDTV sets that this station is broadcasting in HDTV. The code would include a command to the HDTV set's second, internal tuner, to tune to channel 59 to get the augmentation signal. Without the HDTV viewer knowing it, the second tuner would find channel 59 would combine the two channels into one HDTV video signal, and would display it for the viewer. Thus HDTV would be a compatible service, just like stereo FM or color television, receivable on both the old and the new sets.

Sound farfetched? Think about this: the effects of things like ghosting and snow on HDTV signals is going to have to be evaluated. That means experimental over-the-air transmissions. Subject to FCC approval, sometime in 1987, the Advanced Television Systems Committee will take to the airwaves in Washington DC with HDTV transmissions. The committee has applied for channels 58 and 59, using WUSA-9's tower, directional south so it can be viewed in FCC, NAB and Congressional offices. Since these channels are adjacent, both the "double-wide" channel method and the "compatible and augmentation" channel method could be tried. It's unlikely that the double-wide transmission could be received as anything viewable on an NTSC set. However, the NTSC-compatible channel in the second case could easily be received on today's receivers. This might provide a unique DX opportunity to see a special kind of engineering test on an experimental television station.

PS: The Committee may also test two other transmission methods for HDTV: (1) using the 12 GHz band (terrestrially, not satellite) with FM video and (2) using the 2 GHz multichannel MDS band, with vestigial sideband AM video.

EASTERN TV-DX

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Limited Edition

DEADLINE ALERT: Deadline for the January column will be December 24th, in order to accommodate my heavy inventory schedule!

DECEMBER 1986 PRICE: No sense

Although autumn is usually a prime time for tropospheric DX, no major openings have occurred, and it's been quiet in the troposphere. (You know it's been bad when no less than Bob Seybold called September and October "the worst...for tropics I have ever observed here!"). On the bright side, E-skip has refused to die, producing some good openings in October that even reached solidly into the FM band. Even as this column is ready to be mailed, I received a phone call from Larry Van Horn informing me of some E-skip into OK that I missed on November 4!

Scott M. Hood, 7 Auburn Rd., Beverly MA 01915-2501 (EDT)

MAY 1986		JUNE 1986		JULY 1986						
21 E	0855 MUF ch. 6+	15 T	2310 NYC V's + 68	14 E	1555 MUF ch. 6+					
	1100 WRCB-3 TN 975		2320 "WMLR-9 NH now only a weak 20 kHz offset on WOR-9!"		1600 WSAV-3 GA 975					
	1200 WBTV-3 NC 775				"finally NBC!"					
	2005 MUF ch. 2		2320 WNUJ-47 (NY) 225		1630 WBTV-3 NC 775					
25 E	1010 MUF ch. 6+		2320 WMDT-47 MD 390		1715 WYFF-4 SC 850					
	1120 WCBD-2 ? SC T		2320 CT 18/20		1800 WSB-2 GA 1000					
	1155 WEDU-3 FL 1275		2355 WLLG-55 NY 145		1900 WMAB-2 ? MS T					
	1650 MUF ch. 2		16 E	0935-1815 in & out	1925 WLBZ-3 MS 1350					
26 E	1300 MYF ch. 2		18 E	0940 MUF ch. 2	1930 WRCB-3 TN 975					
	1 E	1110 MUF ch. 3		19 E	0945 MUF ch. 4					
	7 E	1035 MUF ch. 2		20 E	2005 MUF ch. 2 vy wk					
	8 E	1335 MUF ch. 2		22 E	0855 MUF ch. 2					
		1920 MUF ch. 2		23 E	1000 MUF ch. 4					
	10 E	1055 MUF ch. 6+			"but ch. 3 clear!"					
		1100 WRCB-3 TN 975		27 T	2215 NYC V's					
		1115 WYFF-4 SC 850		28 E	0950 MUF ch. 2 weak					
		Above 2 "logged at Ann & Gopes dept. store in Danvers!"		T	2325 NY 2/4/5/7					
		1825 MUF ch. 5			2325 MA 22/40 CT 20/24					
		2035 WEDU-3 FL 1275		JULY 1986						
		2115 MUF ch. 6+		2 E	1510 MUF ch. 2					
		2200 WEAR-3 (AL) 1300		3 E	1000 MUF ch. 2 weak					
		T 2235 WVEC-13 VA 530			1930 Ditto...					
		2235 WAVY-10 VA 530		4 E	2130 Likewise...					
		2250 WOR-9 vy strong		5 E	1605 MUF ch. 3 in/out					
		2335 WCAU-10 PA 295		6 E	1115 Same...					
11 E	0940-2055 MUF up/down all day...		7 E	1700 MUF ch. 6 (+?)	19 E	0010 WMAB-2 MS 1250				
				1830 WCIA-3 IL 950		1025 MUF ch. 2 in/out				
				1910 KYTV-3 MD 1300		1605 MUF ch. 4				
				1915 KTVO-3 MO 1175		1700 WBTV-3 NC 775				
				1925 WSL-3 ? IL T		1710 WRBL-3 GA 1100				
12 E	1000 MUF ch. 5		8 E	1055 MUF ch. 6		T 2340 Phil 3/10/12 T				
	1040 KTVO-3 MO 1175			1100 WEDU-3 FL 1275		20 E	1435 MUF ch. 2			
	2005 MUF ch. 3			9 E	1205 MUF ch. 2		2000 MUF ch. 3			
13 E	1555 MUF ch. 2				1805 MUF ch. 5		21 E	1655 MUF ch. 6+		
14 E	0950 MUF ch. 2 brief				1805 WBTV-3 NC 775			1740 WCIA-3 IL 950		
	1655 MUF ch. 4				1900 WEDU-3 FL 1275			1755 KTVO-3 MO 1175		
	1850 WRBL-3 GA 1100				10 E	1045 MUF ch. 6+		1810 WTV-2 IN 925		
15 E	1015-1845 MUF up/down					1130 WRCB-3 TN 975		1820 KTV-2 MO 1100		
	1900 WEAR-3 (AL) 1300					1215 WRBL-3 GA 1100		1930 WMAV-3 NC 750		
	1915 WEDU-3 FL 1275					1500 WEAR-3 (AL) 1300		2000 WCBD-2 ? SC T		
	T 2215 Phil 3/6/10/17/29					1700 f/out		2020 f/out		
	2230 WYYY-12 (PA) 315					2030 MUF ch. 4		22 E	0945 MUF ch. 5	
	2255 WJMN-40 NJ 330					11 E	1030 MUF ch. 4		2230 MUF ch. 2-3	
	2300 WNUJ-52 NJ 260						1300 f/out		23 E	0000 WBRZ-2 LA 1475
	2300 WNUJ-50 NJ 215						1620 MUF ch. 3 weak			0015 WMAB-2 MS 1250
	2305 WSTV-65 NJ 310						12 E	1810 MUF ch. 4		1750 MUF ch. 5
	2310 WBSB-57 PA 295						13 E	1900 MUF ch. 5+		1845 WEDU-3 FL 1275

EL "DX" DE SCOTT SE CONTINUA EN LA PAGINA PROXIMA --> --> --> --> --> --> -->

JULY 1986	AUGUST 1986	AUGUST 1986	AUGUST 1986
23 E 1915 WVAR-3 (AL)1300	1 E 1015 MUF ch. 2 vy wk	11 E 1755 MUF ch. 2 vy wk	
T 2315 WNJM-50 NJ T	2 E 1010 Same...	12 E 1905 MUF ch. 5	
24 E 1050 MUF ch. 6	3 E 1045 La misa cosa...	"Meteor Es: < than 1 min."	
1215 WREG-3 TN 1200	1810 MUF ch. 6	13 T 1910 ME 2(T)/7/10/12	
T 2210 NYC V's 205	T 2150 NYC V's 205	"in unusually strong"	
2210 WLIW-21 NY 185	4 E 1630 MUF ch. 2	2330 WLIW-21 NY 185	
2220 WNJU-47(NY) T	2255 MUF ch. 3	2340 WLIW-55 NY 145	
2220 Philly 3/10 295	5 E 0935 MUF ch. 2	2345 NYC 9/11 205	
2220 WAVY-10? VA T	1450 MUF ch. 6+	14 T 1905 WLBT-2 ME 186	
2220 WVEC-13? VA T	1500 WGAU-3 GA 975	1905 ME 7,10	
2245 WTAF-29 PA 295	1700 WRBL-3 GA 1100	2220 UNID-56	
2300 WHHT-68 (NY) 205	"FM is unbelievable!"		
2325 WGBS-57 PA 295	1800 WRCR-6 AL 1125	2225 CT 53, NH 50	
2340 WBAL-11 MD 380	2000 WYFF-4 SC 850	2225 WNJU-47 (NY) 205	
2340 WUSA-9 DC 415	2030 WVAR-3 (AL)1300	2325 WTAF-29 PA 295	
"New calls"	2100 WEDU-3 ? FL T	2335 WUSA-9 ? DC T	
2340 WCPB-28 MD 390	2200 WREG-3 TN 1200	KYW-3 ? PA T	
2340 WPHL-17 PA 295	2235 f/out	15 T 0725 PA 29, NY 9/21	
2340 WISN-12 (NJ) 315	6 E 0935 MUF ch. 2	E 1900 MUF ch. 6	
2340 WLIW-55 NY 145	T 2020 Philly 3/10/29	1940 WEDU-3 FL 1275	
2340 WHYY-12 (PA) 315	2020 WCBF-2 vy strong	T 2315 NY 4/5/7/9/11/13	
2350 WJHM-40 NJ 330	2055 MPVI-6 PA 295	2335 NY 2/21	
2350 WNJS-23? NJ 245	2125 CT 24/20, MA 22	2350 WCPB-28? MD T	
2350 WNJB-58 NJ 235	2205 NYC V's + 68	2355 WTAF-29 PA 295	
2350 CT 20/24	2205 WSJV-65 NJ 310	16 T 0000 WJHM-40 NJ 330	
25 T 0010 WAPB-22? MD T	2205 WNJB-58 NJ 235	0010 WHHT-68 (NY) 205	
0010 WHAR-2 ? MD T	2205 WLIW-55 NY 145	0025 Philly 6/10/12	
E 1005 MUF ch. 5	2205 WNJS-23 NJ 245	E 1035 MUF ch. 2 weak	
T 1005 Some NYC in/out	2205 WHYY-12 (PA) 315	1640 MUF ch. 3	
2235 NYC V's + 68	"= wing WPRI @ 2345"	17 E 1015 MUF ch. 2	
2235 WLIW-55 NY 145	2205 CT 53, MA 40	1645 MUF ch. 2 in/out	
2240 WJHM-40 NJ 330	2220 WLIW-21 NY 185	18 E 1845 MUF ch. 2	
2310 WLIW-21 NY 185	2255 WPHL-17 PA 295	19 E 1955 MUF ch. 2 vy wk	
2325 Philly 3/10/12/29	2255 W17AG ? NY T	20 E 0845 Again...	
2340 CBHT3-11 NS 270	2255 WGBS-57 PA 295	2150 Yet again...	
"30-40 kHz to WPXI!"	2330 WXTV-41 (NY) 205	T 2325 NY 2/4/5	
2345 CJCHS-6 NS 330	2330 WNJU-47 (NY) 205	2330 KYW-3 ? PA 295	
"Halifax on FM"	2330 WNJM-50 NJ 215	21 E 1800 MUF ch. 2	
26 E 0930 MUF ch. 4	2330 WNJT-52 NJ 260	23 T 0015 KYW-3 ? PA 295	
0950 WEDU-3 FL 1275	2330 WTRV-54 NY 170	E 1030 MUF ch. 2 vy wk	
A, 2340 "Hash on 2 & 4"	7 T 0010 WBAL-11 MD 380	24 E 1150 MUF ch. 2 weak	
27 E 1040/1400 MUF ch. 6	0010 WCDC-19? MA T 26 T	2310 NYC V's in/out	
28 E 1005 MUF ch. 5	0035 WHAR-2 ? MD T	2220 Ditto...	
1030 WSIL-3 IL 1025	0210 WUSA-9 DC 415	28 E 1815 MUF ch. 6+	
1100 KYTV-3 MD 1300	E 1930 MUF ch. 4	1915 WEDU-3 FL 1275	
1100 WTDQ-2 IN 925	8 E 0015 WHAB-2 MS 1250	1930 WPBT-2 FL 1375	
2010 MUF ch. 3	0725 MUF ch. 3-4	29 E 1755 MUF ch. 6	
29 E 0920 MUF ch. 3-4	"no time to DX!"	2320 WEDU-3 FL 1275	
1925 MUF ch. 2	2305 MUF ch. 3-4	2325 WRBL-3 GA 1100	
30 E 1630 MUF ch. 2	9 M 2000 UNIDs-2,3,2	2325 WBTW-3 GA 775	
31 E 1115 MUF ch. 2	E 2355 MUF ch. 2	2330 WREG-3 TN 1200	
1955 MUF ch. 3	10 E 2020 MUF ch. 3	31 E 2350 MUF ch. 2	
2000 WLBT-3 MS 1350	11 E 0715 MUF ch. 2	"MS induced"	

"What a humdinger of a season! The first half and the tail-end were real duds tropospherically. But what a middle! As for the 'legendary' June 10-12 Es, it didn't seem too spectacular from this QTH, at least MUF-wise. What was most noteworthy with this opening was the time and length. August 5th, on the other hand, was flabbergasting! The way FM was cooking (some freqs sounding like an AM local channel at night), I was sure the MUF was going to reach ch. 7 or higher! The prime time for Es this season appears to have been the early and late evening, rather than the traditional 1000-1400 schedule. The UNID-9 via MS on August 9th was a real eyebrow raiser. I find that the most frequent MS occurs a few days to a week before the predicted shower. I think there is a definite connection between MS and Es, especially off-season. The brief tropo opening to VA on June 10th was a pleasant surprise. The other tropo surprise was MS on July 25th. I had assumed I had WBAL on 11, but when I logged Halifax on FM, I realized what I had! I started work Aug. 7th as a runner for a firm at Logan Airport. The early hours (0830-1700) knock out late weeknight DXing!"

Dave Nieman, Akron NY 14001-9529

SEPTEMBER 1986	SEPTEMBER 1986	OCTOBER 1986
24 T 0800 CHRO-5 ON 205	24 T 1000 CFJP-35 PQ 297	1 T 1107 WQEX-16 PA 194
0810 WTUV-33 NY 165	Montreal "TBS"	6 T 2016 WTHB-26 CT 344
Utica (testing)	24 E 1920-2011 to ch. 6	New London
0838 WSLAE MA 265	South FL-no IDs	8 E 2031 KFDH-6 TX 1249
Adams (WNVT-13)	29 G 1900 CITY2-31 ON 115	9 E 2005-2040 to 5-no IDs
0900 WSSAU NY 165	Woodstock	20 T 0828 WMPG-23 PA 171
Utica (WCNY-24)		

EQUIPMENT: RCA 9" B&W TV w/Teknika 6510 tuner
CM Crossfire 3617-B @ 16' AG (806' ASL)
B-T CMA-Ub preamp on CM 7' dish @ 40' AG (830' ASL)
RG-11 75-ohm lead-in on both antennas



GANNON UNIVERSITY BROADCASTING, INC.
GANNON UNIVERSITY, ERIE, PENNSYLVANIA 16541
(Logo courtesy of Dave Nieman)

Do not adjust your set

"I saw a call slide on the mystery ch. 49 I reported in last month's column. They are CF88 'Super 49 Stereo.' Also on the slide was 'Television Quatre Saisons' (TBS), also seen on ch. 35 Montreal's color bars. But still no location on the ch. 49. Though my DX report doesn't show it, October 19/20 were good Tr days in western NY. I saw ch. 16/22/26/45 from the Dayton area, chs. 43/49 IN, ch. 15/32/41 from Louisville, and chs. 18/27/36 Lexington. Later had ch. 23/25/41/47 and NBC under ch. 7 and CBS under ch. 9, all from MI. (The latter two, I surmise, would be Traverse City and Cadillac?--jfc) Stns from eastern NY, MA, CT, NJ, eastern PA, MD, DC & northern VA seen, but no positive IDs."

Robert Seybold, 10567 Bennett Rd., Dunkirk NY (EDT)
"Just a short report as there has been hardly any DX of any kind here. Bad weather and lots of rain have resulted in only a couple of tropo openings, and those were short."

OCTOBER 1986

15 T 1500-2300 WTAP-15, WYAH-15, WNPB-16, WNPJ-18, WNEP-16, WQEX-16, Elmira Us, WJTR-20, WHP-21, WDAU-22, WNJS-23, WCVF-23, new WTWS-26 New London CT, WETA-26, Roanoke-27, WBRE-28, WTTA-28, WJTC-26, WITF-33, WMBZ-34, WOLF-38, WLVN-39, WICZ-40, WXTV-41, WPMT-43, WVIA-44, WXAA-23, WUSV-45, WSKG-46, WJNT-52, WWSL-67, Syracuse Us, new WTUV-33 Utica, DC 50, Manassas, Kingston, Riverhead, Vineland, Dayton Us, WNDU-16, WHIZ-18 and others.
"Signals not strong, but fairly steady." **Thumbs Down**



"Other new ones here lately include WETG-66 Erie, CITY2-31 Woodstock, and new Canadian on 49, near Ottawa (Note Dave Nieman's comments above--jfc). There have been a couple of occasions of E-skip observed, but not logged. Veries in from WJTR-16, KLRT-16, WETO-39, WJKA-26, KTVF-29, WBSV-66, all new unless previously reported (getting close to the 1,000 mark). (Mueh! You deserve a plaque or something when you reach that milestone, Bob! How many other TV-DXers in my lifetime will be able to claim 1,000 stations logged?--jfc) In conclusion, this has been the worst September and October for tropo I have ever observed here."

LOOK, TOT! WERE BACK IN KANSAS!

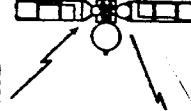
THAT'S SKID, YA LITTLE BUMBOL!

---Shameless Ad Part II

The response to my offer of a set of DX DISTANCE PRINTOUTS has been less than overwhelming! Only 4 people have ordered them thus far. Surely there must be more DXers reading this column who would jump at the idea of a full set of printouts covering the distances to most North American TV stns for only \$7 U.S! Just to see if you're paying attention, and to show how generous I am, anyone ordering the printouts between now and 1993 will receive FREE the entire state of Delaware!!

SATELLITE NEWS

George W. Jensen
4604 Arntana Avenue
Baltimore, Maryland
21206-4220



EASTERN TV-DX

DECEMBER 1986

Matt Sittel, 220 Brookfield Drive, Kingsport TN 37663

(EDT)

SEPTEMBER 1986	OCTOBER 1986	OCTOBER 1986
4 E 1951 unID-3	8 E 1759 KTBS-3 LA 702	9 E 2002 KJAC-4 TX 812
1954 unIDs-2,4 Cuba??	"clearest ever seen"	2031 KIII-3 TX 1055
2007 WPBT-2 FL 747	1800 KPRC-2 TX 878	2036 KMOL-4 TX 1053
OCTOBER 1986	1800 Es f/out "out to dinner, maybe?"	2131 KGBT-4 TX 1166
4 T 0900 WDAY-4 WV 110	1900 Es back "long dinner break, eh?"	2157 KPRC-2 TX
8 E 1641 KENN-3 NH 1206	1900 KACB-3 TX 1088	10-12 IN NASHVILLE
1649 KAMR-4 TX 1116	1900 KJRH-2 OK 747	"No DX there!!"
1657 KTVY-4 OK 837	1918 KGBT-4 TX 1166	14 E 2057 KIII-3 TX 1055
1700 KSNM-3 KS 819	(See Note #1)	(See Note #3)
1702 KMID-2 TX	2000 MUF 93 mHz (TX)	2058 KGBT-4 TX 1166
1708 KFDX-3 TX 936	2025 KCEN-6 TX 932	2058 unID-2 Mexico
1712 MUF 93 mHz (TX)	2107 KAUZ-6 TX 936	(See Note #4)
1713 WDAF-4 MD 691	2200 Es fade-outs...	2058 KMOL-4 TX 1053
1714 KLNE-3 NE 958	9 M 0625 unIDs-2,3	T? 2059 WNAV-3 NC 303
1717 KSNB-4 NE 878	(See Note #2)	(See Note #5)
1721 KJAC-4 TX 812	E 1958 KMID-2 TX 1174	E 2116 MUF 108+ mHz to S. TX and N. Mexico
"K-jack channel 4"	1959 KBTX-3 TX 911	2147 KRIS-6 TX 1055
1724 KIII-3 TX 1055	1959 KACB-3 TX 1088	
1758 KMOL-4 TX 1053		
1758 KBTX-3 TX 911		

NOTES:

- 1—"They have a brand-new ID (see right). Reminds you of Cuba, don't it?"
- 2—"Thought it was Es, turned antennas everywhere, then remembered MS was to be in that day."
- 3—"23rd time seen this year. (Is there a record for the most times a stn has been seen via Es in a year?) (Who knows? Can anyone top that?—jfc)
- 4—"Had ad for Tylenol in SS and a 2 logo (over WBJK)" (Probably an XEW relay—jfc)
- 5—"Antennas west? Over huge E-skip opening? You figure it out!'" (Maybe Tr, or it could be some type of Es backscatter. I think Pat Dyer has seen less than 300 miles by this mode—jfc)



"October was surprising with the good E-skip. Whenever Es is in, the cactus on top of my TV set grows. Weird. If it continues, I may have a cactus tall enough to put antennas up to see some decent tropics. (Humm...sure you're not growing anything else there...like, maybe stuff you smoke?—jfc) On 10/14 I saw Es when it was 50 degrees (F.) out. Back on 1/14 it was 37 (F.) when I saw XHY. Is there a record for the coldest temp recorded by a DXer when Es was in? (Dunno...Es shouldn't be affected by temperature, so I'm sure it's been much colder during some openings. However, I'll leave that esoteric query to the collective experience of our more northerly DXers—jfc) Maybe Santa will bring me a nice E-skip opening this Xmas into ND (or AK, China, etc.). Merry DXmas and 73's."

Keith Pugh, 227 Martin St., New Hope AL 35760

(CDT)

AUGUST 1986	SEPTEMBER 1986	OCTOBER 1986
20 E 1925 unID-2 XEW Net	6 E 2000 XHR10-2 TA 890	14 E 1920 WTVJ-4 ? FL T
1931 XEPM-2 CH 1170	24 E 1500 unID-2,3 spotty	2032 KIII-3 TX 800
21 E 0751 WESH-2 FL 480	OCTOBER 1986	2038 KPRC-2 TX 620
0755 WTVJ-4 FL 702	8 E 1259 unID-5 Isevision	2044 KJAC-4 ? TX T
1031 KGBT-4 TX 870	1326 XEPM-2 CH 1170	2050 XHR10-2 TA 890
1331 KIII-3 TX 800	1354 XHBQ-3 "Where??"	2055 KGBT-4 TX 870
1457 KWGN-2 CO 1080	(There is an XEBQ-3 in Zacatecas—jfc) *	*****
22 E 1030 KMID-2 TX 900	1100 KIII-3 TX 800	*****
	1239 KWGN-2 CO 1080	*****
	1700 KPRC-2 TX 620	*****
28 E 1332 unID-3,4 XEW Net	1406 KGBT-4 TX 870	*****
	1438 XEFB-2 NL	*****
	1719 KIII-3 TX 800	*****
29 E 1447 unIDs-2-5 SS	9 E 1900 KMID-2 TX 900 *	*****
1557 KIII-3 TX 800	2056 XEFB-2 NL *	*****
1559 XHR10-2 TA 890	1959 KPRC-2 TX 620 *	*****
	2052 XHR10-2 TA 890 *	*****
	2127 XEFB-2 ? NL T *	*****
	1602 KGBT-4 TX 870	*****
30 E 1030 KACB-3 TX 840	14 E 1830 WCBS-2 NY 790 * FROM BRUND (THE DXING * T * REINDEER) AND MYSELF! *	*****
1143 WBBM-2 ? IL T	1831 WNBC-4 ? NY T * REINDEER) AND MYSELF! *	*****
	1854 WPBT-2 FL 702 *****	*****



NEW ON THE AIR

Say AMEN to AMEN on Satcom 4 XPRD 15 which has been replaced by Crazy Eddie's Shopping Service. XEIPN in Mexico City has been seen on an irregular basis on Morelos I XPRD 12. Election night brought an incredible number of feeds on many of the birds. On Ku feeds were noted on K-1 and K-2, G-Star 1 & 2, SBS 1, 3 & 4 and Spacenet-1.

SATELLITE OF THE MONTH

ANIK - D 104.5 W Odds/Horizontal	Evns/Vertical
TRANSPONDER	SERVICES CARRIED
1	Occasional Feeds
2	TSN - The Sports Network - probably encoded with Oak/Orion by the time you read this
3	Occasional Feeds
4	Global Television Network - Feeds
5	Occasional Feeds
6	MuchMusic (Canada's MTV)
7	Occasional CBC Feeds
8	CHCH - Ch 11 - Hamilton Ontario - encoded - Oak/Orion
9	WDIV - Ch 4 - Detroit, Michigan - encoded - Oak/Orion
10	WXYZ - Ch 7 - Detroit, Michigan - encoded - Oak/Orion
11	CBC North - to Pacific and Yukon regions
12	Occasional Feeds
13	TSN and other Occasional Feeds
14	TTV - Montreal, Quebec - encoded - Oak/Orion - French Language
15	CBC French Network Television Service
16	CBC House of Commons Coverage - French Language
17	CBC Feeds
18	CITV - Ch. 13 - Edmonton, Alberta - encoded - Oak/Orion
19	CBC North - to Atlantic Provinces
20	CBMT - ch 6 - Montreal, Quebec - English
21	WTWS - ch 56 - Detroit, Michigan (PBS) - encoded - Oak/Orion
22	CBAN/BCTV - Vancouver, British Columbia - encoded - Oak/Orion
23	WJBK - Ch 2 - Detroit, Michigan - encoded - Oak/Orion
24	CBC - House of Commons Coverage - English

AUDIO SERVICES

4	CFNY - Brampton, Ontario
5	CFRR - Toronto, Ontario
6	?
7	2 ??
8	CKOC - Hamilton, Ontario (tent) plus one other
	CKUI - Alberta?
	CFUN - Vancouver, British Columbia
11	?
14	CITE and CKAC - Montreal, Quebec (French)
15	CBC French Networks
16	CBK - Kingston, Ontario
	CBOF - Ottawa
18	CKK - Edmonton, Alberta - plus another (CKO - Edmonton?)
19	unID'd Indian Dialect - irregular operation - poor fidelity
20	CBM - Montreal, Quebec - English
21	CFMI - New Westminster, British Columbia
	CFU - Vancouver, British Columbia and others
	CSL - Toronto, Ontario
23	CKRW - Whitehorse, Yukon, Territory
	CHON - Whitehorse, Yukon Territory
	VOCK - St. Johns, Newfoundland
24	Various CBC Radio feeds
21	CKNM - Yellowknife - North West Territories

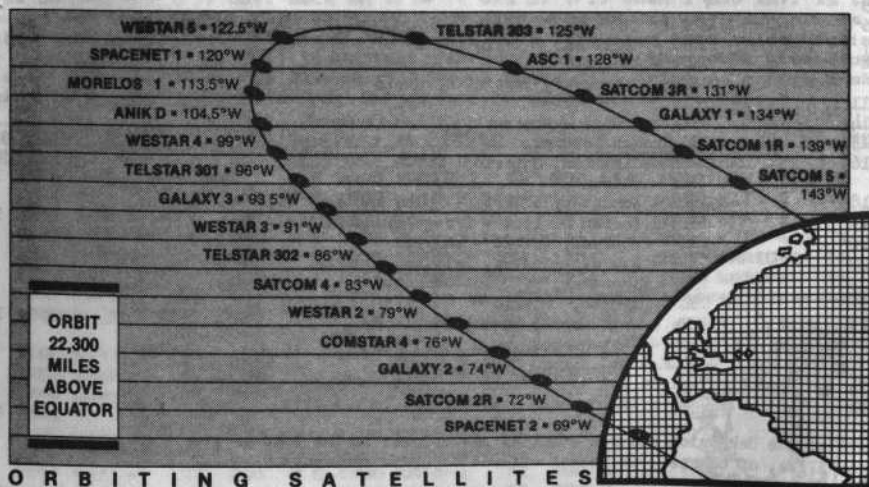
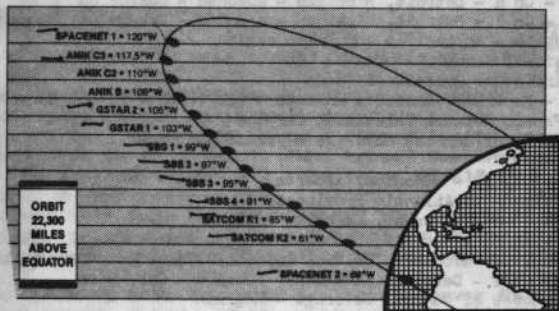
All of the Oak/Orion encoded stations are offered to the TVRO as a program service for a fee, of course. It is not offered to U. S. residents.

ANIK - B at 109 W is a Hybrid C and Ku Sat. There are only Odd/Horizonta l channels on this bird for C-Band and they are used, at this time, primarily for feeds. Power levels (or outputs) on the ANIK C-Sats are 9 watts which makes these birds about the strongest in the heavens at this time (in C-Band).

As I type this I am listening to CKNM - Yellowknife as if it were originating from WSR which is less than 1/2 mile from this location. The signal is A-One Crystal clear and the female announcer is strictly in dialect. From the Nov. 3rd issue of Broadcasting is the following information. Viscon has leased 21 transponders on Telstar 303 through 1995. Interested in moving to the bird are Disney Channel, Weather Channel, C-SPAN and Lifetime. Galaxy 3 is being opened up to regular programming (there's a Shopping Channel on it now). RCA is pushing Satcom 1 and 2 and Home Shopping Club will be uplinked to one of the RCA K Birds. Definite in moving to Telstar 303 are Nickelodean, Viewer's Choice, Showtime West, MTV, VH-1 and Lifetime in the next few months. The reason given for most of this is the signal strength and the newness of Telstar 303 and the price is right. If you recall - XPRD 21 on Satcom 3 blew out a while back and the Weather Channel had to be moved to XPRD 19 causing C-SPAN Senate coverage to move to Satcom 4. It has been noted at times also on K-1 and ASC-1.

'73's

KU-BAND SERVICES



ORBITING SATELLITES

ANARC UPDATE

FREE MAPS

Winter is here. The DX is slow. It is time to think about other things. Remember last summer when you got that un-ID'd station and they mentioned a town in an ad that you could not find on any map? Now is the time to do something about it.

There are plenty of sources of good maps, if you want to pay for them. I've seen maps sold in gas stations and book stores. You can purchase a Rand McNally highway atlas, but you probably won't get the detail that you are looking for. Or you can join an auto club. The one I belong to has nice maps. But there is a source of maps that is completely FREE.

Most states, in their effort to attract tourists print state highway maps and they give them away for the asking. Many states give out fairly detailed maps, often better than a map that you could purchase. The small States give out maps that are almost as big as the states themselves. Many States take this one step further. Not only is the map free and all the travel brochures that they will send with the map free, about half the States have toll-free 800 numbers. Below is the list that I have. Most are national, but can not be used inside the State. Those that are regional are marked with an *. States with in-state WATS line number is marked with an 'i'. When calling, ask for tourist information and "Please include a highway map". If they ask when you will visit their state, say you are not sure. If they ask where you got the number, please do not say from the VUD or WFFDA. Tell them the newspaper, a magazine, the library, a list you have, or don't know. All these numbers are current at present as I have used them in the past 3 months, but they are subject to change. And there are some States with 800 numbers that I may have missed (please tell me of any others you know of).

- ALABAMA 1-800-ALA-BAMA 1-800-392-8093 (i)
- ARKANSAS 1-800-643-8383
- CONNECTICUT 1-800-243-1685 1-800-842-7492(i)
- DELAWARE 1-800-441-8846 1-800-282-8667(i)
- INDIANA 1-800-2WA-NDER 1-800-622-4464(i)
- IDAHO 1-800-635-7820
- KENTUCKY 1-800-225-TRIP
- LOUISIANA 1-800-231-4730
- MASSACHUSETTS 1-800-533-MASS x306
- MICHIGAN 1-800-248-5700(*) 1-800-292-2520(i)
- MINNESOTA 1-800-328-1461 1-800-652-9747(i)
- MONTANA 1-800-548-3390
- NEBRASKA 1-800-228-4307 1-800-742-7595(i)
- NEW MEXICO 1-800-545-2040
- NEW YORK 1-800-CAL-LNYS (* and i)
- NORTH CAROLINA 1-800-VIS-ITNC
- NORTH DAKOTA 1-800-437-2077 1-800-472-2100(i)
- OHIO 1-800-848-1300
- OREGON 1-800-547-7842
- PENNSYLVANIA 1-800-847-4872
- RHODE ISLAND 1-800-556-2484(*)
- SOUTH DAKOTA 1-800-843-1930
- VERMONT 1-800-331-1750 operator 406
- WASHINGTON 1-800-541-9274
- WEST VIRGINIA 1-800-CAL-LWVA
- WISCONSIN 1-800-356-9508(*) 1-800-362-9566(i)
- WYOMING 1-800-225-5996

What about the states that are not listed? Each state has a Tourism Division at the Department of Commerce. You can write to them and they will send the map.

Did anyone listen to Glenn Hauser's World Of Radio program the weekend of Nov 1st? He played tapes of stations that he reported on in last month's VUD. It was a fascinating program and this listener greatly enjoyed it.

In ANARC news, the All Ohio Scanner Club has applied for membership in ANARC. I'm sure they will be accepted. In the next ANARC UPDATE I will give a profile of this club.

Another year is over. I hope it was a good one for everyone. The SFRACHMAN Family wishes everyone happy holiday and a happy and healthy New Year. Best of DX in 1987!

'73's Stan P. Sprachman



PHOTO-NEWS

David J. Nieman
12284 Nice Road
Akron, NY 14001-9529

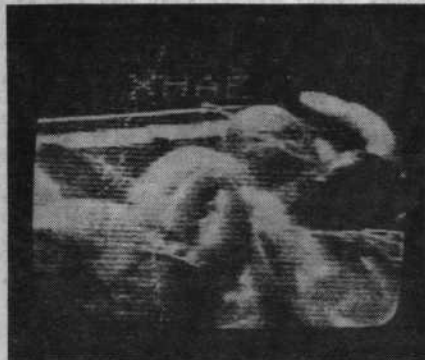
DECEMBER 1986

SEASONSGREETINGS**

TIME LIMIT 1 1/2 YEARS OLD

.....more of Jeff Kadet's E-skip loggings from Macomb, Illinois.

Equipment: Zenith 9" B&W, Zenith 12" B&W, Zenith N1310, Zenith Y1310 (all circa 1979-1982), Channel Master 1110 with CP 3800 preamp, RG-11 at 50', Winegard 5 element low band vertically polarized at 20'.



XHAE-5
Saltillo, Coah., Mexico
1205 mile E-skip
seen August 4, 1986

jk6



XHZ-5
Cerro del Zamorano, Gro., Mexico
2222 mile E-skip
seen August 4, 1986

jk7

Jim Pizzi of Lovington, New Mexico sent in several of his great tropo photos. Sorry to say we only have room for one of them in this edition.



WBMG-42
Birmingham, AL
959 mile tropo
seen January 31, 1986

jp1

we'll start off the new year by finishing-up the pix sent in by Jim plus more tropo as seen in Akron, Ohio.....

THE HAPPIEST OF HOLIDAYS TO ALL

DAVE



FM NEWS

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

Happy Holidays to all who may have sent cards or otherwise extended greetings!

Long-time mono holdouts KLIO, WDMG-FM embrace Stereo

New Stations, Translators Granted

AK Anchorage 98.1 100000 h, 91000 v; 276 m
AZ Payson 101.1 100000 h,v; 328 meters
CA Garberville *89.7 200 watts h,v;
2510', Redwood Community Radio
CA Johannesburg 103.9 185 h,v; 1000'
FL Gretna (transmitter 3km S + vicinity)
100.7 3000 h,v; 330' (Pukalani)
HI Lahaina K257CZ 98.3 (Kaiwi-FM) 98.3/
NC Spindale *88.7 17000 horizontal, 10500
vertical, directional, transmitter
Clingman's Peak, Mt. Mitchell, 3055',
"Isothermal College" (Tulsa)
OK Shawnee K249BO 97.7 (KCFO-FM 98.5/
VA Elkton 98.3 2400 h,v; 106 m
WA Naches 96.9 3000 h,v; 770'
WV Ravenswood 102.3 3000 h,v; 500'
MEXICO Mexicali BJ XHMIAM 89.9, 1,
commercial, 900 watts h,v, 112',
not known if \$.
XEVV-FM 106.7, not known if \$, power
unknown, but estimated at 400-900 watts
BJ Tijuana XHUAM 102.5 400 w, 164, 1, \$
(same facilities as former XHFE 88.5)

New stations? Canada mysteries listed in Broad-
casting Yearbook '87, but not elsewhere: 9C
Kelowna CKIQ-FM 98.1 12 w, 60', "duplicates
AM 100%" (r)... NF Gauer CJDJ 99.9 5000
watts, r, same ownership ** CHOZ 94.7 St.
John's... NF St. John's CKIX-FM 98.3 100000
watts, 950', stereo?

NE Beatrice *K25CS, FCC shows as still being
alive, with application granted for extension of
time. This answers a doubt I had expressed
before, when several other midwest translators
owned by the same company were deleted.

On Air and DX Ready (selected)

CA Delano KZAY 105.3 50000 h,v; 500' -
check out its music format and stereo status,
those of you within DX range!

Multi-City IDs in Use

AZ Oracle KTTZ 103.1 with Tucson
CA Santa Paula KIEZ 98.7 adds Ventura
FL Holiday WLVU 106.3 with New Port Richey
and Hudson (rock format)
IN Washington WRTB 106.5 with Vincennes,
IA Humboldt KHBT 97.7 with Fort Dodge
KY Cadiz WBZD 106.3 with Hopkinsville
and Murray, r; r normally, but p
8 p. m. to midnight, "The Suzzard"
KY Central City YKYA 101.9 with Greenville
KY Fort Campbell WABD 107.9 with Clarksville
(TN) - Hopkinsville (Lakes/Wahpeton (ND)
MN Fergus Falls KJK-FM 96.5 with Detroit/
NY Cobleskill WITU with Oneonta
PA Muncy WTPS 103.9 with Hughesville
(dropping Williamsport), now nr
(affects one translator)

Deletions

CA Garberville KERG 104.7, FCC now accepting
applications from others for this frequency
CA Dublin KABL-1 98.1 "Engineer at KABL
has never heard of it in two years on the
job. Long ago they told me they were
scrapping it due to engineering reports
which indicated it would do almost as much
damage as good"
CA Lakeport K217AM *91.3 (replaced by
K217AN (Wilf-Utah))
CA Inariposa K288CD 105.5 (due to duplication

with KEFR *89.9 La Grand, although
K288CD's primary was KDNO 98.5 Delano
-different ownership from that of KEFR,
but similarly formatted). This deletion was
inevitable because "a new 105.5 allocation
in the area would have forced the eventual
shutdown of K288C."
IA Pella KCUV *89.1, FCC rejects station's bid
to stay on that frequency, and mentions no
other frequency, so KCUV assumed deleted
SC Folly Beach 97.7, station back to application
status along with six others

Call Letters Assigned or Changed

AL Jasper 102.5 WZBO (from WWWB-FM)
AK Houston 94.3 KJHA [2 translators
AZ Phoenix 94.5 K00L-FM (K00L), affects/
CA Hanford 107.5 KCLQ (KLTK), "Classic
Rock"
CA La Quinta 96.7 KBZT-FM
CA Los Angeles 97.1 KLSX (KBZT),
"Classics," r oldies
CA Monte Rio 97.7 KwiGG (grant to KCLQ set
aside; remains KMGG)
CO Pueblo *90.7 KPFR
FL Arcadia *89.1 WFDA
FL Bonita Springs 96.1 WRXK (WLEO), r,
ID with Fort Pierce
FL Branford *91.3 WOLR
FL Naples Park 105.5 WIXI
FL Sanibel 98.5 WRWX
GA Gordon 107.1 WQXM-FM (WQXM)
GA Macon 105.3 WDEH-FM (WDEH); nonID
assumed retained)

GA Quitman 105.3 WGAF-FM, ID with Moultrie-
Valdosta, "Star 105.3," Stereo, r ("classic
hits"), ON AIR AND OX READY!
Moultrie also served, interestingly, by WOFF
105.5 Camilla-on an adjacent channel!
ID New Plymouth 93.1 KIZN-FM (KIZN);
nonID assumed retained

IN Evansville 104.1 WKY-FM (WKY); nonID
assumed retained
IN Lagrange 105.5 WAE0
IA Clinton 98.1 KLIO (KLTP), embraces stereo,
nr, no ID with Fulton IL, but ID with
Clinton only, "K-Lite 98-FM" (strict). No
commercials heard during extensive monitor-
ing, but this testimony taped and broad-
cast: "98 FM is the best thing to happen to
Quad Cities radio in some time."

IA Des Moines *91.3 WDFR
KY McDaniels *91.5 W5FI
KY Russellville 101.1 WBVR (apparently re-
maining that, not changing to WLTO); still
"Beaver." Affects five not-yet-on-air trans-
lators.

KY Wickliffe 95.9 WYMC-FM (WCRG); AM is
in Mayfield KY
ME York Center 95.3 WQML
MD Baltimore 106.5 WVMX (W5KR), nr with
light rock; "they call themselves W-Mix-
106.5" ad nauseum
MD Salisbury *89.5 WSCL
MA Hyannis 103.1 WPXC
MI Gladstone 105.5 WNWIA (W5FMM)

MI Houghton Lake 98.5 WJGS-FM (WJGS-
FM); AM now has different calls
MI Mackinaw City 94.3 WSSW
MN Rochester *90.7 KZSE (KLSX), a still-
unbuilt station, the format of which IN
Public Radio declines to identify
MS McComb 94.1 WXL (WCCA)
MO Liberty 106.5 KLTY (KKCI), still "K-Light
106.5 FM"

NH Los Lunas 102.3 KBBU
NJ Portales 95.3 KKJH (from KNIT)
NI Teos 101.7 KTAO (KVMN)
NY Canton 96.7 WVN/C (from "YJGT"), \$,
commercial, music format not known
NY Albany 100.9 WKLI (WVOM)
OH Cleveland 98.5 WNCX (WVCL), "NCX,"
also "North Coast New FM," "N. C. Excit-
ing," r, "Including some rap music"
OR Baker 104.7 KCMB
PA Erie 102.3 WJET-FM (WSE0); affects
one translator

SC Georgetown 97.7 WGMH (from W3LXX)
TN Etowah 103.1 WCPH-FM (WVKS)
TX Abilene 107.9 KEYJ (KFMN-FM)
TX Amarillo 103.1 KR3N
TX Austin 95.5 KLOT (KOKE-FM)
VT Rutland *90.5 WFTF
VA Farmville *90.1 WLCC (WUTA)
VA Strasburg 104.9 WLSL-FM, "200" (3000
h,v)
VA Winchester 102.5 WUSQ-FM (WUSQ), non-
ID assumed dropped; to 28000 h,v; 204 m
WI West Salem 100.1 WQJY (WISQ); affects
two translators in La Crescent MN
CANADA London ON



Radio Western 94.7 FM

94.7 CHRW (not CHRU, apparently), p
MEXICO Tijuana BJ 90.3 XHITZ (not XHZ),
still with Muzak SCMO

Stereo - or to be Stereo

AL Brewton WYJD *90.9 r, "Y-91" ("snags
strict"), has weekly classical show, too,
but not enough c to warrant a dual format
listing
AZ Flagstaff KENR 97.5, b, with "clean
sound"
AZ Parker KMDX 99.3 no stereo, remove \$
listing
AZ Prescott Valley KIHX 106.3, "Kix-106,"
affects two translators
CA San Clemente KJVE 107.9, "but they
don't always have it on due to their mono
programs"
CA Santa Margarita KWSP 106.3
CO Delta KLDZ 95.1 CO Curya KUCA 104.9
FL Starks WTLG *88.3
GA Douglas WDMG-FM 99.5, now "Stereo
FM-99"
IL Champaign WEFT *90.1, FCC grants dual
studio-to-transmitter link, which means \$;
completion of new construction permit not
done, unlike what was given in VUD last
month
IN Linton WQTY 93.5 drops \$, now mono,
now K, "Cutie Country"
LA Jonesboro-Hodge KTCC 104.9 no \$, remove
\$ listing... "station has had bad technical
and personnel problems, and may be sold"
MD Baltimore WJHU *88.1 on (classical and
news-four hours of daily news, as well as
some weeknight "classic jazz") See Readers'
Reports". Was on at 10 watts for a few
days, now on air and DX ready with these

FCC-FM

newly authorized facilities: 10000 horizontal, 8100 vertical, 130 meters. MD Cambridge WCEM-FM 106.3 manager was quite indignant that they were still listed as mono, claiming they've been stereo all the seven years he's been there, yet I recall one of my reporters claiming they are mono, despite having been listed as \$\$. Music format alleged to be mr. I will resist them as stereo until such time as I hear differently. NV Carson City KNSS 98.1 NV Ely KBXS 92.7, "X-93" NY Lake Placid WLPW 105.5 OK Cordell KBGG 99.3, k OK Healdton KZEA 105.5 OK Madill KMAID-FM 102.3, k PA Punxsutawney WPXZ-FM, now (rock), "FM-105" TX Hooks KLLI 95.9, r TX Keene KJCR '88.3 UT Kanab KCKK 101.1, "KK-101" UT Smithfield KVEZ 103.9, rp UT Tremonton KKVU-FM 104.9 has stereo generator, no mono programming, rm, so remove \$ listing. VA Farmville WFLD-FM 95.7, 40000 h.v (340') WY Rock Springs KYCS 95.1 PT Fort McMurray KOKY 97.9 PQ Fermont CFMF 103.1 ++++++ Not in stereo-delete \$ listing: CA Stockton KSTN-FM 107.3 "they once more register as simple mono. Horrible buzz in audio during each \$ episode has caused me to suspect it's just noise confusing the tuner" nonIDs often used in Lieu of Calls AL Chickasaw WDLT 98.3 with Mobile, m, nonID assumed dropped AL Mobile WKRG-FM 99.9 FM-99.9, now top hits (r); ID with Pensacola FI AZ Apache Junction KSTF 107.1 The Storm AZ Arizona City KXMK 106.3 Classic 106, r (Sunday nights), not known if \$ AZ Globe KEYX 100.3 Key-100.3, rp, \$ AZ Sun City KONC 106.3 Concert 106, "c 24 hours, with good coverage, but heavily processed sound and an annoying hum. And KXMK Arizona City gets out well, so the two compete horribly in SE Phoenix." AR Hot Springs KQUS 97.5 US-97, still k (country) CA Bakersfield KIKI 92.1 Keewee CA Needles KWAZ 97.9 K-West CA San Diego KLZZ-FM 106.5 California Classics (sold to Edens Bcstg., effective around Jan. 1), so there may be further changes CA Yuccipa KLRD '90.1 K-Lord, g CO Avon KZYR 103.1 Z-103 FL Ocala WMMZ 93.7 Z-93 "on 10-21-85 they changed from k to 'Hits of 60s-70s-80s, Fresh New Sound of North Florida,' 'FNS' didn't last a year; I guess they should be called top hits now" FL Sarasota WHV 102.5 still Wave, 507 m (100000 h.v) FL Tallahassee W8GM-FM 98.9 still FM-99, mr GA Adel WDDO 92.1 Classic-92 U, r GA McRae WDAK-FM 95.3 FM-95 (from Dax), r IN Terre Haute WMSI 100.7 Magic KS Newton KOEZ 92.3 Easy-92, ID with Wichita ME Lewiston WAYU 93.9 drops "94-Rock," since station is now k (country) ME Portland WGAN-FM 102.9 FM-103 (from Stereo-103) MA Lawrence WCGY 93.7 The Rock Garden ("resurrected") MA New Bedford WJFD 97.3 Radio Globe-O MN Virginia WHLB-FM 107.1 Arrowhead Country FM, now k, "Arrowhead Country" is what northeastern FM is called, just as the

Starship 105 is K288BA!

facing WI area is "Indianhead Country" WIS Vicksburg WST Z 106.7 Z-106 NV Henderson KLNQ 95.5 Classic Soft Hits, rm KMZQ 100.5 Classy-100 (strict); actual calls unknown; one reporter spent the on-hour period trying to hear them and they failed to identify! NH Concord WKXL-FM 102.3 All Hit Stereo 102, r NH Dover WOKQ 97.5 no nonID, says "WOKQ 97-5" NY Albany W6NA 107.7 no nonID OH Alliance WJDO 92.5 Hit Radio 92 PA Beaver Falls WVKK 106.7 Kiss-106.7, adds Pittsburgh id PA Braddock WMYG 96.9 Magic-97 PA Clarion WCUC '91.7 U-92, r PA Du Bois WDBA 107.3 Hit-107 PA Indiana WQSU Music-103, r PA Pittsburgh WHTX 96.1 Hit Radio 96 WPTS '98.5 New Music FM, pr, some j WOVE 102.5 DVE PA Sharpville WHGZ 95.9 Z-96 PA Tyrone WGRR 101.1 GMR-FM RI Providence WPRO-FM 92.3 92-Pro-FM TH Elizabethtown WJUS-FM 99.3 US-99 TN Hendersonville WQQQ 92.1 Power-92 TN Nashville WEEZ 92.9 EZ-93, r KOYE 94.9 Y-95 TX Laredo KJZ 92.7 Z-93, r KOYE 94.9 Y-95 TX Pasadena KKBQ-FM 92.9 93-Q (not 93-KBD) TX Wichita Falls KNIN 92.9 just uses calls now WVV Wargotown WVVU '91.7, View-92, pj WCLG-FM 100.1 CLG-FM WY Casper KGRQ 94.5 Q-94 (not "WGRQ," as on p. 121 "FM Atlas") FM Mistakes—10th ed. FM ATLAS—and this column AR Fort Smith p. 36, 92, 92.7 KHLT (not KLPQT) [as on p. 50 map] MN Aitkin KEZZ 94.3 (not 99.3) MO Montgomery City, 8-86 VUD, calls should be KOMC (not KDMC, which is in Dyersville IA) NV McDermitt map p. 68 and list p. 108 106.3t is for KFML, not KFDF-FM (Nampa ID) [format: OK Muskogee p. 112 KRLQ 93.1 add/ OK Pottsaw 97.9, 9-86 VUD, list calls as KZBB, not KZBB (KZBB is in Beaumont TX)] VA Staunton add format for WSGM 93.5, rp (p. 119) ON Sudbury p. 124, 90.9, stereo symbol missing MEXICO, Piedras Negras 99.9, p. 62 shows XHSG, p. 126 XHSE. XHSG is correct. See also Nov. VUD for: FL Clearwater WKRL 97.9 format, Fela, p. 40 FL Hialeah WCMQ-FM confirmed on 92.3 (having moved from 92.1), Hauser, p. 23 FL Naples WSLG 103.1 format, p. 40, Fela w Newport WZYC 103.3 Z-103, Fela, p. 40 PA Harrisburg WBSF 99.3 Sunny-99 nonID Fela, p. 40 TX Andrews KACT-FM 105.5 k format, p. 32, Merrill, not known if stereo VA Warrenton WQRA 94.3 Sunny 94 nonID Fela, p. 40 MEXICO, Mexico DF XHIMER '94.5, c, apparently a new station; stereo status, power unknown, Hauser, p. 25 Veracruz XHVE 102.1 r format, Pizzi, p. 22 XHCS 103.7 60000 new, not known if \$, Hauser, p. 25 Villahermosa, Tab. XHSAT 90.1 30000, on air, Hauser, p. 24 Facilities Changes Granted AL Carrollton WAQT 94.1 990' (98000 h.v) AZ Bullhead City (from Searchlight NV)

K2058G '88.9 AZ Cottonwood K265BU 100.9 has KKL 98.7 Phoenix on it (not KNIX-FM 102.5 Phoenix) AZ Flagstaff K292DF 106.3 has KUPD 97.9 Tempe (not KDAN-FM, still unbuil, Williams) AZ Lake Havasu City K240AZ 95.9 has KFMS-FM 101.9 Las Vegas NV (not KKKR 92.3 Glendale AZ) K296CH 107.1 has KXTZ 94.1 Henderson NV (not KYRK 97.1 Las Vegas NV) AZ Mingus Mountain (from "Mingus Creek") K221BD 92.1 AZ Prescott K265CI 100.9 assumed to have KAIA-FM 101.5 Phoenix on it, not KDKB 93.3 Mesa K288BA 105.5 definitely has KDKB 93.3 Mesa, not KAMJ-FM, dual translator ID with K221AY Flagstaff, "Starship 105," and takes \$ off when translators break away for their local on-the-hour announcement with commercial. AZ Summerhaven K292CH 106.3 now has KUPD 97.9 Tempe on it, not KKKJ 103.9 Payson AZ Tucson K269CY 101.7 has KTTZ 103.1 Oracle on it, not KOEZ 103.9 Coolidge AR Blytheville KHL 96.3 100000 horizontal, 50000 vertical, 350' (should finally move from 96.1) AR Hot Springs K276BQ 103.1 has KGAP Gordon on it, not KCFO-FM 98.5 Tulsa OK AR Springdale K224AV (from Fayetteville), but "it is also audible in nearby Fayetteville, though mountains there seem to make the signal noisy" CA Montalvo K272CB 102.3 is on the mainland, but transmitter correctly shown in "FM Atlas" as on the island CA San Jose KSJO 92.3 113 m, transmitter Coyote CA (50000 h.v, directional) CA Tahoe City KRZQ 96.5 850 h.v; 904 meters CO Colorado Springs KRCC '91.5 1000 h.v, directional (2100') CO Pueblo KKM 98.9 369 m or 1210' (100000 h.v) CO Security KWYD 105.5 60 watts h.v (2230') DE Milford WAF 97.7 100 m (3000 h.v) FL Homestead WRFM 95.7 299 m (100000 h.v), class C1 FL Port St. Joe WJST 94.5 302 m (100000 h.v) FL Springfield WVBH 95.9 180 m (3000 h.v) GA Atlanta WRAS '88.5 100000 h.v; 133 m GA Nashville WJYF 95.3 450 h.v; 243 m ID Mountain Home KJCY-FM 99.3 290' (3000 h.v) IA Clarion KRIT 96.9 100000 h.v (adds vertical); 173 m. This is the change Robert Baker mentioned last month, which would put KRIT's tower closer to Humboldt and Fort Dodge. KS Ottawa KHUM 95.7 97000 h.v, directional, 265 m, class C1 KY Corbin WCTT-FM 107.3 (from 107.1), 50000 h.v; 150 m KY Henderson WKQD 99.5 100000 h.v (920') KY Louisville WLDX 99.7 24000 h.v (490') KY Morgantown WWSK-FM 95.3 300' (3000 h.v) LA Monroe K244X 97.7 has KTRY-FM 94.3 Bastrop on it, not KCTO-FM 103.1 Columbia ME Bangor WPGC 92.9 20000 h.v; 239 m MD Salisbury WJCO-FM 97.5 330' (3000 h.v) MI Portage 107.7 152 m (500'; 50000 h.v); reversal of original decision for this new station in favor of a different applicant MN Minneapolis WCTS '100.3 95000 h.v, directional, 332.1 m, transmitter at Nowthen MN (same site as KMGK 107.9 Anoka MN); on air with these facilities NE Lincoln KRNU '90.3 adds v, 100 h.v; 120' NV Reno KSXY 101.7 (not 102.3), on air, "Sexy Radio...if you like KOH, then you'll love Sexy Radio," format and stereo status unknown NY Amsterdam WVMQ 97.7 330' (3000 h.v)

FCC-FM NY Garden City WLIR-FM 92.7 directional (Jared Bcstg., to take over license): 1000 h.v; 520', same tower site as picture; last month NY Patchogue WBLI 106.1 150 m (10000 h.v) NY Southold WBAZ 101.7 2700 h.v; 340' NC Charlotte 'RCO 95.1 1670' (100000 h.v) OK Durant KAFM 97.5 (from 97.7) 45000 h.v; 615'; class C2 OK Shawnee K272BX 102.3 has KKL 97.7 Edmond on it, not KCFO-FM 98.5 Tulsa (see new stations granted) OR Enterprise KWVR-FM 92.1 '625' (3000 h.v) OR Pendleton KRBM '90.9 25000 (h); 203 m PA Harrisburg WMSF '94.9 2000 h.v; 213 m, retains directional antenna-transmitter to Blue Mountain, Summerdale PA PA Scranton WEZX 107.1 190 h.v (1270') SC Florence WJMX-FM 106.3 1100 h.v; 160 m SD Sioux Falls KAUR '89.1 adds vertical, 680 h.v; 56 m TX Fort Worth DLZ 107.5 25000 h.v; 502 m TX Marshall KBWC '91.1 adds v, 34 m (135 v) VA Colonial Heights WKHK 95.3 1600 h.v; 450' VA Manassas WMAW 106.7 directional VA Pulaski WPSK 107.1 200 h.v (1210') VA Richmond WRXL 102.1 remains 140000 h.v; 320'. Did not complete ep for 20 k-w at 785'. "When they found out they were losing their grandfather clause by moving more than a mile from the present site, they now plan to build where they are at the equivalent of 140,000 watts at 320'." WV Martinsburg WVEP '88.9 3600 (h); 495 meters WI Wisconsin Rapids WVRV 103.3 100000 h.v; 323 m VI Christiansted WSTX-FM 100.3 50000 h.v; 67 m SCServices, 57, 67 and 92 kHz CA El Cajon KECR '93.3 telemetry, 67 kHz CA Escondido KOWN-FM 92.1 receives Muzak rebroadcast from XHITZ 90.1 Tijuana (calls corrected from XHZ) CA Oceanside KGMG-FM 102.1 57 kHz ARI, 67 kHz 1U telemetry CA San Diego KSDS '88.3 Multicomm, 92 kHz (TV) KFSO 94.1 57 kHz ARI traffic alert proposed KSON-FM 97.3 67 kHz +X (Pocket Quote stock data system), 92 kHz R, "Lifestyles, fore and background music on multiple channel AM system" KGB 101.5 TS "occasionally transmit KPQP audio for remote air monitoring" KJQY 103.7 may add "Musicals" foreground in the future (retains "Musicals" background music 67 kHz) KLZZ-FM 106.5 possible paging within 6 months; sale to Edens Broadcasting pending IA Burlington KGRS 107.3 tZ (frequency shift data, 67 kHz) MN Minneapolis WAYL 93.7 tX 67 kHz (low level injection data) MN Northfield WCAL-FM '89.3 t1 (remote cueing, to be in use after 1-1-87 most mornings 8:00 to 10:00 with talk, carrier to mute between messages) MN Rochester KRCC-FM 106.9 tZ (FSData) 67 kHz; tX ("Normal") data) 92 kHz NE North Platte KELN 97.1 Common Carrier Bureau of the FCC reaffirmed KELN's right to continue offering video paging at 92 kHz over the objections of Con-Tac Communications (67 kHz retains TX data) NY Albany WHRL 105.1 no 92 kHz (had Mutual network relay; looking for another use for its 92 kHz); main channel format claimed no v to be "b" Formats AL Huntsville WAHR 99.1 k (only) AZ Bullhead City KCR 102.7 m AZ Casa Grande KBBT 105.5 r (top 40) AZ Flagstaff KMG 93.9 r, "Magic

ECPA ct Passed 93.9," affects three translators AZ Lake Havasu City KZUL-FM 105.1 r, "Casual," this despite having a "hard rock format" AZ Marana KXMG 98.3 [Latin], Spanish, with Spanish announcing AZ Nogales KAYN 98.3 rm (rock and middle of the road music) AZ Oracle KTTZ 103.1 rp (album rock) AZ Pace KXAZ 93.5 r, "Z-93"—not "95.3" as given on p. 92 "F & Atlas" AZ Phoenix KKLT 98.7 rm, affects 1 translator KLZI 99.9 rj, with all-nite jazz AZ Prescott KAHM 103.9 b (beautiful) AZ Tucson KJHI 92.9 rm AZ Yuma KXYI 100.9 r says one reporter, but Pete Nolan's "M Street Journal" says it is a Format 41 station, which would mean m. I tend not to believe it is Format 41, at least not all the time, so will call it r as our reporter heard it AR Brinkley KQIC 102.3 r (ock) AR Fayetteville KKBG 92.1 rp AR Sheridan KAUL-FM 102.3 s (oul) CA Colusa KTMX 107.5 r, Stereo CA Escondido KOWN-FM 92.1 mr, "All your favorites with a touch of jazz" CA Indio KCIJ-FM 92.7 r, "Classy 92-FM" CA Los Angeles KNX-FM 93.1 m CA Modesto KQUD rm, "Q-92" CA "Overside KQUD 97.5 m (now more up-tempo, with more vocals) CA Rosamond KAVC 105.5 g, \$, affects one translator CA San Bernardino KOLA 99.9 r (CHR) CA San Luis Obispo KCXB '90.1 j, no c, affects three translators CA San Diego KPBS '89.5 ct (classical and talk), affecting 1 translator KIFM 98.1 rj, "Rocking softly by day and lights-out jazz by night" CA San Mateo KCSM '91.1 jc, "replacing their all-night c with j, but still has about two hours c in the morning" CA Santa Monica KCRW '89.9 jc, affects two translators CO Colorado Springs KKF 96.5 r, "mostly oldies" [one translator] CO Denver KMJ 100.3 rm, affects/ KOAQ 103.5 m CO Ft. Collins KFKB 99.9 k, \$ (error p. 96 FM Atlas, is not 93.9) CO Rifle KDBL-FM 105.3 rm FL Fort Pierce WKGR 98.7 rj FL Lakeland WVFH 94.1 b FL Orlando WUCF '89.9 c [classical and p (rogressive) WBCW-FM 105.1 sr, "simulcast with Afr 950" FL Tampa WUSA-FM 100.7 rm gospel) GA Albany WJLZ 96.3 g (soul and/ WGPC-FM 104.5 b GA Atlanta WVEE 103.3 sj GA Cochran WDCO-FM '89.7 cj, has NPR's "Jazz Through the Night"; not sure if other GA public stations have this feature WVMG-FM 96.7 k GA Moultrie WMTA-FM 93.9 k (only) IL Chicago WYFR 103.5 m (except for "Goldies" weekends and Larry King at night) IL Mount Carmel WYER-FM 94.9 r (same format as WNVF 106.1 North Vernon IN) IN Danville WATI 107.1 k IN Owensboro WFBM 96.7 k KY Vincennes WBRK 92.5 still k, and "I doubt if they change" ME Caribou WCXU 97.7 rm, not known if \$ MN Bemidji KSHP 101.1 k, open carrier SCA for telemetry Jackson to ID MS Gluckstadt WEQZ 101.7 r, adds/

Contributors continued from column's rear: had help in collecting SCA data from Don Hobson, KQY; Rick Basseter, KXII and one Elliott L. Vine, longtime FM OSL collector, who recommends Gerry Dexter's book, Secrets of Successful OSL Hrg. 73th, Bruce

December, 1986 MO Kansas City KCPW 94.9 r NV Carson City KWZ 97.3 r, "K-Wins," affects three translators NV Reno KRNO 106.9 rm, affects 1 xlr NV Sparks KRNO 100.9 rm, "Kroy-FM 101" NJ Vineland WVLT 92.1 m NC Claremont WPAR '88.1 p, on air (10000 w, not known if stereo) NC Durham WYDQ '88.7 cj, some p OH Alliance WRRU '91.1 pc OH Youngstown WQDD 93.3 r OK Idabel WKDQ 96.7 r PA Benton W8E 95.9 r PA California WVCS '91.9 r PA New Kensington WXPX 100.7 rp PA Pittsburgh WRCR '88.3 pj WLTJ 92.9 rm WPIT-FM rg PA Slippery Rock WSRU '90.1 r (S) SC Charleston WXLV 102.5 rm ("Goldies") SC Greenville WAILU '94.5 bg, "lots of gospel programming on weekdays" [oldies]; not on yet TX Houston KUHF '88.7 c, dropping 11-1-87 UT Bountiful KLXZ 99.5 de r/ UT Brigham City KSOS 106.9 rm, "K-107" UT Cedar City KCGD 92.5 r (CHR), "Kissed F A" affects 3 translators UT Centerville KCGI 105.5 g (was p (riefly); affects 1 translator UT Logan WYFM 94.5 r (CHR) UT Ogden KJQN-FM 95.5 r (CHR), still "KJO" UT Price KARB 98.3 r (CHR) UT Provo KBNG 94.9 m UT Spanish Fork KBER 106.5 rp VA Charlottesville WTJU '91.3 pc (some j) WUVA 92.7 r (ock) VA Alichanville WZZR 92.7 rs, believed to be mono for better rim-shot coverage into Richmond VA Tappanhook WRAR-FM 105.5 r VA Woodbridge WCRF-FM 105.9 r, "classic hits" [104, "not known if \$ WA Spokane KWVO 103.9 r, "Power/WV Wheeling WKWK-FM 97.3 r WOVK 98.7 k WY Cheyenne KFBO 97.9 r (CHR) WY Greybull KZMQ 100.3 k, not sure if \$ WY Laramie KRQU 102.9 rp PQ Gaspe CJRG 93.3 m Readers' Reports and Other FM-Related News You can still legally listen to SCA—at least for now! The ECPCA passed, and its full implications are not known. I hear Reagan signed the bill, and the Senate judiciary committee is about to issue directives, telling us what the law really means—what we can listen to and what we cannot listen to. I am afraid to leave my radio-listening freedoms hostage to a Senate committee, and have written ANARC's Washington liaison to not cooperate with this committee. It is better that the law stand as is, rather than have another agency of the government further take away our freedoms as listeners to FM subcarriers, FM stereo, scanners, certain satellite TV feeds, all of which are now forbidden. According to the bill's prohibition against tuning into subcarriers, even tuning in television is illegal, since TV uses audio and video subcarriers. Yes, it is a wonderful law, and it must be allowed to stand 100% or fail 100%—nothing in between, like I am sure the Senate will try to come up with. The ECPCA is to be in effect 90 days after Reagan signed the measure. Exact date of signing not known, except that it was early October, and the SCA for telemetry [Jackson to ID law therefore should take effect early in

NORTHERN FM-DX

Joseph Fela
150 Robert Place
So. Plainfield, N.J. 07080
1-201-755-3852

DECEMBER 1986

Deadline: 8th of the month

As we go into the winter months, anyone who wishes to submit a bandscan of their dial can do so and it will appear on an available space basis. A bandscan (of sorts) is included in this months column. A few other bandscans, forwarded by Saul, are also on hand and will appear in the next month or two.

Also, starting with this months column, there will be a slight change in the listings. Those who wish to note call changes logged can list them in brackets - (WMMX) as an example. Scott Hood listed call changes in this manner in his last report. Credit should go to him for this idea which I feel is worth adopting. Like milages, it is an optional listing. Now for this months reports -

BOB SMOLAREK - R.D.#1 - BOX 63 - WHITEHOUSE STATION, N.J. - 08889

AUGUST 1986			
5 Es			
1700	WDCO	89.7 GA	Cochran-Macon, Peach State Network 731
1710	WAAC	92.9 GA	Valdosta, "MASON-DIXON 93" 812
1725	WAZE	92.1 GA	Dawson 812
1726	WLJS	91.9 AL	Jacksonville
1728	WDJC	93.7 AL	Birmingham 827
1733	WTLN	95.3 FL	Apopka, g
1735	WJAD	97.3 GA	Bainbridge, r, "THE HOT FM" 812
1738	WMMX	97.7 SC	Georgetown, s
1739	WTKT	98.5 FL	Crystal River
1743	WNNX	95.9 FL	Tallahassee 901
1747	WAIV	96.9 FL	Jacksonville "97 WAVE" 812
1750	WROQ	95.1 NC	Charlotte, "HOT HITS, CAROLINA'S BEST MUSIC" 506
1753	WCGQ	107.3 GA	Columbus 800
1755	WBCY	107.9 NC	Charlotte 506
1756	WRDX	106.5 NC	Salisbury, "X-106"
1757	WFMX	105.7 NC	Statesville
1801	WIOK	95.3 KY	Falmouth
1804	WZLZ	92.9 TN	Nashville, "EASY 93" 727
1806	KZLE	93.1 AR	Batesville
1809	WMTM	93.9 GA	Moultrie
1811	WXID	94.7 KY	Mayfield
1825	KWTO	97.5 AR	Hot Springs 1090
1831	WCMT	101.7 TN	Martin
1832	KTNO	98.9 MO	Kennett, STEREO 99"
1833	KASU	91.9 AR	Jonesboro 936
1837	WKYQ	93.3 KY	Paducah, "24 KARAT COUNTRY" 801
1840	WVLK	92.9 KY	Lexington, "K-93" 546
1841	WLAP	94.5 KY	Lexington, "94 AND A HALF" 546
1842	WDBL	94.3 TN	Springfield
1843	KFIN	107.9 AR	Jonesboro "SUPER COUNTRY" 936
1845	KHLS	96.1 AR	Blytheville
1847	WVYN	106.9 TN	McKenzie "WIN 107"
1850	WGKX	105.9 TN	Memphis, "KIX 106" 903
1852	KZOU	98.5 AR	Little Rock, "200 98" 1049
1930	KWCL	96.7 LA	Oak Grove
1932	KTJC	92.1 LA	Rayville
1933	KUZZ	95.9 AR	Lake Village
1940	KLTR	93.7 TX	Houston

AUG 5 Es (Continued)			
1943	KKBQ	92.9 TX	Pasadena, "93a" 1395
1945	KPCH	97.7 LA	Dubach-Ruston
1947	KSRR	96.5 TX	Houston 1395
OCTOBER 1986			
4	Tr		
0057	WESU	88.1 CT	Middletown
6	GW		
0705	WUCI	91.5 NY	Binghamton 116
10	GW		
0900	WRGN	88.1 PA	Sweet Valley, g
11	Tr		
2320	WBYR	107.7 NY	Wethersfield, pr "Buffalo's Bear" 113
2346	WNNK	104.1 PA	Harrisburg 113
12	Tr		
0035	WCTD	107.1 MD	Federalsburg, k
0100	WBNE	95.9 PA	Benton, "B-96", r
0113	WOVU	101.7 DE	Ocean View
0115	WGTY	107.7 PA	Gettysburg, k
0120	WQXK	94.1 PA	Sudbury
16	GW		
2000	WJHU	88.1 MD	Baltimore, John Hopkins University 136
23	GW		
2200	WMMX	106.5 MD	Baltimore, ex-WMKR on a Joe Fela tip
NOVEMBER 1986			
3	GW		
2014	Wkli	100.9 NY	Albany, ex-WWOM "K-LITE" 143

COMMENTS: August 5 produced some incredible skip for about 3 hours. I managed to hear 10 states ranging from NC (506 miles) to Texas (1395 miles). This Fall has been disappointing from the trop standpoint, only Oct. 12 produced anything really worthwhile as the Buffalo, NY area showed.

NICE
WNCE FM-101
24 SOUTH QUEEN STREET
LANCASTER, PA 17603

WGET
BOX 280
GETTYSBURG, PA. 17325

NORTHERN FM DX

DECEMBER 1986

WILLIAM R. HEPBURN - #18-62 WALKOVER ST. - THUNDER BAY, ONTARIO, CANADA - P7B 1L2 EDT

Thunder Bay equipment: JVC R-X330V Receiver with indoor dipole on 3rd floor.

AT NIAGARA FALLS:

SEPTEMBER 1986

9	Tr		
0928	CBSM	89.5 ON	Sault Ste. Marie "CBC NORTHERN ONTARIO" 320
17	GW		
-----	CKLH	102.9 ON	Hamilton, heard testing in \$, 60 db signal 62
18	Tr		
1500	WPHN	90.5 MI	Gaylord, \$, on car stereo 295

AT THUNDER BAY:

GROUNDWAVE 200+

Stations heard often during any time of day:

KCRB	88.5 MN	Bemidji	275
KAXE	91.7 MN	Grand Rapids	215
WFC	95.5 WI	Wausau	250
WMBN	96.3 MI	Petosky	295
WJMC	96.3 WI	Rice Lake	235
KNNS	96.9 MN	Grand Rapids	215
WGLA	97.1 MI	Escanaba	215
KPRM	97.5 MN	Park Rapids	290
WDUZ	98.5 WI	Green Bay	275

GROUNDWAVE 200+ (cont'd.)

WJML	98.9 MI	Petosky (o/u CBQY)	295
WIXX	101.1 WI	Green Bay	275
WRVM	102.7 WI	Surling	235
WMKC	102.9 MI	St. Ignace	275
WWIB	103.7 WI	Ladysmith	220
KKBJ	103.7 MN	Bemidji	275
WAXX	104.5 WI	Eau Claire	265
WYKX	104.7 MI	Escanaba	215
WRL0	105.3 WI	Antigo	225
WFMM	105.5 MI	Gladstone	205
WAPL	105.7 WI	Appleton	295
WJY	106.5 MN	Brainerd	265
WYCO	107.9 WI	Wausau	250
KMGK	107.9 MN	Anoka	295

DX:

OCTOBER 1986

8 MS

0530	WFAE	90.7 NC	Charlotte, calls, my first MS ID in 10 years of DXing! 1005
15	Tr		
0859	W0JB	88.9 WI	Reserve 200

COMMENTS:I've just moved to Thunder Bay from Toronto....a great DX spot as there are only 3 local FM stations. I finally IDed a MS burst. Seems that there are almost continuous MS bursts here....don't know if it's my imagination since the band is so clear....but I think this October's MS is the strongest I've ever heard. I usually listen on the hour and half-hour to see if I can catch any IDs. Many bursts in \$ overriding semi-local GW stations. Maybe my new receiver has something to do with it.

DAVE NIEMAN - AKRON, NEW YORK - 14001-9529 EDT

Equipment: Carver TX-11 tuner, CM Stereo Probe 9 at 25' (815' ASL), RG-11 coax

SEPTEMBER 1986

29	Tr		
1000	WBNJ	105.5 NJ	Cape May Court House mr (\$?), ID, nx-wx 328
1301	WBNE	95.9 PA	Benton-Bloomsburg-Berwick, kr\$, ID, "B-96" 166
OCTOBER 1986			
8	Es		
1932	WMSU	88.5 MS	Hattiesburg, t\$, ID 1002
1950	WJDR	98.3 MS	Prentiss, k\$, call 1008

OCTOBER 8 Es (continued)

2000	KSLU	90.9 LA	Hammond 1089
2044	KMAR	95.9 LA	Winnsboro, k\$, call 1034
2100	KAMU	90.9 TX	College Station, c\$, ID 1305
9	Es		
2005-2030		91.9 MUF,	briefly to SW, no IDs
19	Tr		
2220	WIXX	101.1 WI	Green Bay, r\$, call (American T-40) 496
			Dave

ALAIN PEPIN - 234 RUE MONTCALM - ST-JEAN-SUR-RICHELIEU - QUEBEC - J3B 3N8 EDT

DXing on Mont St-Gregoire, Quebec (650 ft. above ground level)

G.C. 45 degrees 21'N 73 degrees 09'W 6 miles east of St-Jean, QC.

SEPTEMBER 1986

21	Tr		
1350	WFLY	92.3 NY	Troy, "FLY-92", r 186
1410	WKNE	103.7 NH	Keene, r, "MAGIC 104 KNE-FM" 171
1420	WXTY	103.9 NY	Ticonderoga, "WXTY-104 FM" seems weaker than before, letting WKNE-FM easily through 105
27	Tr		
1400	WJJR	98.1 VT	Rutland, "Relaxing 3 great states in stereo from the top of Killington, this is WJJR Rutland, Lebanon, Glens Falls at FM 98", EZing format, now strong and regular 122

1600	WMTK	106.3 NH	Littleton, "From historic Thayers Inn 106.3 FM Stereo WMTK Littleton" now blasts WIZN right off the dial 100
OCTOBER 1986			
5	GW		
ALL DAY	CF0U	103.1 QC	Ste-Therese leaving carrier on, no audio, carrier off on Oct. 11, carrier back on with no audio Oct. 19.

>>> CONTINUED >>>

(Alain Pepin's report, continued.....)

OCT 12 Tr				
1430	WFCR	88.5	MA Amherst, ID	205
1403	WGDR	91.1	VT Plainfield, promos, ID	80
1502	CBF6	93.7	QC Lac Megantic, Radio-Canada news, ID for CBF	110
1459 WLWH 93.7 CT Hartford, EE jingles, SS programs 250				
1500	WAYU	93.9	ME Lewiston, ID, r	168
1520	WHJY	94.1	RI Providence, 94-HJY, r	260
1500	WZOU	94.5	MA Boston, "Z-94"	230
1603	WMRQ	103.3	MA Boston, "q-103", soft r	230
1601	WITU	103.5	NY Cobleskill, "U-103" MoR/rock (soft rock)	200
1445	WPYX	106.5	NY Albany, "PICKS 106" Capital Land ads	185

OCT 19 Tr				
1454	WJSC	90.7	VT Johnson, legal ID, "JSC College"	55
1203	WJNY	90.9	NY Watertown, "CLASSIC FM" ID; WCNV, WUNY, WJNY	170
1100	WCNY	91.3	NY Syracuse, Endless concert, // 90.9, not as strong	220
1101	WVOR	100.5	NY Rochester "WVOR FM 100"	270
1309	WKCI	101.3	CT Hamden, "KC-101"	240
1154	WKFM	104.7	NY Fulton, "K-104", mentioned WKFM, top-40 mx	215
WOIV	105.1	NY De Ruyter, legal ID, ethnic pgm.	220	

COMMENTS: I have been up to Mont St-Gregoire 5 week-ends in a row, and the last two were the most spectacular tropo openings. The new

Sanyo MW-750 "Double dubbie" helped too. Pete Matthews, a friend from St.-Hubert, brought along his Panasonic RF-2200. It did catch a couple of stations that my Sanyo didn't, but then again the weak batteries of the Sanyo didn't help it after two weeks of British DX (no AC available) and five weekends of mountain climbing.

I recieved a letter from Roy Barstow with good hints on reception, some of which were already under consideration. All the stations I am reporting this time are considered DX and unusual. WGDR, WJJR, WMTK seem to come back almost regularly now. The openings of Oct. 12 and 19 were totally different. The DX spot under a specific cliff that was used to hear WAYU, WHJY on Oct. 12 was quite useless on Oct. 19, when another spot was found useful. Don't ask me, I don't make the propagation!

73 Alain

MARTY BARVINCHAK - GLENSHAW, PA. - 15116

JUNE 1986				
8 Tr				
1357	WCBO	88.7	OH Batavia	243
9 Tr				
0010	WMBI	90.1	IL Chicago	480
	CBE	89.9	OH Windsor	195
0100	WGTE	91.3	OH Toledo	205
	WCSB	89.3	OH Cleveland	110
	WUOM	91.7	MI Ann Arbor	230
	WVXU	91.7	OH Cincinnati	265
	WRQC	92.3	OH Cleveland Heights	120
	WBEA	107.3	OH Elyria	126
2300	WRDL	88.9	OH Ashland	126
12 Tr				
1545	WQZK	94.1	WV Keyser, "q-94"	95
1605	WKSZ	100.3	PA Media, "KISS-100"	252
1620	WCLT	100.3	OH Newark, "T-100"	140
	WDJY	100.3	DC Washington, "DJ-100"	205
1630	WPHD	103.3	NY Buffalo, "103-PHD"	180

15 Tr				
1100	WMRT	88.3	WV (Marietta College) (NOT in 10th ed. of FM Atlas!)	
29 Tr				
0900	WOUB	91.3	OH Athens	140
	WXGT	92.3	OH Columbus	165
	WOSU	89.7	OH Columbus	165
	WSONY	94.7	OH Columbus	165
	WLVQ	96.3	OH Columbus	165
	WBNS	97.1	OH Columbus	165
	WNCI	97.9	OH Columbus	165
	WIKI	100.1	KY Carrollton/Madison (IN)	310
	WVAF	99.9	WV Charleston	180
	WGAR	99.5	OH Cleveland	110
	WTOF	98.1	OH Canton	80
	WHIO	99.1	OH Dayton, "FM-99"	236
	WQAL	104.1	OH Cleveland	110
	WDOK	102.1	OH Cleveland	110
		106.5	OH Cleveland	110

COMMENTS: Here are some dx loggings recorded way back in June, just after I purchased my Onkyo T-9090 tuner. I thought this would get me back into FM DXing after a long while, but a new baby boy in July and a new job in October plus a few other added responsibilities have all put a stop to that for the time being. Hope to heave some time soon. A few other comments: Heard and recorded pirate WZUM on 88.7 here in Pittsburgh on Friday, July 12th through 3 a.m. July 13th. The station originates from the eastern suburbs (I'm in the northern suburbs 5 miles northeast of downtown Pittsburgh) and broadcasts in stereo, but this time had lots of overload distortion, especially on the mic'ing. Their slogan is "ZOOM". Also, WYEP, 91.3 has been off the air for over 6 months now with no word or sign that they will ever return.

Not enough room for my own DX so that will appear in next months column. But room for a few items: WJHU-88.1 Baltimore hit their new 10 kw in mid-October, ex-10 watts. They are listed for 23 kw ERP so I wonder if 10 kw is the transmitter output. They are directional to protect WPVI-6 Philly, per NRC'er Dave Schmidt, but I'm on the other side of WPVI from them and they have a nice signal so..... WMMX-106.5 Baltimore (ex-WMKR) installed a new antenna also in mid-October to replace one with a burnt out bay. Gets out much better! This facility will become their auxiliary when they go up on the channel 45 tower. 73, Joe

BANDSCAN [PLUS] DEPARTMENT - - -

During the NRC Convention (Aug. 31, Sept. 1 and 2) in New Castle, DE, a MR-78 tuner and a Stereo Probe 9 (with rotor) were set-up. The listing which follows are the stations heard during that week-end. It should be noted that WSTW-93.7 and WJBR-99.5 were 8 miles from the convention site. A CF-98 FM Antenna Filter helped cut down the overloading (for more info contact Craig Healy, Clement Corp., P.O. Box 2012, Pawtucket, R.I. 02861). For severe overloading problems, I recommend this tunable filter. It should be noted that conditions for the most part were "normal" to just light tropo. No big openings, unfortunately. Local stations underlined.

88.1	WMNR	CT	94.5	WCHR	NJ	98.9	WUSL	PA	104.3	WBSB	MD
88.3	WBGQ	NJ		WDAC	PA	99.1	WPLR	CT		WNCN	NY
	WRVL	VA		WRVQ	VA		WHFS	MD	104.5	WSNI	PA
88.5	WAMU	DC	94.7	WDSB	DE		WAWZ	NJ	104.7	WWMD	MD
88.7	WRSU	NJ	94.9	WRSD	PA		WAAL	NY		WQHQ	MD
88.9	WXPB	PA		WMSP	PA	99.3	WLAQ	NJ		WSPK	NY
89.1	WFDU	NJ		WPVR	VA	99.5	WJBR	DE	104.9	WRDR	NJ
	WWFM	NJ		WNRN	VA	99.7	WSHH	PA	105.1	WNRS	NY
	WTFV	VA	95.1	WRBS	MD		WYFI	VA		WIOV	PA
89.3	WPFW	DC		WAYV	NJ	99.9	WFRF	MD		WAVA	VA
	WSKG	NY		WZZO	PA		WKHI	MD	105.3	WDAS	PA
	WRDV	PA	95.3	WSBH	NY		WEZN	CT		WXRI	VA**
89.5	WSOU	NJ		WOBR	NC		WQQQ	PA	105.5	WLWV	MD
	WITF	PA		WDNH	PA	100.1	WJZZ	NJ		WBNJ	NJ
89.7	WCVT	MD		WSPJ	PA		WUFM	PA	105.7	WQSR	MD
	WGBH	MA		WKHK	VA		WYFJ	VA		WMRV	NY
	WFGY	NY	95.5	WCYI	MD	100.3	WKSZ	PA		WQXA	PA
89.9	WOEL	MD		WPLJ	NY	100.5	WRCH	CT	105.9	WNWJ	NJ
	WKCR	NY		WKYE	PA		WVOR	NY		WAMO	PA
90.1	WRTI	PA	95.7	WFLN	PA		WCMS	VA		WCXR	VA
90.3	WJTL	PA	95.9	WWTR	DE	100.7	WGRX	MD	106.1	WTRK	PA
90.5	WDUQ	PA		WWIN	MD		WNBR	NJ	106.3	WCEM	MD
	WJYJ	VA		WBNE	PA		WFMZ	PA		WHTG	NJ
90.7	WVUW	NY	96.1	WLEV	PA	100.9	WQEZ	PA		WSLT	NJ
90.9	WETA	DC		WQCB	PA		WNNT	VA	106.5	WMKR	MD
	WHYU	DE	96.3	WHUR	DC	101.1	WEAZ	PA		WHLM	PA
91.1	WFMU	NJ		WQXR	NY	101.3	WKCI	CT		WRFK	VA
91.3	WXDR	DE		CFMK	ON		WNCE	PA	106.7	WLTW	NY
91.5	WBJC	MD	96.5	WPEL	PA**		WGBI	PA		WRKZ	PA
91.7	WKDU	PA		WQWB	PA	101.5	WKXW	NJ		WBMW	VA
91.9	WGTS	MD	96.7	WYRS	CT	101.7	WVUW	DE	106.9	WKDN	NJ
92.1	(WKQV/WVLT silent)			WCEI	MD		WNNN	NJ	107.1	WCTD	MD
	WLNG	NY		WQCM	NY	101.9	WIOQ	PA		WMJY	NJ
	WGLL	PA		WKJX	NC		WPJX	NY	107.3	WRQX	DC
	WMJW	PA		WQPM	PA	102.1	WIOQ	PA		WDBA	PA
	WCTX	PA		WQWK	PA	102.3	WTKS	MD	107.5	WBLS	NY
	WDYL	VA	96.9	WFPG	NJ		WSJL	NJ		WBYO	PA
92.3	WYST	MD		WLAN	PA	102.5	WOLC	MD	107.7	WSNJ	NJ
	WXRK	NY	97.1	WASH	DC		WRFY	PA		WGTY	PA
	WRRN	PA		WYNY	NY	102.7	WXYV	MD		WMJR	VA
92.5	WXTU	PA	97.3	WMBV	NJ		WNWE	NY	107.9	WEBE	CT
92.7	WGMD	DE		WHP	PA		WKSJ	PA		WFSI	MD
	WOBM	NJ	97.5	WPST	NJ	102.9	WMGK	PA		WDSY	PA
	WHTF	PA		WKMZ	WV	103.1	WBEY	MD			
92.9	WLTI	PA	97.7	WAFI	DE		WQEQ	PA	**	Heard with local on the air.	
	WMGS	PA		WJJB	NY		WXLR	PA			
	WFOG	VA	97.9	WIYY	MD	103.3	WPRB	NJ			
93.1	WPOC	MD		WEVD	NY		WSBA	PA			
	WPAT	NJ		WWSH	PA	103.5	WMSM	DC			
	WMMR	PA	98.1	WCAU	PA		WQHT	NY		CFMK-96.3 - 319 miles	
93.5	WSEA	DE	98.3	WSUX	DE	103.7	WHDG	MD		WGBB-89.7 - 299 miles	
93.7	WSTW	DE		WMGQ	NJ		WMGM	NJ		WVTF-89.1/WPVR-94.9 - 288 miles	
93.9	WKYS	DC		WDVR	NJ		WEZS	VA		WVOR-100.5 - 264 miles	
94.1	WYSP	PA	98.5	WYCR	PA	103.9	WIBF	PA		WOBK-95.3 - 259 miles	
	WQXK	PA**		WKRZ	PA	104.1	WXTR	MD			
94.3	WWOC	NJ	98.7	WMZQ	DC		WABE	PA			
	WQRA	VA		WRKS	NY		WNKK	PA			
				WNOR	VA						(The 5 Pittsburghs are at 241 miles.)

SOUTHERN FM DX

Danny Buntin
1312 N. Skyline
Stillwater, Ok 74075

December 1986 **BERRY CHRLTRAS**

DEADLINE: 10th

For FM DX reporters from: AL, AR, AZ, CA, CO, DE, FL, GA, IL, IN, IA, MD, MI, MO, NC, MN, NY, OH, SC, TN, TX, UT, VA & VA.

MORE AUG. AND OCT. ES REPORTED

ONKYO SPOKESMAN COMMENTS ON THE T-9090!!

The few reports coming in on the latest DX activity continue to show August was unusually strong for Es with Pat Dyer saying his extensive showing for that month equaled the sum of the previous 6 Augusts. Having not report it yet, he may still be recovering from that month and the rest of the summer that was also quite good, in fact the 2nd best of the decade for him. September has apparently gone by with no DX. October can go by without FM Es for anybody, including even Pat Dyer, but this October has featured at least a couple of Es days, with one reporter saying it was the first time he ever had Es in Oct. Trop, especially long haul continues in '86 to be in the doldrums, with one having to go clear back to February to find any when a lucky lone reporter from Alabama managed to find some from Mexico and the southern tip of Texas. Trop may easily continue down, but Es may bear closer watching from now on in case the previous extensive activity suggests it may be on the upside of a cycle, perhaps coinciding with the sunspot cycle.

ONKYO I wrote to Onkyo about their T-9090 and received an interesting reply. But first some background info. The reviewer of the T-9090 in Sensible Sound was the engineer for the legendary McIntosh MR 78. He noted remarkable similarity in the selectivity circuitry of the two tuners, and it occurred to him to pull the Onkyo super narrow IF filter and replace it with the one from the MR-78. Along with a few minor changes on the Onkyo circuit board he succeeded in bringing up the Onkyo selectivity to match the MR-78, making it possible to permit reasonable reception of weak stations adjacent to 100 kw locals. He reported his findings to Onkyo and the company was quite interested. And so since the review came out over a year ago it has been speculated that Onkyo would modify the T-9090, or perhaps even offer modifications to current owners. My reply from the Onkyo product manager concerning this read:

"Thank you for your recent letter concerning the T-9090 modification described in the review by the Sensible Sound magazine, reviewed by Mr. Modafferri. Mr. Modafferri used spare McIntosh parts to obtain the increase in selectivity; those parts were in his possession from his engineering days at McIntosh. While we have indeed duplicated his findings, using parts supplied by him, in our own labs, we are not pursuing any modifications to the T-9090 at this time. The McIntosh part in question is proprietary to them, and I'm sure they would take a dim view of any requests from us or our customers for those parts; they're still in the tuner business, you know. The T-9090 is not slated for any design changes until 1987. I won't know until later this year, or early next year, as to whether or not we've come up with a new type filter for this model. However, modification of any tuner of the sensitivity of the T-9090 requires special test equipment, and our engineers design these things in special rooms, that are entirely shielded for stray RFI. Extensive field testing of the T-9090 originally took place in the Orient, North America, and France and West Germany, before the design was finalized. Needless to say, the procedure could be quite expensive. I doubt that Onkyo would be considering any retrofits to the T-9090 for this reason. Thank you for your interest in Onkyo products."

So it appears the only feasible way for big city DXers to coax more selectivity out of the T-9090 is to take it in for service to see if it can be modified to tune in .05 MHz increments, so it can be detuned away from locals. I would be interested in hearing from anybody who has tried having this done. The T-9090 has gone up, now discounted in the \$400 range.

Pay Dyer, 5315 Silvertip Dr., San Antonio, TX 78228		May 1986 CST	
5/12 tr (cont. from last month)		5/12 Es	
1007 KNUE 101.5 TX Tyler, ID	280	1027 WSEZ 93.1 NC Winston-Salem, ad	1150
Es		1028 WWSF 99.9 NC Asheville, wx	1010
1008 WKOQ 94.1 NC Lexington, Q-94, k	1150	1030 WLWK 96.9 NC Statesville, k-97, k	1110
1012 WHPbt 95.5 NC High Point, g	1160	1035 WZZU 93.9 NC Burlington, ad	1190
1020 WXRC 95.7 NC Hickory, ID	1085	1038 unID 107.9 (MUF)	
1025 WRSA 96.9 AL Decatur, ID	760	Cont.....	

SOUTHERN FM DX

Dyer, cont.

DECEMBER 1986

5/12 Es		5/12 Es	
1057 WUTC 88.1 TN Chattanooga, ID	865	1601 KCEPt 88.1 NV Las Vegas, s	1050
1058 WDEF 92.3 TN Chattanooga, ad		KKTzt 94.1 NV Henderson, RL	1040
1059 WMBW 88.9 TN Chattanooga, wx		KUDot 93.1 NV Las Vegas	1050
1100-1144 unIDs 88-92 very spotty		1605 KOOL 94.5 AZ Phoenix, ID	835
lull to		1606 KKFRt 92.3 AZ Glendale, r	840
1212-1235 unIDs 88-89 very spotty		1617 f/out	
tr		tr	
1240 KVNE 89.5 TX Tyler, area town	280	2154 WCKW 92.3 LA Laplace, area ad	495

I had to replace the rotor on the TV-FM after things died down the afternoon of May 10. The 1973 vintage RS Servo unit (5-wire) was taking 3 minutes to go only 180 deg! The new RS item (3-wire) doesn't seem to be as good as the older versions. A healthy amount of Es for less than half of May. And, this with the best Es season on FM since 1983! I still have a dozen C-90's to edit yet. Shades of a few years ago. The extraordinarily late-running Es in August gave a total (minutes) for that month equal to the sum of the previous 6 years of Augusts combined! The total May-Aug. time turned out to be the 2nd best for the decade. I'm sorry that the "latest" report that I've been able to compose here only goes thru May 12. (That's OK, Pat. DB)

Tulsa DX Killers

Three Tulsa, OK stations KWEN 95.5, KRAV 96.5, KM0D 97.5 have moved from their rather short downtown tower to a new tower at the dreaded 1325' level, located about 6 mi. west from the former site. The new site may be possibly an old TV tower. Here at your SFM editor's QTH, the tower move resulted in an awful 20 to 25 db increase. Those Tulsa 3 now come in at a very steady 60 db's or slightly better all times. For car FM reception the Tulsa three-some has also improved quite a bit. Formerly they were always avoided due to the choppy behavior of their stereo signals. Now they compete well with the near steady, tall towered Oklahoma City counterparts. A recent new tall towered Tulsa rimshotter on 99.5 was already providing some competition to OKC, but those Tulsa 3 are coming in about 5 db's better. Depending on the quality of the car radio very good reception of these stations is often possible, with KMGL 104.1 of OKC, the highest towered of the OKC and Tulsa stations likely to be the only one capable of flawless car reception here.

Over in Tulsa, where I recently visited, the dreaded tower move has not killed DX but has meant the opposite. For instance in south east Tulsa it's as if an iron curtain has been lifted from car FM reception, like a breath a fresh air after years of confinement. Now fairly broad stretches of the FM band are free of strong overload, enabling out of town stations like the high towered ones from OKC about 95 mi. away to get through, when formerly they were hopelessly buried. They are on the noisy side, but it was surprising to hear KLTE 101.9 of OKC, which just recently moved to a 1000'+ coming in almost noise free much of the time. Of the OKC stations, only "FM-100, the CAT" was buried, of the high towered stations, that is. Never before could I here OKC from Tulsa. This reception on a very moist night, so may not represent routine conditions. The translator located on a downtown Tulsa building now has greater inward range. In other words, one can drive a mile or so closer to it before overloading interference ruins it. Downtown Tulsa has been a wasteland of FM overload and multipath for a long time. It still is, but without the same overwhelming intensity. Stations like that downtown translator that were formerly hopelessly buried now get through but tend to be too noisy for practical listening. The translator's primary station is still better to listen to. So it's probably more redundant than ever, considering that it is located within the mother station's primary circle. Folks with car radios that are supposed to be more immune to overloading probably can enjoy even more dramatically enhanced DX reception possibilities, like with the Pioneer Supertuners. (See 9/85 SFM for more info about the translator.)

Matt Sittle, 220 Brookfield Dr., Kingsport, TN 37663

6/10 Es
1900 unIDs Cuba, SS
2200-2359 Matamoros, Monterrey, Reynosa in. Harlingen, Brownsville, Corpus Christi, San Antonio, Abilene, San Angelo, (36 stations total)

6/11 Es
Most incredible day I've ever seen on FM. 136 stations logged, locals were buried for hours by Es, every channel was covered by 1 or stations.
0000 KBIL 92.9 and ksel 93.7 TX
1050-1100 Denton, Abilene, Wichita Falls in.
1100-1200 Texas Es intensifies. More Abilene, now Matamoros.
1200-1300 Harlingen-Brownsville, all stations in. Corpus Christi strong, caught few from cont...

Dallas and even a station from Coahuila, Mexico, XHNE 106.3 1300-1400 Definitely the best hour this day. Every Houston station in by 1315. San Antonio stations strong. By 1330 was getting wild catches. Had San Antonio, Austin, Corpus Christi, Monterrey, D-FW and Tyler at same time. Abilene in strongest by 1345 Dallas-Ft Worth took over by 1400.

1400-1500 Starting to weaken. Shreveport, Houston, and most of east Tx from Dallas and Houston east in Surprise logging of KMOR 92.9 in Scottsbluff, NE at 1417 That was the only Nebraska station I caught that day.

1500-1600 KTQQ 100.9 LA was only catch

1600-1700 FM gone, TV down to where it was watchable. South Dakota TV's in , but Corpus Christi came back late.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1700-1900 Great Northern E-skip, first logging of a Montana FM, 1713 KXXL-92.9 ND 1089, 1736 KQDY-94.5 ND 1179, etc.

1900-2000 Most Dallas FM's back in, also KAXY 96.1 OKC 837. TV was Omaha, though.

6/15 Es 1315 KXXL 92.9 ND 1089. very weak

6/18 tr 1000 Most Nashville stations in, also WKTG 93.9 KY 282 in.

Es 1200-1330 Houston, basically, also KZFM 95.5 in. Late had Shreveport 6/19 tr, Es 0830 WZZZ and WSM in from Nashville, Es was an unID 93.3 playing AC music from TX or NM. 6/26 tr, same as 18th. 6/30 tr 1100 Dayton, OH in.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 10/8 Es 1648 KNIN 92.9 TX Wichita Falls 936, 1745 KITY 92.9 TX San Antonio, r 1055, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 10/9 Es 2000 Frequent MUF's to 89 MHz, no ID's, 10/14 Es 2057 KZFM 95.5 TX Corpus Christi 1055, etc.

Equip. used: Sony STR-AV 340 tuner, General Electric 7-4875A clock radio, GM 1160 Quantum antenna at 34' AGL (1453' ASL). Hello to all DXers. October gave me E-skip more than I expected. The Sony tuner was of great aid in IDing some of the stations. I held onto a station until it totally faded out. Even if it was very weak, it kept it in. 8th and 14th openings were quite alike, but the 14th openings were quite alike, but the 14th opening was much stronger, and not much fading occurred on any of the stations. I got a perfect hourly ID out of KZFM, which can be heard on "THE ID TAPE". I just finished it and it's ready for you. It has TV and FM ID's and NOAA ID's as well. Hourly local ID's are plentiful and E-skip catches are abundant as well. Many ID's from recent trips to Western US and Georgia give a great variety of nationwide ID's. If you, like me, enjoy listening to ID's straight, this 90 minute tape is jam-packed to the walls with ID's of all kinds. This tape is yours for one of two ways: 1) for 2 tapes of 2 top-40 or urban contemporary stations in your area, and a copy of your local TV Guide, or 2) A check for \$3.50 (for a high quality tape and first class postage) An index for the tape will be included. My TV Guide trading offer still stands. I've gotten many requests already, and trading of FM stations stands, too. I get a large area, so if you've got a particular station you would like, be sure to tell me. And, don't forget the Bumper Sticker Trading Post. I'm waiting for your stickers. See Nov. VUD for the rules. I'll be waiting for your letter and tapes. Merry DXmas to all.

Keith Fugh, 227 Martin St., New Hope, AL 35760 CST/ CDT Equip: JCPenney 3921, 18 db amp, Archer 6 element at 30 ft. All new except when indicated.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 2/12 tr 1418 WJLC 107.9 MS Poplarville, ID 317, 2/13 tr 2315 WEVL 89.9 TN Memphis, ID 225, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 2/18 tr 1128 WFMF 102.5 LA Baton Rouge, ID 405, 1148 KNOE 101.9 LA Monroe, relog 382, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 2/19 tr 0006 WNOO 88.9 LA New Orleans, c, ID 388, 0047 WCNE 98.5 FL Panama City, b, ID 305, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 2/20 tr 0029 KTDY 99.9 LA Lafayette, r, ID 450, 0055 KWIC 107.9 TX Beaumont, ID Rock 108, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 2/21 tr 0000 WNOE 101.1 LA New Orleans, k, ID, 5/1 tr CDT 1058 WMPR 90.1 MS Jackson, ID 273, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/2 tr 0000 WKBB 100.9 MS West Point, big band, 0001 WRJH 92.7 MS Brandon, g, ID 266, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/6 tr 2200 WBFM 98.1 SC Seneca, g, s/off 211, 5/10 Es 1051 WHEB 100.3 NH Portsmouth, ads, ID1015, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1059 WUUU 102.5 NY Rome, ID 839, 1101 WSSH 99.5 MA Lowell, ads, calls 968, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1255 WKIS 90.9 MN Winnipeg, r, Kiss 97, 1258 KQHT 96.1 MN Crookston, r, ID 1000, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/11 Es 1502 KOCV 91.3 TX Odessa, rp, ID 935, 1628 KTSN 99.9 TX El Paso, b, ID 1160, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/17 Es 0923 WTHK 93.1 MI Iron Mountain, ID 790, 0929 WNKU 90.1 MI Marquette, c, ID 840, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1905 WBOG 88.3 NJ Newark, j, ID, 1932 WAYU 93.9 ME Lewiston, baseball, ID1095, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/21 Es 1011 CBD 91.3 NB Saint John, wx, nx 1300, 1017 CKBW2 93.1 NS Shelburn, mk, \$, ID 1300, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 5/25 Es 1210 WJLK 94.3 NJ Asbury Park, r, ID 735, 1215 WLNQ 92.1 NY Sag Harbor, ID 879, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1220 WQRC 99.9 MA Barnstable, ID 995, 1224 WBAB 102.3 NY Babylon, p, ID 810, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1231 WLKW 101.5 RI Providence, b, ID 940, 1232 WBBE 107.2 CT Westport, Wee Bee 108 830, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1234 WBLS 107.5 NY New York, ID 790, 1241 WNAS 94.7 MA Springfield, r, ID 900, etc.

Table with 3 columns: Time, Station, and Signal strength. Includes entries like 1247 WSRG 96.1 MA Worcester, ID 925, 1251 WOKQ 97.5 NH Dover, ID 1015, etc.

CONTINUED NEXT PAGE

7/16 Es
2100 KDCR 88.5 IA Sioux Center, ID 775
(state #42)
2205 KTIG 100.1 MN Pequot Lake, ID 940
7/18 tr
2259 WDCO 89.7 GA Cochran, s/off 228
2312 WETS 89.5 TN Johnson City, s/off 258
7/19 tr
1208 WHHK 39.7 SC Columbia, g, ID 307
Es
1842 KEBC 94.7 OK Oklahoma City, k, ID
1858 KACV 89.9 TX Amarillo, ID, FM-90",
plus one TX, NM relogs. f/out 2135 875
7/23 thru 7/23 out of town, missed es!
8/3 Es
1701 WBAU 90.3 NY Garden City, ID 790
1900 WEGU 97.1 ME Bangor, k, ID 1160
spotty opening, f/out 1930
8/4 Es
1649 XHFJ 106.9 NL Monterrey,
"Astereo Classique"
1717 KITM 105.5 TX Mission, EE ID, wx 940
1811 KZOR 94.1 NM Hobbs, r, ID 960
(many TX relogs and SS unID's, f/out 1850)
8/5 tr
1058 WLHQ 96.9 AL Enterprize, ID 210
Es
1621 WBRU 95.5 RI Providence, ID 950
1622 WJFK 94.9 MA West Yarmouth, ID 980
1624 CJLS 96.3 NS Barrington, ID
1632 WNGY 103.1 NY Newburgh, ID 825
1637 WIGY 105.9 ME Bath, r, ID 1080
1640 WHDQ 106.1 NH Claremont, ID 960
1648 WBLF 107.1 VT Bellows Falls, k, ID
1658 WBLM 107.5 ME Lewiston, rp, ID 1095
1659 WVP5 107.9 VT Burlington, c, ID 960
1780 WQCB 106.5 ME Brewer, k, ID 1155
(Over WSKZ Chatt. TN with the beam pointed
right at them!)
1705 WAFX 104.7 ME Belfast, r "New Fox"
1713 WMRV 105.7 NY Endicott, ID 759
1724 WLKZ 104.9 NH Wolfboro, k, ID 1015
1727 WGFN 99.5 NY Schenectady, 99-GFM 870
1737 WABK 104.3 ME Gardener, r, ID 1080
(over local WZYF!! The Zip was Zapped.)
1748 WRSB 102.7 PA Williamsport, ID 700
1755 WROU 103.7 NH Berlin, ID 1041
1807 WAVR 102.3 NY Waverly, ID 737
1838 NIOV 104.7 SD Sioux Falls, ID 355
1843 KRFW 99.9 ND Fargo, g, ID 1085
1859 KICW 107.7 IA Spencer, ID 760
1930 KILI 90.1 SD Forcupine, ID 1030
2037 KIKS 93.3 TX Killeen, r, ID 695
8/7 tr (WAHR 99.1 off)
2220 WBTP 99.3 MS Booneville, k, ID 127
2359 WHIC 99.1 OH Dayton, b, ID 370
8/8 tr (WAHR off)
0509 WJWQ 99.3 TN Jefferson City, r, ID 258
ms
0605 WXLV 99.3 TN Crossville, ID 124
8/10 ms (WAHR still off)
0059 WFTK 99.1 MI East Lansing, calls 565
0101 WAWZ 99.1 NJ Zarepath, nx, ID 730
8/11 tr
0104 WFAY 104.1 OH Portsmouth, k, ID 240
(WZYP at low power)
1100 WMLS 98.3 AL Sylacauga, k 98
8/12 ms
0911 WGER 102.5 MI Bay City, calls 640

8/16 Es
1040 KGCY 97.9 CO Pueblo, oldies, ID 1050
1053 KSL5 101.5 KS Liberal, k, ID 839
(and TX, NM relogs, f/out 1134)
8/21 Es
0801 JBC 91.1 Jamaica, "JBC Stereo" relog
0803 WBYN 90.5 FL Tampa, "Family Radio", ID
0805 WJIS 88.1 FL Bradenton, Joy 88, wx 540
0810 WAIL 95.5 FL Key West, r "Wail-95" 740
9/22 Es
1012 KOKE 95.5 TX Austin, ID 710
1249 KRAZ 100.7 WY Cheyenne, r, ID 1110
1259 KUNC 91.5 CO Greeley, ID 1080
1321 KLZY 92.5 WY Powell, ads, ID 1360
8/28 tr (WJDC off)
1350 WQID 93.7 MS Biloxi, ID 340
Es
1642 KROO 93.5 TX Breckenridge, KR-double 0
1707 KMTX 98.7 NM Maljamar, ID 990
8/29 Es
1505 KTEF 88.5 TX El Paso, ID relog 1160
1515 unID 88.1 "Radio VIP", EE, SS, b, XHRED?
8/30 Es relogs except KACU
0945 KGNZ 88.1 TX Abilene, ID 780
1005 KATX 97.3 TX Plainview, k, ID 870
1011 KTKM 99.9 NM Clovis, r, ID 950
1038 WACU 89.7 TX Abilene, bc, ID 780
9/20 gw
1000 WZMX 97.7 AL Russellville, r, new to air
10/8 Es
1759 WBYR 90.9 MA Boston, ID relog 980
1953 KQIZ 93.1 TX Amarillo, "Z-95" relog 875
2001 KVMG 95.3 TX Fearsall, live remote 820
2009 KNFM 92.3 TX Midland, k, ID 925
2022 XHRK 95.7 NL Monterrey, "3r" relog
2030 XHRF 94.7 COA Sattillo, city ID
2043 XHAAA 93.1 TA Reynosa, city ID relog
2049 KHOY 88.1 TX Larado, "K-hoy, Today's
radio for today's Larado" 895
10/9 Es
1906 KORQ 100.7 TX Abilene, r, ID 780
1908 KGEZ 99.9 TX Monahans, k, KG100 relog 960
1928 KBIM 94.9 NM Roswell, ads, ID 1022
1929 KLLL 96.3 TX Lubbock, k, ID, relog 880
10/14 tr
1239 WYNN 101.5 LA Baton Rouge, k, ID 405
1243 WGGZ 98.1 LA Baton Rouge, r, ID
1356 WYJD 90.9 AL Brewton, rc, Y99, \$, ID new
Es relog
2029 KSTE 93.9 TX Corpus Christi, ID 800
2101 KTSU 90.9 TX Houston, ID 620
10/19 gw (WQSB is local 105.1)
1156 WQSB 104.5 AL Albertville, weak, \$ 23
1156 WQSB 105.7 AL Albertville, strong, \$
About the two WQSB logs, they must have moved
to new tower on this day or other problems.
It's not in my rcvr, checked it out on my car
\$. 105.7 is weakly receivable in downtown
Huntsville at 40 mi. Problem seems to be
WAVU-AK 640kHz in Albertville. As long as
WAVU-AK is on air 104.5 & 105.7 signals are
present. Weak audio from WAVU heard on each
side of freq., with WQSB's audio in middle.
When WAVU off at sunset both 104.9 and 105.7
disappear. I hope this stops soon. Anyone
else had this type of problem?
This has been the most productive DX I've
had in one year since I began in 1983. Es on
7/5 strongest of the year. 1st Es heard in
Oct. 73.

#####



QSL CORNER

THOMAS J. YINGLING, JR.
221 PINEWOOD ROAD
BALTIMORE, MD 21222-2345



FM QSL'S

LA WCKW 92.3 Laplace, * P. O Drawer
"B", Garyville, LA zip 70051.
Unreadable name on qsl card in 2
weeks. (Ross)

GA WAAC 92.9 Valdosta, Box 1297,
zip 31601. Prepared card signed by
unreadable name in 2 weeks. (Ross)

WV WVPM 90.9 Morgantown, * 1900
Washington St. E., Suite 424,
Charleston, WV zip 25305. Prepared
card & letter back signed by
Francis Fisher in 1 month. (Ross)

WV WZMM 107.5 Wheeling, 98 16th
St., zip 26003. Letter from John A.
Rees. (Ross)

ON CKSY 95.1 Chatham, Box 100, zip
N7M 5K1. Letter from Carl Veroba in
1 month. (Ross)

CO KQAG 103.5 Denver, Box 85, zip
80236. Letter & card from Tom
Bender in 2 months. (Ross)

ON CBEE 88.1 Chatham, no address
given, prepared card & CBC sticker
from A. Clark in 2 weeks. (Ross)

WI WGNV 88.5 Milladore, P. O. Box
88, zip 54454-9998. Letter from Pat
VanZandt accusing me of being the
most distant listener. (Elving)

NC WVSP 90.9 Rocky Mount, P. O.
Box 2351, zip 27801. Nice
handwritten letter for that got
"Lost in the shuffle!" signed by
Don Mussell, Consulting Eng.
(Holbrook)

FL WGYL 93.5 Vero Beach, 1500 20th
St., no zip given. Handwritten qsl
on "Christmas at WGYL" post card!
signed by Dave Reuscher, CE WB4PCU.
(Holbrook)

FL WRGI 93.5 Naples, 950 Country
Rd., zip 33940. Handwritten qsl on
back of photo "You received us
during a live remote", etc., etc.
signed by Brian Lange, Manager.
(Holbrook)

NC WOFM 92.1 Chesapeake, P. O.
Box 15272, zip 23320. Letter from
Klaus D. Raab, General Manager.
(Holbrook)

AL WTSU 89.9 Troy, Troy State
University, zip 36082. Letter from
John Brunson, CE who says they also
received a report a man in
Provincetown, MA; could that be
Erne Cooper? (Holbrook)

AR KLRE 90.5 Little Rock, 7701
Scott Hamilton Dr., zip 72209.
Letter from Avis F. Moore,
Broadcast Asst. (Holbrook)

MO KWFC 89.1 Springfield, P. O.
Box 5027, zip 65801. Letter from W.
F. Askew, Manager. (Holbrook)

AR KASU 91.9 Jonesboro, State
University, zip 72467. Richard
Carvell, Station Manager send
program guides & letter says that
my reception occurred at the same
time their scanner was picking up
the NJ Highway Patrol! (Elving)

IN WVPE 88.1 Elkhart, 2424
California Rd., zip 46514. Letter
from Tim Eby, Station Manager for
my logging by aurora dx skip.
(Elving)

KS KVGB 104.3 Great Bend, P. O.
Box 609, zip 67530. Letter from
Randy Hooker, Program Director said
"That's quite a skip!" (Elving)

MN KHBL 103.9 Osakis, no address
given but zip 56360. Letter from
Dave McIver says call stands for
"Kept by his love" (Elving)

NE KZEN 100.3 Central City, P. O.
Box 101, zip 68826. Letter from
Gene McCoy, President, who says
there signal is send 33.5 miles via
dual stl to KBGT-TV 8 tower near
Genoa, NE. (Elving)

ND KJKJ 107.5 Grand Forks, P. O.
Box 1203, zip 58201. Letter from
Mike Anderson, Operations Director
for Joy-FM. (Elving)

TX KACU 89.7 Abilene, Abilene
Christian University, zip 76699.
Letter from Karen Stevens
Development Director. (Elving)

TX KDXR 104.3 Borger, P. O. Box
1478, zip 79008-1478. Letter from
Bill White, Operations Manager
mentions going to a 1000 foot tower
by fall when reception should be a
bit better! (Elving)

WI WUEC 89.7 Eau Claire.
University of Wisconsin, zip 54701.
Letter from Robrt L. Bailey,
Director says they operated by
remote control & it is not possible
to turn off the stereo generator
during monphonic programs. (Elving)

OH WONE 97.5 Akron. P. O. Box
1590, zip 44309-1590. Prepared card
& qsl card in 1 month from B.
Simms. (Ross)

OH WRJS 98.5 Oil City. P. O. Box
1127, zip 16301. Prepared card in 1
month from Bernard Staudt, CE.
(Ross)

NC WNAA 90.1 Greensboro. N.C. A. &
T, State University, Suite 200,
Price Hall, zip 27411. Letter from
Tony Welborne, GM in 1 month.
(Ross)

FL WJIS 88.1 Bradenton. P. O. Box
1640, zip 33506-1640. Letter from
Roger J. Roth, Dir. of Eng. in 8
weeks on letterhead of sister
station WCIE Lakeland, FL.
"atmospheric conditions provided
the reception of WJIS in several
areas of the country during that
week". (Nieman)
Also reported qsl'ed by Cathy
Busseu, Office Manager for Hank
Holbrook, but address different as
6455 Parkland Dr., Suite 110,
Sarasota, FL 34243 who says the
call sign stands for "With Joy In
Serving"

NY WTNV 93.5 Watertown. 134 Mullin
St., zip 13601. Letter from D. C.
Alexander, Pres. in 10 days
confirming my reception of T-93-FM.
(Nieman)

FL WPDS 93.3 Tampa. 801 Jackson
St., zip 33602. Note on fm
coverage-map, signed by Pat Sh?????
?. (Holbrook)

OH WELA 104.3 East Liverpool. Box
90, 236 West 6th St., zip 43920.
Letter from James A. Grimes, CE.
(Holbrook)

DE WOVU 101.7 Ocean View. Route 1,
Box 33, zip 19970. Letter from
James A. Hammond, General Manager.
(Holbrook)

PA WLTJ 92.9 Pittsburgh, 1051
Brinton Rd., zip 15221. Coverage-
map & verie message from Randy
Dietterich, CE. (Holbrook)

NY WRHU 88.7 Henslead, Hofstra
University, zip 11550. Letter from
Jeffrey C. Kraus, General Manger
for 470 watts reception! (Holbrook)

MI WNFA 88.3 Port Huron, Box 123,
zip 48060. Letter from Ed Czezada,
CE in 3 weeks. (Ross)

MI WHNN 96.1 Bay City, * 5196
State St., Saginaw, MI zip 48603.
Letter from Robert Friedle, CE in 2
months. (Ross)

NY WYRK 106.5 Buffalo, 500 Rand
Bldg., zip 14203. Letter from Ken
Johnson, Pgm. Dir. in 1 month.
(Ross)

NC WWOK 105.7 Columbia, * P. O.
Box 1418, Mags Head, NC 27959.
Letter & much promo material from
Dale H. Cook, CE. (Yingling)

TX KTKS 106.1 Dallas. Qsl card
signed by Mark V. Caguer (?) in 1
week with the wrong call sign on
card as KISS-106 FM (KISS-FM is
their jingle name). New call for
KIXX-FM. (Yingling)

Reporters: Robert S. Ross, VE3JFC
of London, ON; Bruce Elving of
Esko, MN; Hank Holbrook of Chevy
Chase, MD; Dave Nieman of Akron,
NY; & me, editor. A few reminders
to reporters to this column. Please
give all information you can. You
can type up your report the same
way I do this column, so it would
be easier for me. Please give the
freq. and the address. This is
because stations can change
ownership very often & the post
office may not forward your report
to the new address if the time for
forwarding as expired. I know how
it is to have your letter returned
undeliveable due to address change.
If the signature is hard to make
out, then say so. 73's... 70n

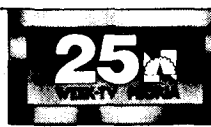
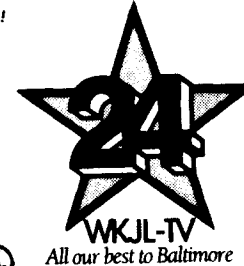


LOGO'S RUN

THOMAS J. YINGLING, JR.
221 PINWOOD ROAD
BALTIMORE, MD 21222-2345



WE'RE COMING ON STRONG!





VHF UTILITY DX



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

VHF UTILITY DX this month will continue the feature on public service frequencies with frequencies 37.72, 37.74, 37.76. I will continue this series unless I am otherwise notified. I have gotten very little response of late, so I can only assume that this series is acceptable. I would appreciate comment POSITIVE or NEGATIVE!!!

37.72



I have received lots of logos in the mail; so I guess my column has gone over with a bang. To make it easier for you to send in id logos, here are a few suggestions. If you collect tv guides when you are on vacation, and don't want to cut out the logo, then send in a good xerox copy of the page. Or then buy 2 copies of the same issue. Another ideal is to xerox copy your qsl letter & envelope & send it in. The station's logo maybe on the letterhead paper. Also check your local newspaper or cable guide for logos for you may just see one there. Also I have just subscribed to Broadcasting magazine which always has some id logo in it. I'm planning a special issue on skip channels 2-6 as soon as I get enough items for use.

Here's the list of logo's for this month: WJLA-7 Wash,DC / WNUV-54, WKJL-24, & WBAL-11 Baltimore, MD / WMDT-47 Salisbury, MD / KGMB-8, KHNL-13 & KITV-4 Honolulu, HI / WVUE-8 New Orleans, LA / WQWT-6 Omaha, NE / KTVQ-2 Billings, MT / KOVR-13 Stockton, CA / WNEP-16 Scranton, PA / WNOL-38 New Orleans, LA / KRTV-3 Great Falls, HI / KOLD-13 Tucson, AZ / WAGA-5 Atlanta, GA / KXLF-4 Butte, MT / KPAX-8 Missoula, MT / KZKC-62 Kansas City, MO / WGN0-26 New Orleans, LA / WPEC-12 West Palm Beach, FL / WOC-6 Davenport, IA / WXIN-59 Indianapolis, IN / WAKA-8 Selma, AL / KOLN-10 Lincoln, NE / KGIN-11 Grand Island, NE / WPTY-24 Memphis, TN / WTHR-13 Indianapolis, IN / KSDK-5 St. Louis, MO / WEEK-25 Peoria, IN / KHGH-7 Denver, CO / WPRI-12 Providence, RI / KSHO-26 Honolulu, HI / WUHQ-41 Battle Creek, MI / WFTS-28 Tampa, FL / WSN5-44 Chicago, IL / WOR-9 New York, NY / WLWT-5 Cincinnati, OH / KWML-7 Waterloo, IA / WEEK-25 Peoria, IN / WTEM-10 Albany, NY / WCCB-18 Charlotte, NC / WHAG-25 Hagerstown, MD <-page 2-> KPLC-7 Lake Charles, LA / WLVTV-23 Miami, FL / KPTM-42 Omaha, NE / KADN-15 Lafayette, LA / WFLX-29 West Palm Beach, FL / WDZL-39 Miami, FL / NTV-? possible CUBA or Nebraska ETV / KULR-8 Billings, MT / WTAF-29 Philadelphia, PA / KMEG-14 Sioux City, IA / WKBS-48 Philadelphia, PA now off air, now used in Altoona, PA ch.47 / WGEM-10 Quincy, IL / CKSH-9 Sherbrooke, PQ / CKTM-13 Three Rivers, PQ / WTLV-12 Jacksonville, FL / KHQA-7 Hannibal, MO / CHLT-7 Sherbrooke, PQ / WSOCTV-9 Charlotte, NC / WSVN-7 Miami, FL / LOGO'S RUN tv set with a Computer's picture of me last.

Thanks to the following for their logo's: Paul Gains, Rich Eddie, Mett Sittel, Robert Schweitzer, Steve West. 73's for now... Tom

KKC-306	Oklahoma Gas & Electric	AR	KKY-893	Ardmore	OK
KKJ-737	Fort Smith	AR	KZN-412	Bristow	OK
KWT-540	Ozark	AR	KKE-351	Chandler	OK
	Van Buren	AR	KKG-324	Drumright	OK
	Georgia Power Company	GA	KKC-335	Durant	OK
KIQ-675	Augusta	GA	KKC-309	Enid	OK
KUO-477	Augusta	GA	KKT-267	Guthrie	OK
WXA-951	Austell	GA	KKR-395	Healdton	OK
KIF-615	Claxton	GA	KRU-431	Konawa	OK
KIC-450	Evans	GA	KBC-218	Muskogee	OK
KIQ-784	Hinesville	GA	KKC-311	Muskogee	OK
KIC-458	Louisville	GA	KKL-261	Muskogee	OK
KIC-457	Rome	GA	KAP-396	Norman	OK
KUD-887	Rome	GA	KFL-436	Oklahoma City	OK
KIC-459	Statesboro	GA	KKC-310	Oklahoma City	OK
KID-404	Summerville	GA	KKL-794	Oklahoma City	OK
KIH-806	Swainsboro	GA	KKT-658	Oklahoma City	OK
KIC-461	Thompson	GA	KVJ-512	Oklahoma City	OK
KZJ-717	Villa Rica	GA	KKG-767	Pauls Valley	OK
	Page I Rural Water Dist	IA	KKB-842	Ponca City	OK
WSV-356	Shennandoah	IA	WXU-730	Red Rock	OK
	Jackson County Water Util	IN	CKK-485	Sapulpa	OK
KIX-862	Brownstown	IN	KKD-277	Sapulpa	OK
	New Bedford Gas/Edison Lt	MA	KKB-260	Seminole	OK
KGU-720	New Bedford	MA	KKC-306	Shawnee	OK
WOK-664	Plymouth	MA	KAZ-827	Sulphur	OK
	City of Detroit	MI	KUI-376	Tonkawa	OK
KJA-341	Detroit	MI	KZC-290	Watonga	OK
KGD-287	Detroit	MI	KFL-438	Wewoka	OK
KQC-337	Detroit	MI	KKC-334	Woodward	OK
WQD-286	Detroit	MI		The York Water Company	PA
KQE-632	Detroit	MI	KGE-577	York	PA
KQF-478	Detroit	MI	WQM-529	York	PA
KQF-479	Detroit	MI	WQM-530	York	PA
KGF-480	Detroit	MI		Houston Lighting & Power	TX
KQH-349	Detroit	MI	KET-591	Alvin	TX
KLL-373	Port Huron	MI	KKZ-542	Angleton	TX
	Freeport Mower Elec Co-op	MN	KKC-896	Baytown	TX
KAB-326	Albert Lea	MS	KKC-894	Bellaire	TX
	Mississippi Power & Light	MS	KJC-723	Channelview	TX
KKB-218	Clinton	MS	KKC-899	Freeport	TX
CKC-246	Greenville	MS	KKC-898	Galveston	TX
KTS-349	Jackson	MS	KKC-893	Houston	TX
KLN-397	Morton	MS	KKC-901	Houston	TX
WSY-458	Pearl	MS	KKD-348	Houston	TX
	Deptford TWP Muni Auth Ut	NJ	KKO-341	Houston	TX
KJZ-813	Deptford	NJ	KKQ-880	Houston	TX
	Orange & Rockland Cou Util	NY	WRH-303	Houston	TX
KEB-502	Greenville	NY	WSP-755	Houston	TX
KTY-910	Middletown	NY	KKR-611	Houston	TX
KEB-503	Spring Valley	NY	KSR-783	Humble	TX
	Oklahoma Gas & Electric	OK	KKA-548	Katy	TX
HUI-375	Alva	OK	KKA-546	Rosenburg	TX
KHD-281	Ardmore	OK	KJL-451	Seabrook	TX

METEOR SCATTER INSIGHTS

It's been a few years since the articles I did on meteor scatter had been published, and quite a few new members have joined the WTFDA since that time. Because of a lack of member input, I eventually dropped the METEOR SCATTER INSIGHTS column, which had appeared in a few later issues of the VUD. But lately, there had been more discussion of Meteor Scatter, making it possible to revive this column.

Scott M. Hood's letter of 10/19/86 raised two controversial issues. The other issue is to be found in the TELEVISION NEWS column, but his remarks on meteor scatter indicate a need to clarify earlier comments which I made, as well as a need to inform new members about meteor scatter.

Scott writes, "On this issue, I'm afraid we are on different corners. I have to strongly disagree in that I think it exists and that I believe there is a definite connection between meteor scatter and sporadic-E. For instance, on August 12, I had noticed frequent MS for several days. Then, at 1905, I was watching ch. 5 and noticed semi-strong offset suddenly appear. I switched around and chs. 2-5 were all loaded with CCI. Sure I had Es, I made a note of it in my log, and when I switched around again - less than 1 minute later - it was perfectly clear! No sign of offset anywhere! I think the opportune time is right now, when sporadic-E is off season (roughly October-March). I think the theory of meteor scatter simply being a short burst of Es is highly unlikely, as I have logged 2 units on VHF-hi at different times (chs 9 & 10)."

It is a proven fact that meteor scatter exists, and I do not question it at all, as is apparent by the number of articles I have written on the subject. What I do question, however, is the view that meteor scatter can induce an E-skip opening. Firstly, there is no correlation between meteor rates and E-skip. Meteor rates are at a minimum from January to June, and peak in August. E-skip peaks around June-July and dies in August. Nor is there unusual skip activity during heavy meteor showers. Secondly, meteor trails are at an angle to the earth's surface, while skip clouds are spread out in a plane level to the earth's surface. Nor can I imagine an ionized meteor trail having anywhere near as many ions as a skip cloud.

I think where a lot of people go wrong is assuming that all meteor bursts are the "ping" type, lasting no more than a fraction of a second. The article, "The Physics of Meteor Scatter," in the 3/82 VUD, brings out the different types of meteor trails found by

BILL FAHBER
336 ATLANTIC ST.
BRIDGETON, NJ 08302

researchers in the field. Overdense trails, which are opaque to radio waves, can reflect radio waves for as much as an hour. One WTFDA member logged a single burst for more than a half hour. And these bursts can reflect television signals clear on up into the upper VHF channels, a rarity for E-skip.

It is interesting to note that at the time and date Scott reported the E-skip, and at his QTH in Beverly, MA, the radiant of the Perseid meteor shower was only 16000' above the horizon at Azimuth 20°55'. If, as speculated in QST (5/74, p. 46-47) electrons in the ionized trail move more freely parallel to magnetic lines, then a perseid meteor trail at that time, being nearly perpendicular to the magnetic field at such a low angle above the horizon, could spread out into a sheet for a brief period, giving the illusion of an E-skip cloud. I wonder if other instances of MS induced E-skip could be connected with radiants to the north and near the horizon.

Scott continues, "I notice when MS occurs, it usually seems to occur in 2 gusts: a sudden weak appearance followed by a longer, much stronger burst. My theory is that the initial gust is the direct result of the meteor passing through the ionosphere, and the second Es like gust is the disturbed ions settling down." Not really. Another factor of ionized meteor trails is distortion in the upper atmosphere. The first burst you receive is from a single point source in the trail, near the head. As wind shears twist the trail, multiple reflections occur from several points along the trail. As these multiple reflections rapidly move in and out of phase with one another, you will notice the signals either cancelling each other out or increasing their strength, resulting in a received signal strength that would be much greater than the initial burst. You may even notice multiple images (ghosts) on the picture as this happens. In overdense trails, this wind shear would result in more than one brief "ping" within a two-second period from the same meteor trail.

Any new members interested in obtaining a copy of the two meteor scatter articles should feel free to write to me. The article in the 4/81 VUD deals with meteor scatter from the astronomical viewpoint: comparing sporadic with shower meteors, describing zenith hourly rates and observed hourly rates, and gives a calendar of the twenty largest meteor showers with data. The second article, in the 3/82 VUD, goes into the physics and explains the four types of meteor trails, why bursts are so short at times, and long at other times, even reflecting signals in the UHF band.

Future appearances of this column will depend on interest of WTFDA members as evidenced by their response.

TELEVISION NEWS

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

FORUM

Let's start off this month's column with a letter from Scott M. Head (Beverly MA), part of which appears in the METEOR SCATTER INSIGHTS column this month. "I read your comments about offset in a recent VUD, and I believe you are on my side. I asked — in the past about offset, and he insists 10 KHz = fewer, larger bars, and 20 KHz = the more plentiful, smaller bars. But I find it is just the opposite: 10 KHz = many small bars and 20 KHz = $\frac{1}{2}$ as many large bars." He gives examples of 10 kHz and 20 kHz interference patterns. "...all of the 'small bars' correspond to 10 KHz and the larger ones 20 KHz. In fact, every offset I've computed - except, of course, E-skip, which is obviously futile - confirms my belief. What creates doubt is the fact that I have seen other sources back up the 10 KHz large, 20 KHz small belief (e.g. A CATV handbook gives an offset formula as follows: number of lines equals the offset divided by the frame rate.... Thus, (my deduction) offset = $LxFR$, and if you try some examples, you find it proportionately matches —'s belief - although I can't make heads or tails on where the author came up with that formula!) To top it all off, I've seen both beliefs expressed by various reporters in the VUD."

Until I raised the issue a few years ago, everybody believed the CATV books and several other sources, including magazine articles, DX books, and articles in the VUD, which all stated that 20 KHz produced more lines. But with a little math and comparing CCI patterns as you have, I came to the truth: everybody else was wrong. There is a growing number of converts, however, who have seen the light at last.

To start, when you have two signals on very close frequencies, you have a combined signal whose strength fluctuates at a rate equal to the difference between the two frequencies. Take two stations on the same offset and only 5 Hz apart. The combined signal will rise and fall at a rate of 5 Hz. Your picture will blink on and off at the same rate. Now increase that difference to 60 Hz. Now the picture blinks on and off at a rate equal to picture rate of 60 Hz. Now you have half of the picture dark, and the other half light. Often, the television mistakes the dark part for the vertical blanking interval, so that the center of the picture will be light and the upper and lower part are dark. You now have one white bar across your screen. Now increase to 120 Hz and you have two white bars and two dark bars, one of which may be at the horizontal edges of your screen. Now you see how $O=LxFR$ applies. But that applies only when you have horizontal lines, or about 60 Hz to about 7 kHz. Beyond that, you have the picture blinking close to, or more often,

than the 15,734 Hz scan rate, which means that the formula never applies to 10 kHz and 20 kHz CCI. Now a different formula applies.

Let's go to two signals at 15,734 Hz apart. We now see a single set of perfectly vertical dark and light bars. If we increase that to 15,794 Hz, we see a single diagonal bar with a positive slope (that is, from left to right, it increases in height). This bar stretches from the bottom left of the picture to the top right. Go to 15,854 Hz and you see two sets of bars. The formula: one bar for every 60 Hz off the scan rate. 10 KHz CCI is 5734 Hz off the scan rate, which produces 5734/60, or about 96 lines. That's one diagonal bar, with a negative slope, for each 2.74 scanning lines. 20 kHz is 4266 Hz from the scan rate, which produces 4266/60, or 71 bars with a positive slope, or one set of bars for every 3.7 scan lines. Hence, 20 kHz produces fewer lines than 10 kHz, and they are sloped in a different direction. Robert Grant had noticed that 20 kHz CCI often causes a secondary pattern of broad, steep negatively sloped bars, not quite as evident. I suspect that may be from the fact that 5734/15734 is close to, and slightly higher than, a simple fraction of 1/4. Theoretically, CCI of 19,667.5 Hz would produce a secondary pattern of four perfectly vertical sets of bars. One caution, however. Since stations can stray as much as 1 KHz from their assigned offset, you can see, especially with stations that have cheap or old equipment, different sets of lines. 10 kHz CCI could go from 62 to 129 lines, and 20 kHz could go from 38 to 104 lines, but those are extreme cases, assuming both stations are 1 kHz off in opposite directions. But in nearly all cases, look for 96 or 71 sets of diagonal bars, and try to determine which way they are slanted.

"Do you know any of the more technical tidbits: 'offset key' ID-ing; what that false offset is on some syndicated programs...; why some offsets 'stand still,' some move rapidly in one direction, and others roll in both directions..."

Offset key identification is permitted for translators in unattended operation, using a device which automatically identifies the station at designated times, at least once an hour on the hour. Code of Federal Regulations, Title 47 (Telecommunications), section 74.750 (c)(7)(i) allow for a shift of 5 to 25 kHz in the aural and visual carrier frequencies, giving the call sign in international Morse Code at no greater than 20 wpm, or no less than 3.0 seconds for a standard call sign. As mentioned sometime before, I picked up one on W35AB in Philadelphia, but only because CCI from Richmond VA produced an audio tone, operating much like a BFO in a shortwave radio.

As for false offset on syndicated programs, I never heard of it. Could it be cable leakage or airplane reflections that you just haven't noticed on regular network programs? Different factors are at play in causing

moving CCI patterns. The closer the difference in frequencies to an even multiple of 30 kHz, the less it will move. The closer that difference is to an odd multiple, the faster it will move. As said before, a 60 Hz CCI pattern will cause one set of stationary bars. 61 Hz will create bars that drift upward once a second. 62 Hz will drift upward twice a second. Contrariwise, 59 Hz would drift down once a second. 10 kHz and 20 kHz CCI are more stationary if they are a multiple of 60Hz also, but the closer the actual difference in frequency gets to an odd numbered multiple of 30 Hz, the less defined they become. As for CCI patterns that roll in either direction, and for some that change rates, that is the result of slight drifts in the carrier frequency of one or both of the stations. The same effect is seen with airplane reflections, where doppler shift comes into play. As the plane approaches, the reflected signal is at a higher frequency than the direct signal, but the signal being reflected is decreasing in frequency. As the plane passes by and is traveling away, the reflected signal is lower than the direct signal. At its closest approach to a point between you and the transmitter, the direct and reflected frequencies are the same. Thus you will see, on VHF, a rapidly fluttering picture, with the fluttering slowing down to a stop when the reflected signal is the strongest, then increasing in rate as you see the reflected signal fading. On UHF you would probably see lines going down, then up, then fewer lines down, then up, until there is only one line down, then up, then a flutter, then the pattern is reversed.

"Finally on the subject of offset (and this is what rekindled my curiosity), do you know what the other Canadian offset is? Over the summer I logged an UNID-2 via E-skip that was 30-40 KHz - WGBH with other Canadians on ch. 3 & 6 (normal offset), and in July I thought WBAL's offset was 'off'...but later found Halifax all over FM (I assume I had CBHT3)."

There isn't really another Canadian offset. But lower class Canadian stations (as mentioned recently in this column), as well as LPTVs and translators in the United States do not operate on an assigned channel from the Canadian Allotment Plan or the American Table of Channel Assignments. In the United States translators operating with over 100 watts ~~XXXXXX~~ must remain within .002% of their frequency. That means a ch. 69 translator can drift from its assigned frequency by as much as 16 kHz. A ch. 14 translator can drift 9.4 kHz. Weaker translators can drift 10 times those figures. VHF translators, being no greater than 100 watts, can drift 11 kHz on ch. 2 and 42 kHz on ch. 13. One odd thing, however, is that CBHT-3 (Yarmouth, N.S.) and WBAL (New York) should be 20 kHz apart. I suspect that some American satellite stations, and maybe some of the Canadian repeaters, while operating on an assigned channel, may not be bound to adhere to their assigned offset if they are using intermodulation to convert the received signal's channel to the transmitter channel.

The last time I saw WDPB (ch. 64, Seaford DE) being interfered by another ch. 64, the CCI pattern was not from standard offsets. WDPB is a satellite of WHYI-12, Wilmington.

Ken Onychuk (Oak Lawn IL) writes, "In Fri. 10/24 Tribune (Chicago) there's a small piece that said Home Shopping Network has entered into a definite contract to buy WPRW-ch 60-Aurora/Chicago and turn it into a home shopping format station. Ch. 60's current signal will then move to ch. 50, the licensed to Gary, Ind. about Jan. 1987. Both stations will beam from Chicago Sears Tower. Still there is the question of 'What happened to the Ch. 56 CP (WDAL) granted in 1981, to Gary, Ind?' WDAL is changing to ch. 50, according to a recent MP.

From Nate Ely (Madison WI): "WTLJ-54 in Muskegon MI was seen running a promo tape and testing their 5 million watt xmr this evening. (10/26/86 -wbr) They will be religious programming. Address is: TV-54, P.O. Box 5403, Muskegon, MI, 49445."

I left off last month partway through a letter from John Adams (Seaside OR), ironically on the subject of KTGF-TV, ch. 16 in Great Falls, MT. The 10/15/86 SRDS began listing the station, and says it is an NBC affiliate after all, throwing my logic out the window. That would make KRTV, ch. 3, a CBS affiliate only. Also, KFBB-TV, ch. 5, would no longer be carrying CBS and NBC rejects, making it strictly ABC. John continues, "Ch. 4: KDUH-TV Scottsbluff NE is ABC (matches primary station KOTA-3, Rapid City SD)" SRDS agrees. Still on ch. 4, John makes the correction that the primary station for KPRY-TV, Pierre, is KSPY-13, not KSPY-3.

Let me remind the readers that these are corrections on the ch. 2-6 list in the 5/86 VUD. "Ch. 5: KREX-TV, Grand Junction, CO, is CBS only. The area is served by KONG-4, Denver translators." SRDS still has CBS, NBC for KREX, as well as KREY and KREZ. Again, remember that the presence of a group of translators in a certain area does not preclude the possibility of a network affiliate of the same network as the primary station in the same area. "KXGN-TV, Glendive MT is CBS only. The area has KUMV-8, Williston ND translator." (SRDS has it as CBS, but it does include some NBC programs on a per program basis. That means that any programs dropped or pre-empted by the local NBC can be picked up by KXGN. "KFBB-TV, Great Falls, MT is...ABC only."

As mentioned earlier, "KPYR-TV Bismarck ND is NBC only. It has been so since KBY-17 came on the air." (SRDS checks out; KBY-17 is ABC) "KOB1, Medford OR is NBC only. It has been so since KDRV-12 came on the air." (SRDS checks out; KDRV-12 is ABC) "KYCU-TV, Cheyenne WY is CBS only. There are two UHF construction permits there, possible future network affiliates. (SRDS has KYCU, as with KTYS in Sterling CO, as CBS primarily, but carrying certain NBC programs; see last month's VUD) "Ch. 6: KVIQ, Eureka, CA, is now CBS only." (SRDS did not give any information on the station listings about network, but lists of network affiliates included KVIQ in both the ABC and CBS lists. Can anybody give

more information on the Eureka situation?) "KREZ-TV, Durango CO is CBS only. The area is served by KOB-4, Albuquerque NM/KOBF-12 Farmington NM translators." (Again, as with KREX and KREY, SRDS has them as CBS and NBC) "June VUD, pg. 23, col. 1: Under 'Construction Permits granted,' there are two CPs listed for Sebring, FL, one on ch. 60 and one on ch. 69, both with the same ERPs and HAATs, and both to Focus Broadcast Communications Inc. Since ch. 60 is mentioned under 'Applications Dismissed,' I assume that that is the correct channel." That is correct. "Under 'Construction Permits Cancelled,' I have no calls listed for ch. 18, Salina, KS. I have the KYE calls listed for the CP on ch. 64 in Salina." (I can't find any record of any ch. 64 construction permit, nor even a ch. 64 channel assignment, in Salina KS.) "June-July VUD: In reference to the applications for ch. 40, Bluefield, WV, I have a CP listed for ch. 40 in Bluefield, VA (WRJK). Was this CP cancelled or what?" (Probably was, though I hadn't seen any official report on it. The application is over three years old, never on the air, was deleted on the data base from Larry Fuss as far back as 12/85, and new applications for the channel began pouring in in April-May, 1986.) "As you can see, I've been trying to update my 1981 TV Station Guide as much as possible. I have several gaps in my information, too numerous to get into here. I am really looking forward to a new TV Station Guide. July VUD, pg. 32, Col. 1: 'K78AH now has PBS on,' would that be KSPS-7, Spokane WA?" (I don't know.) "Pg. 33, col. 2: I believe the PTL network now originates from some place besides WDLI-17, Canton OH. On their 'Spring Praise-a-thon,' Trinity Broadcasting (I get them on local cable) mentioned that they now own WDLI. To add to the confusion, TBN has a nightly program called 'Praise the Lord' which they consider their flagship program."

"K61CL (or whatever their call is) may very well be in Camas, WA. It is very weak in Vancouver and the north side of Portland, but is stronger in the area between Portland and Gresham (east side, closer to Camas). They definitely ID as PTL. The Portland Oregonian and Vancouver Columbian list PTL, but as a cable service; no mention of ch. 61."

"September VUD, pg. 31, col. 1: in the sports list under the Oakland A's: KASK-48 is in Las Cruces, NM, not NV. Under the Pittsburgh Pirates: in reference to 'TV-65, Harrisburg, PA,' in the list of translator grants in the March 1985 VUD, pg. 5, there is listed a W65AV in Harrisburg."

"In area station news, both KPDX-49, Vancouver, WA and KSTW-11, Tacoma, WA now operate 24 hours a day most days.... KGW-8, Portland, OR airs the last hour of 'Today' live at 5-6 AM Pacific Time, in addition to the full program from 7-9 AM. Do any other west coast stations do this?"

"The Neah-kah-nie Mountain (Rockaway and vicinity) translators (K70CV, K72DO, K74BO, K77BG, K80BL) are now on lower UHF channels. ... Do you know what the new channels and call signs are?" No. I haven't been keeping

any updates on the LPTV/translator list since the 1984 list was published. All I do is publish whatever WTPDA members report. "Oregon Public Broadcasting has two new translators in eastern Oregon: K68CB, John Day and ch. 36, Burns. They are running a new series of ID slides. Local translator K62BF, Seaside (still off) is not mentioned. Independently-owned translators relaying OFB aren't mentioned anymore either. Also, their September program guide doesn't list their translators as they have done in the past."

"CKVU, Vancouver, BC is still on ch. 21 according to the Western Washington TV Guide." (Letter was dated 9/15 Letter from John, dated 10/7 and reported last month, mentioned the change to ch. 10, which probably took place in late September.)

"Finally, some questions maybe you or anybody else can answer. Are cable TV companies still required to 'black-out' distant stations when they air programs one of the local stations have the rights to? When I lived in upstate New York in the mid-70's this was quite a controversial issue. However, they never seemed to 'black-out' religious programs on distant stations, even when a local station aired the program at the same time. Are or were religious programs exempted from this rule, and if so, why?" I don't know to what extent cable companies are required to black out programs, but there is a big difference between syndicated programs and religious programs. The broadcast station buys the rights to syndicated programs, and the money invested is eventually returned by the sponsors, whose commercials are aired during the program. In religious programs, as well as your home marketing, auction, get-rich-quick, and other programs that have no commercials, the producer of the program is actually the sponsor, and the station isn't buying rights to be the sole broadcaster of the program. It is merely selling air time to a sponsor who pays to air whatever program he wishes, as long as it doesn't get the station into trouble.

"How come many Canadian (and some U.S.) cable systems put local VHF stations on different channels?" I don't know. Can anybody answer that?

"Are there or were there any 'must-carry' rules in Canada?" I got a large amount of material from Dave Sinclair last month, which I haven't yet thoroughly studied, but much of it deals with the CRTC's revised Cable TV rules which went into effect August 1, 1986. Not much has changed in the area of required carriage in the changes. It's not exactly a "must-carry" list, but it's a list of priorities that must be met according to the cable system's capacities. That priority is: (1) All local CBC owned & operated stations, if any; (2) programming of that province's educational authority, such as TVOntario; (3) all other local television stations; (4) a CBC owned & operated station covering a Grade B signal or greater to the cable's headend, if there is no local station covered in the first priority; (5) all other stations covering the headend within their Grade B contour, if not

affiliated with a network already represented in priority three; (6) a CBC owned & operated station that can't reach the headend with a Grade B signal, but can be picked up by microwave relay or Anik satellite, unless a CBC station is already included in priority one or four; (7) a community channel for community programming, unless the cable system is in a remote community, in which case such a channel is still encouraged; (8) the same as priority six, but in a different official language (that is, either French or English); and (9) any other distant stations that aren't of a network already represented by CBC or a priority three or five station.

"Some terms I've seen in the TV-DX columns: What do VAFI and TASO mean? (in reference to signal strength)" They are methods of defining signal strength and clarity. VAFI stands for Video, Audio, Fading and Interference. See the chart at the top of the next page. Quoting from p. 7 of the 4/74 VUD: "VAFI is a system for detailed reporting of signal quality in a minimum of space. A typical DX column VAFI report would be similar to the following: 4334N540. The first four numbers read directly off the chart.... 'N' indicates the station is a new logging. 'R' for relog and 'T' for tentative are alternatives. The last numbers indicate mileage from DXer to DX station." TASO stands for Television Allocation Study (or Systems) Organization, which developed a method for defining picture quality. I have yet to see their definitions of picture quality.

"What is a Phillips test pattern?" Beats me! I hope somebody can answer that one. Send in a picture of one if possible.

"The translator guide lists 4 translators (W69AZ, Mobile, AL; K550P, Reno, NV; W69AZ, Charleston, SC; and W43AE, Knoxville, TN) as carrying WRBV-65, Vineland, NJ...via satellite. Do you know the current status of these translators...? Only that W69AU is supposed to be rebroadcasting WPAN-53 in Fort Walton Beach. WRBV was supposed to be the flagship station for Wometco Home Theatre's network of STV translators. That was before the days of LPTV. Since LPTV regulations were still under consideration at the time, the FCC was granting certain translator construction permits with Low Power features, which meant that they could originate programming, rebroadcast satellite signals, and operate at higher powers than normal translators. The first LPTV stations to go on the air were really translators with low power features.

"Finally, is the 1985 Translator/LPTV list advertised in recent VUDs an update of the 1984 list or what?" I tried to make this clear in earlier issues. There was no update publication. I published update information in two subsequent issues of the VUD, and corrections and changes sent to me by WTFDA members as I receive them, but that's it. I believe it was the decision of the Board of Directors, who felt that the data in the 1984 list was still sufficiently current, to advertise it as a 1985 list. The 1984 list was a one-shot deal that took more time than I thought. If only I had my computer at the

time! Updating that list and making corrections on a regular basis would have been very easy.

I'm not done with John quite yet. He sent a few articles. From the 4/9/86 Portland Oregonian, "The Oregon Court of Appeals affirmed a Land Use Board of Appeals decision Monday, which held that Greater Portland Broadcasting Corp. could build its transmitting facility - including an 1,100-foot tower - on a parcel off Miller Road in Northwest Portland."

"Station operation on assigned local channel 24 could begin by February 1987." The call letters are KTDZ-TV. "Monday's court decision involved an appeal to an original building permit for the tower issued by the Multnomah County Commission in February 1984. The permit followed the first test of a 1981 county transmission tower law which said that where practical, new transmission systems should be added to existing signal towers. Columbia River Television Ltd., owner of UHF Channel 49 (KPDX -wbf), argued that Channel 24 should be made to attach to Columbia River's Channel 49 transmission tower, and pay rent to Channel 49's owners. But [KTDZ] argued successfully that the lower tower position to be assigned to the new station would have reduced its potential transmission capability by as much as 25 percent."

The 4/29/86 Portland Oregonian reported two new LPTV grants in that area: one to Mike Mendoza for Portland, which will have religious programming, and another to Family Television of Coos Bay, for Coos Bay. The article adds, "Low-power stations are designed to bring local television service to small towns or specific neighborhoods in large cities." Such is not always the case.

From Harry Hayes (Wilkes-Barre, PA): WDAU-22 Scranton, PA officially switched towers right on the 11 o'clock news on October the 8th. Switch occurred at 11:01 PM. Channel 22 went to snow all for but a half second to make the switch. It was really just luck that I managed to witness the event.... I am about two or three miles of Penobscot and within easy eyeshot of the towers from my home. My picture...went from very good to ghostly until I turned the antenna to Penobscot.... Believe it or not the move closer to me greatly improved my overload problem. Even when I aim right at the towers I receive very little overload, quite a bit different from when I used to aim at the 22 tower when it was nine miles away. The channel 65,22 translator station in Penobscot for Mountain-top PA stayed on the air about a day after the switch. This is now off. Glenn Jacobs in Moscow PA, Wayne County has said that his neighbors have a very tough time receiving 22 now; not surprising. Also, Glenn has a much easier time DXing around this channel now. Call change WYOU went into effect 10/9 at 12:01 A.M." Not a whole lot of change here in Bridgeton, but one strange thing I noticed during the first three weeks since the change: its CCI pattern with W1PT in Annapolis MD was definitely NCT 20 kHz. It had several steeply sloped bars, much like I

VAFI CODE CHART

GRADE	VIDEO	AUDIO	FADING	INTERFERENCE
0	No signal	No signal	Auroral flutter	Loss of signal
1	Just detectable	Just detectable	Deep to fast	Extreme
2	Heavy snow	Poor	Slow deep	Heavy
3	Moderate snow	Fair	Moderate	Moderate
4	Light snow	Good	Light	Light
5	Snow free	Excellent	None	None

would see from two translators or a translator and a broadcast station. The CCI pattern went back to normal around the beginning of November.

Ed Frye (Los Angeles CA) writes, "Driving along Sunset Boulevard past my office here in Los Angeles was a Ford Econoline Van, neatly lettered 'N9EUD - Amateur Television'. The truck appeared to be outfitted as a mobile unit: atop the vehicle was an end-mounted yagi that resembled a professional solid-bar UHF narrowband antenna. Any thoughts on this?" Yeah! I didn't know Ford was still making Econolines. Some club members have been DXing amateur television, and I think one of the letters to follow talks about it. Ed sent a few articles that appeared in various issues of Variety magazine about the SIN stations. The SIN-TV network is getting out of the news business, which will be taken over by Orbital Communications Enterprises, which is being created by Televisa, SIN's parent company. Its initials, in Spanish, are ECO. It will sell its newscasts to other networks also. As of next year, SIN will no longer exist. It will become Univision, and the American division will be Univision.

Matt Sittel (Kingsport TN) writes, "...the weekly TV magazine of the Briston Herald-Courier...list WCHS as CBS and WOWK as ABC, yet WCHS shows ABC programs only, and WOWK shows CBS programs only. They have changed networks, obviously...." WCHS-TV is ch. 8, Charleston WV; WOWK-TV is ch. 13 in Huntington, WV. "WTVI-42's new signal comes in nicely up here. It's as strong as WSOC-9, but neither are as strong as the almost local-like signal of WBTV-3." "Is there a new trend on PBS? Recently I saw KENW running a news program at 1900 on weeknights. I thought this was just one station. Then I saw at 1930 KOET doing the same thing.... Do all PBS's except us do this, or is it done only in the west where signals don't always reach certain areas, or is it a new trend spreading throughout America?" New Jersey Network has had a news program for years, in the early evening then repeated late at night. I guess other stations are operating their own news services. New Jersey officials have complained for years that Philadelphia and New York stations virtually ignored New Jersey, and New Jersey Network has been attempting to fill in that gap.

W.R. McIntosh (Granada Hills CA) sent in several articles from the Los Angeles Times. The 9/24/86 Times reports that KHS, ch. 46 in Ontario, CA, is being sold to Home Shopping Network. The article describes the history of the station. "It first went on the air as a Spanish-language station for six

months in the mid-1970s. In April, 1984, under its current licensee, HBI Acquisition Corp., the station started broadcasting family, Catholic and other religious programming. Last March, it started offering more commercial programming in addition to religious programming." "HBI Acquisition is a joint venture of DeRance Inc., a Catholic foundation based in Milwaukee, which owns 60%, and Santa Fe Communications, a closely allied philanthropic organization that owns 40%. The sale of KHS apparently marks the end of DeRance's efforts to start a conservative Catholic television network in the United States." "(Judy) Ludin, the Home Shopping Network spokeswoman, said FCC guidelines require Home Shopping Network to intersperse some community-oriented programming with its shopping shows." "Last Week, Fox Television Stations and Lorimar-Telepictures jumped aboard the TV merchandising bandwagon, announcing a joint venture called ValueTelevision (sic) to compete with Home Shopping Network and a Financial News Network's TelShop. And in June, Warner Communications said it would join with COMB, an off-price merchandiser, and Denver-based Tele-Communications, the nation's largest cable network firm, in a home merchandising venture." "Sounds like Fox Network has next year's fall programming schedule all lined up already. Maybe they can put Joan Rivers up for sale, then syndicate her program on the BBC.

From the 8/19/86 Times: "The Nustar Television Network, a shoestrung outfit in Tujunga that started broadcasting on Friday the 13th of June, appears likely to provide the superstitious with ammunition. Nustar once vowed to become the nation's fourth network, with round-the-clock satellite broadcasting aimed at UHF stations and homeowners with dish antennas. It said it would broadcast continuously, with more and more original programming as time went by. But Nustar is now broadcasting just four hours a day, from 5 p.m. to 9 p.m., Monday through Friday. And there is no original programming, the company says. It just airs old movies." "The network also had some technical problems that interrupted programming, and it ran afoul of the (FCC)...for broadcasting without a license...because Nustar's rented 'uplink,' a transmitter that fires its signal at a satellite, was unlicensed."

Time for a trivia question. What network beat out Nustar, Home Shopping Network, Fox and all the others to become the fourth commercial television network? Everybody knows it's PBS!

According to the 8/16/86 Times, Rupert Murdoch, owner of Fox Broadcasting Co., finally

managed to strike a deal with CBN to purchase WJNE, ch. 25 in Boston for \$28 million, making the station Fox's outlet in the Boston area. But in order to purchase the station, But it means he will have to sell the Boston Herald, which he purchased in 1983, unless the FCC grants him special privilege. As part of the deal, WJNE will continue to air The 700 Club twice daily, and CBN will gain the right to air 36 Fox movies.

From the 8/8/86 Los Angeles Times: "In a move expected to have a major impact on the nation's television industry, the Federal Communications Commission Thursday required most U.S. cable-TV companies to continue carrying some local over-the-air TV stations and non-commercial TV signals for the next five years. The FCC ruling, expected to take effect later this year, also will require cable systems to make special switches available to the nation's 40 million cable subscribers, enabling them to select between cable and conventional television broadcasts. The new FCC ruling, approved by a 5 - 0 vote, includes a modified version of a compromise worked out earlier this year by the cable industry and television broadcasters. 'In many respects, the cable subscribers of the United States have become accustomed to the absence of all other means of accessing satellite and local broadcast signals once cable is installed in their homes,' said James C. McKinney, head of the FCC's Mass Media Bureau. 'We believe it is important to correct the perception of consumers as to the actual availability of a lot of non-cable programming in the video marketplace.' Under the new rule, which expires in five years, cable systems with fewer than 20 channels will not be required to carry any local stations. Cable operators with 21 to 27 channels will be required to devote seven channels to local stations while cable systems with more than 27 channels must set aside 25% of their total capacity for local stations. In addition, the rule also allows new TV stations to be included for a year without having to meet the current requirements for a 2% audience share." "The FCC rule also will require that all cable systems, regardless of size, carry one non-commercial educational stations, a category that includes public broadcasting as well as religious broadcasters that use non-commercial TV stations. Cable systems with more than 54 channels will be required to carry at least two non-commercial stations."

Begathons take on a new look, according to the 8/16 Times. Public Television's on-air appeals for money are as old as the system itself. Yet they remain a sore point with many viewers and, as another fund-raising drive gets under way today, many stations are striving anew to find a better way. At one extreme, WNET in New York City (sic) and 14 smaller stations have decided to forgo the nine-day August pledge festival, hoping to raise the money through other means. At the other extreme, many stations are taking a lesson from KCET in Los Angeles and trying to make their on-air campaigns more polished and less strident." "Most of the country's

314 public television stations traditionally devote a portion of air time during August, December and March to pledge drives soliciting contributions from viewers, especially those who haven't donated before." "Other stations have experimented with 'pledge-free weeks' in the past, with mixed results. Miami's WPBT, for example, canceled all three on-air pledge drives last year and is continuing the policy this year. But Boston's WGBH tried doing without and then went back to them, citing the drop in new members as a primary reason. It is that concern that has kept KCET from trying the no-pledge experiment. 'The bottom line is that pledge is the best way to get new members,' said Bonnie Winings, Channel 28 director of subscriber development." KCET is ch. 28. "What she did in 1984 to try to appease criticism of the pledge drives was to take a more professional marketing approach to the campaign - producing the pledge breaks as mini-programs with scripts, a sense of pacing and a respect for the viewer's intelligence. The idea, she said, was to give the breaks the tone and quality of the programs they were interrupting." The article reports statistics of how pledges greatly increased, while the number of complaints about the pledge drives has decreased. "That's why PBS approached KCET to share some of its expertise with other stations. The result was the creation of a package of print and videotape materials that can be used to make pledge breaks more effective." "PBS officials said at least 20 stations around the country will be using all or part of the KCET package...."

Two articles from the 9/30 and 10/9 Times report on a program aired over PBS outlet KCSM (Ch. 60, San Mateo CA) called "Stock Market Today," in which guests paid \$30 to give stock market advice on the air and advertise their own services. Some guests have represented firms that have since gone out of business, bankrupt, or have owners who have gone to prison because of their financial dealings. Although the station has been on the air for six years, it went off the air the day after the first article appeared.

The 8/29 Times reports, "Although nearly 700 programs are shown on Mexican television, only nine are of any educational value, according to a newly released private study. Claudia Valero, a sociologist at the National University, said Mexican television 'imitates the model of commercial American broadcasting,' aiding multinational firms to profit from 'commercial bombardment.' The study...also said the lack of educational programming is detrimental to the country, and fails to fill the needs of the Mexican people.' The lion's share of Mexican television programming is controlled by a privately run network, which depends largely on translations of U.S. situation comedies." Now if they can get some people to dub the audio into Spanish with a British accent, the whole problem could be solved.

That article was obviously talking about the Spanish International Network, which was blasted in an article in the 8/24/86 Times.

"We're the only game in town!" is the way SIN programming director Rosita Peru assessed the situation in a Variety trade paper article last year. And while SIN has made some progress...the programming remains banal." "In a poll of the Los Angeles Latino community earlier this year... newly arrived Latinos prefer to watch American TV - despite the language difference - instead of SIN's offerings." "Yet children's educational programming remains almost nonexistent." "Since adultery and incest played major roles seven days a week, it seemed like it was more than a coincidence that during the commercial breaks, a local abortion clinic offered quick service and monthly payments. At present, 'Chiquilladas' is the only SIN program that is geared to children and adults, but it is only offered on Saturday afternoons." "SIN's best program is its national newscast... despite its occasional Cuban-American anti-communist bias.... (what's wrong with that? -wbf) But this bias is a mere peccadillo when compared to other 2 1/2 hours of weekday news programs broadcast by SIN... (which) have been guilty of censoring news or only presenting the 'official' PRI (...Mesico's ruling party) version of events. To make matters worse, there is no weekend SIN... news program." "Another facet of SIN's programming that seems peculiar is the daily 'Jimmy Swaggart Ministry,' whose Christian fundamentalism must be anathema to predominantly Catholic Latinos. When asked why Swaggart was on its schedule, SIN officials retorted: 'Because we buy it.'"

While on SIN, here's another article about the sale of the SICC stations from the 9/21 Los Angeles Times. "The forced sale of KMEV-TV in Los Angeles and nine other Spanish International Communications Corp. (SICC) TV stations appears unlikely to break the grip of a Mexico media magnate over this country's largest Spanish-language broadcasting chain. Nor is it likely to foster any substantial changes in what its 10 million American viewers will see on the air. It appears that Emilio Azcarraga Milmo, his Mexican media monopoly Televisa and his Spanish International Network (SIN) will continue reaping millions in profits from the stations after legally transferring them to American ownership." "Azcarraga and his close associates are making use of a U.S. law that restricts foreign ownership of broadcast stations while imposing no limits on holdings in companies that supply programs. They are poised to maintain substantial control over the programming and advertising after selling them for a record \$301 million to Hallmark Cards Corp. and First Capital Corp. of Chicago."

"...to Tirso Del Junco, a Los Angeles surgeon who led a group of Latinos in a \$260 million bid rejected by SICC officials because of unsatisfactory financing, the sale of the SICC stations has changed little. 'SIN wants to have a monopoly and control things,' said Del Junco, who represents one of ten bidders for the stations. 'SICC and SIN is the same management,' he believes." "But Larry Dam, an SIN attorney and spokes-

man, called Del Junco's allegations 'outrageous.' '(SIN) has no monopoly,' Dam said. If SIN has become the nation's biggest supplier of Spanish-language programming, he said, it is because other stations choose to buy the network's shows. 'What we are talking about is an open market, simple supply and demand.'" One more interesting piece of information from the article: "The major networks - ABC, CBS and NBC - pay local stations and not, as in the case of SIN, the reverse. Typically, major networks pay local stations between 15% and 17% of their commercial rate in exchange for the stations airing network programs and commercials. Networks do not receive a share of advertising revenues sold by the stations. By contrast, ...SIN asked for two free minutes of time for every hour of programming and 37.5% of net national, network and local advertising revenues as a programming fee for each hour or half-hour network programming."

From the 9/16/86 Los Angeles Times: "The (FCC), in an abrupt about-face, has told a federal court that its policy of granting preferences to minorities and women who seek television and radio licenses is unconstitutional and should be eliminated. The FCC has granted such preferences since the 1970s, prompting a growing number of applicants for lucrative broadcast licenses to try to bolster their chances by recruiting minorities and women as owners. The program has been controversial because some of the beneficiaries have been wealthy minority investors."

Two letters, and other information, from Ed Siroy (Westmont IL). One subject goes back to Ken Onyschuk's letter five pages back. Both members are reporting something that sounds odd to me. My understanding is that of the two channel 60s in the Chicago area (WPWR in Aurora and WBBS in West Chicago), WBBS folded up and WPWR took over. Meanwhile in Indiana, the educational reservation was changed from St. John IN (ch. 50) to Gary IN (ch. 56), and along with that change WDAI's commercial construction permit was modified from 56 to 50, while WCAE in St. John, temporarily off the air, would change from 50 to 56. Ken and Ed both report that WPWR is going to channel 50 in Gary. Ed gives background: "The FCC assigned ch 20-26-32-38-44 to Chicago and 50-56-62 (in series) to Gary-Hammond. 60-66 were assigned to peripheral Illinois cities Aurora and Joliet. After all Chicago channels were assigned, other groups applied for 50-56 and 60-66 specifying Chicago loop xmtr locations. The FCC saw this as a backdoor reallocation and denied them all. (A station, WXLT Aurora with a West Chicago tower location actually did operate for a short time.)"

"With an anything-goes-Reagan-FCC, others tried again. This time the FCC agreed but had to choose which channels could be used, as less than 6 channel spacings violated the 'taboo' rules. All the new stations planned subscription-TV. The FCC remembering the NJ fiasco held the Indiana channels in place and allowed the Illinois channels to move. The channel 60 comparative hearing copped out in a split decision allowing daytime WPWR and

nighttime Spanish and Sportsvision WBBS. When SIN took over 44 (WSNS-TV -wbf) and all subscription-tv folded, WBBS was odd Spanish out (26 also does Spanish as well as other... ethnic programming). In the meantime, WPWR initiated the 50-56 swap transaction in an attempt to gain a full time channel. After WBBS folded and sold out (to WPWR) WPWR let the 50-56 swap go through anyway. So now WPWR unloads 60 and keeps 50. WPWR walks away with a lower channel and 25 million in cash, the Indiana educational TV people walk away with an inferior channel and \$684,000 in cash! Hardly a fair exchange. This means there will be 13 TV transmitters operating in the Chicago Loop. 32-38-50-60-66 run 5000KW each! 20-26-44 run 1000-2500KW. I wonder what all this UHF power is doing to the health of upper floor residents and workers indowntown Chicago! 7-11-26-50-60 are on Sears Tower and 2-5-9-20-32-38-44-66 are on the John Hancock building. Since channel 56 will not be inline with existing loop pointed receiving antennas, wonder if anybody will watch them if they ever come on?"

Ed also sent a copy of the 10/24 Chicago Sun Times, which reports that Home Shopping Network is buying WPWR, the ch. 60 station in Aurora mentioned above. "WPWR-Channel 60, a Chicago (sic) independent television station, will be acquired by the Home Shopping Network, the cable channel and broadcasting company that sells consumer goods over the air 24 hours a day. An HSN subsidiary will pay \$25 million to WPWR's owners, Metrowest Inc., for Channel 60's transmitters and facilities, and rename it WHSI. But simultaneously, WPWR will switch to an unused Channel 50, licensed (sic) by the Federal Communications Commission to Gary, Ind., and continue its operations from that channel position. The changeover should be completed by January. WPWR, now licensed to Aurora, will be easily able to continue to beam its signal to Chicago from its antenna on top of the Sears Tower; the move from Channel 60 to 50 also removes viewer confusion between WPWR and one of its independent TV competitors, WGBC-Channel 66." "Metrowest actually bought the license (sic) to Gary's unused Channel 56, but, for technical reasons, could not have used that channel frequency to reach the Chicago market. So it swapped that channel with the Indiana Public Television group, which owned Channel 50. Getting that swap approved by the FCC took over 2 years." "Apparently aware that the HSN deal was in the works, Channel 66, owned by Grant Broadcasting Co., started its own home shopping show, 'America's Marketplace' in Chicago earlier this week. It airs from 11:30 p.m. to 2:30 a.m. and is shown on other Grant Broadcasting stations, in Miami and Philadelphia."

From John Abeling (Bloomington MN), the same article from the 10/6/86 that was mentioned last month and sent by Patrick Durkin Jr. That happens occasionally, but thanks the same for taking the trouble to sent it.

From Tom Yingling (Dundalk, MD), an article

from the July 20-26 Satellite TV Week. The headline reads, "Bill Gives FCC Scrambling Powers." Not referring to me, of course. Nor is that headline correct anyway, since no bill in congress can grant anybody any powers until it becomes law. This bill hasn't even passed Congress. "Four members of the House Telecommunications Subcommittee have introduced new legislation which would give the FCC power to ban scrambling if home satellite signal access fails to develop at competitive prices." As if the FCC really wanted to become involved. "According to Curt Smith, aide to Rep. Dan Coats (R-IN), the bill's chief sponsor, the bill seeks to strike a balance between consumer and programmer interests. The bill also mandates an annual FCC report to Congress to monitor the access and rates for scrambled stations." "Mark Fowler, FCC chairman, recently testified before the House Telecommunications subcommittee that he thought rate regulation measures such as HR 1840 and SB 1618 were not necessary if the marketplace can provide a fair distribution system." "Didn't I tell you?"

Rich Turcsany (Fairfield CT) writes, "I have some more TV station news to pass along to you - including some info about the Home Shopping Network, which is trying to purchase stations in the top-14 markets that will carry nothing but a satellite-delivered shop-at-home service. (Has WSJT-65 begun carrying HSC's 'late-night fun' program with Hans Burt from 12 AM - 6 AM yet?)" No. Just From Oregon With Love and other foreign programs, with English captions. They do have a Three Stooges remake every night disguised as a telephone auction. "I'm expecting a lot more CP's to come on the air with this type of programming in the near future, since there are other syndicators offering this type of show to UHF stations across the country. (WLIQ-55 offers a show called 'Shopping Line' weekday afternoons while WTX-20 broadcasts 'The 800 Club' - not a religious program - all night long)." I'm waiting for the day that I will see one of these programs auctioning off fourteen UHF television stations.

"I've been doing a little ATV (Amateur Television) Dting recently using my P.C. Electronics downconverter, but I still haven't come across any DX activity, except for the ATV repeater on 426.25 MHz atop the World Trade Center! In fact, there aren't any local hams in my area operating amateur television, either, but I'm expecting this to change soon - the price of video equipment is coming down." I can see it now: ATV Shopping Club. More data from Rich:

TARGET DATES: 10/1/86, KPST-TV, ch. 66, Vallejo, CA (Home Shopping Club); 10/86, KTGF, ch. 16, Great Falls, MT (NBC affiliate); (both of those stations are now on the air -wbf); 10/86, WFYF, ch. 50, Watertown, NY (will be network affiliates).

STATIONS UNDER CONSTRUCTION WILL AIR SOON:

KTTN, ch. 17, Sioux Falls, SD (affiliated with Fox)

KTZO-TV, ch. 20, Denver CO

WSJN-TV, ch. 24, San Juan PR (English lang.)

WJWN-TV, ch. 38, San Sebastian PR (satellite of WSJN-24)
WFWY, ch. 43, Syracuse NY (original CP granted in 1967!)

WVBT, ch. 43, Virginia Beach VA
WNPL-TV, ch. 46, Naples FL
SECOND AUDIO PROGRAM ACTIVITY:
WNBC-TV, ch.4, New York NY (WYNY, 97.1 FM)
WXXI-TV, ch. 21, Rochester NY (WXXI, 1370 AM)

MISCELLANY:

"WSNL-67 Smithtown has gone back to full-time broadcasting (24 hours a day, in fact) with Home Shopping Club - station is still operating as a satellite station of WHHT-68 Newark, but has not resumed local programming from its Central Islip studio yet, which I highly doubt they will do. (If I only had the bucks, I'd buy that station and make it compete with WLIQ-55 by running programming similar to what was aired during 1973-75 when WSNL first hit the air!)"

"New indie WTWS-26 in New London is running mostly current syndicated fare, but they have a rarity on Saturday mornings at 8 AM - 'The New Phil Silvers Show,' a 1963-64 sitcom that lasted only 26 weeks! (Now, let's all try to get 'My Mother, the Car' back on our local indies)"

"In Boston WQT-68 has been sold to the Christian Science Monitor, but there have been no major programming changes (except for the Boston debut of Dr. Gene Scott's program), and WMRE-1510 is carrying Joan Rivers' 'Late Show' program until Fox Television finalizes the purchase of WXNE-25." I read in BROADCASTING magazine that as long as CBN had ownership and control of the station, it would not air Joan Rivers because of the program's crude humor.

"W59AT Plainview NY (WLIQ-55 xltr) is off the air for reasons unknown; W63AS Westbury (LPTV) remains on." W59AT is still a LPTV, even though it is rebroadcasting WLIQ.

"WHCT-18 Hartford FINALLY has been granted FCC permission to increase power to over 3000 kw - which means that ALL of Connecticut will get to watch the Hartford Whalers road games and 'The Avengers.'"

David R. Alpert (New York) sent an article from the 10/1/86 Variety, giving a brief history of the CTV network. This summary will be even briefer yet. "The network was started by Spencer Caldwell, who died in 1983. (The initials CTV don't stand for anything, not Canadian Television, the usual assumption, and certainly not Caldwell Television, the natural second guess.) At the beginning, there were eight television stations in affiliation with CTV, and each are still full affiliates.... Three other affiliates came on line in 1964.... Those early years were financially rocky ones, and CTV simply couldn't make a go of it. Finally, in 1966, the affiliates won government approval to take over, thus establishing a real oddity in the world - a commercial television network owned by its affiliates, each of which has diverse business interests of its own." "At their own expense, with the cooperation of various community groups, the affiliate-owners estab-

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lished a total of 246 rebroadcasting transmitters throughout the country to extend CTV service to the vast reaches of Canada, which away from border areas tends to be lightly populated at best. That very lack of population density led to the establishment of secondary affiliates through the practice of 'twin-sticking in the early 1970s. It became obvious that some areas couldn't support full-fledged new CTV affiliates, and that rebroadcasting transmitters in an area served only by a CBC station wouldn't be practical. Competition could have been ruinous. So CTV proposed, and the Canadian Radio-television and Telecommunications Commission agreed, that CBC affiliates be allowed to set up second transmitters, 'twin sticks,' and by broadcasting both signals become dual affiliates. The first supplementary affiliate, CHFC-TV Thunder Bay, began twin-sticking in 1972. Since then four other stations have joined CTV as supplemental affiliates: CIOC-TV Yorkton in 1975, CITL-TV Lloydminster in 1976, CKCY-TV (now CHBX-TV) Sault Ste. Marie in 1978, and CJBN-TV Kenora in 1984."

Donald C. Marshall (Engineer for KRTV, ch. 3 in Great Falls, MT) writes, "KTGF 16 came on the air for one hr. Sept 20 then programming Sept. 21st. They had short sked for several weeks. They had 200 ft. of tower. While they built ANT they came on between 4 PM to as late as 9:45 PM. They are now on full time and are in stereo. KRTV in your article is mentioned as being NBC and CBS. You said that as a VHF KRTV would have first pick of Networks. Wrong. KRTV is CBS net. We have been CBS primary for over 2½ years, using NBC to fill holes. We dropped NBC about 2 weeks before KTGF came on

the air. The reason KRTV is CBS is that we are part of a four station net. KXLF-TV 4 Butte; KPAX-TV 8 Missoula; and KTVQ-TV 2 in Billings. We went CBS because the other stations were CBS to make things the same and easier for all concerned."

APPLICATIONS FOR NEW TELEVISION STATIONS
CH ERP HAAT STATE/CITY/APPLICANT

- 45 87.1 335 FL Leesburg; Lake Community Educational Partnership
- 36 5000 570 SD Sioux Falls; Darryl Madlock
- 6 100 845 VA Richmond; Richmond Community Television
- 60 1795 1756 AL Dothan; Broadcast Associates
- 59 2731 690 FL Jacksonville; Jacksonville Educational Television Inc.
- 59 5000 895 FL Jacksonville; Palmetto Broadcasters Associated for Communities Inc.
- 29 869 542 FL Ocala; Gospel Horizons Corp.
- 64 5000 518 TX Mineola; Wood County Broadc
- 52 1000 1224 WI Mayville; Lancer Telev. Co.
- 2 9.1 1056 WY Jackson; Western Broadcasting
- 43 100 1666 VI Charlotte Amalie; Broadcast International Inc.
- 21 1790 1840 CA Hanford; Hispanic Broadcasting Systems Inc. (in contest with license renewal of KFTV)
- 34 1950 2940 CA Los Angeles; Hispanic Broadcasting Systems Inc. (in contest with license renewal of KMEX)
- 14 2570 1250 CA San Francisco; Hispanic Broadcasting Systems Inc. (in contest with license renewal of KFTV)
- 41 3240 1660 NJ Paterson; Hispanic Broadcasting Systems Inc. (in contest with license renewal of WXTV)
- 29 5000 1959 FL Ocala; Cultural Arts TV Associates Inc.
- 64 5000 273 TX Mineola; Steven Sparks
- 41 1000 500 TX San Antonio; Hispanic Broadcasting Systems Inc. (in contest with license renewal of KWEX)
- 51 5000 1165 MS Jackson; Turner Broadcasting & Communications

CONSTRUCTION PERMITS GRANTED

- 33 5000 1143 NV Las Vegas; 4-A Communicat'ns
- 38 5000 474 NC Greenville; Community Service Telecasters Inc.
- 58 5000 379 TN Nashville; Ruth Payne Carman (Review Board decision)
- 38 2690 2878 CA Santa Barbara; Coast TV (initial decision)
- 11 31.3 340 MN International Falls; Marina D. Leathers (was CP for KITF cancelled?)
- 52 2500 1370 TX Blanco; Opal Chadwell (initial decision)
- 48 5000 1229 CA Bakersfield; Dorothy Owens
- 59 5000 1109 CO Denver; High Seas Communications (Summary Decision)
- 64 3236 1000 FL Inverness; Meredith Corp.
- 45 3259 1081 MN Minneapolis; Vision Broadcasting Corporation
- 32 2495 507 SC Myrtle Beach; Coastal Carolina Broadcasting Company

40 5000 1780 OR Portland; Cascade Video of Portland (Review Board dec'n)

APPLICATIONS DISMISSED

- HI Wailuku; ch. 15; Dan Mahoney.
- IA Waterloo; ch. 22; Hawkeye Broadcasting Ltd, Partnership. (Construction permit for KTCG was reinstated.)
- CA Los Angeles; ch. 68; Visions International Inc. (returned; four-year-old construction permit for KDDE is still outstanding.)
- CA Santa Barbara; ch. 38; Mission Broadcasting Corporation; Solar Television Inc. (initial decision)
- MI Marquette; ch. 19; Linda Turner d/b/a Turner Broadcasting (returned).
- MS Jackson; ch. 51; Linda Turner d/b/a Turner Broadcasting (returned).
- SD Sioux Falls; ch. 36; John H. Echols (ret'd)
- HI Hilo; ch. 14; Harry J. Turner
- FL Inverness; ch. 64; Nancy Sharp (settlement agreement); Lonny Walters
- NV Las Vegas; ch. 33; Classic Visions Inc.; Independent Concepts (settlement agreement)
- TX Blanco; ch. 52; Blanco Communications Ltd.; Dorothy O. Schulze & Deborah Brigham (initial decision).
- WV Martinsburg; ch. 60; M&D Broadcasting.
- NC Greenville; ch. 38; East Coast Media (settlement agreement).
- CO Denver; ch. 59; Don Thomas Moore; Sky High Telecommunications Company; Brassell & Romero; Mountain States Telecasters (Settlement agreement).
- FL Bunnell; ch. 58; Press Broadcasting Company (at its request; proposed coverage area is far inferior to that of other applicants for the channel).
- CA Bakersfield; ch. 48; Harold J. Mullican; Lash Communications; Liberty Broadcasting Corporation; Crown City Television Inc. (settlement agreement).
- HI Lihue; ch. 10; William Gault (returned).
- FL Leesburg; ch. 45; Lake Community Educational Partnership (returned)
- SD Sioux Falls; ch. 36; Daryl Madlock (ret'd).
- TX Mineola; ch. 64; Steven Sparks (returned).
- FL Orlando; ch. 27; RCTV Inc.
- GA Dalton; ch. 23; Family Television of Dalton Ltd.
- MN Minneapolis; ch. 45; Metro Program Network.
- NV Reno; ch. 4; Washoe Broadcasting Company.
- OR Portland; ch. 40; Portland Television Associates Ltd.
- SC Myrtle Beach; ch. 32; Myrtle Beach Broadcasting Ltd. Partnership; South Carolina Broadcasters Ltd. Partnership.
- TX Crockett; ch. 40; Peggy Nicholson; William Sanders.
- TX Longview; ch. 54; Ashley Broadcasting.
- WA Bellevue; ch. 51; Rainier Broadcasting Co. Note: The SICC applications for license renewal have been conditionally granted, subject to the sale of the stations. This would mean that the applications for Hispanic Broadcasting Systems Inc. would probably be returned.

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS

- 21 n.c. 696 KY Louisville; WBNA (now on the air; probably as-built data change.)
- 47 107 341 MN Rochester; KXLT

- 32 1885 918 MA Greenfield; WLQF
- 64 3134 1701 CA Barstow; KVVT
- 64 1433 1000 MI Kalamazoo; WLLA
- 23 957 1007 NY Buffalo; WNEQ-TV
- 50 1112 1268 NY Watertown; WFYF (ex-WJCK)
- 43 4320 1372 AR El Dorado; KCM
- 23 5000 964 IN Marion; WMCC
- 32 2069 890 FL Lakeland; WTMV (now on the air; probably as-built)
- 39 690 730 IN Fort Wayne; WFVA
- 24 ? ? KY Bowling Green; WKYU-TV (from ch. 59)
- 17 20.6 209 SD Sioux Falls; KTTW
- 60 2056 1537 VA Roanoke; WZZW

CONSTRUCTION PERMIT MODIFICATIONS GRANTED

- 60 1403 1011 NH Merrimack; WGGT
- 50 5000 1623 IN Gary; WDAI (from ch. 56; WCAE ch. 50, St. John to change to ch. 56)
- 53 1306 1169 TN Cleveland; WFLL-TV
- 23 5000 964 IN Marion; WMCC
- 35 85.9 471 MI Bad Axe; WUCX-TV

APPLICATIONS TO CHANGE EXISTING FACILITIES

- 23 182 1062 PA Altoona; WWPC-TV (CP)
- 56 3390 1150 KY Danville; WDKY-TV (NP)
- 10 316 1214 MI Sault Ste. Marie; WWUP-TV (CP)
- 44 1738 971 TX Harlingen; KLUJ (CP)
- 6 97.5 2030 GA Thomasville; WCTV (MP)
- 57 800 2377 NY Plattsburgh; WCFE-TV (CP)
- 19 1662 421 PA Johnstown; WFAT-TV (CP)
- 60 5000 1621 IL Aurora; WPNR-TV (CP)
- 7 316 819 ME Bangor; WVII-TV (CP)
- 8 132 580 OK Sayre; KVIJ-TV (CP)
- 6 100 954 TX Corpus Christi; KRIS-TV (CP)
- 10 316 1869 VI Charlotte Amalie; WBNE-TV (CP)

FACILITIES CHANGES GRANTED

- CT Hartford; WHCT-TV, ch. 18; granted license to cover CP for changes; see 7/86 VUD. Also granted CP to raise ERP even further from its newly licensed 547 kw max to 3273 kw max; 1830' AAT/160' AG/4600' ASL (10' lower ASL); TL at 376 Deerfield Road, Avon CT; coordinates 41°46'30"/72°48'04" (Az. 3°, 0.98 mile from present TL).
- IN St. John; WCAE (off the air for about 3 years now); granted CP to change from ch. 50 to 56 in accordance with recent changes in the table of channel assignments; change ERP from 1910 kw max/603 kw hor to 1355 kw max; 1033' AAT/975' AG/1695' ASL (650' higher ASL); TL 0.6 mile east of Reeder Road; coordinates 41°20'56"/87°24'02"; just east of Cedar Lake, Az. 165°, 22.04 miles from its present TL. Studios are located at 123 Sesame Street in St. John. Trivia quiz: what other educational stations have studios located on Sesame St.?
- AR Little Rock; KTHV, ch. 11; granted license to cover CP for changes; see 11/85 VUD.
- CA Hanford; KFTV, ch. 21; granted license to cover CP for increase in ERP from 1790 kw max/131 kw hor to 2820 max/151 hor; 1830' AAT/160' AG/4600' ASL (10' lower ASL); same TL, which is 52 miles away from Hanford. Increase in ERP should at least expand the Grade A contour to Hanford. CP was originally granted November, 1982.
- CO Broomfield; KBBI-TV, ch. 12; granted license to cover MP for changes; ERP raised

from 151 kw max/123 kw hor to 229 kw max. HI Honolulu; KMGT (ex-KSHO-TV), ch. 26; granted license for changes; ERP reduced from 99.3 kw to 75.9 kw max; 2120' AAT/60' AG/2500' ASL (10' higher AAT); same TL.

LA Baton Rouge; WRBT-TV, ch. 33; granted CP to raise ERP from 1014 kw max/871 kw hor to 5000 kw max; 1713' AAT/1705' AG/1719' ASL (669' higher ASL); TL 1.9 miles west of Hwy 1 and Hwy 1148; coordinates 30°19' 35"/91°16'36" (Az. 233°, 5.38 miles from present TL).

NH Keene; WEKW-TV, ch. 52; granted license to cover CP for increase in ERP from 37.5 kw to 60 kw max.

NY Buffalo; WNEB-TV, ch. 17; granted CP to raise ERP from 1150 kw max/910 kw hor to 2500 kw max; 999' AAT/1008' AG/1541' ASL (same TL, but 279' higher AAT, 270' higher AG, but only 196' higher ASL)

NC Charlotte; WSOC-TV, ch. 9; granted license to cover CP for changes; see 6/86 VUD.

MO Kansas City; KCPT, ch. 19; granted CP to raise ERP from 1042 kw max to 1137.6 max; 1170' AAT/1192' AG/2019' ASL (27' lower). Same TL.

NH Littleton; WLED-TV, ch. 49; granted license for changes: ERP raised from 36.7 kw to 94 kw max. 1285' AAT. Everything else the same.

CA Sacramento; KVIE, ch. 6; granted MP to raise ERP from 55 kw to 100 kw max; 1861' AAT/1869' AG/1871' ASL (327' higher ASL)

NJ Wildwood; WMGM-TV, ch. 40; due to damage to its transmitter on 10/6/86, the station is operating at an auxiliary site with greatly reduced power until repairs are completed. From Bridgeton, it looks about as powerful as it was in the WAAT days.

APPLICATIONS FOR NEW CALL LETTERS

- CH CALLS STATE/CITY/APPLICANT
- 51 KBGE WA Bellevue; Gill Communications

CALL LETTER CHANGES GRANTED: NEW STATIONS

- 61 WROZ KY Owensboro; WPGA
- 55 KLDI TX Lake Dallas; Opal Thornton
- 46 WRYT MA Norwell; WYOV
- 46 WJZY NC Belmont; WMHU
- 22 KLRB TX Wolfforth; Randy Chandler Ministries
- 41 KCHD CO Denver; Colorado Christian College
- 19 WTAU GA Albany; Albany Television Inc.
- 52 WOCT GA Albany; Albany Broadcasters Inc
- 62 KMNZ OK Oklahoma City; Richard Mendoza

CALL LETTERS GRANTED: STATIONS ON THE AIR

- 23 WAKC-TV OH Akron; WAKR-TV
- 22 KWVT OR Salem; KECH

After eleven pages, I better call it quits. I still have plenty of mail, new stations on the air, Fox affiliates, and much more.

* * * PUBLISHER'S NOTES * * *

WTFDA REPRINTS AVAILABLE AGAIN! DETAILS ON THE NEW WTFDA REPRINT SERVICE CAN BE FOUND AT THE BEGINNING OF THIS ISSUE. WTFDA HAS OFFERED SUCH A SERVICE IN THE PAST, BUT HAD GONE WITHOUT IT SINCE PREVIOUS VOLUNTEERS HAD TO GIVE IT UP DUE TO LACK OF TIME. FORTUNATELY, V.U.D. TECHNICAL EDITOR TIM MCVEY CAME FORWARD TO RE-START THE SERVICE. TIM DESERVES OUR THANKS FOR THIS--HE'S ALREADY BUSY WITH A REGULAR COLUMN FOR THIS PUBLICATION, AND IS DOING THIS ON HIS OWN--ANOTHER EXAMPLE OF A CLUB MEMBER GOING ABOVE AND BEYOND THE CALL OF DUTY!

WESTERN TV DX TAKES A MONTH OFF EDITOR FRED MCCORMACK SENDS WORD THAT A LACK OF REPORTS, AS WELL AS SCHEDULE PROBLEMS, MADE IT IMPOSSIBLE FOR HIM TO DO A DECEMBER COLUMN. WATCH FOR THIS COLUMN'S RETURN NEXT MONTH!

FMEDIA IS COMING! 1987 CLUB CONVENTION HOST DR. BRUCE ELVING HAS LONG BEEN KNOWN AS A LEADING AUTHORITY ON THE TOPIC OF FM BROADCASTING; NOW, IN ADDITION TO THE FM ATLAS, HE'S GOING TO BE PUBLISHING HIS OWN MONTHLY NEWSLETTER ON THE TOPIC. IF YOU ARE INTERESTED IN THE STATE OF THE FM BROADCAST INDUSTRY, AND ITS SPECIALIZED SERVICES, SUCH AS SUBCARRIERS, YOU'LL WANT TO SUBSCRIBE TO THIS PUBLICATION. SUBSCRIPTIONS WILL COST \$45 PER YEAR FOR THOSE IN THE BROADCASTING BUSINESS, BUT WATCH FOR NEWS ABOUT SPECIAL RATES FOR DXERS.

AIRCHECK SERVICE OFFERS SPECIAL WTFDA RATE #1 MARKET AIRCHECKS, A NEW YORK CITY AREA AM/FM AIRCHECK SERVICE, HAS A TWO-TAPE SET OF NYC AREA AIRCHECKS AVAILABLE TO CLUB MEMBERS FOR \$10.50. THEY'RE ALSO SELLING AN ALL FLORIDA TAPE FOR \$6.75. THESE ARE 90-MINUTE STEREO CASSETTES, AND ALL THREE CAN BE PURCHASED FOR \$16.00. IF YOU'RE INTERESTED, CONTACT THEM AT: #1 MARKET AIRCHECKS, P.O. BOX 568, EAST HANOVER, NJ 07936.

HAPPY HOLIDAYS TO OUR READERS! HERE'S HOPING YOU HAVE A GREAT HOLIDAY SEASON! WE'D LIKE TO THANK YOU FOR YOUR CONTINUED SUPPORT (AS THE TWO FELLOWS SAY ON THE WINE COOLER COMMERCIALS) AND WOULD LIKE TO REMIND YOU THAT YOU ALWAYS GET MORE OUT OF A DX CLUB IF YOU ARE WILLING TO GIVE A LITTLE OF YOUR TIME TO CONTRIBUTE A DX REPORT, ARTICLE, OR WHATEVER! WTFDA HAS HAD A GREAT YEAR IN 1986--WITH YOUR HELP, WE'LL HAVE AN EVEN BETTER 1987. IT'S REALLY UP TO YOU!

--BILL THOMPSON

SPECIAL OFFER FOR DX CLUB MEMBERS:

1987 World Radio TV Handbook The 1987 WRTH will be published in Dec. 1986 or Jan. 1987 and retail at approx. \$19.95+shipping. Prepublication orders are being taken at \$17 Book Rate or United Parcel Service (please specify) in the USA only. First Class Mail is \$18. CA residents, please add \$1.02 sales tax. The deadline for this special price structure is 20 January 1987. Thereafter, until further notice, the price is \$20 for Book Rate or UPS; First Class Mail will be \$21. Orders, with check or money order payable to CENTURY PRINT SHOP, including applicable sales tax, should be mailed as early as possible to: Century Print Shop, Don Erickson, 6059 Essex Street, Riverside, CA 92504-1599. (Please mention your club affiliation or source of info when ordering). Inquiries welcome at (714) 687-5910. Back copies of WRTH, 1981 thru 1984 and 1986, may be ordered at \$15 ea., 2/\$27, 3/\$39, 4/\$48, mix or match years.

RAY BRIEM SHOW/ ABC TALKRADIO 3RD ANNUAL "DX SPECIAL" SATURDAY, JANUARY 10, 1987-- 0806 UTC

HERE'S YOUR CHANCE TO PLUG YOUR FAVORITE CLUB AND AIR YOUR FAVORITE DX-RELATED TOPIC ON NATIONAL RADIO! OUR IN-STUDIO GUESTS WILL BE PAUL SWEARINGEN, "MONITORING TIMES" COLUMNIST AND "MUSINGS" EDITOR FOR THE NATIONAL RADIO CLUB--AND STEWART MACKENZIE, PRESIDENT OF THE AMERICAN SHORTWAVE LISTENERS' CLUB---JOINING US BY PHONE ARE BOB GROVE, PUBLISHER OF "MONITORING TIMES", AND DR. BRUCE ELVING, PUBLISHER OF THE "FM ATLAS". LATER IN THE MORNING, WE'LL ALSO SPEAK WITH TOM KNEITEL, EDITOR OF "POPULAR COMMUNICATIONS", AND GEORGE JACOBS, WORLDWIDE RADIO ENGINEERING SPECIALIST--AMONG OTHER NOTABLE PERSONALITIES FROM THE DX WORLD. WE WOULD ALSO LIKE TO HEAR FROM YOU-- IF YOU'RE OUTSIDE THE LOS ANGELES AREA, JUST DIAL 1-(213)-879-8255 DURING THE SHOW. WHEN YOU DIAL IN, JUST LET THE PHONE KEEP RINGING-- WE'LL SAVE YOU A FEW BUCKS, AND ANSWER JUST BEFORE YOUR TURN TO GO ON THE AIR! THIS PROGRAM WILL BE HEARD NATIONALLY--SOME KEY STATIONS INCLUDE WABC/770; WPRO/630; WTKN/970; WERC/960; WJBO/1150; WKIS/740; KPBC/950; KRNN/930; KTAR/620; KABC/790; KFBK/1530; KXL/750 & KGU/760. PROGRAM TIMES MAY VARY A BIT, SO BE SURE TO CHECK YOUR LOCAL SCHEDULE. ANY INFORMATION, INQUIRIES, IDEAS, ETC. ARE WELCOME--JUST SEND THEM TO: GREG HARDISON
KABC RADIO
P.O. BOX 79
LOS ANGELES, CALIF. 90016