

From The Staff:

WTFDA Headquarters, P.O. Box 97, Calumet City, IL 60409

F2 MAKES QUICK RETURN...F2 skip conditions above 30 MHz have been improving rapidly in recent weeks, to the point where 41 MHz British TV audio has already been noted by DXers in eastern North America. F2 skip watchers can expect some great DX in coming weeks. Be prepared--most of the best activity will probably take place before mid-December, with the current sunspot cycle now on the "downward slope."

PHOTO SERVICE...EASTERN TV DX editor Robert Kramer has made an offer to process TV DX photos free, through his photo service, when they are for use in the VUD. In return for this, we've let him tell you all about his custom TV DX photo processing service in an ad in this month's VUD. See page 51 for details.

1980 CONVENTION REPORT...A report on this year's 1980 WTFDA convention will have to wait until next month. In the meantime, here's another reminder for those interested in hosting WTFDA's 1981 convention: deadline for bids is November 30. In the event of more than one proposed site, we'll have a membership vote. Those interested in hosting can obtain info from WTFDA HQ.

COLUMN NEWS...VHF UTILITY DX is back after a two-month absence...PHOTO NEWS should return in November...NORTHERN FM DX editor Ralph Strobel has a fascinating report of what the FM and TV bands are like in several European locations in this issue.

SUPER NEW FM DX RECEIVER...FM DXers shouldn't miss Peter Sawatzky's review of the new Akai AT-V04 tuner. With features practically made to order for FM DX purposes, and digital frequency readout, you may want to check this tuner out. The October, 1980 issue of Audio magazine, one of the best of the hi-fi publications, lists this fantastic unit at only \$279 in the U.S. If you've checked tuner prices lately, you'll know what a bargain that really is!

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MAILBOX

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Bethany, OK 73008
(405) 787-3717
Deadline: 5th

New Members:

Jim Albrecht
Gerald Barkow
Patrick Durkin, Jr.
John Gerler

3313 N. Weil St.
29 Sedgefield Drive
8829 W. Orchard St.
6499 Chateau Court,
Apt. 269

Milwaukee, WI 53212
Morris Plains, NJ 07950
West Allis, WI 53214
Riverdale, GA 30274

Tom Haskett
Tom Jackowski
David Newkirk
Lonnie Nine
David B. Riley

3831 Hendricks Place
8 Marcia St.
1208 N.E. 91st St.
Route 2, Box 287
37048 Polk Court,
Apt. 732

Gary, IN 46408
Parlin, NJ 08859
Seattle, WA 98115
Monett, MO 65708
Farmington Hills, MI
48018

Paul Swearingen
Allan Walker
James Yaratto

P.O. Box 500
Box 3246
9549 20th Bay St.

Moran, KS 66755
Enfield, CT 06082
Norfolk, VA 23518

Renewals:

Jim Alexander, John Barber, Jr., R.S. Broadhead, Roosevelt Crawford, Kocsis Ferenc, Bill Heusmann, Tom Huehn, Jim Korn, Mark Lucas, Ian Meyers, David Moody, Kurt Nelson, Walter Patton, Robert Ross, Rich Turcsany, John Walters, Paul and Dave Wardell, Larry Weil, Michael Wimer.

745-5909

Rejoins:

Robert A. Curtis-17 Cobbleview Drive-Colchester, VT 05446
Roger Horie-2071 Kaumana Drive-Hilo, HI 96720
Bill Migley-922 Carpico Drive-Lancaster, OH 43130

Address Changes:

Richard Eckman-2900 E. Aurora Ave., #359-Boulder, CO 80303
George Gallacher-RR 1, Kozy Kourt Lot #32-Ossian, IN 46777
Mark Lucas-331 Reber Ave.-Lancaster, OH 43130
Joseph Markewicz-1408 Maple Grove Road, Apt. 315-Duluth, MN 55811
Dr. Michael Rosen-265 Main St., Apt. 515-Ridgefield Park, NJ 07660
Wayne Thompson-3900 Memorial Drive, Apt. D7-Decatur, GA 30032

Renewals Due in November:

J. Mario Abrego, Nicolas Beja Baruh, B.W. Battin, Albert J. Bernard, Leo Boehl, G. Cranston Bonnell, Don Erickson, Bill Fahber, Perry Ferrell, Robert Fischer, Robert Foxworth, Robert Grant, Richard Hawkins, Roy D. Horsley, John Jefferson, Michael Koronka, Ed Kowalski, Frederick Martin, Deane McIntyre, Mike Mitock, Dave Pomeroy, Marvin Shults, Ken Simon, Gary Walsh, Thomas Weeden, William Wurtzel, Tom Yingling, Jr.

Leading off this month's new members is long-time and well-respected IRCA member JIM ALBRECHT. We'll let Jim and fellow new members DAVID NEWKIRK and LONNIE NINE introduce themselves in Tidbits.

GERALD BARKOW is a designer who is into TV and BCB DX. He also belongs to NRC and NNRC.

Next up is JOHN GERLER, who has a busy profession- airline radio operator. He enjoys listening to BCB, shortwave and the aircraft bands, and belongs to NRC.

Another NRCer joining our ranks this month is TOM JACKOWSKI. He writes, "I have tried to DX FM, but have been unsuccessful. That's why I have sent for your Beyond Shortwave booklet. I also would like to learn a lot more about TV DXing even though I have been DXing for 2 years with 67 stations logged." You've come to the right place, Tom!

Another engineer in the club? That's right! DAVID RILEY is an engineer for WXYZ 7 Detroit MI. As I recall, Rod Luoma of WTFDA is an engineer at your competition, WJBK, David.

Tidbits.....

Congratulations go out to Andy Bolin, who passed the 2,000 mark in FM catches August 24. #2,000 was KRCH 101.7 Rochester MN. Way to go, Andy!!

As promised, let's start our extended intros with Jim Albrecht: "I recently got into the FM DX hobby although I've been DXing AM since 1971 and belong to the IRCA. I became interested in FM DX when noticing a strong temperature inversion on the local weather radar on TV. This was last September. My first catch was WJML 98.9 Petosky MI. To this date I've heard 224 stations in less than one year. My receiver is a Panasonic RF-2200, which is so sensitive it picks up images from stations like WOJO 105.1 Evanston IL, WPLB 107.3 Greenville MI, and WLJY 106.5 Marshfield WI. My location certainly wouldn't be called the greatest. I live some 6 blocks to one mile from a tower farm, which houses WZUU 95.7, WKTI 94.5, WFMR 96.5, WEZW 103.7, WLPX 97.3, WUWM 89.7, and WYMS 88.9, and get images from these plus and pest of the local stations. Despite this, I've heard most of the catches from this location. Others heard at the lakefront and at a friend's house. I've heard stations on E-skip only twice, 6/18/80 and 7/17/80. My best catch so far on E-skip is KVLV 107.9 Edinburg TX. FM DX is quite exciting and would like to learn more about meteor scatter and auroral conditions. Look forward to contributing to this club."

Next in line is new member David Newkirk: "Radio has been a fascination for me since 1968, when I first sat down with a BCB radio and found WWL, WWVA, even KFI in my ears between and beyond the local programming. An amateur license followed -- WN9CJS -- in 1969, with BCB and 3-30 MHz SWling still great interests. I had the privilege of undertaking a 3 year stint with the American Radio Relay League in the service of amateur radio from 1974 to 1977, with the permutations in amateur callsign you might expect resulting from a move to Connecticut from my native Chicago.

"Now, I find myself in the state of Washington with new responsibilities and interests. As you may know, I was selected to author a chapter on the listening side of non-professional radio for ARRL's Operating Manual, published just this June. I went into the project suspecting that it would be a new beginning for my radio learning. And indeed it was! One matures rapidly when his knowledge is subjected to wide scrutiny. I've had the pleasure of scratching the surface of a number of radio pursuits I had not been involved with before my research for the chapter began. I want that learning to continue. The world above 30 MHz is a new world for me, and what I've heard about WTFDA assures me that it's a club offering the best window into that world a club can provide."

Our third extended intro is from Lonnie Nine: "I am a member of NRC and have DXed the AM band for years, but have never been serious or organized about it. Just dialed around seeing what could be heard. Due to that interest, I purchased a GE Superadio because it was reasonably priced and had a good reputation for AM sensitivity and selectivity. The receiver was as good as its reputation and in addition it had a good (but not great) FM section. After listening to FM for a short while I decided that the radio was probably worthy of a good antenna, so I bought a 10 element Archer and a Channel Master rotor. I then discovered that FM DX was possible. Within about 6 weeks, I heard 172 stations (I kept a log of sorts on these, something I'd never done on AM) and counted 12 states. Enough interest in that so I wrote asking for a sample of the VHF-UHF Digest. Now I am really interested and have many questions after seeing those reports in the July 1980 edition. I am now thinking about a purchase of a receiver or tuner so that I can really DX the FM band. I am 46 years old and am meteorologist-in-charge of a radar station operated by the National Weather Service. We also take upper air soundings. I live on a small farm just southeast of Monett, MO. There are two local FM stations, one in Monett and one in Aurora. As you see, I am a novice at FM DX and could use advice as I begin to search for a good rig (at a reasonable price)."

Let's hear now from Saul Chernos: "I've noticed a lack in this club and have decided to help eliminate it. In all MW clubs there is a 'sports' column and thus all MW 'sports unIDs' can be solved. But what happens when, on FM, you hear a brief meteor scatter spurt from a Texas-Yankees game on 102.5, but as you have no network lists, you can only guess. The same applies to TV. Even with tropo or Es, who wants to sit around and wait for an ID when other stuff awaits? I am therefore volunteering my services, but I need help. I will keep up-to-date files on sports nets. All you have to do to solve an unID is to send it, plus a SASE, to my address (see end of Tidbit). I would also appreciate info on nets and

(Chernos, cont.) flagships, etc. Otherwise, this venture will not be possible. If this is successful as a service and if the BoD feels it appropriate, this could eventually, in itself, create a new VUD column. We'll wait and see. I'm covering all major league sports in Canada and the USA only: baseball, hockey, football, basketball and soccer. In addition, I'll also cover all college, junior, etc., hockey, basketball, and football, and events like the Indy 500, racing, etc....only on contributor requests. If this really works out and I get a nice load of support, I may do shows like "Dr. Demento," etc. Remember, I need support just like any other column. I sincerely believe this will be a necessary and successful addition to the wonderful world of DX. Write to: Sports Data, c/o Saul Chernos, 79 Ridge Drive, Toronto, Ontario, Canada KOM 1C0." Saul, in his letter, requested my comments on the matter, so here goes: First of all, we're always open to the submission of any sports network lists. I'm glad someone is taking the initiative to round them up. Whether it merits being a separate column, tho, is questionable. While contributors are very valuable in compiling such a net list, it's also important to request an official list of network stations from each team listed. This is the way the BCB clubs do it. It also would not hurt to expand the list of sports covered, or list a 'specialty' sport if a station is known to carry it. For example, my alma mater's station, WBST 92.1 Muncie, IN, has been carrying Ball State men's volleyball because the team usually makes the NCAA finals. A word of caution about sports nets- no one should assume he has heard a station just because it is the only one on the frequency carrying the listed network program. The credibility of any DXer identifying stations solely on the basis of a network list must be questioned. Always try to get an ID or a local mention that would narrow the field down to the assumed station. Feel free to submit sports nets, Saul, and ask Bill Thompson about doing a regular column.

Good to have Bill Migley back in the club! He has some interesting comments as to why he dropped out for a while- "Extreme lack of technical and 'how-to' type articles. Over-emphasis on personal DX loggings that have little relevance to others." We can only print the technical articles we receive. How about you technically inclined folks contributing? Many thanks to the ones who have.

Wrapping it up this month, we continue a letter from West German DXer A.H. Wiese (Erminoldstr. 175/2, D-8000 Munchen 83, West Germany): "Some VUD issues ago somebody told about a converter (I think from England) to convert VHF into UHF. I found a similar device here from a German firm. It works quite fine, but I had no opportunity to prove it with DX signals as no DX was happening since I purchased it. The thing converts 40-300 MHz into 570-830 MHz. It costs 85 DeutscheMark, that's something around \$50. Anybody interested should contact me, but I don't know how much the tax and mail would cost.

In 'Consumer Reports' from March '79 I saw an antenna test. Third best was Jerrold VIP304 for \$72. Here in Europe log-periodical antennas are not common - nobody sells them. So I thought of purchasing such an antenna from the US. Could anybody tell me where to write to order the Jerrold? (It's a log-periodic, isn't it?) (believe it is...Jerrold address is Byberry Road and Pennsylvania Turnpike, Hatboro, PA 19040 USA-jz). Are you interested in a West German antenna catalogue? Have the Hirschmann catalogue. Hirschmann is one of, if not the biggest, antenna firm here in Europe, but they only make yagis."

Well, I thought A.H.'s report would do it, but not quite. Let's see, how about some ANARC info? Jeff White will now edit the ANARC newsletter, replacing Dave Browne in that position. Dave remains Executive Secretary. The newsletter should look 100% better with Jeff doing it, and should be much more timely. Subscriptions are currently \$3.50 per year in North America, \$8 overseas. It's well worth it if you want to keep up on what's happening in other clubs. ANARC 1980 awards voted by delegates at the recent ANARC convention included North American DXer of the Year Lawrence Magne, International DXer of the Year Arthur Cushen, and Broadcaster of the Year Bob Zenotti of Swiss Radio International. None of the BoD members nor staff were able to get to California for the convention, hence no seminars on FM-TV. Bidders for the 1981 convention include Thunder Bay, Ontario, and St. Louis. Our condolences go to SPEEDX, whose managing editor, Oliver Ellsworth, died recently.

Well, that about does it for this month. Oklahoma City '81? A capital idea! See y'all next month.....73.....jz

wtfda newswire...

Morrie S. Goldman WA9RAQ
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Chicago, IL 60659

WTFDA NEWSWIRE APPEARS on an as-needed basis. While I scan many news sources for information of interest to WTFDAers, your news is needed! When you spot an item in your local newspaper that's DX newsworthy, clip it and send it on. Other WTFDAers can then benefit from your keen eye for news. News of new stations should go to the FCC news editors.

NEW TV TRENDS FOR '81... There are changes occurring in set design for '81. More sets are being offered with SAW filter i-f circuitry. In theory this should mean that selectivity is getting better, but as always, if you're considering a new set for DXing, give it a well rounded test. A SAW filter i-f will assure you of less i-f detuning as the set ages, and fewer components to fail...The hottest new feature is another type of filter, called a comb filter. This new component is installed in the luminance circuit of color receivers and is said to increase picture resolution by 25%. Because it is not in the i-f circuit, it has no effect on selectivity. Within 1-2 years, comb filters will be a feature of the majority of "quality" color sets, while about a third may feature SAW filters...Other strong trends include sound circuits with improved fidelity, a lowering of the cost (and an increasing use) of digital channel tuning. Some high end TV sets are being offered with added channels for convenient hook-up to CATV systems...On the monochrome scene, several manufacturers have introduced very compact TV receivers. Inspired by the now discontinued Sinclair receiver, the new receivers seem to offer better performance and battery life at somewhat greater bulk.

NEW FM AUTOSOUND TRENDS... For '81 more manufacturers will be offering over-\$500 auto AM/FM/tape combos. There is a very strong trend toward digital tuning. FM sensitivity, selectivity and resistance to overloading all appear to be improving. Other refinements include automatic blend circuits to reduce noise on stereo signals and automatic noise blankers to foil ignition noise. Pioneer, famous among FM-DXers for their Super-tuner series, has begun a Supertuner II series with built-in "PNS noise suppression." Other specs were unavailable. Most autosound manufacturers are beginning to offer radios that will fit into the tiny openings in GM's new X-body cars. Of this group, the most impressive is the Kenwood KRC-411. Weighing in at over \$300 list, the KRC-411 is an AM/FM/cassette with digital readout of frequency and time, and five AM and five FM presets. There is little doubt that the new Kenwood unit will be superior to the disappointing Delco AM/FM/FM stereo radio offered by GM. Unfortunately, I discovered this the hard way. When I ordered my Buick Skylark, there were no "quality" aftermarket radios available, so instead of waiting I ordered a Delco. While FM sensitivity is not bad, it cannot begin to compare with the Bendix radio in my old 7 year old Cougar. It is apparent that the capture ratio is very poor. Multipath distortion is much more prevalent. The number of button presets is a total of 5 for AM and FM, whereas 10 was an industry standard for factory radios. Another aside, the cassette deck (which is a separate under dash unit fed into the radio) has an awful s/n ratio--probably about 35 or 40 dB. In short, if you're considering an X body, consider an aftermarket radio. In fairness to GM, I should say that the AM portion seems quite good. A good combo might be a GM AM in-dash unit with a Pioneer under-dash FM Supertuner.

UNDERDASH TV SOUND CONVERTER AVAILABLE... Kraco has introduced an under-dash converter to bring TV sound to your FM car radio. No other details yet available, but it might be just the thing for avid TV-DXers who do a lot of driving.

TWENTY HOURS ON ONE VCR? THE DECK IS STACKED... Just in case you want to record the entire broadcast day of a local or ten straight movies, Sony will soon be offering a 4 cassette stack loader for use with their SL-5400, SL-5600 and SL-5800 Betamax VCRs. At the recent Consumer Electronics Show, I had an opportunity to see the AG-300 "Auto-changer" in action. This amazing baby robot is microprocessor controlled, with three motors for motivation. In less than 15 seconds, the AG-300 withdraws the recorded cassette and pops in a fresh blank. The unit can be programmed for recording 4 events over a 2-week period. The AG-300 is expected to sell this fall for under \$200.

PANASONIC DEVELOPS NEW GENERATION UHF TUNER... Broadcasting magazine reports that Panasonic has developed a "high-performance (UHF) tuner that is said to surpass existing tuners by wide margins in noise and other performance measurements." We hope to have more next month.

TOSHIBA SHOWS TWO CHANNEL VCR... Probably around spring, Toshiba plans to intro its long awaited LVR (longitudinal video recorder) to the industrial market. One of the two units recently shown permits recording two video inputs and two audio inputs simultaneously. Two DX channels could be recorded at once...an interesting concept. Both units employ a fixed head 800 track design that holds the promise of design simplicity and low cost.

6 CONSIDERING A SATELLITE earth station? Better read the next WTFDA NEWSWIRE first! 73, Morrie

IN SEARCH OF PSB

Donald L. Blevins
1715 Earhart Road
Baltimore, MD 21221
phone# 301-574-2714

IN SEARCH OF PSB..... This month's feature will recap the vacation Tom Yingling and I were enjoying after attending after the convention. The wide area traveled will expose a seven state area for DX information. Keep in mind I am only recapping a few bits of information; the list is in no way complete. Should you have anything to add I would most certainly would appreciate any additional data.

Turnpike Information

Pennsylvania: 159.045 159.075 New York 453.425/453.525
Indiana: 154.755 155.415 Maryland 151.04
Ohio: 155.685 155.79
West Virginia: 155.43

Indiana, like some other states, operates a great number of police networks on basically the same frequency. In the case of Indiana, that frequency is 155.13. Equipped with this frequency, a great number of agencies can be monitored. Illinois, Indiana, Ohio and Missouri operate point to point networks on 155.37.

Larger metropolitan areas are an exception, as outlined below:

South Bend Police 453.65 453.75
Mishawaka Police 453.525
South Bend Fire 154.19
Laporte Sheriff's Office 155.01

Missouri has a common police frequency of 155.73 with exceptions being those counties and police around metropolitan areas. Also note that Missouri also maintains a statewide hospital/ambulance network on 155.34.

Saint Louis County 155.565

Camped at Leavemorth, Indiana I observed:

Jefferson County, Kentucky 155.58
New Albany, Indiana 155.01
Jasper, Indiana 155.13
Evansville, IN 155.13
Friends Lake PD 155.13
New Albany, IN PD 154.19

Maryland State Police Hagerstown, MD 39.34

Till nextime folks.....

Don

SPECIAL REPORT

FM AND TV IN FIVE EUROPEAN CITIES

by Ralph Strobel

Viennese FM - Kaiserhof Hotel

- About 90.1 - EZ rock songs in English, occasional MoR, also heard two LeRoy Anderson selections - The Typewriter Song and Bugler's Holiday.
- About 92.1 - All classical including orchestral works and opera. This station simulcast on AM band at all times. s/off 2330.
- About 95.1 - Talk programs in German.
- About 98.1 - Talk programs in German, occasional classical and EZ listening music in German. This station in unison with 95.1 at times.
- About 100.1 - Rock songs in English.
- About 102.1 - Rock songs in English, occasional country and EZ listening music in English, news and sports. This was the only station with English speaking DJ's. In fact, it sounded similar to any station here in the USA. It was announced that a French speaking program would be broadcast later in the day. News on the hour, given by both male and female announcers, was in unison on all six stations for five minutes. No ID's on the hour were given except for the above station which used "Blue Danube Radio." When I returned to my room at 2300, 90.1, 95.1 and 98.1 had signed off. 100.1 and 102.1 were on in unison. It was impossible to get exact frequencies, so have approximated. All FM stations heard 8/4-5/80. No TV set was in the room to examine.

Salzburg TV - Cottage Hotel

When I entered my room at the Cottage Hotel, I was delighted to find a Philips Color TV. At 1410, all stations were showing test patterns. Channel 2 (or 8), was playing classical music from the baroque period (1600-1750), while Channel 3's (or 9's) background music was English rock. Stations signed on about 1500 or a little later.

Test patterns were much more colorful in Austria than those we see here. Small vertical strips in many colors were at the top of the screen, while the bottom of the screen had small horizontal strips of color, all enclosed in a circle. On the left is a diagram of the channel selector. There were 12 channels in all on the set, but only five stations. The stations on the left (channels 1 through 6), are in unison with stations to the right (channels 7 through 12). Therefore, channel 1 and 7 in unison, 2 and 8 in unison, etc. There was no channel 6 (or 12). I asked why stations were identical on the opposite channel and was told a station would sometimes broadcast a different program on their second channel.

ID's were given while a test pattern was shown. Channel 1 or 7 - ORF FS1, Channel 2 or 8 - ORF FS2, Channel 3 or 9 - DBP ZDF WENDELSTEIN, Channel 4 or 10 - DBP ZDF, Channel 5 or 11 - BR-MCHN 3. PROGRAMM. All stations signed off about 2300 or 0000. I was surprised at the limited hours these stations broadcast each day.

Salzburg FM

- About 91.1 - All classical and in unison with AM simulcast. s/off 2307.
- About 92.1 - Found after 91.1 s/off. Signal weak with classical music. Vienna?
- About 95.1 - German polkas, music of Austria, and classical.
- About 96.1 - EZ listening and talk.
- About 97.1 - English rock and jazz, occasional MoR in English and German polkas.
- About 98.1 - German polkas and English rock.
- About 99.5 - EZ listening and EZ rock in German and English, talk and jazz.
- About 101.1 - German polkas, music of Austria, talk and classical (20th century works).
- About 102.1 - A weak signal heard at night. Vienna?
- These stations heard 8/6-7/80. No English speaking station, but all similar to Vienna.

SPECIAL REPORT

OCTOBER 1980

Paris FM - Penta Hotel

- About 88.1 - Talk and French rock. s/off at 0000.
- About 91.1 - French and English rock, jazz, occasional classical and disco. This station was simulcast on the AM band, and was in unison with 88.1 at night with AM station off air. s/off 0000.
- About 94.1 - Mostly talk with occasional MoR songs in French, 20th century classical music and opera. s/off 0000.
- About 98.1 - All classical.
- About 100.1 - French and English rock, occasional progressive rock. s/off 0000. Again, all frequencies are approximate. No TV set in my room, but I did see one in a store. The set was tuned to channel 3 showing a test pattern at 1400. The test pattern was again very colorful, but different than Austria. Calls shown were TDF at top of screen and FR3 at bottom of screen. Eight channels were possible on French TV sets. All heard and seen 8/8-9/80.

London FM - Kennedy Hotel

I was hoping the broadcasting guide of the London Times would set me straight as to the exact frequency of each station, but I find myself confused. It seems that all stations are simulcast 100% of the time on the FM, AM, long wave, and medium wave bands. Here is what the London Times shows: WAVELENGTHS : Radio 1 medium wave 275m/1089kHz or 285m/1053kHz. Radio 2 med wave 330m/909kHz or 433m/693kHz and 88-91 VHF. Radio 3 med wave 247m/1215kHz and 90-92.5 VHF. Radio 4 long wave 1500m/200kHz and 92-95 VHF. Greater London area only : med wave 720kHz/417m. LBC 261m, 97.3 VHF, Capital 194m, 95.8 VHF. World Service : med wave 648kHz (463m). BBC Radio London 206m, 94.9 VHF. Here is what I found on the FM band in London:

- About 89.1 - Mostly progressive rock, occasional rock, disco, and country. I heard a documentary program regarding Elvis Presley. Elvis was interviewed in his early days of popularity. Many of his songs were then played.
- About 91.5 - Classical (opera), jazz (Chick Corea record), simulcast on AM band.
- About 94.1 - ID as Radio 4, VHF, educational talk programs, classical, and big bands.
- About 95.5 - ID as BBC Radio 2, sports (motorcycle races), country, rock, and MoR. This station in unison with 89.1 at night. Gospel on Sunday morning.
- About 96.5 - ID as Radio 1, Mostly disco, with occasional rock and Latin.
- About 98.1 - Mostly talk programs, much news, sports (cricket game). The frequencies from 99.1 through 103.1 were used for police calls.

London TV

I did have a Kinloch black and white TV in my room. There were four possible stations on the set, with three stations on the air. BBC-1, BBC-2, and ITV-1 were on the air. No station broadcasting on ITV-2. The London Times lists three TV stations. They are BBC-1, BBC-2, and Thames. BBC-1 and BBC-2 sign on at 0640 with sign off at 0010. Thames has a sign on at 0930 and sign off is 0025. Rather than saying sign off in England, it is referred to as close. All seen and heard 8/9-10/80.

Edinburgh FM

My final destination was Edinburgh, Scotland, where I attended the annual convention of the International Double Reed Society, an organization for oboe and bassoon players. The convention lasted four days, but I spent exactly one week there.

- About 88.5 - ID as Radio 1. Edinburgh Evening News lists: 1053 kHz, 285m, 1089 kHz, 275m, VHF: 88-91 MHz. Mostly jazz and rock with occasional country, MoR, and progressive rock.
- About 90.1 - ID as Radio 2. Listing: 693 kHz, 433m, 909 kHz, 330m, VHF: 88-91 MHz. Mostly jazz and rock, with occasional country, MoR, and progressive rock. In unison with 88.5 at night.
- About 92.1 - ID as Radio 3. Listing: 1215 kHz, 247m, VHF: 90-92 MHz. All classical and news. 2315 close.
- About 95.1 - ID as Radio 4, Open University. Listing: 810 kHz, 370m, VHF: 92-95 MHz. Mostly news and educational talk programs, with occasional rock and MoR. ID at 0800 was "You're listening to good morning, Scotland."
- At 96.8 - ID as Radio Forth. Listing: 1548 kHz, 194m, VHF: 96.8 MHz. Mostly rock, with occasional disco. On Sunday evening, classical music was heard. This was the only radio station I saw advertised. I first noticed a billboard at the train station with 194 meters and 96.8 VHF given as frequencies. All buses (double deckers) had large signs on them plugging Radio Forth. A few souvenirs brought back included a tee-shirt, sweatshirt, cup, and pen with big letters on each reading: Close To You 194 Radio Forth. The cup reads: 194 medium wave, 96-8 VHF STEREO.

Continued

SPECIAL REPORT

OCTOBER 1980

Radio Forth was certainly Edinburgh's most popular station, and the only station using a frequent non-ID of "194."

Once again, the frequencies of 99.1 through 103.1 were loaded with police calls coming in loud and clear. There was a great deal of unlawful activity on Friday and Saturday nights that was fun to listen to.

Edinburgh TV - Golf View Hotel

There was a nice TV set in the lounge of the hotel, where three channels were on the air. BBC-1 and BBC-2 both sign on at 0515 with a 0015 close. STV (Scotland TV) signs on at 0930 with a 0005 close. Here is a listing of evening TV programs from the August 13th edition of the Edinburgh Evening News:

STV	BBC-1	BBC-2
5.15 - Popeye.	5.5 - Newsround.	6.55 - Dallas.
5.20 - Crossroads.	5.10 - Grandad.	7.45 - News.
5.45 - News.	5.40 - News.	7.55 - Top Crown.
6.0 - Scotland Today	5.55 - Reporting	8.40 - Lost in the Stars :
News and High	Scotland.	Film.
Summer Extra.	6.25 - Dr Who.	10.15 - Journey Back.
6.30 - Happy Days.	6.50 - Top Sailing.	10.45 - Newsnight.
7.0 - Don't Just Sit	7.20 - Golden Soak.	11.30 - Cricket.
There.	8.10 - The British	12.5 - Close.
7.30 - Coronation Street.	Greats.	
8.0 - The Big Top	9.0 - News.	
Variety Show.	9.25 - The Good Old	
9.0 - Women of	Days.	
Courage.	10.15 - Bloomers.	
10.0 - News.	10.45 - Medical Express.	
10.30 - The Granada	11.15 - News Headlines.	
Band of the	11.17 - International	
Year 1980.	Athletics.	
11.30 - Late Call.	12.10 - Scottish News,	
11.35 - Enterprise.	Weather.	
12.5 - Close.	12.15 - Close.	

All heard and seen in Edinburgh 8/11-18/80.

As you can see, many European FM stations employ a "freeform" style and play a variety of music, rather than following a strict format of rock, country, jazz, etc. You've also probably noticed the lack of disco, country, gospel, soul, and Latin on many of these stations. Austria and France seemed to play mainly classical, rock, and jazz selections. In England and Scotland, 1950 rock was still played, with country music being popular also. Elvis Presley records are extremely popular in Great Britain, and at expensive prices. Records in Austria were selling between 160 shillings (\$12.80) and 180 shillings (\$14.40). I found everything to be at least double American prices.

I looked for antennas atop houses and buildings throughout my travels. All antennas were much smaller than we see here. Yet, they seemed to have the same number of elements. Not once did I see a tower with an antenna on it!

It was surprising to find so few FM stations in these large cities. I was expecting the FM band to be loaded with stations, but not so. I went into a Radio-TV store in Edinburgh and asked when the FM band was born in Europe. I was told 1960. The men I talked to were amazed that here in the US one could hear as many as three, four, or five stations on one frequency simply by rotating an antenna!

I enjoyed looking at FM tuners in these countries. Most are identical brands as we see selling here, but a few tuners did not go above 104 MHz. As yet, there are no FM stations in Europe above 102.1.

Television programs seem to be of a higher quality in Europe. One doesn't find a station overloaded with game shows, sobbing soaps, comedy programs, etc. Instead, there is much news and educational programming. Seems that competition and ratings are not stressed as strongly. Fewer stations in large cities no doubt account for this.

For DXing purposes, I bought an Imperial PR-202 AM-FM portable radio by Superscope. Cost was \$19.95. I am quite pleased with it, although I do get some cross modulation which is always uncalled for. During the summer, I was pulling in St. Louis stations at 310 miles with strong signals on this radio.

Now for the big question: If I suddenly moved to any one of these five cities, would I continue to DX the FM band? Doubtful, but I would try! Since there are fewer stations, no definite ID's or frequencies given, it would certainly be a challenge. The language problem would also make it difficult. DXing the AM band would actually be more enjoyable. Anyone have more to add to this? If so, please feel free to write.

NORTHERN FM-DX

Ralph Strobel, editor
2510 E. McGalliard Rd.
Muncie, Indiana 47303
(317) 288-5815
Deadline: the 10th

OCTOBER 1980

For FM DXers in Canada, the Northwest-Central states of WA OR ID MT WY ND SD NE MN IA MO and states east of the Mississippi River and north of the Mason-Dixon Line.

TEN YEARS OF FM DXING:

ANDY BOLIN HEARS OVER 2000 STATIONS!

Andy Bolin - 709 Lincoln Ave. - Charleston, IL 61920

So here it is 8/31/80. Ten years ago tonight radio station WOXR 97.7 Oxford, Ohio held a COLLECT CALL WEEKEND. On the other end of that phone was a guy you veterans will remember - Bill Bens. Bill turned me into something called an FM DXer. I haven't decided yet if I want to thank Bill, or pound him!

7/17 KILLER Es. From 0930 to 1300 Boston top of the band. @1010 WSDH w/mono "childrens program" 91.5 Sandwich MA (45). 1230 Tampa-WJIZ. 1248 "\$ WCTO" w/EZ 94.3 Smithtown NY (795). 1400 WKNC, WAMU, WJMD-Norfolk. @1419 WBCI "FM-96" w/R 96.5 Williamsburg VA (640); 1429 WYVA "94-\$" w/K 94.1 Yorktown VA (655); 1431 WESR AM-FM ID w/\$/upbeat MOR 103.3 Tasley VA (680); 1500 KRVS 88.1 from 88.3 Lafayette LA; 1530 KNUZ \$EZ 101.5 Tyler TX (640); 1606 KFMM \$/P 107.9 from 99.3 Abilene TX; 1626 KKCC "Our second month of service to you," \$/K 106.9 Clinton OK (655); 1628 KBIL \$/R 92.9 San Angelo TX (895); 1633 KTQM "Q-100 All Star Radio" \$/R 99.9 Clovis NM (910); 1717 "99" KSLS \$/K 99.3 Liberal KS (685); 1721 KARB \$ 98.3 Price UT (1210); 1727 KFMG \$/P 107.9 & "K-lite" KLYT 88.3 \$/G both new to the air & both Albuquerque NM (1070); 1807 "city" CIFE \$/French/upbeat MOR 107.3 Montreal PQ (840); 1814 CJAB \$/French/upbeat MOR 96.7 Chicoutimi PQ (1060); 1815 CKO-FM1 \$/English/upbeat MOR 106.9 Ottawa ON (750); 1830 CIGL \$/EZ 97.1 Belleville ON (645); 1844 CIMF \$/French 94.9 Ottawa ON; 1915 CHEZ \$/P rare Ider 106.1 Ottawa ON; 1850 CKAT \$/K/jingles 101.9 North Bay ON. Back from 1815 to 1920 most of Toronto was in at a close 520 miles. Later @2100 non-IDer "K-95" KIXV \$/auto/R 95.3 Brady TX (860); 2111 KRUN \$ "super country" 103.1 Ballinger TX (855). TX fell to TV-6 @2140. 7/18 Es 0900 to 0938 KCME, KREX, KQIX, KCFR, KEPC, KIL0 & KWDE all CO. 7/19 Tr w/WDSY 107.9 Pittsburgh PA all evening (430). 7/25 Tr @0000 w/WVWC WV (430). Later @1600 to 2000 strong Au from mostly west- all noise. 2030 Tr w/WDSY & "the point" WPNT both Pittsburgh. @2145 Es touched from MA. 7/26 after 0000 Tr cont. from Pittsburgh and @0110 Tampa up on Es! Also in was WWVL & WJIZ. @0125 WRYO w/\$/ phone requests 98.5 Crystal River FL (805); Fade out @0147. Later 0845 to 1000 S. FL & Keys very strong MUF top. @1000 WRMF Titusville FL was heard on 97.9 and not 98.3. I assume that's off frequency & not a change; anyway, I don't count stuff off frequency. @1047 KHAAM TAM (1060) to 1102 fizzle. Later 1800 to 1836 El Paso to the top. @1829 "we're different" KENW \$/EZ 89.5 Portales NM (925); 1839 "KEY" KKEE \$ 94.3 Alamogordo NM (1100); 1958 KUAT 90.5 Tucson AZ (1370); KAMA lasted to 2100. 7/29 Tr w/KQKQ after 0000 IA (420). 7/30 Tr @0000 KQKQ & KWIT. Later @1150 WQOX \$/R 88.5 Memphis; 1200 "J-103" WJHR 103.1 Jackson TN; Also @1200 WCMT TN o/semi WYAY. 7/31 Tr @1045 WVCP 88.3 mono/upbeat MOR Gallatin TN; 1107 WLIV mono/farm nx 95.9 Livingston TN. 1135 WJRS mono/swap shop 104.9 Jamestown KY; 1200 WRKM \$/G 102.3 Carthage TN. Later @2300 CJBC mono/French ID 99.3 London ON (435); 2329 WDEZ \$/J 92.7 Flint MI. 8/1 Tr 0008 CBEG s/off 106.3 Sarnia ON. 8/2 Es 1650 to 1730 lots of MT. @1700 KQUY a strict non-IDer as "Y-95" & IDs only on the hour - \$/auto/R 95.5 Butte MT (1310). 8/4 Tr WAYL, KCTR, KQRS, KTIS & KEKY all MN. Later @1547 Es from KRAI CO. 8/6 Tr 0100 WTVG 8/24 Tr @0127 #2,000 was KRCH "K-102" \$/auto/R 101.7 Rochester MN (390); 0400 10 watt 300 mile KBBG w/mono/soul 88.1 Waterloo IA. 8/26 Tr 0206 WATZ \$/nx 93.5 Alpena MI (445); Also in was WBEH Buffalo NY (540) & CKGL ON (450). Later @1900 CBCL, CJBC both London ON; 2100 CHFI 98.1 Toronto (520); then it all fell apart.

2,000 & A SMILE, Andy Bolin

+ + + + +

Saul Chernos - c/o P.O. Burnt River, ON Canada KOM-ICO
(summer address)

6/14 MS
0030 CKO-9103.5 NS Halifax, "CKO" all news
6/14 tr
0100 WNUZ 103.5 MI Detroit
0200 WDFW 98.7 MI Detroit
0920 WCRF 103.3 OH Cleveland
1120 WRFO 97.1 OH Ashtabula
1135 WVIV 107.7 NY Wethersfield
1140 WWWW 106.7 MI Detroit, "W-4"
6/14 Es
1510 WDBO 92.3 FL Orlando, weak Es
6/15 Es
1730 KYND 92.5 TX Pasadena
6/15 tr
1630 CKAT 101.9 ON North Bay, ex-93.7
6/27 tr
2000 WYFM 102.9 PA Sharon-Youngstown OH
2023 WHNN 96.1 MI Bay City
2130 WQAL 104.1 OH Cleveland
6/28 tr
0000 WWST 104.5 OH Wooster
0030 WQXK 105.1 OH Salem
0130 WMMS 100.7 OH Cleveland
0130 WZPR 100.3 PA Meadville
0130 WNIC 100.3 MI Dearborn-Detroit
0200 WZZP 106.5 OH Cleveland
0230 WHBC 94.1 OH Canton
1915 CKO-1106.9 ON Ottawa, "News-107" CKO
2005 CBON 98.1 ON North Bay
6/28 MS
1758 CBHM 106.5 NS Middleton
6/29 tr
0332 WEZO 101.3 NY Rochester
1449 WKSX 99.5 OH Cleveland
7/2 tr
1900 WOMC 104.3 MI Detroit
1920 WWJ 97.1 MI Detroit
2317 WRIF 101.1 MI Detroit
7/3 tr
0003 WGCL 98.5 OH Cleveland
0025 WLYT 92.3 OH Cleveland Heights
0630 WLBS 102.7 MI Mt. Clemens
0930 WNCQ 97.5 NY Watertown
1038 WCLW 105.3 OH Mansfield
7/10 tr
1135 WKGW 104.3 NY Utica
1202 WRVO 89.9 NY Oswego
1228 WHCU 97.3 NY Ithaca
2200 WAER 88.3 NY Syracuse
7/11 tr
2253 WNCQ 101.3 OH Alliance
7/12 tr
1600 WBIV 107.7 NY Wethersfield
7/13 tr
1211 WGCL 98.5 OH Cleveland
1214 WMMS 100.7 OH Cleveland
1225 WBEA 107.3 OH Elyria
1230 WKSX 99.5 OH Cleveland
1250 WITL 100.7 MI Lansing
1437 WTBQ 98.7 NY Utica
1440 WHFM 98.9 NY Rochester, "FM-99"
1442 CFLY 98.3 ON Kingston
1447 CJBC 99.5 ON Kingston, (CJBC-18)
1630 WPKY 97.9 NY Rochester
7/14 tr
1210 CIEL 98.5 PQ Longueuil
1225 CKO-1106.9 ON Ottawa, "News-107"

7/14 tr
1241 WVIV 95.1 NY Bristol Center
1300 WBBF 95.7 NY Olean
1515 CBO 103.3 ON Ottawa, "CBC-5"
1900 WVGR 104.1 MI Grand Rapids
7/16 tr
1100 WRRN 92.3 PA Warren
1200 WCNV 91.3 NY Syracuse
1203 WGMG 90.1 NY Greece
1220 WELV 103.7 NY Ithaca
1228 WSGO 105.5 NY Oswego
1255 CIMF 94.9 PQ Hull, FF
7/16 MS
1300 WPCB 94.9 GA Atlanta
7/16 Es (93.9 MUF)
2127 CHOZ 93.9 NF St. Johns, "OZ"
2130 WBNM 90.3 NF Marystown
7/17 Es (107.9 MUF)
1230 WMEZ 94.1 FL Pensacola
1245 WCHY 94.1 GA Savannah
1248 WPCS 89.3 FL Pensacola
1250 WJCT 89.9 FL Jacksonville
1252 WLMT 92.3 AL Montgomery
1253 WQTD 93.7 MS Biloxi
1254 WRNO 99.5 LA New Orleans
1457 WEZE 97.1 LA New Orleans, "B-97"
1459 WALT 97.1 MS Meridian
1505 WSJC 107.5 MS Magee
1510 KGAF 94.5 TX Gainesville
1512 KSMB 94.5 LA Lafayette
1513 WPAP 92.5 FL Panama City, "PAP"
1710 KLBK 93.7 TX Austin
1730 KESS 93.9 TX Ft. Worth
1800 KJAK 92.7 TX Slaton
1809 KAPM 92.5 TX Dallas
1818 KNOK 107.5 TX Ft. Worth
1820 KVIL 103.7 TX Dallas
1828 KNUS 98.7 TX Dallas "K-News"
1834 KMGZ 102.9 TX Dallas
1840 KMEZ 100.3 TX Dallas
1845 KSYN 92.5 MO Joplin
1854 KTTS 94.7 MO Springfield
1937 KFIN 107.9 AR Jonesboro
1940 KRAV 96.5 OK Tulsa
1945 KCKN 94.1 KS Kansas City
1950 KOFM 104.1 OK Oklahoma City
1955 KLUP 97.9 OK Poteau
2004 KATT 100.5 OK Oklahoma City, "Cat"
2005 KLUK 99.9 TX Wichita Falls
2008 KTCS 99.9 AR Ft. Smith
2010 KROZ 102.9 AR Harrison, "Z-103"
2012 KTFX 103.3 OK Tulsa
2015 KKAJ 95.7 OK Ardmore
2020 KINB 107.3 OK Poteau
2025 KMOD 97.5 OK Tulsa
2030 KHEN 99.5 OK Henryetta
2037 KTFN 93.9 OK Ada
2039 KLTE 101.9 OK Oklahoma City
2055 KWEN 95.5 OK Tulsa, "Queen"
2130 KEBK 94.7 OK Oklahoma City
2133 KRNG 92.5 OK Oklahoma City
2157 KAEZ 107.7 OK Oklahoma City
2159 KBFL 90.3 MO Buffalo
2200 KLUK 88.9 MO Jefferson City
2229 KNOE 92.1 MO Butler
2233 KCBW 92.1 MO Sedalia
2300 KOSU 91.7 OK Stillwater

7/17 Es
2300 KCSC 90.1 OK Edmond
2301 KWGS 89.5 OK Tulsa
7/19 tr
1202 WCFM 96.5 NY Rochester
1233 CFMO 93.9 ON Ottawa
7/20 tr
0317 WJML 98.9 MI Petoskey, "JML"
0345 WNGO 101.3 OH Alliance
0400 WAEZ 97.5 OH Akron
7/22 tr
1010 WRLX 106.9 NY Auburn
7/23 tr
1800 WSEN 92.1 NY Baldwinsville
1823 WYFM 102.9 PA Sharon, "Y-103"

7/23 tr
1830 CBOF 102.5 ON Ottawa
1840 WDKX 103.9 NY Rochester
7/24 tr
0545 WNTQ 93.1 NY Syracuse
0800 WNSE 93.3 NY Jamestown, "SE-93"
1005 CIMF 94.9 PQ Hull
1014 CFMK 96.3 ON Kingston
7/25 tr
0739 CKBY 105.3 ON Ottawa
8/2 tr
0855 ??? 94.3 ON Belleville
8/2 MS
0904 WWL 93.9 FL Miami Beach
(New underlined)

A very poor season for Es. One really nice opening 7/17 to OK-TX-FL produced 51 FM's (50 new). In addition, I checked only one "top of hour" on TV and made 3 (all new) ID's. The day before this I had Es's on TV & FM to the east, fairly rare here. Then on 8/2 I heard a WWML ID and a short (1/2 minute) bit of programing before CBL & WBLK took over. Not a typical MS but not E's, as not a trace on TV, just nice tropes up north. In addition, not another trace of E's on FM. Other MS not bad and only one decent FM tropes opening (6/28). I've found a 300 ft. "lump" hill in a field near here (including a tower), and caught WYFM in PA (one of the better stations I've had on tropes this summer), in well, despite horrible conditions down below. Bob Seybold could have competition here, although I bet he doesn't have to face swamp/mosquitoes and porcupines that refuse to let you pass on a narrow bridge over the mosquito infested swamp, days after the resources ministry failed to catch a huge bear they saw there! Am puzzled over 94.3 in Belleville (8/2). Heard ... "It's ? degrees in Belleville. No calls in FM ATLAS, just a power of 50,000 watts. I guess their CP has been granted! 73's, Saul

+ + + + +

Frank Wheeler - 6589 Wattsburg Road - Erie, PA 16509

7/2 tr 0959 WOSE 94.5 OH Port Clinton
1030 WJR 96.3 MI Detroit, 154 miles
7/13 tr ?? WDBN 94.9 OH Medina, (new)
?? WMJC 94.7 MI Birmingham, 195 miles
7/17 Es 2030 WAAG 94.9 IL Galesburg, (1st skip & new state), 533 miles.
2032 ?? 93.7 or 94.7 unIDed 2 KS stations, one w/KS baseball.
7/24 tr 0630 WEMU 88.1 MI Ypsilanti, 174 miles. (new)
0634 CJOM 88.7 ON Windsor, 154 miles.
0728 CKLW 93.9 ON Windsor, 154 miles.

Not much of a report, but I received my first skip WAAG and other KS stations unIDed. 73s, Frank

+ + + + +

Neil Kazarooss - 30 King Philip Rd. - Pawtucket, RI 02861

6/18 Es
1437 WFSU 90.1 AL Troy
1910 KSNJ 91.1 NJ St. Paul

6/18 Es
1911 KAXE 91.7 MN Grand Rapids
1941 KSJR 90.1 MN Collegeville

First FM Es ever - Rx is Sony portable. 73 & good DX, Neil

+ + + + +

Robert S. Ross - VE3JFC - Box 4373, Stn. C - London, ON Canada N5W5J2
Equipment: Marantz 2226 & dipole, Panasonic RF 1115 & whip.
Antennas on 9th floor apartment.

4/1 tr WHSB 107.7 MI Alpena
WCMU 89.5 MI Mt. Pleasant
WMJC 94.7 MI Birmingham
CFEI 98.1 ON Toronto
5/13 tr WENE 107.9 MI Flint
5/20 tr WCMU 89.5 MI Mt. Pleasant
6/26 tr WBCL 90.3 IN Ft. Wayne
7/13 tr WJCK 105.1 MI Jackson
7/14 tr WFCB 91.9 MI Spring-Field
WJEM 89.1 MI Ypsilanti

7/15 tr WSWT 106.9 IL Peoria
WAUR 107.9 IL Aurora
WMBI 90.1 IL Chicago
7/29 tr WING 100.5 OH Findlay
7/7 tr WOOS 106.9 OH Canton, ex-WHLQ
8/19 tr WFLB 107.3 MI Greenville
WHSB 107.7 MI Alpena
8/25 tr WBRW 103.3 WI Wisconsin Rapids
WJML 98.9 MI Petoskey
WJCY 106.5 MI Marshfield

NOT after May 1

+ + + + +

Harry J. Hayes - 9 Henry St. - Wilkes-Barre, PA 18702

Equipment: Wilkes-Barre - Zenith Trans Oceanic w/whip
Gouldsboro - GE Superadio, CM Amp., Finco FM-4G at 25 ft.

7/6 Es
1345 KWR 93.7 SD Winner, r, very strong
1401 KRSW 91.7 MN Worthington, ID
7/17 Es
1852 KNEN 94.7 NE Norfolk, ID
1900 KWOA 95.1 MN Worthington
1903 KGBI 100.7 NE Omaha, religion
1912 KYSM 103.5 MN Mankato
1916 KEXL 106.7 NE Norfolk
1920 KICD 107.7 IA Spencer, extensive news
1932 KLFM 104.1 IA Ames, ID
1947 KGOR 99.9 NE Omaha, ID
1953 KFRX 102.7 NE Lincoln, r, "X-103"
1958 KTWN 107.9 MN Anoka, "K-Twin"
2005 KDLT 96.9 SD Garden City, k
2020 KCHE 102.3 IA Cherokee, town mention
2021 KFMQ 101.9 NE Lincoln, Acknowledging call from Friendship, NY
2048 KJLS 103.3 KS Hays, Temp. at 103°
2100 KDMT 97.3 IA Des Moines, no ID
2100 WBW 97.3 KS Topeka, mixed w/KDMI tent.
2114 KSRD 96.9 NE Seward, "Your Soft Rock"
This season had really only three good days so far: the 6/18 and 7/17 Es and the 6/27 tropo. The meteors of 8/12 were a disappointment this year. Tropo were far and few between as my number of DX loggings for August shows. The WX this summer has been hot and windy with most days having thunderstorms and indeed many severe ones, one of which cost me \$80 in roof repairs and no antenna losses since I have no outside antenna on that house, hi. I picked up the GE Superadio for \$70 at a local downtown department store so I would have another AM RX, but the radio has shown its superiority over my Zenith for sensitivity and selectivity on FM, so now I am keeping the GE in Gouldsboro connected to my Finco. The Zenith will serve in Wilkes-Barre as an AM RX and for E Skip on FM with its whip. The 7/17 Es opening was done on the Zenith with the whip from Wilkes-Barre. Oddly enough, my Zenith is a much better performer on its built in whip than the GE is on its. Thus, for people thinking of getting a Superadio for FM do intend to connect it to an outdoor antenna because its built in FM whip is just not all that sensitive. I haven't tried it, but possibly rabbit ears will improve performance also.

7/17 Es
2118 KEZHT 93.5 NE Hastings, EL
2125 KMGK 93.3 IA Des Moines, ID
2142 KEEY 102.1 MN St. Paul-Minn., ID
2148 KQKY 105.9 NE Kearney, ID, "KQ-106"
2152 KELN 97.1 NE North Platte, SIDs
2210 KMGK 93.3 IA Des Moines
2220 KWR 93.7 SD Winner
2220 KKRLt 93.7 IA Carroll, town mention
2230 Skip gone
7/25 Au
1900 WMPR 88.1 SC Sumter, Ending All Things Considered, SC net. ID
8/9 tr
0330 WZIR 98.5 NY Niagara Falls, WBRE off
0445 CKQT 94.9 ON Oshawa, "Motor City" ments. "CKAR-1350 and CKQT FM-94" IDs
8/9 GW
1525 WDST 100.1 NY Woodstock, r, typical small town

8/24 tr
0900 WCTP 92.1 PA Palmyra, ID, WMJM null
This season had really only three good days so far: the 6/18 and 7/17 Es and the 6/27 tropo. The meteors of 8/12 were a disappointment this year. Tropo were far and few between as my number of DX loggings for August shows. The WX this summer has been hot and windy with most days having thunderstorms and indeed many severe ones, one of which cost me \$80 in roof repairs and no antenna losses since I have no outside antenna on that house, hi. I picked up the GE Superadio for \$70 at a local downtown department store so I would have another AM RX, but the radio has shown its superiority over my Zenith for sensitivity and selectivity on FM, so now I am keeping the GE in Gouldsboro connected to my Finco. The Zenith will serve in Wilkes-Barre as an AM RX and for E Skip on FM with its whip. The 7/17 Es opening was done on the Zenith with the whip from Wilkes-Barre. Oddly enough, my Zenith is a much better performer on its built in whip than the GE is on its. Thus, for people thinking of getting a Superadio for FM do intend to connect it to an outdoor antenna because its built in FM whip is just not all that sensitive. I haven't tried it, but possibly rabbit ears will improve performance also.

Bob Zent - 1835 Fruit St. - Huntington, IN 46750

7/29 tr
0600 WUTC 88.1 TN Chattanooga 415
0600 WMBW 88.9 TN Chattanooga 415
7/30 tr
0630 WEXL 88.7 OH Kettering, g, 10w 105
0630 WQRP 88.1 OH W. Carrollton, g, 10w 125
2300 WHPK 88.3 IL Chicago, r, 10w 135
2320 WUTC 88.1 IL Chicago, p, 10w 135
7/31 tr
2209 KPLL 103.3 IA Pella, baseball 400
2220 KMGK 93.3 IA Des Moines, r 430
2222 KMGGO 98.7 IA Centerville, g 395
2228 KAOL 101.1 MO Carrollton 440
2231 KLYF 100.3 IA Des Moines, m 430
2252 KYN 94.1 NE Omaha, k 555
(positive ID at 2300)
2322 KGGO 94.9 IA Des Moines, r 430
2331 KRNQ 102.5 IA Des Moines, r, "Q-102" 430
2340 WOI 90.1 IA Ames, j 435
8/1 tr
2214 WOKZ 100.3 IL Alton, r, "Z-100" 295
2218 WKDQ 99.5 KY Henderson, r 245
8/6 tr
0622 WFXZ 92.9 NY Buffalo, r 370
0627 WGRQ 96.9 NY Buffalo, p 370
0647 WDCX 99.5 NY Buffalo, prog. guide 370
0652 WBEW 102.5 NY Buffalo, "Rock-102" 370

8/16 tr
1930 WWR 89.1 VA Roanoke, j, o/WIPU 390
1935 WXLK 92.3 VA Roanoke, r, "K-92" 390
1938 WSLQ 99.1 VA Roanoke, r, "Q-99" 390
(pinning signal meter)
1942 WPR 94.9 VA Roanoke, m 390
1945 WMEV 93.9 VA Marion, mono 360
8/18 tr
2030 Relogs of Buffalo NY on 92.9, 93.7, 94.5, 96.1, 96.9, 99.5, & 102.5
8/24 tr
0017 KWIT 90.3 IA Sioux City, j 575
2003 KSUI 91.7 IA Iowa City 335
2015 KLS 106.1 IA Mason City, r 425
2035 WHH 91.3 WI Highland 310
2044 KUNI 90.9 IA Cedar Falls, p 375
2110 WWRW 103.3 WI Wisconsin Rapids, r 340
2208 KFMH 99.7 IA Muscatine, j, "99" 300
8/25 tr
2225 KILW 105.5 IA Mt. Pleasant, nx 320
2252 WORT 89.7 WI Madison 255
2253 WHRM 90.9 WI Wausau 355
2306 KPLL 103.3 IA Pella 400
2314 KIWI 105.3 IA Dubuque 300
8/27 tr
0516 WCUC 91.7 PA Clarion, r, 325
(wx & ID just before WUOM's s/on)

August has been a fantastic month for tropo. New loggings to 400-500 miles plus, and very good signal strengths. Hopefully, this will continue into the fall. 73's, Bob

Roger Winsor - P.O. Box 536 - Portage, IN 46368

Hello. A good duct into So. MN this am brought in five new stations. They were:
8/24 tr 0110 WLOL 99.5 MN Minneapolis, almost perfect rock radio, WEFM nulled
0120 KDWB 101.3 MN Richfield, Zerver jewelry ad, "\$-101," r
0130 KEEZ 99.1 MN Mankato, thru WNUW, "from KEEZ-FM"
0145 KAUS 99.9 MN Austin, "FM-100 Country," Austin airport wx
0215 WRLO 105.3 WI Antigo, "FM-105," r, asking for local nx reporter in Tomahawk/Rhineland area
Also heard: Eau Claire strong on 104.5; all Madison, WI and Waterloo, IA also. WEHB 89.9 Grand Rapids, w/jazz talking about moving and needing money. A few days ago Detroit and South Ontario in, but no new stations heard. Dial is getting very crowded with 100k stations.
Roger

Fred Nordquist - 7945 Boxford Rd. - Clay, NY 13041

Equipment: Receiver: HeathKit AJ-15; Antenna: JFD LPL IUA at 45 feet. All DX recorded on Roberts 770X reel to reel tape recorder. Antenna after 8/16: Stereo Probe 9 at 45 feet. New loggings underlined solid. New prop. mode underlined broken.

6/30 Es (spotty to south)
2138 WJAD 97.3 GA Bainbridge, ID, "97-Rock" 970
7/1-7/13 - Vacation to OK/KY - Hope no DX was around.
7/16 Es Localized to NF 1916-2145 (New Prov. #5) Strong signals
1916 CHOZ 93.9 NF St. Johns, "OZ FM," uses CJOZ calls, r\$, ad 1140
1925 CBNN 90.3 NF Marystown, CBC Radio, mono, variety 1040
1934 CIOZ 96.3 NF Marystown, "OZ FM," wx, ads 1040
1938 CFOZ 100.3 NF Argentia, "OZ FM," ad 1100
2035 CPOQ 98.5 NF Stephenville, "OZ FM," r\$ 920
2038 CKOZ 92.3 NF Corner Brook, "OZ FM," r\$, low modulation 930
2108 CBYP 89.5 NF Portland Creek, CBC nx, // 90.3 NF wx 1000
2128 CBTB 97.1 NF Baie Verte, CBC Radio, // CBYP & CBNY 1010
7/17 Es to west 1817-2320, MUF 108 + MHz (very intense)
1917 KTKP 106.9 KS Topeka, "Country-107," ads, o/WRLX! 1045
1922 KSAS 106.5 MO Liberty, wx, ID 980
1924 WNCI 105.7 IL Peoria, local ads, r\$ 710
1928 KILW 105.5 IA Mt. Pleasant, ad, ID 800
1936 KLFM 104.1 IA Ames, SID, ads 885
1945 KVCB 104.3 KS Great Bend, ID, Beautiful mx, o/WKGW! 1220
1952 WQCY 99.5 IL Quincy, "FM-99.5," m\$, TC 815
2011 KWKI 93.3 MO Kansas City, "Sonlife-93" 1000
2115 KSRD 96.9 NE Seward, ID, "\$-97," r\$, o/WOUR! 1080
2133 KEYN 103.7 KS Wichita, temp, ads 1165
2135 KICT 95.1 KS Wichita, local ads 1165
2153 KINF 91.9 KS Dodge City, ID, r\$, wx 1295
7/19 GW 1000 WACJ 104.1 NY Buffalo, ex-WWOR, "FM-104," oldie rock
7/22 Es 2250 unID 98.5 local PSA - S.E. Denver - probable KYGO
7/22 GW 2300 WZIR 98.5 NY Niagara Falls, r\$, ex-WHLD
7/25 Au 1730 No IDs
7/25 Es 2313-0050 7/26 to South
0050 WKGK 90.7 FL Panama City, ID 1040
0108 WVJC 89.1 IL Mt. Carmel, SID, r, steady signal after Es to south faded out. 690
7/26 Es 0944 KWJS 94.9 TX Arlington, ID
0952 KETR 88.9 TX Commerce, ID, wx
8/9 MS 0200 KROA 95.7 NE Grand Island, ID, (perseid MS), prev. Es 1140
8/11 MS 0503 WZZR 95.7 MI Grand Rapids, ID 475
8/16 Installed new antenna - CM Stereo Probe 9 - much improved directivity.
8/17 tr 0006 WJFM 93.7 MI Grand Rapids, nx, wx, thru WBLK 475
0029 WLVU 99.9 PA Erie, m, wx, ID, (WNOZ off) 215
2140 WVPR 89.5 VT Windsor, drama, NPR, (all weak tr on 8/17) 190
8/18 tr 2040 WHEE 97.3 IN Ft. Wayne, r, o/WHCU 485
2200 WAUS 90.7 MI Berrien Springs, ID, nx 540
8/19 Es briefly at 2355. No ID's, MUF 90.3
8/25 tr Super tropo to West (820 miles out).
1759 WHAD 90.7 WI Delafield, NPR, ID 615
1801 WZZR 95.7 MI Grand Rapids, r, prev. MS 585
1802 WGLB 100.1 WI Port Washington, k, nx, ID 595
1832 WDLH 89.3 IL East Moline, g, Moody Bible ad 730

+ Continued +

NORTHERN FM DX

Fred Nordquist cont'd:

OCTOBER 1980

8/25 tr	1957 WQON	100.1 MI Grayling, ID, r, "100-FM"	445
	2053 CKHE	101.9 ON North Bay, "Country-101"	280
	2300 CKNX	101.7 ON Wingham, r, "FM-102," o/WECQ	270
	2314 KUNI	90.9 IA Cedar Falls, in solid, (Ho hum - I've relogged this one three times, hi).	820
8/26 tr	2319 WBSU	88.9 NY Brockport, ETing to West (out to 650 miles)	90
	1816 WLKI	100.1 IN Angola, r, ID, TC, nx	460
	1849 WILL	90.9 IL Urbana, c, ID	650
	1858 WEMU	89.1 MI Ypsilanti, ID, j	385
	2153 WVEP	88.1 IN Elkhart, "Rock-88" & "FM-88"	505
8/31-9/1	- WSEN	92.1 noted off air - back on 9/1 pm	
9/1 AF	(Airplane Flutter)		
	1050 WLPL	92.3 MD Baltimore, ID, wx, r	280
	1703 WGTB	91.9 MD Tacoma Park, c	295

Total logged now at 1116 - discounting the KAZI - 88.7 Austin, TX claimed to be heard on 5/30/80 at 2019 - more likely I heard the ID of KTCU, but I'll never know since I didn't have my recorder on at that time. We had a great time at the WTFDA Convention in Dunkirk, despite the stormy wx. Bob Seybold provided non-stop DX, food & drink. 73.

+ + + + +

Paul Mount - 471 Emerson Ave. - Teaneck, NJ 07666
Sanyo M-9980 \$ cassette w/whip

7/16 Es	1840 CJOZ	92.1 NF Argonia, rp\$	7/17 Es	1934 KCNB	105.7 IA Des Moines
7/16 tr	1930 WFSI	107.9 ND Annapolis, g	1938 KIOV	104.7 SD Sioux Falls, k	
1930 WSNJ	107.7 NJ Bridgeton, M nx	1959 KGOR	99.9 NE Omaha, r\$		
2001 WKQV	92.1 NJ Vineland, r, (new calls)	2002 KHAKt	98.1 IA Cedar Rapids, ABC/E nx		
7/17 Es (All New)	2023 KSRD	96.9 NE Seward, r	2037 KOWHt	94.1 NE Omaha, k, local spot	
1844 KQDE?	92.1 MN Mankato, local spot	2039 KGIN	96.5 NE Grand Island, Royals bb		
1853 KSMX	92.1 IA Fort Dodge, r	2041 KWOA	95.1 MN Worthington		
1913 KRSt	91.7 MN Worthington, wx for SW MN	2051 KULLt	94.5 KS Scott City, SC bb		
1916 KICD	107.7 IA Spencer, nx	2109 KMAZ	92.9 NE Beatrice, k		
	(to column on right)	2140 KSTP	94.5 MN St. Paul, r, "KS-95"		

As usual, thanx to Joe Fela for tips. This was the best opening I ever experienced. Two states, SD & KS, are still needed on AM from here. Called Steve McIntire & Neil Zank to see if they were hearing anything. Steve said TV was good; Neil had things since 1345 that afternoon! Called KSRD - Tom Smith said he'd been hearing the east coast all day and also got a call from Williamsport, PA. Around 2010 all disappeared.

8/2 tr	2000 Phil & Hartford strong, some \$	9/4 tr	2100 WOLC	102.5 MD Princess Anne, g
8/30 tr		2112 WGRF	99.3 NJ Pleasantville, r\$	
2059 WTEV	88.75 RI Providence-MA New Bedford, (ch. 6), no audio calls given	2135 WESR	103.3 VA Tasley, Al Hirt wx	
		2200 WJRE	100.1 NJ Manahawkin	

Note new city of license for WJRE. Manahawkin is the nearest city on the mainland to Ship Bottom. Guess where I found out about this opening? WESR was my first VA to hear call letters on. Never can hear that 100.5 that blasts into S. Plainfield. Missed WTFDA but had a good time at IRCA in Louisville. 73-PRM

+ + + + +

Dave Brumfield - 1505 Kimberly Lane - Muncie, IN 47304
Equipment: 2270 Marantz receiver w/Winegard antenna and rotor at 40 feet.

8/13 tr	0139 WKMS	91.3 KY Murray	310	8/24 tr	0255 KEYE	102.1 MN St. Paul-Minneapolis	520
8/13 MS	0200 KEYS	88.5 ND Belcourt (new state)	950	0257 KDWB	101.3 MN Richfield		505
8/15 Au	2310 WHRS	90.7 FL Boynton Beach	1000	0258 WISM	98.1 WI Madison		280
8/24 tr	0000 WHWC	88.3 WI Menomonie	480	0300 WIBA	101.5 WI Madison		280
0109 KAUS	99.9 MN Austin-Albert Lea	460	0302 KQRS	92.5 MN Golden Valley			525
0146 WSUP	90.5 WI Platteville	325	0303 WIFC	95.5 WI Wausau			390
0157 KTCR	97.1 MN Minneapolis	510	0305 KEEZ	99.1 MN Mankato-Blue Earth			520
0203 KLSS	106.1 IA Mason City	450	0423 WZUU	95.7 WI Milwaukee			230
0227 KSTP	94.5 MN St. Paul	520	0458 WIXX	101.1 WI Green Bay			325
0233 WAYL	93.7 MN Minneapolis	510	0501 KLSE	91.7 MN Rushford			425
			0509 WDLB	106.5 WI Marshfield			400
			8/26 tr				
			0105 WXJY	98.3 WI Menomonie Falls			260

+ Continued +

NORTHERN FM DX

More From Dave Brumfield

OCTOBER 1980

8/26 tr	0145 WJML	98.9 MI Petoskey	340	8/26 tr	0500 WCSR	92.1 MI Hillsdale	120
0200 WWRM	106.7 MI Gaylord		310	9/3 GW			
0300 WUGN	99.7 MI Midland		240	0800 WAXT	96.7 IN Alexandria		11
0344 WZEE	104.1 WI Madison		280	9/7 tr			
0359 WVCY	107.7 WI Milwaukee		230	1959 WKZN	96.9 IL Zion-Kenosha WI		200
0442 WKJF	92.9 MI Cadillac		275	9/9 tr			
0452 WHSB	107.7 MI Alpena		340	2100 KCMW	90.9 MO Warrensburg		490

All new. Totals: 613 with 132 Ed. band, including 19 10 watters.

+ + + + +

Ralph Strobel - 2510 E. McGalliard Rd. - Muncie, IN 47303
Equipment: Heath AJ-1510, Winegard antenna w/rotor at 60 ft.

8/23 tr	2350 WSRX	88.5 MI Allendale, rj\$, 10w	180	8/26 tr	0158 WITW	96.7 MI Cadillac	275
	(My 35th 10 watter heard o/WMUB & KUMR)			0200 WATZ	93.5 MI Alpena		340
8/24 tr	0109 KAUS	99.9 MN Austin-Albert Lea	460	9/3 GW			
0147 WSUP	90.5 WI Platteville, s/off		325	0535 WAXT	96.7 IN Alexandria, k\$,		11
0205 KLSS	106.1 IA Mason City, s/off		450	1st day on air taped. "IN Country-97"			
0208 KSTP	94.5 MN St. Paul		520	9/5 tr			
0212 KEEY	102.1 MN St. Paul-Minneapolis		520	1945 WTHH	88.5 IL Park Ridge, 10w		175
0230 WAYL	93.7 MN Minneapolis-St. Paul		510	2358 WCBN	88.3 MI Ann Arbor, 10w		150
0300 WIBA	101.5 WI Madison, o/WWJY		280	9/6 tr			
8/25 tr	1930 KSAY	96.1 IA Clinton, o/WQLK	285	0201 WXXI	91.5 NY Rochester		440
1934 KLYF	100.3 IA Des Moines		450	0221 WGRQ	96.9 NY Buffalo		380
2000 KDMI	97.3 IA Des Moines		450	0358 WBLK	93.7 NY DePew-Buffalo		385
2017 KFJB	101.1 IA Marshalltown		420	0400 WFXZ	92.9 NY Buffalo, ex-WBUF		380
2102 WKZY	97.1 MI Escanaba		400	9/9 tr			
2200 WWRM	106.7 MI Gaylord		420	2030 KCMW	90.9 MO Warrensburg,		490
2300 WKHQ	105.9 MI Charlevoix		330	o/WBDG	Indy & WILL Urbana		
8/26 tr	0100 WJVL	99.9 WI Janesville, s/off	250	2100 WIBW	97.3 KS Topeka, o/WNEE		550
				2130 WPRC	100.1 IL Lincoln		225
				2155 KANU	91.5 KS Lawrence		540
				2200 KBIA	91.3 MO Columbia		400

Once again, luck was with me and I heard and taped my 35th 10 watt station. WSRX in Allendale, MI has to be one of the craziest stations I've ever heard! The DJ must have been either stoned or drunk! (perhaps both?) Here is what I taped: "Disco! Put some disco on. Oh great, I'll do that, in a certain special...burrpp!...way. I'm going to play some beatles here...burrpp!...Come Together." Some music began and the DJ says, "Upps, that's not them." Then he played something else which still was not the beatles.

All summer long I've tried to take Jim Alexander's good advice and find an antenna man to horizontally stack two Winegard FM antennas for me. I called every antenna service in town. Most antenna men here had never even heard of such a thing! Can you believe this? Some stores wouldn't even return my phone calls after I told them what I wanted. I finally found one man who was interested, but had never done this type of work. He said he would let me know soon. I even had him read the article in a previous VUD regarding antenna stacking. One month passed with no response, so I finally stopped at the store where he works. He told me that they really weren't equipped to do that type of work and it probably wouldn't help reception anyway! I still can't believe what morons and idiots these so called antenna men have proven to be. What am I supposed to do, fly an expert in from the Winegard factory? Any of you DXers have any suggestions? If so, let me hear from you before the snow starts to fly this winter.

I can't understand why Central Indiana needs another hillbilly station over in Alexandria! Just another one of those worthless auto garbage stations to put up with. This station is on 24 hours every day, seven days a week. My best frequency of 92.1 with 26 stations heard, is now ruined. WBST had to go on 24 hours seven days a week.

When I began DXing in 1972, I didn't tape anything. What a fool I was! When I told some friends here I had heard TX and FL on FM, I was accused of being a liar. So, in late May of 1977, the tape decks began recording everything. After three months of recording and saving ID's, I played the tape back and counted the number of stations I had recorded. Believe it or not, but I had exactly 300 ID's taped with 103 of them being from the Ed. band. If anyone can top this, more power to you. The previous record was 103 Ed. band stations in one year's time. 1977 was a good summer, but certainly not as good as 1980. Some stations I heard in the early 70's have never been heard again to get on tape, especially some heard by Es.

Total now: 944, with 237 Ed. band.

+ + + + +

(continued on page 27)

SOUTHERN FM DX

Danny Buntin, editor
1312 N. Skyline
Stillwater, OK 74074

DEADLINE: the 10th

AUGUST DX TAKES A WORSE THAN USUAL SLUMP

Pat Dyer, 5315 Silvertip Dr., San Antonio, TX 7828 - June 2-15 w/prior addenda

Equip: Realistic TM-1001 into an Allied 426; 6-el. Archer antenna at 20 ft. with rotator
Central Standard Time used, new underlined, t-tentative

5/23 Es
2109 WRCK 94.7 IL Chicago, ID, r 1045

5/29 Es
2032 KJMC 93.7 UT Richfield, ID, r 995

6/2 Es

1110-1115 WSCI 89.3 SC Charleston, c
1210-1215 unIDs 88.1, 88.5, 89.7
1305 WKNC 88.1 NC Raleigh, r 1230
1317 WQDR 94.7 NC Raleigh, r
WSHA 88.9 NC Raleigh
WDAV 89.9 NC Davidson, c 1110
1324 WFDL 88.5 NC Winston-Salem, c
1336 WQRT 96.9 NC Goldsboro, "Q-96" 1260
1338 WLPT 94.5 KY Lexington, KY nx 995
1342 WKEZ 95.7 VA Norfolk, "Tidewater"
1347 WIAN 90.1 IN Indianapolis, ID 995
1349 WFBQ 94.7 IN Indianapolis, wx
1358 WFPL 98.3 KY Louisville, ID 945
1401 WKQQ 89.1 KY Lexington, r, "Double-I"
1410 WBBF 105.9 OH Middletown, Reds promo
1420 WZZQ 95.1 IL Decatur, area ad 985
1421 KSLQ 98.1 MO St. Louis, ID 790
1423 KSHE 94.7 MO Crestwood, r, ads 780
1425 WPMT 98.7 IL Chicago, ID 1045
1426 WRCK 94.7 IL Chicago, "W-Rock"
1429 WMIX 94.1 IL Mt. Vernon, ID 820
WYGA 92.3 IN Hammond, ID 1040
1457 WKZN 96.9 IL Zion, area ads 1080
1513 KESD 88.3 SD Brookings, rj 1020
KFMt 89.3 ND Grand Forks 1240
KEYAT 88.5 ND Belcourt, k 1335

soon f/out

6/3 Es
1046 KBYU 88.9 UT Provo 1045
1105 KUER 90.1 UT Salt Lake City 1080
lull to
1132 KSUB 92.5 UT Cedar City, k, ID 1005

tr

Es
1150 KRBE 94.9 UT Cedar City, area psa
(weird as very little on Ch 2, 3)
(92.5 & 94.9 loud with little fading, no
trace of 93.5 in St. George though)
1200 apx f/out

6/4 Es
1410-1430 unIDs to 90.9
1415 KUNIT 90.9 IA Cedar Falls 960
nw IA wx
1428 KESD 88.3 SD Brookings, j 1020

6/5 tr
0039 KENW 89.5 NM Portales, ID 430
1135 KKKt 99.1 TX Odessa, g 280

6/6 tr

0059 KENW 89.5 NM Portales, ID, s/off 430
0601 KQIP 96.9 TX Odessa, area ads 280
KKQQ 99.1 NM Clovis, ID, nx 435
0605 KBUY 94.1 TX Amarillo, ID, k 440
0606 KGWC 97.9 TX Amarillo, local nx
0610 KVLV 91.3 TX Beaumont, ID 275
(off back of antenna)
0614 KTKM 99.9 NM Clovis, ID 435
0623 KYTX 98.7 TX Amarillo, ads, "KY 99 FM"
0635 KLEK 94.5 TX Lubbock, town ID 340
0647 KWMJ 103.3 TX Midland, local ads 275
0652 KQTY 105.9 OK Hobart, area ads, 385
"KQ-106"
0657 KHOC 105.5 TX Levelland, ads, ID 360
0700 KACV 89.9 TX Amarillo, ID, "FM-90" 440



6/7 Es
2100 KCSN 88.5 CA Northridge 1210
2105 KPST 89.3 CA Pasadena 1185

6/8 Es
2035 KCSN 88.5 CA Northridge, k 1210
KPCST 89.3 CA Pasadena, c 1185
KCRW 89.9 CA Santa Monica, discus. 1200
KXLU 88.9 CA Los Angeles, c 1190
2040 KLOn 88.1 CA Long Beach, k 1130
2045 f/out

6/9 Es
0932 unID 89.5 lull then
0945 WFIT 89.5 FL Melbourne, r 1090
0955 WUSF 89.7 FL Tampa, c 985
WVFM 94.1 FL Lakeland, ad 1010
WYNT 94.9 FL Tampa, r 985
WMTM 93.9 GA Moultrie, k 885
0956 WAIv 96.9 FL Jacksonville, r 1015
0959 WMNF 88.5 FL Tampa, ID 985
1000 WXL 94.3 AL Abbeville, ID 805
1002 WPCS 89.3 FL Pensacola, AFM nx, ID 685
1008 WFOY 97.7 FL St. Augustine, area nx1035
WQHL 98.1 FL Live Oak, k 930
1010 WGN 98.5 FL Panama City, m 780
1011 WLW 94.9 FL Tallahassee, ID 855
1012 WBEU 98.7 SC Beaufort, ID 1075
tr
1014 KQXY 94.1 TX Beaumont, ID 275

cont.

SOUTHERN FM DX

Dyer, cont.

OCTOBER, 1980

6/9 Es

1021 WJCT 89.9 FL Jacksonville, c 1015
1026 WBG 98.9 FL Tallahassee, psa 855
WYDt 99.9 FL Palatka, k 1015
WJAX 95.1 FL Jacksonville, r 1015
1030 WMEZ 94.1 FL Pensacola, ID 685
1032 WTKX101.5 FL Pensacola, r
1100 f/out
1140-1215 unIDs to 99.1 (1140-1205, lull)
1215 WACF 98.5 IL Paris, wx, ID 930
WLRW 94.5 IL Champaign 935
1217 WIAI 99.1 IL Danville, k 960
1220 WIL 92.3 MO St. Louis, ads, wx 790
1221 KCLC 89.1 MO St. Charles, r 790
1224 KSLQ 98.1 MO St. Louis, r 790
1225 KSHE 94.7 MO Crestwood, r 890
1226 WCRG 95.7 IL Effingham, ad 870
1227 WIBT 91.1 IL Carlinville, g 835
WBEZ 91.5 IL Chicago, drama reading
1227 WYCA 92.3 IN Hammond, g, ads 1040
1243 WBBF 98.9 IL Rock Island, "FM 98.9"
1245 WLVE 94.9 IA Baraboo, ID, m 1085
1248 KHAKT 98.1 IA Cedar Rapids, k 945
1251 KOEL 92.3 IA Oelwein 985
soon f/out

6/12 Es
0815-0845 unIDs to 97's (much CCI from in
state trop)

0849 WXY 93.5 SC Columbia, ID 1075
0853 WYMX 105.7 GA Augusta, local ad, r
0856 WBBQ 104.3 GA Augusta 1010
0900 WRAS 88.5 GA Atlanta, ID 880
0903 WSBT 98.5 GA Atlanta, m 880
0905 WQXI 94.1 GA Smyrna, ads, "94-Q" 875
WRFG 89.3 GA Atlanta 880
0909 WZZW 103.1 GA Augusta, "Z-103" 1010
0913 WBCY 107.9 NC Charlotte, r 1105
(VOR's in)

0919 WVID 106.7 GA Gainesville, "Wide-107"
0924 WQSB 105.1 AL Albertville, wx, ID
0925 WTQR 104.1 NC Winston-Salem, ID 1150
0929 WRQK 98.7 NC Greensboro, ID 1175
0930 WSPA 98.9 SC Spartanburg, ad 1035
0931 WQUT 101.5 TN Johnson City, ads 1050
0934 WIVK 107.7 TN Knoxville, wx, ID 990
0944 WKPT 98.5 TN Kingsport, town ID 1045
1000 WVGE 88.3 TN Galatin, wx, ID 850
1001 WRFN 88.1 TN Nashville, s/on 820
1006 WEXU 88.9 KY Richmond, KY nx 995

Sorry for not keeping the logs more updated, but not getting the new FM atlas until after mid-June did make for a backlog. I've still lots of C-90 tapes to go thru. During some of the good trop sessions (due to the heat wave these regions had then) I was off busy on 2-m trying to find some new states there. The same was true for some of the higher-MUF Es openings. I'm sure a lot was missed on June 15th due to the contest participation (50-MHz had lots of 2 Es into New England). 73, Pat

Randall B. Clark, Rt. 9, Box 231 (Dutch Ridge), Parkersburg, WV 26101 - Aug. 6 to Sept. 4

Equip: Realistic STA-42 with a 3 ft. long twin lead up at 45 ft. AGL, 5 mi. east of the city, 1 mile from WXIL. All loggings are tr. EDT used, standard abbrev's used.

8/6
2311 WGR 107.5 MI Detroit, \$
2315 WNUZ 103.5 MI Detroit, \$
2325 WDET 101.9 Detroit, \$
2332 WCZY 95.5 as above

8/8
0006 WKGO 106.1 MD Cumberland, rare

6/12 Es

1008 WSIP 98.9 KY Paintsville, E KY nx 1065
1013 WNUB 88.5 OH Oxford, OH nx 1045
1015 f/out
1130-1155 unIDs 88-92 mostly 88-90, Ms CCI
1157 WGTN 91.1 WI Kenosha, nx, ID 1085
1159 WPNE 89.3 WI Green Bay, ID 1190
WIAA 88.3 MI Interlochen, ID 1255
1205 f/out

6/13 tr

0641 KLUR 99.9 TX Wichita Falls, ads 305
0649 KTX 88.1 TX Lubbock, psa's, ID 340
0659 KENW 98.5 NM Portales, nx, ID 430
0930 KQIP 96.9 TX Odessa, town ID 280
0934 KYKK 94.1 NM Humble City, ID, "rock-94"
Es

1145 unIDs to 98's Spanish unIDs 88.9, 90.9
1155 TGRT- 88.8 Gua Guatemala City, nx 1120
1156 TGY- 98.6 Gua Guatemala City, nx
1253 TG-- 88.1 Gua Guatemala City, nx
(1255-1315, lull) then much the same to
1330 f/out
2125 KCSN 88.5 CA Northridge 1210
2127 KLCN 88.1 CA Long Beach 1180
KSD 88.3 CA San Diego 1120
2128 KPST 94.1 CA San Diego, c 1120
KPCST 89.3 CA Pasadena 1185
KXLU 88.9 CA Los Angeles 1190
KCRW 89.9 CA Santa Monica 1200
2135 KSFC 88.7 CA Claremont, town ID 1160
KPFK 90.7 CA Los Angeles 1190
KFACT 92.3 CA Los Angeles, c
KJOI 98.7 CA Los Angeles, m
2139 KRO 106.7 CA Pasadena, r 1185
2143 XETRA 91.1 BCN Mexicali, r 1100
2200 XHIS 90.3 BCN Mexicali
2203 KWIZ 96.7 CA Santa Ana, area ad 1165
KXY 96.5 CA San Diego, local ad 1120
KIFM 98.1 CA San Diego 1120
2210 f/out

6/14 tr
0223 WAFB 98.1 LA Baton Rouge, ID 450
0604 KTX 88.1 TX Lubbock, ID 340

6/15 Es
-busy on 6-m with opening in the ARRL VHF cont.
1540-1700 unIDs to 107.9
1558 WUNA 107.7 NY Albany, area psa 2Es 1635

8/9
1200-1611 WXIL off thus hearing various re-logs. Our power was out from 1739-2034 thus missing an Es opening. DRAT!
8/19
0945 WDET, 0957 WRIF & WQMC 1000
cont....

8/19 tr
2212 CBCL 93.5 ON London
2230 WWMW shocks me as they ID! rare!
2256 CJBX 92.7 ON London, tent.
8/23
2358 WCOM 101.7 OH Urbana + others
8/25
0205 KNWS 101.9 IA Waterloo, in w/brief wx temp figures, etc. not ms.
2130 KUNI 90.9 IA Cedar Falls, called Neil Dickerson, but he naturally had nothing.
2145 KOEL 92.3 IA Oelwien, w/t ck CDT, tent.
2207 WKYS 93.9 DC Washington, d and s
2359 WHAD 90.7 WI Delafield

8/26
0104 CJBX 92.7 ON London
1930 KUNI 90.7 IA Cedar Falls
1923 CJOM 88.7 ON Windsor
1935 WCMC 104.3 BOOMING IN! \$
1947 CBCL 93.5 ON London

(WXIL, local, is moving to another site by mid-month, with rumored new format plus possible mass firings. WXIL has had more crap going on than any other I know.)

Hi there! How can you sum up this year's skip cx?...well I just did!...anyway I'm at least 150+ this year past 500 now, Neil Dickerson says cx are exactly like a typical winter morning (It will be winter by the time you read this!)

I would still be interested in hearing from those who are into the station PR collecting bis as I have PLENTY of area stickers, etc....come on, WV has hot to be a rare state for stickers! I am especially interested in collecting t-shirts put out by the various stns (medium size) also have two shirts for trade, WMMR-med & WFLX-xlarge.

Aug. 15, met WTFDA'er Bill Wurtzel NY, NY at our bus depot while Paul Mount was going through the area, it was really nice meeting you, Bill, a real surprise indeed!!

Wishing to each the best of DX! Sincerely, Randall B. Clark

Rick Sanford, 404 S. McNeill, Burnet, TX 78611 - Aug. 6 to Sept. 7 CDT

8/11 tr
2335 KRCT 94.3 TX Ozona, r, heard only once before in April 1978.
KPPM on while KRCT + KLKE were heard

I spent less time DXing during the period covered in this report than I have for any other time since I installed my rotor in the summer of '77, so the poor results should be no surprise. The most interesting catches were a couple of 94.3s in the 150-200 mi. range, that were heard while remnants of "Allen" were to the southwest of them, in New Mexico. KLKE held the distinction of being my most highly sought station, since it was the only operating commercial station in South Texas not logged here. I didn't check enough to know the real extent of the coastal tr. However, I did catch the tail end of two weak openings out to around 500 miles. These produced only a few relogs and nothing beyond New Orleans and Jackson. With cooler weather just around the corner, the tr should begin to pick up this fall and maybe surprise us all during the winter.

Danny Buntin, 1312 N. Skyline, Stillwater, OK 74074 - Aug. 13 to Sept. 11 CDT

Equip: Pioneer TX-9100 tuner, Antennacraft 10 el. ant. up 30 ft. with rotator

8/16 tr
1016 KTQM 99.9 NM Clovis, ID, \$ 375
1018 KKKQ 99.1 NM Clovis
1104 KANZ 91.1 KS Garden City, ID, P 260
(also most of Lubbock & Amarillo in weak)

8/21 tr 160
0945 KUAF 88.9 AR Fayetteville, ID, 10wts.
1003 KNGX 91.3 OK Claremore, ID, in \$ 83
(new to the air, big band and contemp. mx 10 wts at 400', so should not be taken too lightly.) (Well enhanced cx this am)

8/26
2008 WETA 90.9 Simulcasting TV
2250 WOOD 105.7 MI Grand Rapids
2314 CHAY 93.1 ON Barrie

8/27
0049 CKPC 92.1 ON Brantford
1209 WKYS 93.9 DC Washington
1202 CJBX over WHF

8/29
0106 WRQK 98.7 NC Greensboro +CKPC
all day same boring stuff

8/29
1159 WSAI 94.1 OH Cincinnati, \$
1203 WKRQ 101.9 OH Cincinnati, \$
1205 WEBN 102.7 OH Cincinnati, \$
2030-2201 WMFO off (92.1 Middleport)
2120 unID rock stn. +WFEM 2121

9/2
1900 WYYS 94.9 OH Fairfield, "yes-95" xWLVV

9/3-4
2045-2110 KUNI back in! +2132-2156
0100 WHRM 90.9 WI Wausau, s/off of WI net

8/12 tr
0000 KLKE 94.3 TX Del Rio, m, UPI nx
8/21 tr
0914 KHOM 104.1 LA Houma, AP Radio's
"Business Barometer"

8/31 tr
1000 KTEZ 101.1 TX Lubbock, \$ 325
1010 KPAN 106.3 TX Hereford, ad 325
1016 KPER 95.7 NM Hobbs, wx, ID, k 420
1021 KLLL 96.3 TX Lubbock, \$ 325
1031 KLEA 101.7 NM Lovington, wx, ID 415
1045 KBIT 94.9 NM Roswell, ID, m, \$ 460
1055 KYKK 94.1 NM Humble City, r, ID 420

9/7 Es
1700 WITN 93.3 NC Washington, ID, r
1712 WKEZ 95.7 VA Norfolk, ID 1110

cont.

9/7 Es
1718 WQMI 102.9 VA Norfolk, ID 1100
1722 WRVQ 94.5 VA Richmond, ads, "Q"
1725 WSLQ 99.1 VA Roanoke, "Q-94" 970
9/7 Es
1727 WPVR 94.9 VA Roanoke, ID 970
1729 WAMU 88.5 DC Washington 1105
1746 WBOC 104.7 MD Ocean City, ad, ID 1220
1748 WKHI 99.9 MD Ocean City, ID

The great heatwave started to lose its grip here in mid-August as rainy weather gave way, and tr seemed to benefit from it some after a month long absence. The Aug. 21 tr was notable for penetrating further into southeastern New Mexico than the good June tropes were able to do in that area.

KSFT-FM of St. Joseph, MO did not change to KKJO as incorrectly reported in the Aug. column. Actually, KSFT was simulcasting with KKJO-AM at time of reception. 73.

NORTHERN FM DX (continued from page 23)

OCTOBER 1980

Neil G. Zank - 623 Lyncrest Dr. - Lincoln, NE 68510
Equipment: Pioneer SX-750, Ten element Archer at 45 ft.

7/17 Es
WBBQ 104.3 Augusta, GA
WKTC 104.3 Tarboro, NC
WMSQ 104.9 Havelock-Cherry Point, NC
WQTI 103.1 Dunn, NC
WKKZ 92.7 Dublin, GA
WWLV 94.5 Daytona Beach, FL
WREK 91.1 Atlanta, GA
WRAS 88.5 Atlanta, GA
WUSF 89.7 Tampa, FL
WJCT 89.9 Jacksonville, FL
WDEN 105.3 Macon, GA
WBJW 105.1 Orlando, FL
7/17 Es
WFMX 105.7 Statesville, NC
WAPA 92.5 Panama City, FL
WQDR 94.7 Raleigh, NC
KMAR 95.7 Winnsboro, LA
WLPB 96.1 Mobile, AL
WWTZ 92.5 Waterbury, CT
WAIL 92.7 Middletown, NY
WMTM 93.9 Moultrie, GA
WFDR 93.3 Manchester, GA
WSOX 94.9 West Yarmouth, MA
7/26 tr?
KOYE 94.9 Laredo, TX

Another widespread Es opening has netted me three new states, bringing total to 33 states heard. They include Georgia, Alabama & Louisiana. I received a phone call during evening of opening from Paul Mount in NJ checking in on his midwest receptions. Neil

TECHNICAL TOPICS



Q: "What are discone antennas? Are they any good for PSB DXing?"

A: Discones are basically ground plane vertical antennas with very broad frequency coverage. Several PSB monitor antenna manufacturers are offering discone designs for multi-band use, claiming coverage of all the major PSB bands with performance at least equal to that of a single ground plane out for each band. As far as DX performance goes, keep in mind that any type of ground plane antenna may be fine for local monitoring, but your best bet for above-average results would be a yagi or log.

Q: "Can I use a UHF TV antenna for DXing UHF PSB? What kind would work best? What about impedance match?"

A: Stacked-bay type UHF TV antennas work extremely well for DXing UHF PSB, especially the 470-512 MHz "T" band (shared with UHF TV). Some types of 4- and 8-bay UHF antennas perform with good results on 450-470 MHz. However, they should be vertically mounted, not horizontally as for UHF TV. You can use a 300/75 ohm TV balun and low-loss coax for the run to your scanner. While there will be a mismatch between the 75 ohm coax and your scanner's 50 ohm input, the increased gain of the UHF TV antenna should give you much better DX results on UHF PSB than you've ever had before. Just as in UHF TV DXing, you should be careful to choose low-loss coax and a good balun, and get your antenna as high as possible. With the addition of a rotor, the increased gain and directivity of a UHF TV antenna can give you outstanding UHF PSB DX results.

WESTERN TV-DX

October 1980

This month we welcome Bill Heusmann and John Ebeling to the column. I hope to hear from both of you regularly.

Note Buck Pattin's 975 mile UHF logging, Alabama to Minnesota, on June 30.

New _____ New Mode _____ Tentative - t Unidentified - unid

Bill Heusmann, 698 Eighteenth St. #2, Des Moines, Iowa 50314 CDT

While I've been a member of WTFDA since '68 or thereabouts, my apartment lifestyle has kept me from actively DXing since the early seventies. Now, I'm finally in my dream job at the Iowa Public Broadcasting Network operations department and planning to stay put for awhile. I'm also renting from a most amenable couple who let me put up a decent antenna system, discreetly tucked away in a far corner of their under-restoration Victorian house. It's also an excellent location as far as terrain; on a hill, overlooking the confluence of two rivers. For VHF, I purchased a Winegard GH-4053, while still using a fifteen year old eight bay UHF antenna. Receiver is a 19 inch RCA color "portable." The low-band VHF receiver I used for F2 last sunspot peak was stolen a couple years ago, my multi-band portable is dead on that band, so I've gotten none of the recent excellent European reception. Perhaps this fall... Current DX is as follows:

July 1980	August 1980	25 tr 2059	21 WI
31 tr 2036 WKBD 50 MI 525	1 tr 0526 KELO 11 SD	2104 WKOW 27 WI	
WGPRt62 MI 525	0730 K33AA33 IA 95	2110 WEEK 25 IL	
WTWS 56 MI 525	4 tr 2000 K33--33 NE	2119 KDNL 30 MO 275	
WXON 20 MI 525	2110 KTSB 27 KS	2133 K74CO74 IA 95	
2041 WTVO 17 IL	2124 KBMA 41 MO KC41	2134 WCFE 38 IL	
2059 WCFC 38 IL 310	2145 KYFct50 MO	2159 WGRF 39 IL INN	
2101 KIIN 12 IA	5 tr 0730 KCPT 19 MO	2202 WSNs 44 IL	
2122 WGEM 10 IL	0758 KCBJ 17 MO	2213 WCIU 26 IL	
2130 KRIN 32 IA	0759 K33AA33 IA	2216 KDUB 40 IA	
2131 KYIN 24 IA	2229 K38AB38 IA 160	2218 WTWS 56 MI	
2159 KXVE 19 NE	WIGS 20 IL 250	2224 WCVG 24 WI	
2200 KTVQ 2 MT	10 Es 1037 WESH 2 FL	2230 WGVG 35 MI	
tr 2227 WIGS 20 IL	25 tr 2030 WKAR 23 MI	2259 WTVV 47 IL	
	2059 KYFC 50 MO	2326 WFLD 32 IL	

I am well pleased with results in this location, especially on UHF. The effects, good and bad, of terrain and buildings are quite noticeable, with virtually nothing from the north toward crest of hill and apartments. I never expected to see so many translators so quickly. This bodes well for the future. 73, Bill

Pat Dyer, 5315 Silvertip Drive, San Antonio, Texas 78228 CST

Equipment: 9" b&w 1976 Penncrest (model 1001), Archer V-100 and 8-bay bow-tie UHF array at 20 feet with rotor

June 1980	1 Es (MUF 88.3 @ 1810)	2 Es 1059	WGBD 2 SC 1120
1 tr 0910 WJTVt12 MS 525	1858 WBTW 3 NC 1105	1100 WCIVt 4 SC 1120	
Es 0930 unids 2,3 w	(MUF 89.7 @ 1915)	(MUF 89.3 @ 1110)	
(tr CCI hvy)	2035 KTWO 2 WY 1015	1159 WWAY 3 NC 1250	
1000 KNXT 2 CA 1190	(MUF 104.3 @ 2039)	(MUF 89.7 @ 1205)	
1020 KVOAt 4 AZ 750	2200 KUTV 2 UT 1080	1258 WJSK 2 TN 1010	
1025 KPHOT 5 AZ 835	(MUF 105.9 @ 1410)	(MUF 105.9 @ 1410)	
1029 KTVK 3 AZ 835	2220 KVBct 3 NV 1050	1503 WITI 6 WI 1100	
(MUF 98.7 by 1035)	2330 apx f/outs	1528 KTVQ 3 MO 835	
1215 KRMAt 6 CO 810	(tr CCI hvy)	1529 WHT 2 IA 945	
1500 f/outs unid 2-5	2 tr 0049 KHX 10 NL 275	WBSY 2 WI 1190	
1550-1750 unids 2-4	Es 0710-0750 unids 2 n	1555 apx f/outs	
n., Canada	0759 KVBC 3 NV 1050	1750-1830 unids 2	
1759 WSJK 2 TN 1010	KNXT 2 CA 1190	ne/new faint	
WNGE 2 TN 820	0825 KOAI 2 AZ 855	2025-2120 unids 2-4	
(WSJK-aud., WNGE-vid.)	tr 0834 KNID 2 TX 275	(lots of trop CCI)	
1800 KDLO 3 SD 1070	Es KNBct 4 CA 1190	2128 KBHE 3 ND 1200	
1805 KFVrt 5 ND 1200	tr 0929 KETS 2 AR 515	2130 KDIX 2 ND 1225	

Western TV DX

Pat Dyer (continued)

2 Es 2215 KOTA 3 SD 1040	6 tr 0559 KBIM 10 NM 440	13 tr 0659 KAMC 28 TX 340
2315 apx f/outs	2350 KLRK 13 TX 340	KGMCt34 OK 420
3 tr 0448 KMID 2 TX 275	KFDWt12 NM 435	KOKHt25 OK 420
Es 1015 unids 2-4	7 tr 0030 KCBd 11 TX 340	0731 KTAB 32 TX 220
1029 WPMY 2 NC 1175	0036 KSWs 8 NM 440	KLTSt24 LA 350
1058 WSAZ 3 WV 1100	0420 KFDA 10 TX 440	0817 KHMT 2 TX 275
1128 KUTV 2 UT 1080	Es 1830-1850 unids 2,3n	0829 KCBd 11 TX 340
(MUF 94.9 @ 1130)	2030-2050 unids 2,3	0929 KSWs 8 NM 440
1225 f/outs unids2ne	2058 KNXT 2 CA 1190	Es 1135 unid 6 se
1330-1340 unid 2 nw	KNBct 4 CA 1190	(MUF 98.6)
2005-2030 unid2,3 n	2059 KEYT 3 CA 1270	1145 TGv t 3 GU 1120
2032 KDIX 2 ND 1225	(MUF 89.3 @ 2100)	YSU t 4 ES 1200
2040 KOTat 3 SD 1040	2130 f/outs	1205 YSR 2 ES 1200
2100 KTVQ 2 MT 1245	tr 2350 unids 7,9 Mexi.	1248 Cuba? 2
2205 KUTV 2 UT 1080	8 tr 0015 unids 9-11 Mex.	1250-1400 unids 2-4
2355 apx f/outs	Es 0025 unid 2 nw	Mexico
4 ms?0120 KTWO 2 WY 1015	0845-0930 unids 2,3nw	2100 KIXTt 2 CA 1190
tr 0420 KLTv 7 TX 280	1758-1950 unids 2,3nw	2115 KNBct 4 CA 1190
0445 KMID 2 TX 275	1957 KNXT 2 CA 1190	2123 KTLAt 5 CA 1190
Es 1305 unids 2 n/ne	1959 KVBC 3 NV 1050	(MUF 106.7 @ 2139)
1320 KTCat 2 MN 1110	2025 KNBct 4 CA 1190	2150 XHAQt 5 BCN1010
WCCot 4 MN 1110	2029 XHBC 3 BCN1010	2227 XHBC 3 BCN1010
1323 WISC 3 WI 1065	(MUF 89.9 @ 2035)	2250 unids 2,3 span.
1329 WITt 6 WI 1100	2120 apx f/outs	soon f/outs
1350 WTMJt 4 WI 1100	9 Es 0925 unids 2-4	14 tr 0527 KMID 2 TX 275
1358 WBAy 2 WI 1190	0929 WESH 2 FL 1055	0540 WGN0t26 LA 510
(MUF 90.9 @ 1412)	WSAV 3 GA 1050	0629 KCBd 11 TX 340
1422 local 4 off, but	0930-1030 unids 2-5	Es 0755 WESHt 2 FL 1055
no ID's of Es goodies	(MUF 101.5 @ 1032)	0857 WJXTt 4 FL 1015
1430 WMT 2 IA 945	1145 WTTvt 4 IN 950	0925 WCIVt 4 SC 1120
1545 apx f/outs	1158 WTWO 2 IN 935	0929 WCBD 2 SC 1120
1630-1645 unids 2,3	1159 WCIA 3 IL 935	0959 WSB 2 GA 880
1925-2210 unids 2-4n	(MUF 100.9 @ 1212)	1010 WSAvt 3 GA 1050
2010 KVBct 3 NV 1050	1330 WMT 2 IA 945	1036 local 4 off 30s,
2050 KNBct 4 CA 1190	1331 KTVQ 3 MO 835	no ID's though
5 tr 0000 KCRD 11 TX 340	1345-1545 unids 2,3	1100 f/outs
KSWs 8 NM 440	2020-2100 unids 2 n	1800 unid 2 n, brief
0009 KBIM 10 NM 440	Es 0150-0215 unids 2,3n	2030-2045 unids 2-4ne
Es 0150-0215 unids 2,3n	0220 WBBM 2 IL 1045	2117 WBAy 2 WI 1190
0221 unid 5	0221 unid 5	2129 WBBM 2 IL 1045
0245 f/outs	1059 WBAy 2 WI 1190	to 0000 busy with 6m
0800 KqTV 2 MO 750	1118 KDLO 3 SD 1070	in ARRL VHF contest
0930 f/outs ap	1129 KTCa 2 MN 1110	15 Es 0030-0045 unid 2 ne
1655-1850 unids 2,3n	1155 f/outs	0130-0140 unids 2,3 n
tr 1859 KMID 2 TX 275	1405-15 unid 2	0145 Unids to 5 (all
6 tr 0014 KENWt 3 NM 430	1805 unids 2-4	locals off)
0134 KTEW 2 OK 485	0825 unids thru 5	0148 KWGN 2 CO 810
0420 KLTv 7 TX 280	0859 WECT 6 NC 1250	0200 KTVS 3 CO 815
0433 KFDA 10 TX 440	(MUF 107.9 @ 0913)	0225 KUTV 2 UT 1080
0434 WAFB 9 LA 450	1022 WSAZ 3 WV 1100	0300 apx f/outs
0440 KTVH 12 KS 590	1029 WDTN 2 OH 1075	tr 0316 KTVY 4 OK 420
0458 KWTv 9 OK 420	WCMHt 4 OH 1135	0542 KSWs 8 NM 440
0515 KLFYt10 LA 395	1043 WAVE 3(IN) 945	KCBd 11 TX 340
0532 KCBd 11 TX 340	1050 WTTvt 4 IN 950	0549 KAMC 28 TX 340
KSWs 8 NM 440	1058 WTWO 2 IN 935	Es 0850-1100 unids 2-6
KAMRt 4 TX 440	(MUF 91.1 @ 1155)	(MUF 98.1 by 1010)
0533 KOSA 7 TX 280	1225 f/outs	again busy with 6m
0540 KFDWt12 NM 435	2250-2255 unid 2 nw	for contest
(solar flare nx 0542)	2310 unid 2 nw	1059 WESH 2 FL 1055
0558 KNOM 9 TX 295	13 tr 0050 KBMT 12 TX 275	1450-2020 unids 2-6
0559 KLRK 13 TX 340	Es 0145-0210 unid 2 ne	(MUF 107.7 @ 1558)
	(CB tp, no ID!)	1459 WBAH 2 MS 615

Sorry for being so late with this, but I had to catch up on some of the FM logging tapes first. As you can see, a lot of stuff for just two weeks in June!

Trop openings (due to the heat-wave this area was having) very good, but I was busy trying to get some new states worked on 2m during a lot of that. Also, the trop CCI often masked ES MUF determinations - sometimes to the point where

Pat Dyer (continued)

Es was first noticed on the FM band!

The ARRL contest June 14-15 received priority attention over the TV (and even the FM Es). 73, Pat

John Ebeling, 9209 Vincent Ave. S., Bloomington, MN 55431 CDT

(A letter was received from John which included the following DX items, fm)

As you probably know, I do not regularly report TV DX... Usually while up north (Prosit, MN, 30 miles nw of Duluth), I leave the TV on and tuned to ch 2 as an indicator of Es conditions. August 2, 1980 was only a normal day until shortly before 5 PM, then Es became active for slightly over two hours. 5PM produced a perfect ID of KUTV-2 UT which lasted until about 5:20. CCI then, followed by a good ID of KWGN-2 CO at 5:30. Shortly thereafter, fade out until 5:57. 6PM produced a good pix and ID of KPRC-2 TX with Big 2 News starting. The signal was nearly local quality for 20 minutes, then CCI and at 6:30, KMID-2 TX gave their ID. Fade out about 6:40 for a while, then at 7 a fairly good ID of KOAI-2 AZ was noted. Poor reception after that until 8:30 when an ID of CKSA-2 Lloydminster, AB was seen.

All this good Es, but it never made it to the FM band. The antenna used was a 5 element pointed south to Minneapolis, as I sometimes enjoy watching the news from the home area while up north.

B.W. Battin, 4305 Pitt St., Duluth, MN 55804 CDT

Equipment: 10 element yagis for hi and lo band VHF, 7' dish with CMA-Ub preamp for UHF.

Table with columns for date (June 1980, July 1980, August 1980), call letters, frequency, and location. Includes stations like WFIE, WUSI, WJVM, etc.

I've been so busy completing my most recent novel that this is the first chance I've had to report my DX. Not that there's been that much to report. Except for June 30th, when I had a tropo opening out to 975 miles, this has been a very poor DX season here.

May nice, long tropo ducts seek out and find your antennas in what is left of the season. Buck

Randy Miltier, 1068 Fairview Ave., San Jose, CA 95125 PST

DX for August was virtually non-existent here in San Jose. The only trace of DX was on August 15 at 0515-0630 on ch 2 and 3 with no ID's. Even the great Perseids showers produced nothing - not even a blip. I had to keep checking the antenna lead-in to make sure it was still connected to the TV. It'll be interesting to see how other DX'ers did in August throughout the country. Varies in from CFAC and KOA.

Maybe something strange will happen in September - Good DX.

Fred McCormack, Des Lacs, ND 58733 CDT

Table with columns for date (August 1980), call letters, frequency, and location. Includes stations like WSBM, WAVE, WSIL, etc.

KQCD-7 is a new satellite of KFVR-5, NBC programming.

EASTERN TV-DX

Robert Kramer
4639 N. Albany
Chicago, IL 60625

OCTOBER 1980

Deadline 5th

The tropo openings of July died out somewhat in August. Although there was a good opening on the 5th, the DX really didn't reappear until the late middle, but then continued until the end. The early days of September produced some very strange tropo, much resembling Es, in as much as it would be good in one direction, then suddenly die there and come in from a direction completely different, with no forewarning that the new direction was also open. There was one day that I noticed some Es CCI, but I forgot to write it down. Hopefully somewhere in the mountain of reports I have in front of me someone reported something on it.

Jeff Wolf 1131 University Blvd.W. Apt. 701 Silver Spring, MD 20902 (EST/EDT)

Large table with columns for date (January, May), call letters, frequency, and location. Includes stations like W77AE-77, W77AB-77, W77AC-77, etc.

EASTERN TV DX

OCTOBER 1980

Jeff Wolf cont'

Table with columns: Station Call Letters, Power, Frequency, Location, Date. Includes entries for KUSD, WAFB, WFTV, and others.

David Austin 1800 Lexington Ave. Ashland, KY 41101 (EDT)
25 July 2302, Lexington U's 27 & 36 (later WTV4, formerly ch. 62), 2330 GKPR-2 Thunder Bay on a regular visitor this summer on Es.

26 July, Es opening, no positive IDs, 0940 UnIDed-2 NBC, UnIDed-2 SS, 1000 KTVY-4, KOCQ-5 KOTV-6, all OK & tentative.
29 July, another ES opening, 1145 UnIDed-2 NBC, IDed as "Colorful Channel 2 KO??", 1155 KDUH-4 NE tentative, ad for KOTA-3 SD of which KDUH is a satellite. Thought the UnIDed NBC KOAI-2 AZ, wrote them for QSI and they said I didn't receive them. Is there another NBC-2 with calls beginning KO??
24 August, was vacationing at Pine Mountain State Park, Pineville, KY, near Knoxville. At about 0600 I received WZTV-17 Nashville, TN (175 mi) but don't know if it was due to the high elevation or a Tr opening.

"Well that's the DX for now. I've recently upgraded my VHF antenna and accessories, preamp, coax, the whole bit, and have seen quite a bit of nearby tropo (though not true DX) on the Columbus, Cincinnati, & Dayton VHF's. WBNS-10 is becoming almost like a regular semi-local. I haven't done much UHF yet; I'm still waiting to see if two UHPs applied for Charleston, WV and Eastern KY go on the air, if so I'll probably invest in something better when and if that materializes. WKEF-22, Dayton, usually shows strong during those VHF tropo periods from Ohio; it's been coming in so regularly I don't even include it in my log nor my WUD reports anymore. So, meager though my DX has been recently, thought I'd keep you posted on conditions around here, in the Ohio Valley. Sure would appreciate it if somebody could clue me in on that NBC "KO??" channel 2. 73's."

Table with columns: Station Call Letters, Power, Frequency, Location, Date. Includes entries for Neil Kazzaross and others.

EASTERN TV DX

OCTOBER 1980

Table with columns: Station Call Letters, Power, Frequency, Location, Date. Includes entries for Es 1744, Es 1800, Es 1916, etc.

In Pawtucket I use a Zenith color set & a multi-band antenna 8' above our 1 story roof. In Narragansett I use a Sanyo B&W portable W/whip & UHF loop (sophisticated, hi). All tropo is from Gansett & all Es except 7/22 is from Pawtucket. When I get more \$\$\$\$ I plan to put a dish & preamp up at Narragansett along with big high & low band VHF antennas. & 3 & best of DX."

Bill Fahber 336 Atlantic St. Bridgeton, NJ 08302 (EDT)

Table with columns: Station Call Letters, Power, Frequency, Location, Date. Includes entries for Es 2000, Es 2028, Es 1300, etc.

EASTERN TV DX

OCTOBER 1980

Bill Fahber cont'

27 Tr 0305 WCTI-12 NC 330 27 Tr 2330 WAVY-10 VA 180 27 Tr 2330 WYAH-27 VA 180
 W6AL-60 VA WWT-12 VA 170 WXTV-41 VA 115
 XLITing WJZ-13 WXEX-8 VA 200 28 0620 WTVD-11 NC 300
 0319 WGHP-8 NC 350 WVEC-13 VA 190

"KAZXH, according to an

FCC list of translators, are the call letters of a 1 kw translator on ch. 56 in Washington, D.C., broadcasting signals from KWEX-41, San Antonio, Texas, which it receives by satellite. Why ham radio call letters I don't know, it's part of the Spanish International Network (no the translator doesn't translate into English). I refer to it as 56 SIN for short. 100 watt translators W4AD, W4IAC, W6AL & W25AA are in Onancock, Virginia, on the peninsula. As you can see by my report, some of them work overtime. Must have been a hot tropo night in Onancock. A high pressure area over Pennsylvania for a few days (8/26-28) livened things up after two weeks of no skip. I have no record of a translator for WTVD-11, but at 0251 on Aug. 27 WTVD-11 had a CB/TP with a voice "now conducting translator tests" on audio. Two additions to my report in the July WUD, on May 29. WPTV-5 Florida was heard at 1730. The Miami-2 at 1800 was WPBT (It was UnIDed & could have been WTHS, which shares the channel). Both these were unIDed, but I got WSLs from them."

Richard Eckman 2328 Griffith St. Philadelphia, PA 19152 (RLT)

July	17 Es 1215 KARK-4 AR	22 Es 2132 UnIDed-4 CBS
12 Es 1000 UnIDed-2 ABC	1401 WBBF-4 IL	26 0906 WBRZ-2 LA
15 0930 WMT-2 IA	Rock Island	0903 Cuba-3
16 0925 UnIDed-2 PBS	1450 MUF at least	0915 Cuba-5
1801 CJCB-2 NS	103 MHz	0916 Cuba-4
1827 CJCH-5 NS	1535 KTVY-4 OK	0917 WESH-2 FL T
MUF at 6	KOCO-5 OK T	0920 WFBT-2 FL
17 1012 KQTV-2 MO	KTEW-2 OK T	1900 WBRZ-2 LA
WDAF-4 MO	1820 KTCA-2 MN	1917 WMAB-2 MS
KCMO-5 MO T	WCCO-4 MN	1923 WPBT-2 FL T
1032 KSDK-5 NO T	1822 KSTP-5 MN	1930 WCBI-4 MS
1110 WMT-2 IA	1850 KXON-5 SD	1932 KALB-5 LA
1130 CJCB-4 NS	1913 WTMJ-4 WI	1938 WWL-4 LA
1143 WCCO-4 MN T	19 1530 CJCB-4 NS T	August
1145 UnIDed-5 CBC	CJCH-5 NS T	1 Es 0928 WBRZ-2 LA
1146 KTVI-2 MO	1845 WWL-4 IA	1755 WPBT-2 FL
1200 CJCH-5 NS T	20 0025 KTVI-2 MO	WTVJ-4 FL
1215 KETS-2 AR	21 0903 UnIDed-2 PBS	Cuba-5 T

"That's all to date. 7/17 was about the best day for Es this season with openings all day long to many areas and MUFs well into the FM band. It was interesting seeing live olympic coverage from Cuba on July 26. I was probably the only person in the country able to see the Olympics live on TV!"

Frank Wheeler 6589 Wattsburg Rd. Erie, PA 16509 (EDT)

July	AUGUST	26 Tr 0829 WILX-10 MI 236
28 Es 1929 WBRZ-2 IA 1020	6 Tr 0800 WNDU-16 IN 318	0630 WJIM-6 MI 232
2100 KCKT-2 KS 1015	0950 WUCM-19 MI 220	0633 WITI-6 WI 410
2230 KUSD-2 SD 851	8 Es 1600 WBRZ-2 IA 1020	1628 WOBN-7 MI 338
1330 KDIX-2 ND 1169	19 Tr 1222 WCMU-14 MI 262	2132 WJIM-3 MI 431
30 1501 KATC-3 LA 1056	1830 WGPR-62 MI 154	
1530 KETS-2 AR 825	20 Es 0001 KARD-3 KS 953	

"Sorry I didn't get to the

convention. I work on Mon. & Wed. nights all the time, but that week the boss asked me to work from Fri. 11:30 PM until 6:00 AM Sat. the first time since last Thanksgiving, so I missed the conv. The first time it was at Bob's that I didn't get there for at least on a Sat. Too bad the weather was so bad for the conv. Hope nobody got drowned out, hi. Trust you all had a good time regardless of the weather. I also noticed that the DX wasn't too good that weekend (yea, but with Bob's set-up you don't need good cx, ed.)."

Robert S. Ross Box 4373, Stn. C London, ON N5W 5J2 (EDT)

July	6 Es 1450 KLINE-3 NE	16 Tr 0610 WJRT-12 MI
2 Tr 0700 WILX-10 MI	1510 KWGN-2 CO	0612 WJIO-35 OH
0701 WTOL-11 OH	1602 KTWO-2 WY	0659 WAKR-23 OH
0706 WNEV-5 NI	KDIX-2 ND	0701 WFFT-55 IN
0708 WDIV-4 NI	9 2333 CPMT-47 ON	0751 WBGU-57 OH
WKYC-3 OH	10 Es 1328 WPBT-2 FL	0753 WVIQ-25 OH
0709 WJBK-2 MI	14 Tr 2310 WTVQ-36 KY	17 Es 2338 KTEW-2 OK
0711 WKYZ-7 NI	16 0510 CPTO-9 ON	16 Tr 0754 WNNB-40 IN
0722 WTVS-56 MI	0542 WTVG-13 ON	21 0605 WWSW-5 OH
0723 WKBD-50 MI	0543 WJAN-17 OH	23 Es 0005 KTWO-2 WY
4 1247 WUAB-43 OH	WEXI-25 NI	29 Tr 0250 WJIM-6 NI
6 Es 1429 KTVS-3 CO	0544 WUHQ-41 MI	30 Es 2030 KOTA-3 SD

EASTERN TV DX

OCTOBER 1980

Saul Chernos c/o P.O. Burnt-River, Ont. K9M 1G9 (EST/EDT)

Toronto DX	17 Tr 2355 WQLN-54 PA	17 Es 1830 KMOS-6 MO
January	18 0030 WNPE-16 NY	KQTV-2 MO
6 Es 1300 WMAB-2 MS	Burnt River DX	KFSM-5 AR
KATC-3 LA	27 Tr 1830 WWTW-9 MI	27 Tr 1800 WSTM-3 NY
1400 KFDX-3 TX	1900 WFBN-7 MI	30 Es 1900 WPBT-2 FL
May	July	1945 WESH-2 FL
17 Es 1520 WESH-2 FL	2 Tr 2200 WJBK-2 MI	2000 WEDU-3 FL
Burnt River DX	WDIV-4 MI	WTVS-4 FL
June	July	August
14 Es 1458 WCIV-4 SC	2 Tr 2100 WJBK-2 MI	2 Tr 0950 WIXT-9 NY
1503 WPTV-5 FL	WJKW-8 OH	1000 CBFST-7 ON
Tr 1630 WSTM-3 NY	WKYC-3 OH	CBFSTJ-12 ON
Toronto DX	WDIV-4 MI	
17 Es 2057 KOTA-3 SD	WWSW-5 OH	
2156 WWL-4 IA	16 Es 2200 WIBZ-2 ME	
2159 WPBT-2 FL	CJCB-4 NS	
2200 WBAR-3 FL	WABL-5 ME	
Tr 2250 WYNY-7 NY	WESH-6 ME	
Es 2310 KTWO-2 WY	17 Es 1430 UnIDed-6 LA	

Paul Gaines % C.F. Cleaning 15920 Detroit, MI 48227 (EST/EDT)

February	18 Es 1412 KTBS-3 LA 905	11 Tr 0230 WHAS-11 KY 310
23 Ms 0252 WSB-2 GA 600	1500 KBTX-3 TX 1070	0257 KTVI-2 MO 450
March	2108 KOET-3 OK 820	St. Louis
10 Ms 0515 WDAF-4 MO 625	2118 KARD-3 KS 810	0316 WCIA-3 IL 305
19 0321 KDFW-4 TX 1000	2124 KXAS-5 TX 1025	0337 WAND-17 IL 340
25 0452 WCCO-4 MN 525	2308 KFDX-3 TX 1000	0342 KPLR-11 MO 450
Minneapolis	2319 WBAR-3 FL 870	0423 WAVE-3 KY 310
29 0500 WTVY-4 AL 790	1507 KXAS-5 TX 1025	12 2227 KFVS-12 MO 475
April	1510 KAVE-6 NM 1320	13 0244 WAND-17 IL 340
7 Ms 0459 WDAF-4 MO 625	1540 UnIDed-5 Cuba	14 0308 KPLR-11 MO 450
May	1600 KENS-5 TX 1220	0340 WISC-3 WI 315
23 Ms 0516 WDAF-4 MO 625	1630 KTBS-3 LA 905	0803 KETC-9 MO 450
27 Tr 0758 WBOY-12 WV 260	1657 KATC-3 IA 970	0833 WILL-12 IL 305
0947 WBTI-64 OH 235	1238 KOTA-3 SD 995	0855 KFVS-12 MO 475
Cincinnati	20 2057 KTBS-3 IA 905	1145 WTHI-10 IN 290
29 0224 WOVK-13 WV 280	21 0223 KTWO-2 WY 1155	1311 WISD-6 KY 465
Es 2300 KFDX-3 TX 1000	0237 KWGN-2 CO 1125	Paducah
2339 KOAA-5 CO 1145		KSDK-5 MO 450
30 0044 KTVS-3 CO 1025		2226 WTVQ-36 KY 305
0236 KDUH-4 NE 975		2232 WKYT-27 KY 305
2100 KALB-5 IA 915		2234 WKLB-46 KY 305
2200 KATC-3 IA 970		2238 WLEK-18 KY 305
June	28 Tr 0127 KFVS-12 MO 475	2255 WAWB-13 WV 280
4 Tr 2229 WILL-12 IL 305	2215 WILL-12 IL 305	2311 WBOY-12 WV 260
5 0003 WAND-17 IL 340	29 0202 WIUK-11 WI 275	2323 WMLU-33 WV 280
0212 WREX-13 IL 300	July	0228 WCHS-8 WV 290
0239 KFVS-12 MO 475	1 Tr 1037 WTVF-5 TN 475	0222 WHEX-13 IL 300
0253 WHAS-11 KY 310	1218 WDEF-12 TN 525	0229 WHAS-11 KY 310
0313 WTVF-5 TN 475	3 0052 WUHF-31 NY 280	0300 WISC-3 WI 315
0318 WSM-4 TN T	Rochester	0317 KPLR-11 MO 450
0319 WNGE-2 TN 475	0123 WOKR-13 NY 280	0815 WTHI-10 IN 290
1216 KTHV-11 AR 715	0150 WPCB-40 PA 235	0818 KETC-9 MO 450
6 0903 WILL-12 IL 305	Greensburg	0830 WILL-12 IL 305
15 Es 1907 KENS-5 TX	0240 WTVH-5 NY 350	16 0000 MMSV-10 WI 245
1924 KIII-3 TX T	0548 WHEC-10 NY 280	Milwaukee
1950 KRIS-6 TX T	0554 WBNG-12 NY 365	0247 WISC-3 WI 315
16 1218 KATC-3 IA T	0629 CHEX-12 ON 270	0304 WSAU-7 WI 360
2204 KBTX-3 TX 1070	0828 W6AK-64 OH 125	0318 KMWL-7 IA 450
2205 KOET-3 OK 820	1003 WNPE-16 NY 375	0340 CBFST-2 FL 515
Buffalo	4 Es 0315 CKCK-2 SK 1150	17 Es 1226 KENS-5 TX 1220
2208 KFDX-3 TX	7 Tr 0803 WTVQ-36 KY 305	1231 WEDU-3 FL 1000
17 Tr 0845 WILL-12 IL 305	Lexington	1236 KATC-3 IA 970
Es 1155 CJCH-11 MS 970	8 0246 WTHI-10 IN 290	1308 WDSU-6 IA 940
1210 CBHT-3 MS 970	9 0233 WREX-13 IL 300	1319 KMOI-4 TX 1220
18 0225 CKCK-2 GA 1150	0308 WISC-3 WI 315	1425 WKRG-5 AL 855
1215 KRUV-5 TX 1380	Madison	2116 KXAS-5 TX 1025
1239 KAVE-6 NM 1320	10 2325 WTHI-10 IN 290	2256 KMIB-5 NI 1335
1240 KRIS-6 TX 1280	11 0209 KFVS-12 MO 475	2310 KARD-3 KS 810
1350 KENS-5 TX 1220	0215 KRCC-13 MO 530	18 0256 WIUK-11 WI 275

EASTERN TV DX

Paul Gaines cont'

18 Es 0305 CKCK-2 SK 1150
0319 KWGN-2 CO 1125

19 Tr 2345 WILL-12 IL 305
0118 WBOY-12 WV 260
0146 WQWK-13 WV 280
0238 WHAS-11 KY 310
0251 WTAJ-10 PA 275
0410 WJAD-8 IL 375
22 Es 1212 KATC-3 IA 970
2228 KOTA-3 SD 995
2232 KTWS-3 CO 1025
2308 KYCU-5 WY 1090
2310 KTVV-5 SD 1025
23 0026 KLNZ-3 NE 860
26 Tr 0349 WAVE-3 KY 310
0840 W27AC-27 OH 75
Bowling Green

0905 W39AA-39 IN 130
28 Es 2250 WBAE-3 FL 870
29 Tr 0002 WMBD-31 IL 345
0010 WICD-15 IL 305
0013 WICS-20 IL 375
0015 WRAU-19 IL 345
0023 WAND-17 IL 340
0032 KDNL-30 MO 450
0052 KRCR-9 IA 415
0124 WKOW-27 WI 315
0131 WIFR-23 IL 325
0140 WBEK-25 IL 345
0146 KFVS-12 MO 475
0208 WTHI-10 IN 290
0212 WREX-13 IL 300
0214 KPLR-11 MO 450
0258 WEDR-5 MO 450
0308 KMOX-4 MO 450
0315 KTVI-2 MO 450
0338 WTVO-17 IL 300
0407 WOC-6 IA 380
Davenport

0831 WTV4-36 KY 305
0835 W27AC-27 OH 75
0837 WLEX-18 KY 305
0844 WILL-12 IL 305
1231 WZTV-17 TN 475
Es 1302 KLNZ-3 NE 860
1309 KTWS-3 CO 1025
1335 KMTV-3 NE 650
Omaha

30 Tr 0748 WICD-15 IL 305
0815 WAND-17 IL 340
0842 WILL-12 IL 305
Es 1424 KIII-3 TX 1280
1529 KATC-3 IA 970
31 Tr 0002 WAND-17 IL 340
0008 WAND-15 IL 305
2145 WILL-12 IL 305
2156 WTHI-10 IN 290
2203 WBEK-25 IL 345
2205 WJED-31 IL 345
2221 WTVT-22 IN 340
2225 WPIE-14 IN 375
2312 WBAK-36 IN 290
2324 WJLA-15 NY 310
2326 WBAK-36 IN 290
2329 WIKY-32 KY 310
2331 WTV4-36 KY 305
2337 WLEX-18 KY 305
2359 WUSI-16 IL 355

AUGUST

1 Tr 0003 WAND-17 IL 340
0020 WBHW-55 IL 375
Springfield

0012 WICD-15 IL 305
0052 KRIN-32 IA 450
0102 KIIN-12 IA 420
0112 WICS-20 IL 375
0114 WKYT-27 KY 305
0127 WQWK-13 WV 280
0130 WBOY-12 WV 260
0140 WCHS-8 WV 290
0222 WHAS-11 KY 310
0227 WBHT-25 IN 375
2255 WISC-3 WI 315
2 0013 W17AA-17 OH 145
Celina

4 0902 W59AH-59 NY 50
Allentown
Via TVO

1031 WIKY-32 KY 310
1033 WKFC-15 KY 310
1036 WDRB-41 KY 310
1127 WAND-17 IL 340
1131 WICD-15 IL 305
1134 KFVS-12 MO 475
2148 W64AK-64 OH 125
2151 W5FJ-52 OH 165
Newark

5 2134 WAND-17 IL 305
2136 WILL-12 IL 310
2145 WICD-15 IL 305
2214 KDNL-30 MO 375
2225 WMBD-31 IL 345
2227 WBEK-25 IL 345
2229 WTVF-47 IL 345
2234 WRAU-19 IL 345
6 0015 WICS-20 IL 375
0109 WBHW-55 IL 375
0149 WIFR-23 IL 325
0208 WGBA-10 IL 450
0214 WUPF-10 MI 285
0216 KPLR-11 MO 450
0219 WHAS-11 KY 310
0252 WJAD-8 IL 375
0337 KTVI-2 MO 450
0400 KMOX-4 MO 450
0410 WOC-6 IA 380
0735 W46AB-46 NY 180
0806 WQRF-39 IL 300
0809 WTVO-17 IL 300
1126 W39AA-39 IL 130
1215 WIKY-32 KY 310
1217 WDRB-41 KY 310
1231 WTV4-36 KY 305
1252 WAND-17 IL 340
1255 WICD-15 IL 305
2316 W69AO-69 OH 140
2344 W17AA-17 OH 115
7 0020 WBOY-12 WV 260
0214 WOKR-13 NY 280
0217 WHEC-10 NY 280
1159 WILY-32 NY 310
0843 WYTC-9 MO 450
0849 KPLR-11 MO 450
0853 KDNL-30 MO 450
0900 WILL-12 IL 305
0931 WBAK-38 IN 290

8 Tr 0928 WTHI-10 IN 290
0946 WAND-16 IN 340
0948 WIKY-32 KY 310
11 1208 WFLI-28 FL 50
Flint

0233 WTTV-4 IN 255
Es 0308 CBFT-2 IA 515
0318 WGBS-2 NY 490
13 0338 WCCO-4 MN 525
Tr 0917 WICD-15 IL 305
16 0900 WIKY-32 KY 310
0922 WDRB-41 KY 310
0944 WTV4-36 KY 310
17 Es 0215 KOTA-3 SD 995
0224 KTVV-5 SD 1025
0303 KDUH-4 NE 975
Tr 2017 WILL-12 IL 310
18 1023 WILL-12 IL 305
1035 WICD-15 IL 305
1057 WAND-17 IL 340
2248 WJED-31 IL 345
2304 W39AA-39 IN 130
19 0000 WILL-12 IL 305
0010 WEND-30 WI 275
0019 WMTV-15 WI 315
0020 WHA-21 WI 315
0022 WQOW-27 WI 315
0026 WLSF-36 WI 435
Farm Hills

0053 WAND-17 IL 340
0109 WRAU-19 IL 345
0114 WBEK-25 IL 340
0124 WJED-31 IL 345
0140 WTVO-17 IL 300
0141 WCGV-24 WI 245
Milwaukee

0215 WIFR-23 IL 325
0219 W39AA-39 IN 130
0246 WISC-3 WI 315
0919 KDNL-30 MO 450
1252 W64AK-64 OH 125
2031 W39AA-39 IN 130
20 Es 0000 KFDX-3 TX 1000
Tr 2153 WILL-12 IL 305
2155 WICD-15 IL 305
2207 WAND-17 IL 340
2322 WTV4-36 KY 305
21 0208 WUPF-10 MI 285
22 2232 W64AK-64 OH 125
23 0122 W17AA-17 OH 145
0140 WICD-15 IL 305
0833 WIKY-32 KY 310
0835 WIKY-27 KY 305
0836 WLEX-18 KY 305
0838 WTV4-36 KY 305
2144 WILL-12 IL 305
2146 WAND-17 IL 340
24 0015 WJED-31 IL 345
0031 WTVO-17 IL 300
0045 KRIN-32 IA 450
0156 KHIN-36 IA 615
Red Oak

0048 KIIN-12 IA 420
0228 WHO-13 IA 590
0247 WGBS-2 NY 490
0342 KMWL-7 IA 450
0830 WTV4-36 KY 305
0839 W65AH-65 OH 130

OCTOBER 1980

EASTERN TV DX

Paul Gaines cont'

24 Tr 0841 W69AO-69 OH 140
0847 W47AB-47 OH 115
0902 WIKY-32 KY 310
0906 WLEX-18 KY 305
0908 WKYT-27 KY 305
0910 WKLB-46 KY 305
0912 WDRB-41 KY 310
0924 W17AA-17 OH 145
0928 W63AH-63 OH 145
Maplewood

0958 WILL-12 IL 305
1014 WAND-17 IL 340
1018 W39AA-39 IN 130
2111 KDUB-40 IA 375
2119 WQRF-39 IL 300
2214 KYIN-24 IA 495
Mason City

2226 WKOW-27 WI 315
0000 WILL-12 IL 305
0001 WAND-17 IL 340
0002 WMBD-31 IL 345
0011 KDNL-30 MO 450
0024 WMTV-15 WI 315
0050 KCRG-9 IA 415
0100 KFVS-12 MO 475
0109 WICS-20 IL 375
0114 WBEK-25 IL 345
0115 WRAU-19 IL 345
0137 WGBM-10 IL 450
0142 WREX-13 IL 300
0201 WHAS-11 KY 305
0208 KMWL-7 IA 450
0213 KPLR-11 MO 450
0225 WBAU-13 WI 440
0315 KMOX-4 MO 450
0316 WISC-3 WI 315
0836 WTVO-17 IL 300
0840 WKOW-27 WI 315
0908 KRIN-32 IA 450
0915 KDUB-40 IA 375

Tim Cronin 7500 W. 111th St. Worth, IL 60482 (CDT)

May
29 Es 1953 UnIDed-4 CBC
2200 UnIDed-4 NBC, MDT
30 1900 UnIDed-2 PBS
1923 UnIDed-3 ABC

June
6 Es 1800 KPRC-2 TX 927
1900 UnIDed-3 ABC
1700 UnIDed-3 CBC
1800 WCAX-3 VT 749
Burlington

1900 CPOM-4 PQ 892
Quebec City

2004 CBSJ-4 NB 1147
St. John

2030 CBFT-2 PQ 746
Montreal

2200 KFDX-3 TX 927

July
12 Tr 2000 CCI on local
chs. 7, 9, 26, 32
WCA-3 IL 114
2003 WTHR-13 IN 159
14 Es 1000 KENW-3 IN 990
17 1100 KJAC-4 TX 888
1200 WTVY-4 AL 734

25 Tr 0919 KHIN-36 IA 615
0931 KIIN-12 IA 420
2254 WQRF-39 IL 300
2257 WHA-21 WI 315
2340 WPNB-38 WI 275
26 0005 WICD-15 IL 305
0006 WAND-17 IL 340
0007 WICS-20 IL 375
0008 WRAU-19 IL 345
0009 WMBD-31 IL 345
0014 KDNL-30 MO 450
0017 WKOW-27 WI 315
0018 WMTV-15 WI 315
0020 WTVO-17 IL 300
0022 WHRM-20 WI 360
0035 WBEK-25 IL 345
0040 KDUB-40 IA 375
0045 WIFR-23 IL 325
0050 KETC-9 MO 450
0108 KCRG-9 IA 415
0112 WREX-13 IL 345
0129 KRIN-32 IA 450
0224 WBAU-13 WI 440
0242 WUPF-10 MI 285
0245 WISC-3 WI 315
0253 WHAS-11 KY 340
0259 KPLR-11 MO 450
0328 WTTV-4 IN 255
0359 CKNC-9 ON 300
0402 CKSO-3 ON 280
Ms 0435 WCCO-4 MN 525
Tr 0438 KMOX-4 MO 450
0858 WIKY-32 KY 310
2147 WILL-12 IL 305
2230 WPIE-14 IN 375
2232 WBHT-25 IN 375
2254 WQRF-39 IL 300
27 0000 WICD-15 IL 305
0001 WAND-17 IL 340
0005 WIFR-23 IL 325

OCTOBER 1980

27 Tr 0007 WTVO-17 IL 300
0008 WMBD-31 IL 345
0019 WBRF-28 PA "via
TBO 32, 59, 28, 18
0040 CBSJ-44 ON 270
Peterborough

0127 WICS-20 IL 375
0131 WUPF-13 NY 280
0217 WOKR-13 NY 280
0224 WTAJ-10 PA 275
0241 WUTR-20 NY 400
0248 WDAU-22 PA 385
0310 WTVH-5 NY 350
0536 WQWK-13 WV 280
0545 WTCZ-40 NY 365
0546 WBNG-12 NY 365
0603 WDCD-19 MA 505
Adams

0624 WBNY-36 NY 320
0628 WNGC-34 NY 365
0631 WBRF-28 PA 380
0632 WNEP-16 PA 385
0647 WSKG-46 NY 365
0653 WSYE-18 NY 320
0715 WLVZ-39 PA 410
Allentown

0812 WIKY-32 KY 310
1105 WTVT-30 CT 530
New Britain

28 2124 W17AA-17 OH 145
2132 W64AK-64 OH 125
W67AL-67 OH 105
Thompson

2148 W47AB-47 OH 115
2149 W65AH-65 OH 130
29 0011 WMBD-31 IL 345
0127 WAND-17 IL 340
0923 WIKY-32 KY 310
0927 WDRB-41 KY 310
0946 WKFC-15 KY 310
1234 WICD-15 IL 305
2213 W64AK-64 OH 125

6 Tr 0201 WTTV-4 IN
Bloomington

0213 WISC-3 WI 127
0227 WISN-12 WI 94
0251 WREX-13 IL 80
8 1159 WGVG-35 MI 136
1202 WREX-13 IL 80
WISN-12 WI 94
1206 WTVS-10 WI 94
1214 WCGV-24 WI 94
1259 WMTV-15 WI 127

"Still DXing with ye olde indoor equipment, though the move of 8/1 to different house on same property means outdoor antennae are soon to come. Best season for new Es stns. (6 so far) since 1977. All from previously unseen Northeast. CBSJ-4 reception of 6/18 included part of White Sox-Blue Jays game not telecast locally, while CPOM-4 reception my first to be captured on video tape. Other highlights: reception of much wanted WTTV-4 Indy, a rare

EASTERN TV DX

OCTOBER 1980

Tim Cronin cont'

appearance by two Peoria stations, and the usual regular appearances by WTMJ-4. Hoping, but after looking at records from past seasons, not expecting, more Es. 73." (Tim, WTV-4 is in Bloomington, not Indy. That is why I left the mileage you reported out. Bloomington would be about 30 miles further, ed.)

Table listing TV station call letters, frequencies, and program details. Columns include call letters (e.g., WBGU-57, WIIO-35), frequencies (e.g., 13, 18, 19, 20, 21, 22), and program titles (e.g., WJRT-12 MI 224, WUAB-43 OH 293).

EASTERN TV DX

OCTOBER 1980

Robert Kramer cont'

Table listing TV station call letters, frequencies, and program details. Columns include call letters (e.g., CKCO3-42, WDIV-4), frequencies (e.g., 26 Tr, 5 Tr, 10 Tr), and program titles (e.g., WJRT-12 MI 224, WUAB-43 OH 293).

Some really strange tropo this month, especially on 9/5-6. 9/5 all evening there was a good opening into the Pittsburgh area. All of a sudden, about Midnight, it completely died out & the west appeared, namely Iowa & SD. KELO-11 was in the best ever. I got real good photos of them. On 9/4 I got KYNE-26 with my local WCIU off. I don't know why they went off so early that night. If the cost isn't too high, my girlfriend's brothers (one is an engineer at WGN the other at WCFL) are going to build me an STV converter. I won't have to pay for Channel 44's "On TV" service. Actually I really watch little TV so I probably won't use it much. Since it is Oct. (or later, depending on the VUD schedule) it is time to start thinking about the 11th annual CADX DX get together. This is the oldest GT in the entire world of DXing, having first been held on Dec. 19, 1970 hosted by John Zondlo. I have been the host since 1972. This year's dates are 12/26-28, 1980 & the 4th annual DXathon & New Year's Eve Party 12/31, 1980 to 1/1, 1981. For more info write or call me.

Logos for various TV stations including KTFT, Wolo-TV COLUMBIA, WKBW-TV, 12N WICU-TV Erie, WFMJ-TV, WKOW-TV, and TV WAFB.

VHF UTILITY DX

Pat Dyer
5315 Silvertip Drive
San Antonio, TX 78228
Deadline: 5th of month

OCTOBER 1980

Sorry for the 2-month hiatus with the column. That was primarily due to a lack of report submissions by the membership. Also, the very good Es season on the TV/FM etc. kept me busy. (Some antenna damage from a mini-tornado of Hurricane Allen on Aug 10 didn't help things either!)

10.7-cm solar flux (not adjusted to 1 A.U.)

	avg		smoothed avg		Some daily values in August were the lowest since Nov of 1978 (in the 120's).
May	224.6	Nov	196.8		
Jun	195.6	Dec	199.1		
Jul	185.7	Jan	199.4		
Aug	168.1	Feb	199.5		

General 50-MHz news - several days of multi-Es from Gibraltar to eastern US in June-July (once the beacon, ZB2VHF 50.035 fsk, was heard in the Dallas area)...some late June multi-Es from WA,OR to Japan...late Aug and early Sept good nitely openings from Hawaii (KH6IAA) to S.Pacific (Papua New Guinea; Queensland,Australia etc.); some Jun-Jul multi-Es from KH6 to US.

Sheldon Remington, WB6WML, 102 Wreden Avenue, Fairfax, CA 94930 has been very busy on 50-MHz with a good Es season (using an IC-551, 10 watts, to a 5-element beam at 30 feet) - having heard 47 or 48 states in a 70- to 80-day period. Some of the better days of 2Es were:

May 29: east coast	Jun 18,19: east coast & HI
Jun 1,2: east coast & HI	Jun 20,21: east coast
Jun 4: east coast	Jun 22-24: east coast
Jun 15,16: east coast	Jul 23: east coast

via Glenn Hauser, Anthony Mann near Perth, Australia GMT used

4-20: 0545-0610 48.26 Zimbabwe (Rhodesia) Ch E2 video (5200 miles)
0600-0930 35.718 Zaire (in French) (6th harmonic)
-also, April and May daily 45.25 New Zealand video (3400 miles) and sometimes the 50.75 audio.
-local 30.850 2nd harmonic of VLW15 (2300-0941) might be a good target

George DuBois, 10048 NE Campaign, Portland, OR 97220 info from the P&TD in Australia confirmed that VL2AW on 39.25 is the State Electricity Commission in New South Wales - this was received daily in March. Also, a confirmation of the 33.16 Guam Cable TV service was obtained. Bearcat 220/250; A/S MON-8; PDT used (all are Es mode)

5-13: 2130-2210 NM0HJN,NM0UHP 40.1 n.CA ? (Navy MARS)	
5-14: 1630-1900 KOF344 et al. 39.82 et al. Sheridan Co.,MT et al.	
5-18: 1030-1040 39's L.A. Co.,CA 1923 KOB244 39.82 Miles City,MT (Mt.St.Helens ash-fallout warning!)	
5-22: 1833 KOG381 39.82 Virginia City,MT	
5-23: 2230 39's L.A.,CA	
5-24: 1905 KTB238 39.90 Lexington,NE KSN316 " Cambridge, " 1907 KJJ400 " Benkelman, " 1920 KAF490 39.58 Norton,KS	1921 KUA782 39.58 Great Bend,KS 1923 KAH700 " Lincoln, " 1940 42's CA-sp 39's L.A.,CA-cp

VHF UTILITY DX

OCTOBER 1980

(DuBois cont.)

5-25: 1430 39's L.A. Co., Marin Co.,CA	7-26: 1030 41.42 Saskatchewan,Canada 1034 KAG390 39.90 Kimball,NE
6-18: 2201 40.9 Norton AFB,CA	1039 KAA852 " Alliance," 1043 KAL219 39.58 Ness Co.,KS

Now to my various loggings

2-meter (144 MHz), Swan 500 into a Swan TV-2C transverter (14-MHz i.f.) with an 11-element Cushcraft horizontal Yagi at 20' with rotor; GMT

5-25: good trop most of day into OK,KS areas
30: 0245-0400, various underdense Es scatter from s.CA
0400-0445, strong direct Es from Los Angeles-San Diego etc. lasting 30-45 seconds at a time (unstable MUF)

6-18: 1705, brief Es into Chicago

7-17: 1945-2205 very strong and mostly stable Es into OH,ONT,MI,IN,IL, WI,MN (some stations running only 10 watts)

18: 0045-0115 spotty Es into MI

for a total of 14 states & Canada worked since late May. A lot of trop is being missed due to the small and low antenna system. (though I've worked OK,KS,AR,NM,LA,TN & heard MO,IN,KY,AL that way - also QSO MS)

Bearcat 210 with 11-m ground plane at 14'; Hallicrafters SX-62, Allied A-2586 with 30' long wires at 12'; daily F2 MUF peak(s) noted (* Es, bs-backscatter) new underlined, GMT used

5-29: 0019 KLF527 35.22 Honolulu,HI-tp 0549 KGA805 35.22 Pittsburgh,PA-tp* 0654 KIF651 35.58 Ft.Lauderdale,FL -tp*	6-7: 1747 35.46 San Diego,CA-mp* 2038 35.46 L.A.*; 2040 35.38 L.A.* 2107 KFL943* 6-8: 0726 KFL936* 0859 KIF651* 6-9: 0545 KFL943*; 1917 35.28 Spanish 6-10: 1510 KIN645*; 2043 39.98 se 2055 45 New Zealand TV videos (saw test pattern on 45-MHz set!)
0724 KIN645 35.22 Miami,FL-tp* 0729 KQK593 35.58 Cleveland,OH-tp* 1432 KDK669 37.10 Strawberry Point,IA-p* 1446 KBW426 37.10 Missouri Valley,IA-p*	6-11: 0250 KFL943*; 2015 35.62 se 6-13: 0419 KFL943*; 1517 KIF651* 1630 KQC884 35.58 Detroit,MI-tp* 1955 38.5 Spanish 6-14: 0238 35.46 L.A.*; 0301 KFL943* 0359 KFL936*; 1350 KIF508* 2030 35.46 L.A.*; 35.38 L.A.* 2111 KFL943*; 2115 35.28 Spanish 6-15: 0912 KFL943* 6-17: 2130 35.28 Spanish 6-18: 1945 40.86 Spanish 6-20: 0112 KLF527; 0128 35.28 Spanish 1450 KAA201 42.06 Macon,MO-sp* 1910 35.28 Spanish
2020 38.3 Spanish 5-30: 0638 KFL943 35.58 Las Vegas,NV-tp* 1540 KAA203 42.06 Kirkwood,MO-sp* 1542 35.46 Los Angeles,CA-mp* 1546 35.38 " " " " " " 1547 KSA908 39.50 Alledo,IL-cp* 37.19 Spanish	6-11: 0250 KFL943*; 2015 35.62 se 6-13: 0419 KFL943*; 1517 KIF651* 1630 KQC884 35.58 Detroit,MI-tp* 1955 38.5 Spanish 6-14: 0238 35.46 L.A.*; 0301 KFL943* 0359 KFL936*; 1350 KIF508* 2030 35.46 L.A.*; 35.38 L.A.* 2111 KFL943*; 2115 35.28 Spanish 6-15: 0912 KFL943* 6-17: 2130 35.28 Spanish 6-18: 1945 40.86 Spanish 6-20: 0112 KLF527; 0128 35.28 Spanish 1450 KAA201 42.06 Macon,MO-sp* 1910 35.28 Spanish
5-31: 0602 KFL943* 0729 KFL936 35.58 Phoenix,AZ-tp* 1550 35.38 L.A.*; 1647 35.28 Sp.	6-1: 0320 KFL943* 6-2: 1318 KFL943* 6-4: 0030 35.28 Sp.; 0230 KFL943* 1857 35.46 L.A.*; 1859 35.38 L.A.* 1940 37.19 Spanish 6-5: 0613 KIF508 35.22 Orlando,FL-tp* 2040 38.5 Spanish 6-6: 0004 KLF527; 1915 38.5 Spanish 6-7: 0249 KFL943*; 1630 39.98 Spanish

VHF UTILITY DX

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(Dyer, cont.)
 6-21: 1947 35.28 Spanish
 0038 KLF527
 0345 KQI316 33.90 Cincinnati, OH-f*
 0728 KFL943*; 2100 35.28 Spanish
 6-22: 1940 35.78 Brazil ?
 6-23: 0940 KFL943*; 1845 38.5 Spanish
 6-24: 1512 KSA464 42.50 Pesotum, IL-sp*
 1520 - 42.06 Sarnia, ONT ?*
 2355 35.28 Spanish
 6-25: 1248 KFL943* sp*
 1418 KAA202 42.06 Lee's Summit, MO-/
 1756 38.3 Ft. Riley, KS (range control)
 2100 35.28 Spanish
 6-26: 1745 35.28 Spanish; 1812 35.46 L.A.
 6-27: 1900 35.28 Spanish
 6-28: 0058 KIY508*
 6-29: 2155 35.28 Spanish
 6-30: 1945 38.5 Spanish
 7-1: 0135 KFL943*; 2120 38.5 Spanish
 7-3: 0035 38.5 Spanish
 0102 KFL943*; 2255 38.5 Spanish
 7-4: 0028 KIN645*; 0032 KFL943*
 2035 38.5 Spanish
 7-5: 0252 KFL943*; 1745 35.46 L.A.*
 2048 38.5 Spanish
 7-6: 1935 38.5 Spanish
 7-7: 1906 KFL943*; 1925 35.28 Spanish
 7-8: 2035 38.5 Spanish
 7-9: 2020 38.5 Spanish
 7-10: 0922 KIY508*; 2125 38.5 Spanish
 7-11: 2015 38.5 Spanish
 7-14: 0000 35.22 bs; 0105 35.22 Spanish
 2145 38.5 Spanish
 7-15: 1825 35.28 Spanish
 7-16: 0008 KFL943*; 0054 KLF527
 0131 KSG343 39.50 Macomb, IL-cp*
 1537 32.96 Spanish; 2125 KFL943*
 7-17: 0103 35.38 San Diego, CA-mp*
 7-18: 1947 35.28 Spanish
 7-19: 2112 38.5 Spanish
 7-20: 2300 32.96 Spanish
 7-21: 0020 35.58 bs; 1658 35.28 Spanish
 7-24: 0002 35.28 Spanish; 1830 35.28 Sp.
 7-25: 0013 35.58 bs; 2015 38.5 Spanish
 7-26: 2140 38.5 Spanish
 7-27: 1920 35.28 Spanish
 7-28: 1540 35.28 Spanish
 7-29: 1940 38.5 Spanish; 2115 KFL943*
 7-30: 0106 KGA805*; 0556 35.38 S.Diego*
 0558 35.46 L.A.*; 0710 KFL943*
 2128 38.5 Spanish
 7-31: 2030 38.5 Spanish; 2330 KFL943*
 2330 35.38 L.A.*; 2331 35.46 L.A.*
 8-1: 0804 KFL943*; 1953 38.5 Spanish
 8-2: 1930 KFL943*; 2005 38.5 Spanish
 8-3: 1730 38.5 Spanish
 8-4: 2035 38.5 Spanish
 8-5: 0415 KFL943*; 2000 38.5 Spanish
 8-6: 1555 35.28 Spanish
 8-7: 1855 38.5 Spanish
 8-8: 1805 38.5 Spanish
 8-9: 0032 KGA805*; 1958 39.98 Spanish
 8-11: 1358 KFL943*; 1910 38.5 Spanish
 8-12: 1720 35.28 Spanish
 8-13: 1837 38.5 Spanish
 8-23: 1815 38.5 Spanish
 8-24: 1935 38.3 Spanish
 8-25: 1955 38.3 Spanish
 8-26: 2205 35.58 south (Brazil?)
 8-27: 1800 38.5 Spanish
 8-28: 0006 KFL943*; 1955 38.5 Spanish

VHF UTILITY DX

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(Dyer, cont.)
 8-28: 1955 KFL943*; 1957 35.46 S.Diego*
 8-29: 1445 low-30 Can.ne; US ne 31?
 2111 46.74 Spanish
 8-30: 1950 38.5 Spanish
 8-31: 1330 KFL943*; 1915 38.5 Spanish
 9-1: 2005 38.5 Spanish; 2349 KIN645*
 9-2: 1619 KQC877 35.58 Cincinnati, OH-tp*
 1855 38.5 Spanish
 9-3: 0021 KFL943*; 2115 KLF527
 2215 40.86 Spanish
 9-4: 1318 KCG491 33.60 Wallingford, CT-f
 1321 KCD575 33.70 Cheshire, " "
 1322 KCD498 " Sandwich, MA-f
 1330 KCF364 33.78 Brookline, " "
 KCF366 " " "
 KCF369 " " "
 1337 KCA585 33.90 Plymouth, " "
 1346 KBZ283 " Orford, NH-rf
 9-4: 1347 KCD353 33.70 Lancaster, MA-f
 KCH677 " Fitchburg, " -cf
 1349 KCA695 33.78 Manchester, NH-f
 1400 KCE358 33.54 Shelburne, MA-cf
 1402 KCB844 33.70 Greenfield, " -f
 1421 KCC405 37.54 Bangor, ME-he
 1423 KGA305 " Eddington, " -u
 hi-37 US ne
 1433 KFL943*
 1438 KCA346 37.54 Ellsworth, ME-he
 1458 35.38 L.A.*; 1506 35.46 L.A.*
 1513 KCF569 33.78 Tolland, CT-sf
 1522 KCC825 33.70 Kennebunk, ME-f
 1531 KDC288 33.90 Hollis, NH-f
 1536 KCD346 " Tolland, CT-"
 1537 KCB217 " Niantic, " "
 1545 KDA381 " Wilton, NH-"
 1546 KDA383 " Milford, " "
 1952 46.74 Spanish; 2014 KLF527
 2040 40.86 Bucaramanga, Colombia
 2-5: 1947 41.62 Spanish; 2355 43.58 bs
 9-6: 0315 KFL943*; 1610 38.5 Spanish

f-fire	p-police	he-hydroelectric
cf-county fire	cp-sheriff	u-utility
rf-regional fire	sp-state police	tp-tone pager
sf-state fire		mp-mobile phone

With the hoped-for return of the fall F2 season, the 28.885 MHz 6-m information net is coming back to life again. For instance, via the net it was determined that the Sept 4 MUF from NY to AZ was over 39. That is a very high level for so early in the month.

After the below-par Feb-April 1980 season, one does get a little shy of making predictions based on the expected solar flux levels. Anyway, if the flux maintains enough days of over 200 in the fall there should be a fair amount of trans-Atlantic VHF F2 to keep many busy. However, this may well be confined to the US east coast areas, in regards to 50-MHz levels.

If Cycle 21 is on the way down (the Swiss, who will likely quit their sunspot counts at year's end - after over two centuries - maintain it is) there ought to soon come a lot of very energetic solar flares that will produce the "great magnetic storms" that the press has often been mentioning in connection with aurorae etc.

These large storms (i.e., A-Indices in excess of 100), depending upon the time of year and day they strike, can produce F2 MUF enhancements of many percent (particularly in north-south paths). These can literally make a solar flux of 100 almost act, for a time, like 200 etc. This is achieved in part by redistributing the existing ionization - and thus also creates large "voids" of low MUF at the same time.

So, don't give up on VHF F2 DXing just because the peak may be past and the solar flux is sliding down again - with the help of magnetic activity there should be enough interesting events in the next few years to come.

73, Pat WA5IYX

FM STATISTICS

Fred Nordquist
7945 Boxford Road
Clay, NY 13041
Deadline: Dec. 5th

October 1980

FM SCOREBOARD

DXer, Location	Rank	Total	88-92	Es	MS	AU	USA	CN	MX	PO	TPU	YB	As of:
Andy Bolin, Charleston, IL	1	2003	318	774	95	282	45+	7	5	3	61	70	8/31/80
Bruce Kiving, Duluth, MN	2	1449	124	680	8	88	44+	3	1	0	49	48	#11/6/79
Pat Dyer, San Antonio, TX	3	1356	166	1096	22	0	41+	2	6	3	53	70	6/15/80
John Ebeling, Bloomington MN	4	1303	188	720	28	77	47+	4	4	0	56	52	8/21/80
Mike Dalton, Clearwater FL	5	1185	246	689	7	0	41+	2	12	12	68	72	6/21/80
Danny Buntin, Stillwater OK	6	1158	136	664	1	0	47+	5	8	0	61	74	9/3/80
Fred Nordquist, Clay NY	7	1119	162	512	23	40	39+	5	0	2	47	69	9/5/80
Peter Sawatsky, Gualph ON	8	1062	153	484	112	5	38+	7	0	1	47	71	1/14/80
Mike Bugaj, Enfield CT	9	1031	125	520	7	16	37+	3	0	1	42	74	8/14/80
Fred McCormack, Des Lacs ND	10	1028	131	775	25	77	44+	6	3	0	54	65	8/3/80
Joseph Fala, S. Plainfield NJ	11	917	178	431	2	9	37+	5	0	3	46	68	8/10/80
Ralph Strobel, Muncie IN	12	831	196	53	10	0	30+	3	0	0	34	72	1/4/80
Roger Winsor, Hobart IN	13	807	160	211	0	0	32	1	0	3	36	60	3/30/80
Hank Holbrook, Chevy Chase MD	14	727*	169	187	12	-	35+	4	0	3	43	59	#12/22/79
Tim McVey, Bolivar TN	15	705	89	155	2	0	39	4	2	0	46	77	8/1/80
Vernon Eaton, Benton AR	16	617	104	112	1	5	33	5	7	0	45	77	7/26/80
Richard Steinberger, Hudson MA	17	532	103	233	9	6	33+	2	0	0	36	--	#7/1/79
Joseph Smith, Johnson City NY	18	524	69	98	0	0	30+	2	0	1	34	71	8/22/80
Doug Everitt, Enid OK	19	512	80	299	16	0	32+	4	6	0	43	74	#3/17/79
Dave Brumfield, Muncie IN	21	503	96	8	1	0	21	1	0	0	22	78	1/4/80
Fred McCormack, Fargo ND	20	504	57	301	2	39	42+	3	0	0	46	74	8/3/80
John Jefferson, Concord CA	22	434	85	193	56	0	20	2	2	0	24	57	#9/13/79
John Ebeling, Prosit MN	23	346	45	107	2	0	36+	4	0	0	41	75	8/21/80
Ken Simon, Lake Worth, FL	24	274	97	201	0	0	28+	2	1	4	36	66	7/26/80
Eric Fader, Bayside NY	25	257	53	15	0	0	16+	1	0	0	18	74	#8/24/79
Paul Traska, Buffalo NY	26	257	109	63	2	0	30+	3	0	1	35	76	#11/4/79
Michael Hogan, Highland IN	26	250	53	19	0	0	18	1	0	0	19	76	#10/1/79
John Bolduc, Nashua NH	27	185	42	16	0	0	19	0	0	0	19	74	7/1/80
Robert Schweitzer, E. Brunswick NJ	28	170	57	7	0	0	9+	0	0	0	10	77	8/20/80
Dave Hascall, Fortville IN	29	147	24	11	1	0	13	1	0	0	14	76	6/29/80
Frank Wheeler, Erie PA	30	144	16	3	0	0	7	1	0	0	8	64	7/21/80
John Adler, Milbank SD	31	123	10	15	1	0	17+	0	0	0	18	78	7/30/80
Wm Hepburn, Niagara Falls ON	32	112	35	21	0	0	17+	1	0	0	19	79	8/6/80
Paul Mount, Nelsonville OH	33	94	3	3	0	0	5	1	0	0	6	78	#5/6/79

*-Verified. †-Updates required by 12/5/80.

FM Scoreboard definitions: TOTAL = total number of FM stations logged. (Freq. changes count as a new station, call letter changes DO NOT count.) 88-92 = all stations logged from 88.0 to 91.99 MHz. Es = total number of stations logged via E-skip. MS = total by meteor scatter. AU = total via Aurora. USA = total number of states and the + = Washington DC. CN = number of Canadian provinces logged; MX = number of Mexican estados (or states) logged; PO = number of foreign countries logged, but not Canada or Mexico. TPU or "total political units" = sum of USA CN MX & PO. YB = the year you began DXing.

STATES STATS

State	#-DXer	#-DXer	State	#-DXer	#-DXer	State	#-DXer	#-DXer	State	#-DXer	#-DXer	Prov.	#-DXer	
AL	48-tm	44-ab	IN	136-rs	126-ab	NE	24-ab	23-je	SC	32-je	24-db	AT	13-db	2-ab†
AK	None		IA	88-je	65-ab	NV	12-fm	7-jj	SD	20-fm	17-je	BC	5-fm	
AZ	22-fm	21-je†	KS	54-db	40-fn	NH	17-jb	16-rjs	TX	64-tm	60-ab	MB	13-fm	4-ab
AR	59-ve	36-tm	KY	73-ab	56-rs	NJ	54-jf	36-ef	TX	211-rfs	144-ab	NB	1-ab	1-tm
CA	189-jj	74-fm	LA	53-rfs	36-ve	NM	34-ab	27-je	UT	18-ab	17-rfs	NF	8-fm	3-jj
CO	49-ab	34-jj	ME	29-ab	25-rjs	NY	147-fn	132-je	VT	8-ab	8-rjs	NS	8-ab	3-jf
CT	38-ab	32-jf	MD	35-jf	21-je	NC	99-je	47-db	VA	38-je	32-db†	ON	51-fm	
DE	11-sw	9-jf	MA	73-rjs	63-jb	ND	17-fm	13-ab	WA	15-jj	10-je		38-wh	
FL	106-ab	82-db	MI	93-rw	92-rs	OH	196-rs	119-deb	WV	22-rs	22-ab	PEI	1-jf	
GA	44-je	43-db	MN	106-je	62-fm	OK	67-db	37-fn	WI	109-je	90-ab	PQ	17-fm	
HA	None		MS	60-tm	33-fn	OR	16-fm	8-jj	WY	13-ab	7-jj		11-rjs	
ID	17-db	13-rfs	MO	82-ab	72-db	PA	90-je	90-fn				SA	6-fm	4-ab
IL	170-ab	143-rw	MT	15-ab	14-je	RI	8-rfs	7-mb†	DC	13-sw	13-je			

† means 2nd place tied with others. The key to DXers' initials/DX locations listed below:

jb-John Bolduc NH	je-John Ebeling MN	tm-Tim McVey TN	rfs-Rick L. Sanford TX
ab-Andy Bolin IL	ef-Eric Fader NY	fn-Fred Nordquist NY	rw-Roger Winsor IN
deb-Dave Brumfield IN	jf-Joseph Fala NJ	js-Joseph Smith NY	sw-Steve West PA
db-Danny Buntin OK	wh-Wm Hepburn ON	ps-Peter Sawatsky ON	Send in any FM distance
mb-Mike Bugaj CT	jj-John Jefferson CA	rs-Ralph Strobel IN	records/scoreboard/States
ve-Vernon Eaton AR	fm-Fred McCormack ND	rjs-Richard Steinberger MA	Stats by 12/5 -73 Fred

QSL CORNER

Thomas J. Yingling, jr.
221 Pinewood Road
Baltimore, MD 21222

FM-QSL

- AR KANS 95.1 Mammoth Springs. Letter from Paul Leirman, CE says there are 75kw horizontal polarization only. They're country/western. Cooper
- KASU 91.9 Jonesboro, Drawer "BDRB", State University. Letter from Charles Rasberry, Dir. of Broadcasting. Cooper
- DE WSTW 93.7 Wilmington, 2727 Shipley Rd. Letter from Joseph W. Jones, Eng'neer, an NBC Member. They're heard in Texas some years ago, he says. Cooper
- FL WJCT 89.9 Jacksonville, 2037 Main St, 32206. FMGO stationary with signer of Lee A. Young, CE & program guide. Chernos
- WVEY 94.1 Pensacola, Town & Country Plaza, P. O. Box 8057, 32505 with signer on letter Frederic T. C. Brewer, Pres. Chernos (my v/s was Gene Pfalzer; ed.)
- IL WSSR 91.9 Springfield, Sangamon State University, 62708. Received in 2 weeks from Dir. of Eng. James A. Newsbanks. Ross
- MAUR 107.9 Aurora, 620 Eola Rd, 60504. Received in 2 weeks from General Sales Mgr., David W. McAlvey. Ross
- WDON 95.9 Duquoin, Hwy 51 N., P. O. Box 190, 62832. Letter & map from Program Director, Gary R. Showalter. Yingling
- WHPK 88.3 Chicago, University of Chicago, 5706 University Ave, 60637. Letter from James R. Fowler, CE for report of a 10 watt station. Strobel
- IA KLFM 104.1 Ames, 428-5th St, P. O. Box 1647, 50010. Letter from Rich Weiss, Operations Manager, Eddie
- KFMD 92.9 Dubuque, 8th & Bluff Sts, 52001. Letter from Marc Karrmann, CE Eddie
- KS KOSM 105.5 Chanute, P. O. Box 748, 66720. Letter from Al Diller, CE Eddie
- KHUN 89.1 Wichita, 1751 N. Fairmont, 67208. Very friendly, formal verie letter in 2 weeks from James Sensebach, CE who calls RF propagation a "very whimsical thing" He also stated that "its unusual that the signal is copied so clearly I almost expect to start receiving membership applications from your area." Hepburn
- MD W256AC 100.9 Salisbury, translator of WRBS-95.1 Baltimore. This is an one watt station operated by the Calvary Baptist Tabernacle of Salisbury, not by WRBS-FM, with antenna up 350 feet with the yagis aimed southeast, south, southwest & west. Holbrook
- MI WEMU 88.1 Ypsilanti, Eastern Michigan University, 48197. Letter from R. E. Jacques, Station Manager, who says "We utilize a directional antenna to protect a Windsor station & therefore only radiate 515 watts in your direction. Total power is 16 kw. Ellis
- MOBN 88.3 Ann Arbor, 530 Student Activities Bldg. Letter from Judy Schwartz, Program Director for 10 watt station, antenna up 173 feet. Strobel
- IN WYRO 92.1 Little Falls, 62 E. Broadway, 56345. Letter from Joseph M. Benson, General Manager. Holbrook
- MO KTTS 94.7 Springfield. Letter from Keith Olson, CE in 2 weeks says "Put for you to receive us in Nevada, believe you had a little help from the sun by way of an "E" layer. I wish you a lot of luck in your dx'ing." Hart
- NY WQXT 90.1 North Greece, P. O. Box 300, 14505. Letter from Louis Betstadt, General Manager, supervisor of Broadcasting, Communications. Ellis
- OH WDRN 94.9 Medina, 4986 Gateway Dr, 44256. Personal letter verie, signed by A. Truska, CE, enclosed "Cruise" receive book, sheet of general info, 3 pages of programming, showing weather men, etc. promotion showing interior of station, coverage-map & chronological data. Most information of any station I've ever received. Wheeler

Reporters this time are: Ernest Cooper, Saul Chernos, Robert Ross, Richard Eddie, Hank Holbrook, Ralph Strobel, Albert Ellis, William Hepburn, John "Khush" Hart, & Tom Yingling; ed. I like to thank all the new reporters that I have underlined. 73's for now.

Turn

REVIEW:

AKAI AT-V04 AM/FM TUNER

by PETER SAWATZKY, VE3IXQ

While numerous 'synthesized' receivers and tuners are currently available on the market, none to date have offered features useful to the serious FM DXer. While digital frequency readout is a significant improvement over analog dial readout on conventional tuners, it should be noted that most such units are of the phase locked loop (PLL) variety.

While this type of circuitry offers some interesting features such as random access 'preset station' capability, and has the advantage of precise tuning, it must be remembered that the tuner cannot be detuned from any of the 100 allocated frequencies. This is a considerable disadvantage to the DXer, especially in an area where many locals are present, as it is frequently necessary to receive a weaker station on an adjacent frequency by tuning further away from the stronger station, but certainly not by a full allocated frequency as would be dictated by a PLL synthesized tuner. Consider also the case where a foreign station not on an American allocated frequency were to be received. The PLL tuner could not be detuned to a 'split' frequency. This might also be a consideration in the event the FCC were to begin allocating split frequencies or adding allocated frequencies above or below the present 88.1-107.9 MHz range. Any re-allocation of the present FM broadcast band would effectively render the PLL synthesized FM tuner obsolete.

Also, it has been noted that FM tuners consisting of varactor-type front ends tend to, on the average, have lower sensitivities at signal levels below those used to establish IHF sensitivity ratings. This is presumably due to differences in the quieting curves. This phenomenon is evidenced by Pioneer's 'Supertuner' line. Both the KP500 and the KE3000 models are acclaimed by Pioneer as consisting of their 'Supertuner' design and both have identical sensitivity specifications (according to Pioneer's own manuals), but the analog KP500 model was noted to have considerably greater sensitivity at the low signal end than its KE3000 PLL-type counterpart.

The only other commonly available type of FM tuner with digital frequency readout consists basically of a conventional analog tuner with circuitry (commonly a dedicated IC) which converts the local oscillator to a digital signal, which, when driven into the display, shows the frequency to which one is tuned. Frequently the digital display in this type of design is complemented with a conventional analog dial for those who are squeamish about converting to a full digital design all at once. The prime disadvantage in this type of design is that the 'preset station' recall capability and the 'auto-scan' and 'search' capabilities cannot be incorporated, because essentially the tuner is not digital and hence cannot be digitally controlled to produce these features.

While these latter features may initially not appear to be of great interest to the FM DXer, it should be noted that most DXers are at many non-DX times also listeners and/or may tape music, which makes both a much

AKAI AT-V04 AM/FM TUNER

simpler and more pleasurable experience. Having had experience with such features renders them almost indispensable. Most of these latter non-PLL type tuners also offer only 0.2 MHz display increments, or, at best, 0.1 MHz increments. This offers only marginal usefulness towards frequency readability when detuning from strong signals to receive weaker adjacent channel stations.

Now comes the Akai model AT-V04, offering the best of both worlds and incorporating additional features which many of either of the previous types do not have.

Firstly, the AT-V04 features a 'fluorescent' digital readout with display increments of 0.05 MHz. This aids significantly in true frequency readout when detuning, as previously mentioned, is required.

While the unit is billed as a 'digital synthesizer' tuner by Akai, it is obviously not of the PLL variety. This is evidenced by the fact that in spite of its full complement of auto-scan, search and preset station capabilities, it is capable of full manual override--not incremental as in the case of conventional analog tuners.

Hence, the AT-V04 is basically a dual-mode tuner, capable of PLL-type scan, search and preset station capabilities, but converting at the touch of a tuning knob (literally--the tuning knob is touch sensitive) to fully analog operation.

First, let us examine the non-manual tuning mode. 'Auto' tuning incorporated a two-position momentary contact switch, one position for down-tuning and the other for up. By depressing the switch momentarily on either side, the tuner tunes in the corresponding direction on the band until a station of at least a preset signal level is found. The audio is muted until the station has been found and locked onto. If, however, one wishes to bypass several stations, one simply maintains the 'auto' tune switch in the depressed position until the frequency readout indicates that area of the band just prior to which the station of interest is located. At this point, release of the switch will cause the tuner to lock onto the next available station which produces at least a certain signal strength (internally adjusted). The tuner is not of the PLL variety in spite of the fact that it uses a varactor-type front end. Auto-tuning is accomplished by means of a digitally controlled analog voltage ramp inserted into the varactor tuner. This scheme necessitates a frequency readout circuit based on the local oscillator frequency, as in the case of the common non-PLL type analog tuners with digital frequency readout. Of particular interest in the auto tuning mode is that 'scrolling' is possible--i.e. the voltage ramp is controlled in such a manner that once one tunes to the top of the band and continues to up-tune, it automatically resumes up-scanning from the bottom of the band, and of course, the converse is true for down-tuning. Unlike PLL-type tuners, the full tuning range goes well beyond the allocated band of 88.1 through 107.9 MHz, extending from 87.40 to 108.20 MHz. This is quite useful in that it enables reception of channel 6 TV audio which is a good indicator for FM sporadic E-skip in areas with no strong channel 6 locally.

The manual mode of tuning is engaged by touching the manual tuning knob which is electronically touch sensitive. When changing from the auto-tuning to the manual tuning mode (and vice versa), muting is automatically engaged for a period of a second or so. Manual tuning is equivalent to that on a conventional tuner, with infinite resolution. Scrolling is not possible, however, in the manual mode and manual tuning, when selected, returns the frequency to that last selected in the manual tuning mode, not that last obtained in the auto-tuning mode. The reason for this is, that since the manual tuning mode utilizes the same varactor tuner, a multi-turn potentiometer (very smooth in operation) is used as a voltage divider to vary a DC voltage into the varactor tuner stage. When returning to the auto-tune mode, however, up/down scanning resumes from that frequency to which the manual mode was used to adjust the frequency.

A total of 14 stations can be programmed into memory--7 on FM and 7 on AM. These can be programmed into memory while in either manual or auto tuning mode. It is interesting to note that in order to recall a station on a frequency, a station must be present on that frequency with a certain minimum signal strength, since the principle on which the tuner operates is that it searches for signal strength on or about the pre-programmed frequency, and then locks onto it. If, for example, the tuner were programmed for a strong station on 92.7 MHz, and that station were off the air when reselected in the preset mode, the tuner would look slightly on either side of that frequency. If it were to find a strong signal on either 92.5 or 92.9 MHz, for example, under these circumstances, it would lock onto one of these. If nothing was found, it would 'float' in an undefined state around 92.7 MHz without anything to lock onto. Up or down auto-tuning can also be resumed originating from any of the preset frequencies. Since the 'preset station' feature necessitates locking onto a station with a certain minimum signal strength, it is of minimal use to the DXer who wishes repeatedly to call up various good DX frequencies which would normally be vacant. In order to keep the memory intact while the tuner is not powered, the unit contains three standard 'AA' penlight batteries which need replacement approximately once a year. These are readily accessible in the rear of the unit.

The frequency readout is extremely visible, even under high ambient light conditions, due to the bright 'flourescent' display technology used. The flourescent display also includes an "AM" and "FM" display and a "MHz" and "kHz" display. The digits are about ¼" high and are clearly visible across a large room.

In addition to the attractive blue frequency readout, the AT-VO4 is endowed with a full complement of rather impressive LED indicators. Each of the 7 preset station switches has above it a green LED to indicate which preset station has been selected, when in that mode. An 8th switch which enables preset station programming into memory also has above it a green LED to indicate when the tuner is in the programming mode. A five-segment red LED array indicates signal strength. While this type of display cannot be as definitively read as an analog meter, it has found to be adequate except when weak stations are selected. A center-tuning display comprises three LED's, two red and the center one green to indicate when the station of interest has been tuned in correctly. The stereo indicator LED is red. Also, a green LED above the manual tuning knob is turned on when that mode is selected. It is impressive and pleasurable to view the signal strength, center-tuning and stereo LED's change continually while tuning, especially in the auto-tuning mode.

Other front panel features and controls include three levels of muting (one off, one internally preset and the last user-adjustable via a rear panel control), a stereo/mono mode switch, AM/FM selector switch and power switch.

Rear panel controls include the previously mentioned muting level control, an audio level control to control the audio output level to your amplifier, and separate local/distant switches for both AM and FM to reduce signal levels in areas with overload problems. Overload, incidentally, has not been noted to be a problem with this tuner.

Antenna inputs include three separate sets of FM connections, one 75-ohm screw-terminal type, one 300-ohm screw-terminal type and the other a coaxial 75-ohm connector type (although not F59 connector compatible). AM antenna input consists of a built-in adjustable ferrite bar antenna as well as an external input (for which, it would appear, a European style of connector may be required). Only a single set of phono output connectors is provided--i.e. if taping capability is desired, it must be done directly from the amplifier. Also, unfortunately, the AT-VO4 does not have a separate 8-ohm headphone output.

Performance-wise, the AT-VO4 is state-of-the-art. Its 1.6 uV IHF sensitivity rating and greater than 75 dB alternate channel selectivity rating can almost be believed, as when it was compared A-B with the classic

Sony ST-5130, negligible differences were noted on either parameter. It is conceivable that the AT-VO4 might even outperform that unit if more scientific measuring techniques were utilized. As already noted, the AT-VO4 has no problem with overload, at least certainly no more so than the ST-5130. In A-B tests, the full quieting stereo audio signal to noise ratio was as good as, if not better than, that of the ST-5130 and in overall terms sounded better than the ST-5130 due to much higher treble response. Even with full treble on the amplifier, the ST-5130 does not have nearly enough high-frequency output to produce the clean clear sound of the AT-VO4. No significant difference in bass response was noticed.

The AM section, although very selective, has rather poor audio in terms of frequency response, sounding much like a juke-box. The frequency readout for the AM band consists of 1 kHz increments which makes the tuner potentially very useful for foreign broadcast band DX. Unfortunately, the frequency readout for the AM band is frequently off by one or two kHz, but these minor shortcomings on AM should be of little consequence to the FM DXer.

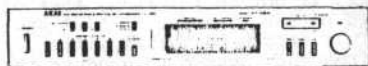
The most outstanding physical feature of the AT-VO4 is its extremely low profile (only 3.1" high) which enables placement into very compact environments. Both black and silver panel models are available. The unit is fully enclosed with no air vents (the unit dissipates very little power in terms of heat) and has no wooden cabinet. In all, extremely attractive styling for an otherwise exquisite tuner.

At \$420 (MSL in Canada; Canadian dollars), the AT-VO4 is a bargain. If anything bad can be said about this tuner, it may be its availability, or lack of it. Toronto Akai sources claim a considerable log of back-orders, indicating either a production problem at Akai and/or an overwhelming response by the consumer. The latter seems unlikely in view of the minimal promotion Akai appears to have made. While several vague references have been seen in audio magazines, no major commercial promotion campaign has been noted. Remarkably, however, the AT-VO4 can, along with several other new Akai components, be viewed on posters on the rear of Guelph, Ontario city buses. It is not known what the delivery situation in the U.S. is at this time. A long-awaited AT-VO4 did finally come through for an audiophile friend though, so presumably the delivery situation is not hopeless.

The only other possible complaint might be that, although much sophisticated large scale integration (LSI) technology is used throughout the tuner, many of the functions should have been achievable with the use of a single general-purpose microprocessor chip. This might have reduced parts count which, as can be seen in the schematics, is quite high and eliminated the need for some of what may be custom LSI (which might prove difficult if not impossible to find in the distant future in case of parts failure).

Let us hope that the AT-VO4 is a sign of technology to come, although this may be a somewhat optimistic outlook. The dual-mode non-PLL tuning feature, while ideal for the FM DXer, may not necessarily be appreciated for what it is by the average consumer or even audiophile, and hence may not set a trend in tuner technology. It would be in the best interests of any serious FM DXers, therefore, to seek out all available AT-VO4's, lest they should soon become much sought-after but discontinued models, as was the case with the Sony ST-5130 in its heyday. That tuner was discovered by the majority of DXers only well after it was out of production.

U.S. headquarters for Akai America, Ltd. are located at 2139 E. Del Amo Blvd., Compton, California 90220. Manufacturer's specifications, illustrations and schematics (on this month's VUD cover) follow:

AT-V04**AT-V04/L**MODEL **AT-V04**

DATE MARCH, 1980

I. TECHNICAL DATA

FM TUNER SECTION

Frequency Range	87.5 MHz to 108 MHz
Sensitivity (IHF)	1.6 μ V
Capture Ratio	1.2 dB
Selectivity (IHF)	More than 75 dB
Image Rejection	More than 80 dB (98 MHz)
IF Rejection	More than 95 dB (98 MHz)
Spurious Rejection	More than 95 dB (98 MHz)
AM Suppression	65 dB
Signal to Noise Ratio	75 dB
Harmonic Distortion	
MONO	Less than 0.08 % (100 % modulation)
STEREO	Less than 0.1 % (100 % modulation)
Muting	OFF
	1.30 μ V
	2.10 μ V to 100 μ V
Stereo Separation	More than 54 dB (1 kHz)
Sub Carrier Suppression	More than 80 dB
Output Voltage	Controllable from 0 to 1.5 V (100 % modulation)
Antenna Input Impedance	300 ohms balanced, 75 ohms unbalanced

AM TUNER SECTION

Frequency Range	520 kHz to 1,605 kHz
Sensitivity (IHF)	150 μ V/m (bar antenna), 10 μ V (external antenna)
Selectivity (IHF)	More than 30 dB
Image Rejection	More than 55 dB (1,000 kHz)
IF Rejection	More than 40 dB
Signal to Noise Ratio	More than 55 dB
Output Voltage	Controllable from 0 mV to 500 mV (30 % modulation)
Antenna	Built-in ferrite bar antenna
Power Requirements	120 V, 60 Hz for USA and Canada 220 V, 50 Hz for Europe except UK 240 V, 50 Hz for UK and Australia 110 V/220 V/240 V, 50/60 Hz internally switchable for others.
Dimensions	440(W) x 78(H) x 332(D) mm (17.3 x 3.1 x 13.1) inches
Weight	5.5 kg (12.1 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

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Tele-Photo Custom Lab is the only TV DX Photo Service that caters to the needs of the TV DXer. After 9 years of using a 620 camera, and learning the needs of processing for the less sophisticated camera, I decided to start this service to benefit all TV DXers. All work you send will be custom processed to the needs of the individual DXer. That is why we call it a custom service, and why we ask for 2-3 test rolls of film. We use the test rolls to determine the density of the film after processing. By developing the rolls in our special high contrast developer, we can determine the best development time for the work of each DXer. Every customer has a file with specific development instructions, which are followed with each roll. The test roll free rate applies to non 35 mm users only. 35 mm (except those with cheap 35 mm, which has no lens adjustment) has a standard development time which comes out fine. For those taking part in the initial test roll processing, if there is a shot on the roll which you would like a print of, please notify me. I will hold the negative on the side (unless there are enough to make the minimum charge). B&W only.

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Film developing with prints (one 4 X 5 of each negative):

Exposures	Price
12	\$2.30
20	\$2.80
24	\$3.30
36	\$4.30

Prints from existing negatives:

Print Size	Price
4 X 5	.20
5 X 7	.50
8 X 10	.70

Film developing (no prints) .50

Prints from color negatives (printed on double weight, non-glossy paper B&W)

4 X 5	.70
5 X 7	\$1.00
8 X 10	\$1.25

All orders should figure about \$1-2 postage and handling, depending on the size of the order. To insure the safety of your valuable TV DX photos, the negatives are kept until your next order or until you request them. Orders will be charged for the full rate for a roll if some negatives don't come out, unless more than 25% don't. Then the lowest rate (either the price for a roll of that number of exposures, or 50% developing charge plus 20% per print, will be charged). For rolls that come out blank, a 50% developing charge plus postage will be charged.

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