

From The Staff:

WTFDA Headquarters, P.O. Box 202, Whiting, Indiana 46394

IT'S SUMMER...Summer is the peak DX season for most VHF/UHF DX enthusiasts. We're into the time of the year when E-skip can bring in scores of distant signals on 30-50 MHz, all low-band TV channels, and the 88-108 MHz FM broadcast band. Tropo activity is rapidly improving in many areas also, and everyone should be able to notice improving meteor scatter conditions by late July. We're also into another season of great interest to DXers—the DX club convention season! It's time to plan your summer vacation travel itinerary now. Be sure to include our club's convention in them!

COME TO BALTIMORE!...WIFDA's 1979 convention will be held in Baltimore August 3-5. The Convention Registration Form can be found in the May VUD. Since the area is adjacent to the U.S. capitol, it's a great chance to see the Washington, DC area for yourself and the family. Worried about gasoline problems? Many of the airlines that serve the area are offering summer discount travel fares. Since the era of relatively cheap air travel may soon come to an end, now's the time to take advantage! Also, don't overlook train or bus travel—they're very economical, and you don't have to worry about the gas! If you'd like to drive to Baltimore while taking the "sting" out of high gas prices, "pooling it" with a fellow DXer(s) will do the trick. We hope to have more convention imfo, plus a tentative schedule, next month.

WIFDA NEWSWIRE...Due to a lack of material, plus the prospect of newsworthy items to come from both the Video Expo and the Chicago Consumer Electronics Show, Morrie Goldman will delay this column until the July VUD.

BITS...CATJ Satellite Journal has been moved to the transponder that feeds West Coast CATV's with Home Box Office pay—TV service on RCA SATCOM II...May E-skip activity so far appears to be running below average—but there have been some good openings in the southern latitudes...WIFDMer Paul Traska is still in need of logos for channel 2-6 TV stations for a WUD project...We hope to have word on a new editor for RASTERN TV DX next month...Pat Dyer's description of his F2 TV DX logging in this issue shows you what to look for.

TABLE OF CONTENTS

MATLBOX: Anyone for microprocessor FM and TV DXing?3
AGC AND HOW IT AFFECTS TV DX: Does it help or hinder?8
INTERNATIONAL NOTES: Richard Clark logs Chile on ch A211
EDUCATIONAL FM UPDATE, PART 1: Big changes for EFMs12
FCC FM NEWS: Does CBQH 100.9 have a split personality?15
FCC TV NEWS: Two Florida stations to have supertowers 18
PHOTO NEWS: A look at Mexican TV via R-skip.
SPECIAL REPORT: Notes on a logging of F2 TV DY
NORTHERN FM DX: Tropo activity is picking up.
SOUTHERN FM DX: Some really great tropo on Way 7th
WESTERN TV DX: A bit of early May E-skip is reported26
MASTIGEN TV DY: Good tropo in couthern exect in April 20
VIII UTILITI DA: SUNSDOT ACTIVITY TO neak in Wovember? 31
IN SEARCH OF PSB: County radio nets
USL CURNER: All FM USLS this month
TV STATISTICS: The TV DX scoreboard
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Renewals Due in July:
John Barber, Jr., R.S. Broadhead, John Clemmer, Bob Curole, Mike Dalton,
Dennis Dean, John Ebeling, Ron Ginardi, Tom Huehn, Chris Landon, David
Legler, Nick Lombardi, Mark Lucas, David Martin, Dan McDonald, Vic Melis,
K. Noffsinger, Walter Patton, C. Hooper Phillips, Ted Pinski, Steven
Shaffer, Gary Siegel, Ken Simon, Doug Talley.

New member JOHN BOLDUC learned about the club in Communications World. He's interested in BCB, FM and TV, and SW and PSB to a lesser extent. His gear includes an SX-650 receiver, a 10 element FM yagi mounted at 45°, a fringe VHF antenna at 30°, a deep fringe UHF antenna at 60°, and Bearcat 101 and 210 scanners. John is also a member of NRC.

From the island of Antigua comes RICHARD DOUGLAS. His DX shack features a Nivico 6001 AM/FM receiver and an RCA XL-100 TV. He heard of the club in the World Radio-TV Handbook. More from Richard in Tidbits.

An electronics technician, GEORGE DUBOIS is primarily interested in PSB TY. He uses a Bearcat 210 and a Regency ACTW-10. Don Blevins, host of

this year's convention, introduced George to WTFDA.

It never fails to amaze me the way people join WTFDA after reading an article about the club in a magazine published several years ago. We're happy to have GRAY FULK on board, who read the article Morrie Goldman did for Elementary Electronics in 1977. Cray is interested in TV and PSB, and TXs with 7enith 9" and 19" TVs and a Bearcat 210 scanner.

BILLY HOLLEY is one of a rare breed...a politician. He's joined the club after campaigning in his local county elections. Billy heard about the club from member Glenn Hauser. He DXs with a 21" RCA TV and several FM receivers. More from Billy in Tidbits.

June 1979 WTFDA Mailbox

From the Longhorn State comes new member JERRY HUNT, a 32 year old truck driver. He's into FM, TV and SW DX, and learned of the club in Communications World.

Member Pandall Clark is hard at work recruiting members, and one he's brought into the fold is RICHARD MILLER. Richard uses a Panasonic RF-4800. He's into CW and MY DY, and is also a member of NASWA.

College student JOHN SULAK wraps up this month's introductions. He's a member of SPEERY and NRC, and uses an FM stereo receiver connected to a Channel Master CH5200 antenna. The World Radio-TV Handbook led John to WTFDA.

Tidbits The following letter from Peter Sawatzky (RR #4, Guelph, ON NIH 6J1) contains some fascinating info about DXing using computers. He's looking for someone to join him in studying the use of microprocessors in FM and TV DXing. Interested Write to Pete for info. Here's his comments: "To date I know of nobody other than myself who has attempted to apply microprocessor technology to our hobby. For that matter I know of no one who has even attempted any sort of serious "automated" DX setup. Surely there must be sufficient technically oriented and interested members out there who might be interested in improving their hobby beyond mindlessly tuning up and down the band in hopes of an opening. About one year ago I completed a completely hardware oriented system (about which I have not yet found adequate time to write a worthy article) to automatically DX the entire FM band 24 hours a day. Very basically, the system works as follows: a memory bank is manually loaded through toggle switches with digital information which, via a DAC (digital to analog converter) addresses a varactor tuner (no moving parts). The digital information in 100 locations in memory corresponds to the 100 allocated FM band frequencies. This information is accessed at a maximum rate of 20 Hz and consequently the entire FM band is scanned once every 5 seconds. At the same time as the digital tuning information is accessed in memory, another 100 locations in memory are accessed, each of these containing digitally a value of AGC, i.e., the signal strength of the station normally found on the corresponding frequency. As the system scans the FM band, it compares the real-time ACC levels with those which have been programmed into the memory. When a real-time AGC level is greater than the programmed value, the scanning is stopped for a pre-determined maximum period of time and a tape recorder is turned on to record what the machine has determined to be DY. The actual varactor tuner used was that found in the Heathkit AJ1510A. The IF from this is fed into a Heathkit AJ-15, bypassing its mechanical tuner section. The system is, of course, too complex to describe in intimate detail in a letter and set me back nearly \$1,500 in parts, but has been successful beyond even the wildest dreams I had while designing and building it. Since it runs 24 hours a day and scans the entire band every five seconds (20 frequencies per second) it has the uncanny ability to simulate 100 Dyers sitting in front of 100 receivers Dying night and day. While this system has given me fantastic results in Es openings (many at times when I was asleep at times of the year I would never have expected an opening), it still has a great number of shortcomings. While I have developed a circuit which encodes the frequency of the signals received on one channel of my tape, it does not encode times of reception on tape. Also, while the system is super for Es, it has severe shortcomings for Tr and MS, which may not be intuitively obvious until the operation of the system is learned in detail. In order to overcome these shortcomings I have decided to supersede the system with one involving a microcomputer. I have purchased an Intel 8085 based kit (the SDK-85). While there is still a mountain of development work to be done and parts to procure, I hope to end up with a system which will be the ultimate in automated DX. I appeal to any member who would be interested in applying microprocessors to FM (or, for that matter, TV) DXing to contact me for possible collaboration. While what I am doing is interesting and fun, I am sure it would be much more so if someone out there with technical background would show a similar interest. While DVing in itself can be satisfying, it seems to me that once such a hobby has been pursued for more than several years, it is necessary to supplement it in some way so as to maintain the satisfaction to be gained from it, and microprocessors seem like a natural progression for FM/TV DX." Pete has already started modifying his system with the new equipment he has, and has plans for some exciting additions to an already great system. If interested in collaboration, by all means contact him. Hopefully, we'll soon have an article from Pete detailing the entire system and any additions or modifications.

<u>WTFFA Mailbox</u> June 1979

From Don Erickson we have word that he's already taking orders for the 1980 World Eadio-TV Handbook. A pre-publication discount is being offered: "Pearly 500 copies of the 1979 WFTVH were shipped, with profits poing to the Handicapped Aid Program. In order to make more secure arrangements for air freight chipment of copies of the 1980 WFTVH, orders are being taken now. Initial orders will be taken at \$11 per copy including UPS or Book Rate shipping of copies when received sometime in 1980. The \$11 price can be guaranteed only through 31 July 1979. The offer will be extended after that date only if there is no announcement of a price increase for the 1980 edition. The offer expires July 31 or immediately upon notification of a list price increase thereafter. Please send orders with check or money order in U.S. funds and a SASE for confirmation after shipment is completed. Lower left-hand corner of your order envelope should specify 1980 WFTVH. A full immediate refund may be obtained at any time for any reason. A few copies of the 1979 WFTVH are available at \$14, including shipping. Please mail all orders to: Donald Erickson, 6059 Essex St., Riverside, CA 92504. 714-687-5910 0100-0700 CMT." This offer represents a \$3 savings on the 1980 edition, barring a price increase. The Handicapped Aid Program, in case you're not familiar with it, is an ANAEC sanctioned organization that provides handicapped persons DXing equipment to get them interested in the hobby. It's main funding is an ANAEC convention auction and Don's WETVH contribution. Don had numerous problems with the 1979, which he details in a lengthy letter. In brief, he tried to order directly from the publisher in Denmark, but was told he must deal with the North American distributor, Watson-Guptill in Cincinnati. Don tried to get the WETVH shipped to him air mail, but it wound up coming by seamail from Europe, contributing to a nearly 2 month delay in his distribution. Don blames several people for the delay, including those at Watson-Guptill and Gilfer Sho

Now we have an intro from new member Clenn Jacobs (address on first page of Mailbox): "As a fairly new member Clenn Jacobs (address on first page of Mailbox): "As a fairly new member T thought intros were in order. I've been an avid TV and BCB DXer for the past 17 years. I also do a bit of FM DXing with a Marantz tuner and hold the ham call K3WEI, active on 20 and 15, but mostly 10 meters. My location is on a 70 acre farm about 2,000 feet up in elevation, 22 miles east of Scranton PA. Nearest VHF station is channel 12 in Binghamton. Nearest UHF is Scranton/Wilkes-Barre, far enough away that New York state covers channel 16 on a good tropo opening. Equipment used for TV DX is as follows: 19" Sony, CE portable, Phillips 19" 405-line set, Channel Master Super Crossfire with BT pre-amp, 7' Channel Master dish with Winegard preamp soon to be put up at 55', and HAM II rotators. Best DX catches on the VHF are KNBC Los Angeles in July 1976 on 2-Es, channel 7 Traverse City MI on trops last summer, and BBC-1 channel 1 video, 1979. Hopefully a rhombic for F2 TV DX will be up by the time this is in print. Average daytime conditions extend out as far as channel 4 Ottawa and include all the Vs from NYC, Providence, CT, Boston, Albany, Rochester, Syracuse, Philadelphia, Altoona, and Buffalo- as many as 35 VHF at any one time. Bursts from as far as Cleveland on 8, Wheeling 7, Pittsburgh Vs, Manchester and Durham 9 and 11, plus Montreal 10 and Mt. Washington 3 make it in at various times for part of the day. Watertown 7 is also always in. Meteor scatter work is very productive in the 6-7AM period, with the test pattern from Cedar Rapids a regular whenever I look. Can't wait to get the dish up for this coming season! I look forward

to reporting and becoming a part of this organization. Best of DX."
Here's a few comments on taping DX from Leo Boehl (622 W. Koenig,
Grand Island, NE 68801): "I purchased a VCR last January in time to catch
the Super Bowl, and thought I'd relay some experiences using one for DX.
This particular recorder is an RCA VCT-200 (VHS format - 2 speed, mechanical
tuners). Some of you may shoot me down for saying this, but I've never seen
a color TV tuner yet that could pull in a weak signal as well as any BAW.
I suspect the reason is the amount of color information needed to process
the broadcast signal, which has to be literally screaming almost compared
to most DX. In a side by side comparison among the RCA, a Sharp Lynitron
19", and a Zenith 21" BAW, the Zenith would consistently receive weak tropostations while the two for color would see no signal present. Also, the
same without splitters for side by side comparison and straight thru
antenna/preamp. Being that you must go through the recorder's tuner, this
is a bit of a trade off even if those DX's are very marginal at best. Don't
know about the electronic tuners. Another aspect is using the recorder to
FY a given channel while you are asleep or away. Not expecting much as just
mentioned, I would set the unit for sign-on of KMTV-3 Omaha (150 miles) when
experiencing weak groundwave the night before. With a picture and sound
every FYer would consider acceptable the automatic speed control would hunt
from slow to fast speed trying to find that "perfect picture". I'm sure

ETFIA Mailtox

(Boehl Cont.) this could be defeated, but that, with the Sams Photofacts for it also, would be a can of worms so enormous I wouldn't wish it even on the infamous Murphy himself. My palms get sweaty enough just cleaning the tape heads. I don't mean to disappoint anyone, tho, as I'm sure it will come in very handy for this E-skip season, and is a rood added tool if you don't forget your "DX patience" while watching a 2 or 4 hour "blank"

As promised, here's a few words from new member <u>Billy Holley</u>: "I have received Nexican TV stations: 2 on U.S. 2, 2 on 3, and 13 on 4, with color but without call letters or ID. With their Spanish up to speed and not that good it was sort of hit and run. Nexican radio FM 100-102 MHz also present. By the way, Ripley is to get its first FV station, owned by our mayor. Studio is on the square downtown in Ripley, with 225 foot antenna located approximately 12 miles southeast of Ripley, connected by telephone hookup. Also, KAIT & Jonesboro AF is increasing range with a new antenna soon. Anytime anyone needs mid-South info feel free to write and ask. The warst I could say is 'I dumpa'.

I could say is 'I dunno'."

From new member Paul Mount we have a raft of information: "I've contributed to Northern FM DX, TV News, and many times to Bruce Elving's column, now all I have to do is join the club. I enjoy reading the FM and TV contributions as long as there are reporter comments along with the station listings. After all, we are people, not just monitoring stations sending in the monthly list. I try to do this in my reports to each of the clubs; I'm active in IRCA, NRC & CWDXA. While I've experienced almost no CTUBS; I'm active in IRCA, NRC & GWDXA. While I've experienced almost no FM DY of any kind, I do agree with Frank Merrill and others who say that FM or TV DY, when it is in, is much more exciting and interesting than good AM conditions. So far I think I'm a jinx to good conditions—when I've visited Joe Fela or George Greene or John Zondlo there's never been anything "going on", except for the time at Karl Forth's when I heard audio from Big Spring TX on channel 4, which was a big thrill for me. Similarly, I was almost panicky, hi, when I heard WNAP Indianapolis that morning in February.

My location is almost ideal for DY in that there are no stations within 10 My location is almost ideal for DX in that there are no stations within 10 miles, only 7 within 30 miles of here, five of them being class A's. Melsonville is halfway between the Logan and Athens dots in your FM Atlas in SE Ohio. We're in a mile wide valley. Reception is somewhat better at the top of the hills. I check conditions almost every day, usually around 0830, 1730 and 0000, just waiting for something unusual to come in. I don't know if these are good times to check, though. As of May 3 (my birthday no less) there's been no Es and almost no tropo or anything else noticed here. As for TV, with no antenna all we get is WOUB-20 from Athens; with the antenna it's cable with a station on every VHF channel. The Baltimore convention is a maybe--probably if I make it I won't make IRCA and NRC, and vice-versa. the summer I will be at a location less conducive to DXing--Teaneck NJ, about 10 miles from the NYC stations. Having no rotor, just the whip antenna on the Sanyo, it'll be rough to hear things. I'd appreciate a call from anyone in the NYC area who notices anything "going on" at 201-836-1137, that's after June 10 when I will be in NJ for the summer to visit my parents and family there."

Seems we have another member interested in videocassette recordingnamely Hooper Phillips (P.O. Box 897, Gilbert, MN 55741): "I enjoy being a member and the monthly newsletters are very informative. Here's hoping we have an exceptional DX season. I would like to exchange videotapes of station IDs, samples of local programming and DX catches by videotape. I have the RCA VHS tape system, and can tape up to 4 hour tape cassettes. Tropo is picking up now that our weather is warming up (it was a long, long winter)—we noted Ceder Panids IA on channel 7 this morning, for example. We also we noted Cedar Rapids IA on channel 7 this morning, for example. We also noted Park Falls WI on channel 36 as well. Location here is 200 miles north of Minneapolis and the stations there on TV and FM are improving 100% now."

Good to have Ed Brindle back in the club! He writes: "Thanks to your most recent flyer (a mailing to former members-jz), I finally found the motivation to rejoin. I enjoyed my previous 2 year membership. However, when it came time to renew, cars and school had priority over the VUD. After *11 (plus!) in car parts and etc., the money just ran out. Hopefully I won't have that problem in the future! Although I don't have the time to DX as much as I used to, I still enjoy it. Some parts of my DX set-up have changed, while most of my set-up remains."

Congratulations go out to Michael Koronka (324 E. 1st St., Gaylord, M 49735), who just received his second class FCC radiotelephone permit. He's now working on the first class ticket, and we wish him all the best. He writes, "My DX activity has been low due to the fact that I am not home - only on some weekends. So when I am home in the summer I hope to get a few more FM verifications and many more logs."

June 1979 WTFDA Mailtox

<u>Michard Clark</u> (P.O. Box 273, La Vega, Dominican Republic) has some exciting news for us this month; "I started TV DX in 1950 and in 1969 I joined WTFDA, a really great TV DX club. But now I have gone into a new joined WTFCA, a really great TV PX club. But now I have gone into a new field of TV DY. I now have my own private satellite receiver!! That's right, I have become the 2nd person in this club to own one! My TVRO is 24 channels microdyne 1100 FFCCXI (I have all crystals for 24 channels) and a 20 foot dish. I am using a 120 degree K LNA amplifier. This is really something else to DY on, when all TV stations are 22.300 miles away!

something else to DY on, when all TV stations are 22,300 miles away!!
What it cost? Well, about \$10,000-\$12,000, but it's really worth it!!!"
Congratulations Dick! Perhaps you could write a short article for us on
what it's like using the TVRO in DR.

Member Roger Sabella (Box 2072, Chicago, IL 60690) passes along a note
that Television Publications, Inc., has increased the price of its "Satellite
TV Study Package" from \$10 to \$14. The package was prepared by WTFDA member
Bob Cooper, and includes a 52 page booklet detailing home terminals,
equipment sources, and pricing, a 22x35 inch wall chart showing the location
of all satellite systems in operation, and a copy of Community Antenna equipment sources, and pricing, a 22x35 inch wall chart showing the location of all satellite systems in operation, and a copy of Community Antenna Television Journal. Bob is editor of CATJ, the official publication of the Community Antenna Television Association. I have a copy of the package and recommend it to anyone interested in satellite TV. TPI's address is Suite 106, 4209 NW 23rd, Oklahoma City, OK 73107.

New member Jerry Hunt would like your suggestions on equipment, etc.: "Here is a list of my equipment- Panasonic RE7671 solid state FM/AM stereo, Radio Shack Archer 10 element FM antenna at 20' with rotor, and a Channel Noteton broadband amplifier 7035 FM/AUF. I am using the FM Atlas and have

Master broadband amplifier 7035 FM/VHF. I am using the FM Atlas and have had fair luck in OK, KS, TX and CO. The most distant FM station has been about 175 miles. Everything within this circle I can receive, depending on conditions. Some of the stations are low power and they are a challenge to try and receive. I have a new local FM station here in Perryton TX, KEYE 95.9. Sunday night is best for FM DX. KEYE goes off the air at 10PM. After 10 things get much better! I need info on how to improve my reception. I would like to catch some of the more distant stations 500-1,000 miles away. I may have to go to a better FM DX radio than the one I have. I would like Would like to find an SCA to install in my radio when I find the one that I will use. I may try stacking two FM antennas at 5' apart and see what that does for my reception. Does anyone know of any filters that I can that does for my reception. Does anyone know of any filters that I can install to cut back on noise and hash. I know that using the amplifier will cause an increase in db gain besides the noise that I receive. Would like some info on an attenuator that I could buy to help with this local station that is overloading my antenna. Turning away from the station does not help too much. The best I have found is to wait until they have gone off the air. Would like to find someone close to me to write to in my area. Here's an interesting case that someone out there might be able to solve. We received the following letter recently from Kevin Jackson (44 Frambill Crescent Meanwood Leads West Vorkshire 187 204 England).

Farmhill Crescent, Meanwood, Leeds, West Yorkshire, LS7 2QA, England): "I might have received a North American signal via an aurora, but I'm not too sure. The signal was seen between 0032-0101 CMT on Channel E3/A2. The sound spacing seemed like A2 and the video had heavy frame roll and the line was quite a way off lock, but this could just be due to the doppler shift, etc. It also had wide, dark hum bars on the picture. The transmitter was switched off at 0101 GMT, which seems early for North America, but I see that in summer Newfoundland time is -2.5 hour GMT, making it 2231 local time if it was Newfoundland, but that still seems quite early. I mention this as you may be able to help. If it was from Europe-Scandanavia I would expect to see more than one transmission. The signal I think was on programming, but with all the hum bars, etc., it was hard to tell. It also wasn't too strong." The reception was April 4, 1979. Bear in mind that daylight savings time hadn't started yet. I wrote him expressing doubts that it was Newfoundland, but I'm sure many of you could be more definite about

it than I am.

Roosevelt Crawford has moved once again (address on first page of Mailbox). He writes: "I have moved to Fuerth, West Germany, which is a part of Muernburg. In February I bought a Sansui G22000 stereo receiver. Since then I have received AFN-FM 98.7 MHz from Frankfort three or four times, and then I have received AFN-FM 98.7 MHz from Frankfort three or four times, and once late at night in \$\frac{x}{2}\$. I can receive Stuttgart 102.4 all day with periodic noisy stereo. I might add that this is using an indoor T-line antenna." Keep us informed of your EX progress there, Roosevelt.

Remember, this column depends on your support. Feel free to send news and views about the hobby, except items that go into the DX reporting columns. Be sure to support the other columns as well. Thanks to the many reporters this time around for making this the largest Mailbox ever.

A last minute reminder- the ANARC convention is June 22-24 in Minneapolis. Hope to see many of you in Baltimore. It promises to be a

AGC AND HOW IT AFFECTS TV DX

Every modern TV receiver has a circuit known as the AGC, or automatic gain control. This control circuit, which is usually taken for granted by most TV DXers, may be the least understood and most often ignored of those controls that are not normally operated by the DXer.

The purpose of the AGC circuit is to control amplification in the video The purpose of the AGC circuit is to control amplification in the video RF and IF stages of a TV receiver. The AGC feature is necessary to prevent the adverse effects of too much signal, a common problem in areas very close to local TV transmitters. If you live quite close to a local station, you may be in a field strength area of several hundred thousand microvolts: This is an unfortunate situation for any TV Dxer to be in, but without AGC, you wouldn't even be able to watch those same locals.

AGC makes it possible to design a TV receiver that can receive both weak and strong signals on different channels. If too much signal from local stations were the only problem, and if you only wanted to watch the locals anyway, a signal attenuator or "pad" at the antenna terminals would probably be the answer; but if you wanted to watch weaker (such as DX) signals, the pad would also eliminate them as well.

A receiver without AGC, or with a poorly-designed or malfunctioning AGC, would not lock into sync when tuned to very strong locals, or would show a very dark (very high contrast) picture, with some audio distortion possible also. Conversly, too much AGC compensation (too low an adjustment of the AGC level) will effectively reduce the sensitivity of the set, resulting in poor contrast on semilocal and weak DX signals, giving them a "washed-out" look.

The trend among TV set manufacturers these days is toward "idiot proofing" their products. This is the philosophy that there should be fewer and fewer controls to confuse the consumer. Thus, we now have features such as automatic fine tuning, VIR circuits (automatic adjustment of color), etc. However, while this trend may be fine for the average consumer (after all, it makes life less complicated for them), it's a problem for the DXer who now finds that the AGC is frequently no longer adjustable on newer TV sets. It seems that although the AGC control has traditionally been designed and located for accessibility primarily to the service technician, it too has become "idiot-proof".

Without adjustable AGC, the AGC action of a TV set has to be a compromise that may cost you some sensitivity. Fortunately, most of the better models have good AGC specs--the ones to watch out for are the cheaper models, such as the no-name discount store type of set that usually sells for an "incredible" price. These sets usually will have incredibly bad specs to match the pricel

Some TV sets employ "keyed AGC" -- this is a form of AGC that's only "on" during the brief interval when the horizontal sync pulse takes place. This reduces the effect of electrical interference such as power line arcing or atmospheric lightning on the AGC circuit. When such an arc occurs, it causes an AM noise pulse that the AGC might otherwise interpet as a stronger video signal, thus reducing the receiver's sensitivity. If you often have the problem of trying to DX E-skip while a thunderstorm is raging several miles away, keyed AGC can help you cope a little better with those static "crashes" visible on the screen.

AGC also helps you cope with signal fading, although the AGC action of most TV sets is not really adequate to deal with the often very deep, rapid fading encountered in some Es openings. It should be noted that TV DXing probably wasn't considered when most receiver circuits were originally designed, so it shouldn't be too much of a surprise to most TV DXers when they learn that what they're using their sets for is not exactly what the AGC circuits were intended to cope with!

AGC And How It Affects TV DX

In one form or another, some type of AGC circuit can be found in almost every modern radio or TV receiver. In radios, it's sometimes known as the AVC (automatic volume control). This is considered to be an essential feature in most communications receivers, many of which have selectable AGC modes to suit the type of signal (modulation) being monitored. In a communications receiver, the AGC function is designed to deal with a very wide range of RF signal input levels that can be found on a crowded band. For example, a communications receiver of good design can take a range of signal strength levels of from just over 3 microvolts to 100,000 microvolts (90 dB of change) and compress it into, say, only 6 dB of change in the audio output stage. Simply stated, this means that the user of such a receiver will not be "knocked out of the chair" when tuning across a crowded frequency band of local and DX signals. Without the AGC, every local signal would appear to be many times louder than the strongest DX signal. With AGC, things are at least brought into a more tolerable range, if not equalized.

But what about AGC in television circuits? For the most part, it helps, rather than hinders your DX efforts. However, there are times when you are put at a disadvantage by this built-in feature. There are a wide variety of AGC circuit schemes in use by TV manufacturers, and while some of them are considered better suited to certain DXing purposes, all of them do have the same basic objective—to control gain in the IF and RF amplifier stages, thus preventing the aforementioned overload effects from strong signals. When you tune a TV receiver to a channel with no signals, AGC turns the amplifier stages up. With very weak signals, AGC allows the amplifiers to run "wide open" or fully on. But when you're tuned to a strong local channel, it allows little or no gain in the RF and IF stages—you don't need it. On most sets, the AGC is always in operation—you can't turn it off without modification. In some sets, this may not be worth the trouble, since most of the AGC circuit may be contained in an IC (integrated circuit) chip.

AGC works by responding to signal strength. The circuit "senses" RF input signal level, and adjusts the amount of gain in the RF and IF amplifiers accordingly. The stronger the input signal at the antenna terminals, the lower the DC bias voltage supplied to the RF and IF amps. Lowering the voltage to the bias circuits lowers the amplification of the input signal. Extremely strong signals require the least amount of gain. As in the example of the communications receiver above, a wide range of signals is effectively compressed into a much narrower range. This is why you don't usually have to readjust the contrast when switching from a strong local to one that may be marginally snowfree, when your AGC is operating properly.

You can make good use of this feature. By locating your set's AGC line and using a good VTVM or high impedance VOM, you can have very accurate signal strength indication—which can be of great use for detecting signs of a DX opening before you can actually "see" it on the screen. Such an 3-meter is also extremely useful for keeping your DX system up to par. For details on using your TV set's AGC in conjunction with a meter for signal strength measurement readings, refer to Dave Janowiak's TECHNI-CORNER column (VUD, October 1977, p. 21--available through the WTFDA Reprint Service).

There are some DX situations where you don't need AGC and could have better DX results without it. In particular, AGC has a big effect on meteor scatter (MS) TV DX. On most receivers, the AGC cannot react quickly enough to many meteor bursts. Since bursts are of such short duration—often a second or less—the AGC doesn't have enough time to adjust RF and IF amplifiers to maximum gain. A very week signal, such as encountered in a MS burst, needs more time to properly "trip the AGC." This results in what amounts to a loss of sensitivity to signals that otherwise might be identified if the AGC could be turned off. This helps to explain why two TV sets, which may otherwise seem to have identical sensitivity, produce widely differing results on MS. Since there are different types of AGC circuits in use, some consumer TV sets are "hotter" for meteor scatter than others, while being of practically no difference when used for other DX modes. Some of the more avid and technically minded TV DXers have gotten around this problem by use of modified older tube-type sets. Larger, more elaborate antenna arrays also will help MS results on any television receiver. They can give you more bursts, and the increased gain can have the effect of increasing the length of the burst, too.

AGC And How It Affects TV DX

10

Different AGC circuits have dissimilar "reaction times" because the time constants are unlike. The time constant of such a circuit is determined by the values of capacitance and resistance, and with many different types of AGC circuits used by manufacturers, some are much faster in responding to changes in signal strength. For MS bursts, you'd need a set with a very "fast" AGC-but this would not be best for other DX modes. An AGC with a slower reaction time might be more desirable for certain types of signal fading conditions such as one might encounter with E-skip. Also, there are different types of fading characteristics encountered over troposcatter paths that would call for an AGC with variable reaction time to be controlled by the DXer who may have the desire to observe scatter-propagated TV signals over a period of time.

The presence of the AGC circuit in your DX receiver can sometimes pose an additional problem. Adjacent channel interference or "slopover" (as some DXers like to call it) from a local signal can sometimes "trick" the AGC into reducing signal strength. This is often the case in some of the newer all-transistor receivers, many of which just don't seem to have the adjacent channel rejection (selectivity) that used to be typical in the sets of the 1960's. To best avoid this problem, traps can be used on the local channels. Often even the simplest of traps, constructed out of T-line (such as twin-lead) will do the job. By concentrating on trapping out the video carrier of a local signal, you can reduce or eliminate the "slopover" on the adjacent channel to the point where the AGC will respond normally to weak DX signals.

Depending mainly upon how old your set is, you may have adjustable AGC level. Usually, this is a "set and forget" type of control, which is why it is primarily intended to be adjusted by the service technician. Typically, the AGC level control will be located on the back of the chassis—but it may be located in "odd places" on some sets. One such unusual location may be a small slot where the contrast control knob is located, accessible only with a screwdriver or alignment tool. Component aging may make it necessary to "touch up" this control setting from time to time. Touching up this control often improves contrast. You may find that the AGC, when set to the optimum point for viewing locals, may actually cause the weaker DX signals to be snowler than they should be. In this case, you'll have to back off on the AGC control so that reception on the weakest signals is at its best. This may result in a loss of contrast on local signals, but you can live with it. If the AGC control was not properly set in the first place, and it often isn't, adjusting it to optimum for weak signals should prove to be a big help for TV DXing.

Some sets have "local/distant" AGC switches. If you DX with one of these sets, it should go without saying that the "distant" position should be used for DXing. Unfortunately, the presence of this switch often indicates a poorly designed receiver! Poor AGC action may frequently be found in the "no-name" imports (the more well known imports are usually free of this), but keep in mind that AGC specs can vary widely even in the top-of-the-line domestic consumer TV sets. Probably the ultimate in AGC options can be found on a professional receiver such as the Conrac AV-12E series. This type of CATV/Broadcast-quality monitor receiver is more than worth its weight in gold to the avid TV DXer. The real DX value of this type of receiver, as reviewed by Morrie Goldman in the October 1972 VUD (p. 35), is the flexibilty in areas such as AGC. On it, AGC can be turned off for maximum meteor scatter DX performance, or adjusted manually exactly to suit the DX conditions.

The purpose of this article has been to make the TV DXer aware of what the AGC feature is, and what it does. We'd suggest that anyone attempting to modify their set's AGC action should take care to know what they are doing. Without the proper service equipment and knowledge, you can cause many more headaches than you bargained for. The latest TV receivers clearly are not as easy to "soup up" as some of the classic receivers, and AGC is something that illustrates that point. If AGC action on a new set is good, you shouldn't have to worry about it for DXing purposes. If, however, you've acquired an older tube type-type TV receiver to be used for DXing, don't overlook the AGC function when checking tubes. Don't forget-AGC is always on when you're viewing a standard consumer type TV. Make it work for you, to improve your DX results.

-DT

INTERNATIONAL NOTES from

Ken Simon 513 6th Avenue South LAKE WORTH FL 33460 305-585-7415 after 5 pm!

RICHARD CLARK sends his greetings from the Dominican Republic and just casually mentions (in a letter received here 27 APR) that he has received the HBC1 on ch B1 but this time he received CHILE on A2 with a test pattern. I wonder if this could be TB? He also sent along skeds for WTVX-12, WSVI-8, WBNB-10 and ZBTV-5. It is attached for your inspection...
(If you run into recent—the last 6 months—TV or FM program skeds, PLEASE share them with us...I'll be more than happy to return them if you want.)

Richard also sends his list of DOMINICAN TV stations, which I've rearranged by CHANNEL:

CHANNEL-2 HIMQ-Santo Cerro HTJB-Santo Domingo

CHANNEL-4 HISD-Santiago HTSD-Santo Domingo

CHANNEL-5 HISD-Alto Bandera

CHANNEL-7 HIN-Santiago HTN-Cayacoa

CHANNEL-9 HIMQ-Santiago HIMO-Pico Isabel de Torres HIMQ-Cumayasa HIMQ-Santo Domingo

CHANNEL-11 HIN-EL Mogote HIWP-Santo Domingo

UHF CHANNEL-70

HTN-La Maviza

CHANNEL-12 HISD-Dajabon HISD-La Descubierta

HISD-Pico Isabel de Torres HTSD-Radio TV Dominicana

HIN-Rahintel HIMQ-Color Vision

part HIJB-Tele-Antillas HIWP-Telesistema D

HIND-Tele-Inde

HIND-Santo Domingo

HIJB- CP - in northern

CHANNEL 13

THANKS TO RICHARD for a good catch and the Dominican list. He now says he has a 20 ft. dish TVRO in operation too ...

From GLENN JACOBS comes word he has photographed HBC-1 ch B1 on a British 405 line set. I don't have the photos yet, but we'll publish them as soon as they're in hand. JERRY PULICE's photos came out but are very hard to tell what they are. In one a man—somewhat humanoid shape—can be discerned...

KEITH HAMER in Derby UK reports no A2s yet in ENGLAND ... Work goes on on Roger Bunney's A2 2Es mystery and as soon as it's confirmed, we'll let you know.

GLENN 'MR. 2ND HARMONIC' HAUSER says he has word that BBC-1 ch 1 has been seen in AUSTRALIA...

THAT'S ALL FOR NOW, good DKing and how bout some reports?? 73s de KEN SIMON

Tuesday's TV Listings WIJX CHANNEL 12 WRNS CHANNEL 10

9:45 A.M. Westher 9:45 A.M. Westher 9:40 Lilies, Yoga and You 9:40 Vegatable Sensy 19:40 Secure Street 18:40 Electric Company 19:40 Mr. Regen' Neighbor 4:50 Villa Allegre 4:44 Secure Street

6:00 Villa Allegre 6:00 Studio Soc #30 Book Boot 7:00 The Blok Covett St

7:30 Over Bary 5:00 The MacNell/Lebra 0:00 Quo Penn, U.S.A.7 2:00 The Shahesmale. S400 The Shehenpalve plays 15:50 Fernick & Johnny 15:50 The Dick Cover St.

WSVI CHAMNEL 8

769 Elght is Enough BdS Charlie's Angels Si00 Vegas Si00 Vegas Si00 Second City TV 1000 Second Statement 11.50 Sign Off

4:00 Matchgame

4:30 The Price in 5:30 Young & Re 5:55 Bulletin Ber 6:00 Love Of Life 7:00 36lbs

8:00 Julicemes 8:30 Miles Winstow & 9:00 Dear Detective 10:00 Mez 11:00 CBS Late Movie 1-00 Station Size Off

ZETY CHAMMEL 5

12:00 Wrinkly 2:00 Bleen Blog 3:00 Clob 700 4:30 Genemoke 5:30 Cegody Th 6:50 Hove Lucy 6:50 Flying Non 7:50 Brwitshed 7:30 Mits From

by Mike Dorner, Jr.

There are great developments taking place on the educational part of the FM band this year, as many DXers are quite aware. Ten-watt (Class D) stations will no longer be authorized after the current applications on file are granted. By January 1, 1980, all authorized ten-watters, including those still to be granted, must either increase their effective radiated power to a minimum of 100 watts or remove themselves to a channel in the commercial part of the band. Finally, the days of the three-hour per day operations are over; the FCC has warned all non-commercial licensees that these must operate at least 36 hours per week, or face time-sharing orders.

Though these proposals have been kicked around for a number of years, along with the oft-suggested table of allocations for the 88-92 mhz part of the band, which has been shelved temporarily, the FCC now means business. There have been considerable proteste, particularly from the college ten-watters and their organization, the Intercollegiate Broadcasting System (IBS), which opposed these items when they were first proposed to the commission, opposed them again during this rulemaking procedure (Docket no. 20735, Rule Makings 1974, 2655, and 78-364), and filed a petition for reconsideration. A background is necessary.

Ten-watters got their start after the second reorganization of the FM broadcast band had taken place, in 1948. Against some opposition from commercial operators, the FCC had insisted that part of the band, 88-92 miz, be reserved for non-commercial FM radio. Applicants were slow--very slow--in coming forth, and as late as the beginning of 1949, the commission was warning educational institutions that unless they began to apply for non-commercial facilities, the commission could not continue to deny commercial applicants these vacant channels. There were only some 60 construction permits issued by then and, to my knowledge, only about half had made the airwaves.

Quietly during this time, the FCC had authorized Syracuse University (New York state) to conduct experimental FM transmissions using a 2½ watt transmitter --you read correctly: 2½ watt--in the 88-92 mhz part of the band for educational broadcasts campus-wide under the call WAER. They proved tremendously successful, and in the summer of 1948, the commission opened up a new class of educational stations, Class *D* tenwatters, in the hope of instigating perennial cautious educationists to enter educational broadcasting. WAER was granted regular license, the first ten-watter on the air, and was quickly followed by WHHS of Havertown High School, Havertown, Pennsylvania--still on the air; WMAS New Albany, Indiana, Public Schools--still on the air, but with much greater power; WITJ Ithaca College, Ithaca, New York, now WIOB and operating with greater power; and WFPL, Louisville, Kentucky, Public Library--still on the air, but with greater power after a local commercial FM went silent and donated its transmitter.

Remarkable also was the fact that, of the first dozen applications for construction permits, two were denied—the Bramwell, West Virginia Rublic Schools and the Fort Worth Baptist Seminary. The latter case represented the refusal of the Commission until very recently to grant educational licenses to church groups unless these were granted directly to church educational institutions. The FCC would soon decide that seminaries were eligible as licensees, but it did refuse the request of the Southern Baptist Convention of Texas to authorize a string of stations in that state licensed directly to the convention. SBC-Texas would put KBUK 107.9 Dallas on the air, later KYBS, sut it soon went dark, while CP's for commercial stations in San Antonio (KSSB 105.7), Brownwood (KHWO 105.9), and KSWW 95.5 Dallas never got on the air. But ten-watters did operate at Brownwood's Howard Payne College (KHPC 88.1), Dallas' Buckners Orphans Home (KNER 88.1) until the earlier sixties.

The big commercial explosion collapsed before the onslaught of television, the hijinks of the musicians' unions (they wanted double pay for AM-FM simulcasts), the medicority and unavailability of FM receivers (Mike Collins' parents unsuccessfully searched the whole of Bridgeport, Connecticut, for an FM receiver birthday gift), and the indifference of most broadcasters. It was the non-commercial station, most often a ten-watter, that kept FM alive cutside the metropolitan areas; quite frequently it was the only station on the air.

In the slump of the 1950's, only 273 new PM authorizations were granted, 81 of which were non-commercial, and almost half of which were Class D. By 1957, of the 143 educational stations licensed, 63 were ten-watters. The year before had marked the turning point in FM growth; by 1963, 93 out of 196 educational FM were ten-watters. By 1974, over half the educational FM were ten-watters; 427 out of 807. In the meantime the Corporation for Aublic Broadcasting (CPB) had been erected by Congress to fund PBS and to organize public radio broadcasting. One of the immediate problems it had was to promote noncommercial radio in major markets where there was none. As late as the 1970's many major markets did not have what has come to be called public radio. But the ten-watters, chiefly but not always operated by colleges as rockers imitating the commercial top 40 and progressive stations, were cluttering up the band, as the CPB saw it.

It then offered a series of proposals to the FCC, most of which have taken form of the present FCC requirements. Let us look at what these are. First in importance is the demand that all ten-watters apply for an increase of power by next New Year's Day. Those who will not or cannot (because of existing short-spacing situations that cannot be relieved) must choose a commercial channel not in the table of assignments. The Commission dickered over allowing ten-watters to remain on their present assignments until an applicant requested its or an adjacent frequency. But the FCC felt such a solution would cause a great deal of uncertainty and confusion as to just when a given frequency would be available for higher-power operations.

To ease the fulfillment of the new rules, the FCC allows all present ten-watters to file for an increase of power to a minimum of 100 watts ERP (Class A minimum) by January 1, 1980. License renewals for present power will be granted until that date on a secondary basis. For renewals filed January 1 or after, an engineering statement and application must accompany the renewal application showing the new commercial frequency chosen. This frequency must be selected in a manner that no present vacant commercial assignment is pre-empted (a ten-watter in Podunk City cannot file for 92.1A if that channel is assigned to Funk City, nor can it file for 92.5, 92.5 or 92.7 for the same reason. A ten-watter may file for a class B or C channel, provided that the table of commercial assignments is protected.

The FOO claims that transitions to commercial frequencies are possible in all but the top three metro areas—New York, Los ângeles and Chicago—on the basis of a staff city. by city study. Dr. Bruce Elvinghas reported in his column that the twenty or so ten-watters in the Chicago area have banded together to file for high power stations in strategic areas to protect themselves. It seems to this author that this might be illegal; but more about that later.

If a ten-watter cannot find a wacant commercial frequency, it must apply for a new frequency created by the commission in the same rulemaking; channel 200, or 87.9 mhz. Many will recognise this as being at the top end of TV channel 6 and so it is. For this reason, and against the wishes of the powerful TV industry matchdog, AMST, in any event, 87.9 is available only in areas outside the grade B contour of TV-6 assignments, including vacant ones. The coastal islands of Morth Carolina, a sliver in central Mentucky, central Illinois and extreme southwestern Alabama but not Mobile are the only areas east of the Mississippi available. In the West, part of the Texas panhandle, northeastern New Mexico and southeastern Colorado, northeastern Arizona and extreme western South Dakot, Mebraica and Myoming, desert Oregon, the western half of Mevada, but not Reno, and part of the Sierra Madre area in central California are awailable for 87.9 mhz use. Since there are almost no noncommercial FM assignments in these areas anyway, it seems to this student that the whole 87.9 mhs deal was a waste of time anyway. To my knowledge, based on studying Broadcasting through 1/79, and the Federal Register through 3/79, which antedate this rulemaking and will not likely be granted anyway.

Supposing a move to a commercial frequency or 87.9 is not possible? Then the ten-watter must look for the least desirable non-commercial frequency to a high-power applicant and move to that channel after filing for it. This is known in FCC parlance as the least preclusionary option. Suppose in this case that such a fre-

quency is occupied by, or is adjacent to a frequency occupied by, another station. Then the FCC will put both into a hearing, deciding in favor of the station "which would more effectively respond to a community's need for expanded educational stations." But no ten-watter will be allowed to cause interference to the 1 mv./m. contour of another station; further, no ten-watter will be protected from any interference except from another ten-watter.

What if none of these moves is possible? Then it's curtains for the ten-watter. It will be interesting to see, over the next several months, which course the ten-watters will take; careful reading of Dr. Elving's column and the use of the EFM Station Directory will make possible a cliff-hanging adventure to see which stations rise, which move and which survive. Now, what about the Chicago ten-watters? It is my understanding that the filing of an application to prevent competition in any form is illegal and places one's own license in immediate jeopardy. I have read one report where the FCC failed to lift a southern AM license only because it could not prove that the owner had supported a local FM application by another party in ...der to keep competition from a nearby AM out. There are many rumors, of course, of local AM's filing for FM CP's and then sitting on them for years in order to keep competition away. If these cases are discovered and proven, the guillotine blade falls. It seems to me unwise a move on the part of the Chicago ten-watters. Theirs is the unenviable lot of being located in a metro area where the band is saturated, both commercial and non-commercial, and there is nowhere to go. Some of them will surely die.

But the ten-watter that moves to a commercial frequency does not have it "made," either. His is a secondary service; while it can bump a translator service on a channel if that is the only one available, he is not immune from bumping himself by anybody else, not even another ten-watter. Here's an example: Supposing Overshoe University's imitation rocker, WOG, moves to 106.5, the only available channel. A year later, a commercial interest in nearby Hotshot Creek wants 106.5 assigned there, and it is the only available commercial channel. If the FCO agrees on the basis of the greatest good to the greatest number, which it almost always uses, then WCG's days are numbered. Or supposing a local group wants 106.5 assigned for commercial use, and the assignment is technically possible. Again WOG's days are numbered. Supposing again that local Dipper Creek Community College's ten-watter WIT is about to be bumped by a local community access group that wants to put Radio Free Dipper Creek with 200 watts using a borrowed transmitter and 1949 studio equipment. If WIT can prove to the feds that it offers a better community service than WOG, then 106.5 goes to WIT.

There are two and only two exceptions to these rules about ten-watters: first, the commission will still accept ten-watt applications from Alaska, following a special pleading from the Alaskan Public Broadcasting Authority. Towns are very very small, and all but Anchorage and Fairbanks can be placed easily within the Grade A contour of a ten-watter. The usual lack of any residents outside city limits for hundreds of miles, literally, precludes higher power. Secondly, treaty provisions prevent the FCC from moving ten-watters within 200 miles of Canada and Mexico, but the commission is working on these matters now. Other than these two, there are no exceptions.

Applicants still waiting in line can immediately amend their applications for (a) higher power, or (b) another frequency in either the commercial or non-commercial band. This explains why the FCC has lately made some perposterous assignments, such as WOCK 88.1 Waukesha, Wischmain, a channel 6 city. Waukesha College has never gone on the air, and is applying for 104.5 in the Milwaukee metro area. LSU in Baton Rouge has amended its application for 107.5 even before it received its OP. There will be many such. Already, no small number of stations has filed for higher power. We'll see more as time grows shorter.

Space prevents me from elaborating on the time requirements. Basically, the FCC was tired of seeing frequencies lying fallow except for a few hours a day or, worse, a few hours a day weekdays only, school sessions only. Yet many licensees balked at the cost of operating more hours a day, more days a week. Many different suggestions were offered. How the feds answered the problem will appear next month.



FM NEWS

New FM Stations Granted

CA Ceres (near Modesto) *89.5 10 w Bet Nahrain CA Chualar (36-34-47; 121-26-37) *89.7 3000 h,v; 133' Central Coast

CA San Rafael *88.1 10 High School CO Burlington 104.1 28000 h,v; 360' km; I

GA Homerville 105.5 3000; 300'; m MA Acton *89.1 10 Schools; previously reported erroneously as a grant; it is only now

being granted NY Patterson 105.5 1100 h,v; 460'; cj AT Edmonton 96.3 100000;

m ON Sudbury 105.3 100000 SA Swift Current 94.1 100000;

Call Letters Assigned AZ Phoenix 94.5 KOOL"-FM" (from KOOL-FM; AM adjunct now has different cell letters)

CA Atherton *88.9 KMAH CA Senside 107.1 KOKO (KZEN) FI Miami 107.5 WQBA-FM (WJOK)

GA Adel 92.1 WDDO GABleckshearf 04.9 WKUB GA Dublin 92.7 WKKZ (WXLI-FM)

HI Honolulu 97.5 KDUK (KHSS) ID Payatte 108.1 KWBJ

IL Fresport 98.5 WXXQ (WFRL-FM); r., non-ID as 99-X IL Wilmington 105.5 WLMT

IN Flichart 104.7 WFRN (WXAX-still "FM -105"?)

IN Greenfield 99.5 WIKS-never changing to WWFM from WSMJ; rs. "Kiss-99, Indiananalis disco station." Thanks to about four reporters who called this change to my attention!

IA Clarinda 106.3 KOWI (KSWI) KY Lebason 100 9 WISK MA Pirrofield 105.5 WBEC-FM (WORB)

MO Warsan 97.7 KAYO **DR Gold Hill** 100.3 KRWQ **OR** Portland 101.1 KLLB (KYTE-FM)

SC Myrtla Beach 92.1 WXTL (WMYB-FM) TN Lexington 99.3 WZLT (WDXL-FM) TX Levelland 105.5 KHOC

TX Torrell 107.1 KTLR"-FM" UT Spenish Fork186.3 KTMP (KONI-FM) VA Charlotteville82.7 WUVA WV Milton 108.3 WNST-FM

94.9 CKQT (CKQS) **Dual-City Identifications**

ON Oshewa

OH Coling WCSM 98.7 adds St. Marys OH OH Wapakoneta WAXC 92.1, Wax-C FM-92, with

St. Maryz OH; both of above still monophonic. SCA (†67 kHz) News IA Carroll KKRL 93.7 †X (data noise)

IA Sioux City KBCM 95.5 FX, AP Audio on m no longer carrying ABC Entertainment news. NC Charlotte WFAE *90.7 to have talk (instructional programs and talking book) by April '80. TN Sparta WSMT-FM 105.5 rock

TN Oneida WBNT-FM 105.5 no SCA, or its former music SCA is inactive, MEXICO Tijuana BCN XHERS 104.5 music

AS you hear DX, take note of stations with changed music formats, networks, Facilities' Changes

(510" CO Steambout Springs KBCR-FM 96.7 870 h,v; / FL Mt. Dora-Orlando WORJ 107.7 70000h,v;780 IN Goshen WGCS *91.1 7700 h,v; 57' 33 mi sec. KY Middlesboro WMIK-FM 92.7 130 h,v; 1440' KY Murray WKMS *91.3 100000 h,v; 600'; has a mysterious SCAI

NY Gouverneur WIGS-FM from 92.7 to 95.3, with 92.7 assigned to Ogdensburg NY.

PA Chambersburg WIKZ ("Wixy") 95.1 50000 h.v; \(\frac{1}{2}\) 230' 39 km primary signal radius. PA Indiana WIUP *90.1 (from *91.3)

PA Pittsburgh WYEP *91.3 (from *91.5) 1700 h,v: 520

WA Pullman KQQQ 104.9 3000 h,v; 275' WA Toppenish KENE-FM 92.7 2500 h,v (-35') ON Sault Ste. Morie CHAS 100.5 6769 (1031) PQ Baie Comesu CBMI 93.7 (from 99.7)

Formats/Networks CA Fremont KFMR 104.9 Spanish (from g)

DE Rehoboth Brach WLRB 92.7 m (from r) FL Jupiter WRYZ-FM 98.7 m (from mj)

IN Monticella WVTL 95.3 mk Richmond WQLK 96.1 k (from m); Q-Country 194 IN Wabash WKUZ 95.9 kr

Perry KDLS-FM 104.9 k (from m) 1A Spencer KICD-FM 107.7 mk KY Barbourville WYWY-FM 93.5 km LA Abbeville KROF-FM 104.9 k (from kr) NIN Amtin KAUS-FM 99.9 k (from m); "FM-100"

has marking FM-only farm news. MM Cloquet WKLK-FM 100.9 m (from km; now mainly separate from Alif); \$, 1.

AN Rochester KROC-FM 106.9 reported to be t or soft 'r (from m), still NBC. Format change not confirmed as of this deadline deta.

NE Norfolk WJAG-FM 108.7 Mutual NE Omaha KESY-Fill 104.5 m (frace ren)

NY Endicott WWRY 105.7 r (from rm) NY Lake Success WTFM 193.5 rm; has directional antenna facing W 79° E; 3809 w maximum h,

3160 w maximum v. Protects NJ stations to SE and SW (183,3 and 183,7). OH Springfield WBLY-FM 102.9 rp, strict nonID

"FM-183," but even strict non! Dors are repaired to give logal call letters on the hour! PA Corbondale WCDL-FM 94.3 rm

PA Easton WLEV 98.1 r (from rm) PA Nanticoke WMJW 92.1 r (from rm) PA Scranton WGBI-FM 101.3 r (from rm) WEZX 107.1 rp

WRKC *88.5 m PA Wilkes-Barre WBRE-FM 98.5 NS, still all non simulcasting AM station 160%.

TN Dayton WNFM 104.9 m TN Etowah WMCC 103.1 k

TN Jefferson City WSBM 99.3 kg I107" TN Lebanon WCOR-FM 107.3 k, "Music Country/

WV Morgantown WVAQ 101.9 rp, "Album 102." WV Parkersburg WIBZ 99.3 Y (from A), "99-Z."

WI Milwaukee WYMS *88.9 rj (late at night) mono. ON Landon--- 99.3 French; c; no stereo.

PQ La Pocatiere CHGB-FM 102.9 mc

nonIDs or slogans, and new stations, whether stereo or not, and report to this column.

Bruce F. Elving, Ph.D., Editor 181/2 East Fifth Street Duluth MN 55805

NonIDs or Slogans Often Used

DE Wilmington WSTW 93.7 Rock (was Rock-94).

DC Washington WRQX 107.3 hard r, "Q-107." FL Fort Myers WHEW 101.9 The Country Giant FL Melbourne WYRL 102.3 Music City 102

FL St. Petersburg WQYK 99.5 FM-99 WWBA-FM 107.3 Stereo 107

and "Bay" [as in Tampa Bay] FL Tampa WJYW 100.7 "Joy" and FM-101 GA Brunswick WSBI 100.7 I-100

IL Chicago WNIB 97.1 "Classical 97."

IL Elmwood Park-Chicago WXFM 105.9 Stereo 106, heard during "night jazz" and soul programming.

IN Fort Wayne WXKE 103.9 "Album-104." OH Akron WKDD 96.5 "Mellow rock 96," but with calls used frequently.

OH Johnstown WWWJ 103.1 3-WJ PA Reading WRFY 102.5 Y-102 still m ON Belleville CIGL"-FM" 97,1 FM-97

ON Kineston CFLY 98.3 Y-98 Stereo added

CA San Diego KITT 105.3, now rs IN Winchester WIUC 98.3 r (from m)

IA Sioux City KTFC 103.3 NE Norfolk KNEN 94.7 mr; E (has Paul Harvey)

NF St. John's CHOZ 93.9, r NS Sydney CJCB-FM 94.9 ON Waterioo CKMS 94.5

Not Stereo IN Indianapolis WIAN *90.1

Abbreviations

c classical, a sthnic, g gospel, j jazz, k country, L Latin American/Spanish, a all news, p prog rock, r all other forms of rock, s soul, t talk. Disco is 12 ST ST. Networks: A ABC-FM, B National Black network, C CBS, E ABC Entertainment, I ABC Information, M Mutual, N MBC, P National Public Radio, S Associated Press Audio, U United Press Audio, Y ABC Contemporary. Of course, ABC is the American Broadcasting Company, CBS Columbia Broadcasting System, NBC Natio Breedcesting Company—even the networks seem to forget what their own initials stand for; at least they never seem to use their full nam the air. SCA is "Subsidiary Communications Authorization" a multiplexing technique at 67 kHz from the station's center of fi by which more then one program can be sent out by a single Fm station. FM is "Freque tion", AM "amplitude modulation." Powers given are effective radiated in watts; heights are above average terrain and are expressed in feet.

READERS' REPORTS

W NAP 93.1 Indianapolis has not yet gon to 5000 h,v at 1020', but hopes to do so by August. An engineer there told Steve Rich August. An angineer there is that they may have to be see hat directional to protect a station in Ohio. Florida's John Combs, getting skip, heard WUPR 104.1 Utuado PR for 11/2 hours without an identification, which w made be illegal for WUPR! WBEU-FM 98.7 Beautort SC has a disc jockey who leaves the mike open during songs, singing, talking to the performers--strange!

FCC--FM June, 1979

John Combs also sent along an item from *Broadcasting* about XETRA-FM Tijuana, Mexico, and how the San Diego stations are trying to prevent the Mexico-licensed station from getting syndicated program tapes from the U. S. And he sent an item from the April 23 issue of the same magazine (p. 65) about Henry Geller's plan to possibly reduce FM channel spacing from 200 kHz to 150 or even 100 kHz. Such a plan, however, takes no account of possible FM-SCA displacement, and I have filed comments with the FCC opposing such a plan, and opposing the adoption of any Fm quadraphonic system that requires a move of SCA away from 67 kHz (such as to 95 kHz). Deadline for filing such comments was May 16.

My contributor from Nelsonville OH, Paul Mount, says not only is he a contributor to the column and an FM Atlas reader, but as of 5-3-79 a WTFDA member. Welcome aboard! He thinks maybe I should have a separate category, d, for disco stations to separate those from stations playing a mixture of rock and soul; this might be a good idea! Fred McCormack says he did make an error in listing the CBC French station in Brandon as 97.5; it is 99.5. "I was surprised to see the grant for a CBC stereo station for Brandon. Brandon (Manitoba) is becoming the major source of interference for DXing out of Des Lacs ND. I actually appreciate their stations which all have good signals. I even listen to the AM relay on 97.9 which is clearer than any CBC AM signal and carries a lot of news and information. I have recently discovered that KAVS 90.1 Third River Falls MN is listenable in Fargo occasionally. They are rock...... KDSU *91.9 Fargo has excellent programming; from 11 pm to 2 am they are rock."

Neil Zank says KAAN 95.9 Bethany MO on the air and DX ready, 3000 h,v; 300', but not sure if stereo or not. WCMX-FM 101.7 to change format to easy-listening music and calls to WEZV, with new owners. Fort Wayne IN. A verification letter from WSAE *89,3 to Albert Ellis accuses him of having "some rather sophisticated equipment." WSAE is in Spring Arbor MI.

WSAE-FM

"some rather sophisticated equipment." WSAE is in Spring Arbor MI.
AI Ellis says WBOE Cleveland has a special permit to run with dead air on the
main carrier while offering SCA. After listening to their dead carrier "for hours,"
he heard: "This is WBOE operating with special authorization for broadcasting
67 kHz information for the blind." They were leaving the air at 2:07 pm EST

Saturday, after over two hours of dead air with no legal i.d.

WBST *92.1 Muncie signs off 7 pm because of interference with some TV sets in
the neighborhood (so TV reception during prime time will be unimpaired).CBE-FM
Windsor has about the best Detroit area signal on FM into Kokomo, says Tom Cornell.
He's only heard them identify as "CBC-FM." Speaking of other nonl Ders, John Ebeling
sent a tape of CBQH 100.9 Dryden ON signing off without mention of calls via CBW

(AM) Winnipeg. The previous night CBCM signed off with mention of calls via CBQ (AM) Thunder Bay. Two different operations feeding one station! Pierre Daigle, Sainte-Foy PQ sent a tape of the sign off of CBAF-14 Fredericton-St. John NB 102.3. But only "CBAF Moncton" is mentioned, no CBAF-14, nor mention of those cities, but Pierre says this is more complete an identification than the station normally uses. Perhaps mention of my contest to the station (see VUD of two issues back) will spur them to give more complete IDs.

[Paid advertisement.]				
100.3 KLYF \$V M DES MOINES IA 87000	1700		55	105
100.3 KXXX-FM SV RM COLBY KS 100000	614	C+	39	83
100.3 KDVV \$V G TOPEKA KS 100000				- 73
100.3 WKOA-FM SV R HOPKINSVILLE KY 100000	600	I	39	83
100.3 KRRV V K ALEXANDRIA LA 55000				73
100.3 WNIC SV R DEARBORN MI 50000				
100.3 *WCTS \$ G MINNEAPOLIS MN 80000	430		34	76

FM COMPUTER BONANZA!

Even though there'll be no new FM Atlas to help you with your 1979 FM DXing, you can keep on top of the latest station developments by having up-to-date computer print-outs. Arranged geographically or by frequency, you'll have the latest station information at your finger tips. Although our a little late to help with skip, either or both of these lists will be a great boon to your tropo DXing. Spread the list out on a coffee or TV table, or a desk top near your receiver—and you'll be in business!

□GEOGRAPHICAL PRINT-OUT, entire U.S., Canada, Mexico, only \$7 if ordered before June 30. After that date, the cards will be sorted by frequency. All prices postpaid.

FM STATION PRINT-OUT BY FREQUENCY. This has been what many DXers have asked for, with the format of the FM Atlas not allowing space for program format information. After June 30, the cards will be physically rearranged so that a frequency print-out will be given. This listing includes program formats, networks, SCA, etc., and is also \$7. Please order by June 30 to qualify for this group rate running of the computer data. Canada and U. S. only, excluding U. S. territories.

COMBINATION geographical and by-frequency print-outs, about 180 pages in all, yours for \$9.75.

FM APPLICATIONS listed geographically \$2 extra when ordered with either of the above; \$6 when ordered separately. Covers U. S. and Canada, giving name of applicant and all other known data.

Order from: Bruce Elving, 181/2 East Fifth Street, Duluth MN 55805.

FCC -FM JUNE, 1979

Stations mentioned on the sign-off of CBQH that John Ebeling heard were a CBQX on 95.5 and a CBQL on 94.5, neither of which I have any listing of.

In Maryland, WITH-FM 104.3 Baltimore has been sold to Heftel broadcasting, and Nick Lemonakis is watching to see if any format change in their operation will ensue.

From south Florida, Ken Simon reports that WRMB *89.3 Boynton Beach is on the air, 100000 h,v; 455', g, \$? He'd like any information on 67 · 70 mHz communist FM stations. Send it to Ken at his new house, 513 Sixth Avenue South, Lake Worth FL 33460. He has a tower up, but no FM antenna on it yet. Dr. Richard Wood reports he, like I, will be attending the ANARC convention in Minneapolis June 22-24. I expect to give an SCA presentation there, with help from John Ebeling. Richard, too, is in the process of installing an antenna and tower at his new location for DX. WRYZ-FM 96.7 Jupiter FL to be easy listening, on 6 am to 2 am.

WBST Muncie will be signing off at 7 p. m. until filters have been installed on all area TV sets that are getting interference from WBST *92.1. An article Ralph Strobel sent along probably applies to WWDS Muncie "Sch Radio Stations have Minimum Air Time," stating that new FCC rules require educational FM stations to be on the air a minimum of five hours per day six days a week (but presumably not during summer vacations). require educational FM stations to WWDS and other stations might have to hire personnel to keep the stations on the air a minimum schedule. Perhaps it is this new FCC rule that is causing some Mississippi educational FM stations to be off the air. Mike Dorner says WVLS *91.5 Jackson is off the air, and has been off for some time, but is being given to the state educational television authority. WMSB *89.1 Mississippi State is reported off the air and dismantled. "A former worker at WMSU *91.1 Hattiesburg reports poor operation there, the students showing interest in the AM commercial carrier current and not in the speech department's WMSU. WLNK *90.9 is reported dark in Columbus. I've heard a saddening report of the muscle of Mississippi commercial broadcasters' efforts to halt an EFM opera tion. They did oppose efforts of the University of Mississippi to put a commercial FM on the air in Oxford in the Confederate sisters. "NOT ON THE AIR: WIXO 105.7 McComb MS, WWOZ *90.7 New Orleans (permit expired 3-29-79) and wants an extension, but Notre Dame Seminary and Xavier U. (black) want it for a sharetime operation. They claim WWOZ had enough time (1-1/2 years) to build, and shouldn't be given an extension. WMNF *98.5 Tampa FI also not on air, although having its permit a long time. In a previous YUD I did not do Mike's publications justice, as I forgot to insert the italics ball to spell out Educational FM Guide (EFM) and Ondas FM, both of which can be ordered from club HQ (see back cover of your VUD). Mike sent several EFM station program guides and data, which I will be analyzing and adding to my collection.

We congratulate him and Mrs. Dorner upon the birth of a fine little girl early in April. We, too, have a new girl,

Kimberly Ann, born April 2, making it our third girl (no boys).

Getting back to FM, Vic Melis says WIOQ 102.1 Philadelphia installed a new antenna, with about a 15% increase in signal strength noted. WDAS-FM 105.3 had a strong signal in Spring City PA before, but since about Jan. 1 it has dropped to about half of its previous strength, with very noisy reception on the road, even in mono. WDAS-FM should have a primary signal of 24 miles and a secondary of 60 miles; directional to protect WIOV 105.1?

Leo Boehl, Grand Island NE, sent a news article that KOWH-FM and AM have been sold to separate buyers, so expect new FM call letters there, or at least a dropping of the "-FM." The FM's soul format was to have ended as of now, but so far no word on what format KOWH-FM has.

From Ontario, Bill Dulmage says in regards to CFMX-FM 103.1 Colbourg, Ont., "Every few weeks we are told that CFMX will be on next week-this has gone on for some three years now. The station still isn't on the air! The CRTC was to have revoked the licence if they weren't on the air by the end of 1978, but that never came about. CFMX was testing with a lot of concert recordings from Radio Nederland the week of April 1, no IDs. There was either music or nothing. The signal was very strong (as I'm only some 15 miles away) but there must have been trouble with the studio to transmitter line, because there was a lot of static. No stereo noted." CKO-FM-2 99.1 Toronto, Ont., said to be 100 kw (hours 6 am to 3 am eastern time), but no official word from CRTC regarding this change—maybe the "100 kw" is CKO-FM-2 hype!

WMWM Salem MA on *91.7 is conducting a fund drive to increase power from 10 watts to 130 h,v; 78'; Apparently it is the cost of new equipment that is preventing them from going up in power, having received FCC permission to do so.

WCRB 102.5 Waltham MA is experiencing an interesting problem, writes George J. Mileon. "WCRB had an AM outlet, WHET, which it sold. However, the AM tower is adjacent to the FM tower, and there is some leakage of AM signal into the studio wiring. The *Phoenix*, a Boston paper, reported on this problem. Apparently, the selling of WHET was also going to require the moving of WHET to a new location by the new owner. This did not happen and WCRB suffers in its signal, even with Dolby, which it uses." And, "WLYN 101.7 Lynn was turned down on its request to locate its FM tower in another, higher part of Lynn. They are now seeking a location outside the city.

Contributors: Walter C. Benson, Jr., Charlotte NC; Leo Boehl, Grand Island NE; T. Caswell, Dunmore PA; John F. Combs, Orlando FL; Thomas V. Cornell, Kokomo IN; Mike Dorner, Jr., Metairie LA; Bill Dulmage, Colborne, Ont.; Albert H. Ellis, Brantford, Ont.; John Ebeling, Bloomington MN; Dave Hascall, Fortville IN; Joel Hermann, Storm Lake IA; Nick Lemonakis, Baltimore MD; Fred McCormack, Fargo ND; Vic Melis, Spring City PA 19475; George J. Mileon, Lynn MA; Paul Mount, Nels ville OH; Steve Rich, Indianapolis IN; Kenneth R. Simon, Lake Worth FL; Ralph Strobel, Muncie IN; Richard E. Wood, Cape Girardeau MO; Neil Zank, Lincoln NE.



John F. Combs^o 2485 Ivan Ct. Orlando FL 32807 305-677-0066

June 1979

CONSTRUCTION PERMITS GRANTED Albany GA, Ch. 19-, 646, 970 (calls WJFT) Valdosta GA, Ch. 44-, 562, 840 Baltimore MD, Ch. 54, 1510, 810 Abilene TX, Ch. 32+, 2040, 920

APPLICATIONS (* indicates requests pay-TV)

Vallejo CA, Ch. 66, 2526, 1596

""""1790, 1609 * " 1141, 1592 Ventura CA, Ch. 16+, 4578, 2010 " " 1000, 615 " " 2944, 1420 Loveland CO, Ch. 22-, 3000, 1021 Gary IN, Ch. 56+, 3516, 1594 New Orleans LA, Ch. 20-, 2450, 1020 * "5000, 495 * Marlbourough MA, Ch. 66, 100, 704 Lansing MI, Ch. 36+, 656, 976 Mount Clemens MI, Ch. 38+, 2140, 1073 * 2690, 450 * 2588, 613 * . . Warren MI 544. 1462 * Reno NV, Ch. 21+, 794, 4997 Poughkeepsie NY, Ch. 54+, 3266, 1609 Greensboro NC, Ch. 61, 6.62, 559 CHANGE IN CALL LETTERS WLUZ-7 Ponce PR (ex-WRIK)

Grand Junction CO, Ch. 8-: KJCT Clearwater FL, Ch. 22: WCLF Bemidji MN, Ch. 9 ETV: KAWE Bismarck ND, Ch. 3 ETV: KBME CHANGES IN ALLOCATION TABLE (Amadd, Dedelete) Angola IN: A 63 (=ETV alloc.) Springfield MO: A 33 Salem OR: A *3,22; D 3,*22 Tomah WI: A 43 SELECTED TRANSLATOR APPLICATIONS Jackson AL, Ch. 58 (WIIQ-41), 100 Chautauqua Co. KS, Ch. 58 (KOTV-6), 100 Aitken MN, Ch. 64 (KSTP-5), 100 Fergus Falls MN, Ch. 55 (KTHI-11), 100 Worthington MN, Ch. 20 (KSTP-5), 1000 Grainola OK, Ch. 60 (KOTV-6), 100 Ponca City OK, Ch. 63 (KOTV-6), 100 TRANSLATOR CHANGE W65AH, Loudonville OH, change primary station from WOSU-34 to WOUC-44 CHANGES IN NETWORK AFFILIATION (See comments below...) STATE OF THE INDUSTRY (...is basically the same as last month with minor exceptions. Still no 1000th TV station on-air, but several CPs that are near ready!)

CALL LETTERS ASSIGNED

APOLOGIES first of all. I have been unable to locate copies of the March issues of <u>Broad-casting</u>, so there may be developments that I am currently unaware of. If you know of any, please write. (It seems the UCF library sent January through March issues out to be bound, which, if they are customarily efficient, will take until about 1986...)

THE FOLKS AT AEC are apparently still not satisfied with their current line-up of affiliates. WATE-6 in Knoxville TN recently became the 200th primary AEC affiliate. NEC is the victim once again, and it is unknown at this time whether WTWL-26 or even WCPT-55 will pick up NEC. The effective date for this change is unknown. Heanwhile, in this editor's own back yard (propagationally speaking), WTLV-12 in Jacksonville FL has announced their intentions to affiliate with AEC. Their current contract with NEC runs through June 1, 1980; however, the station hopes to switch much earlier than that if WJKS-17 is willing to take on NEC, which they are not exactly thrilled about doing.

SEVERE WEATHER in the Wichita Falls TX area, including the now famous tornado that destroyed a sizeable section of the city, knocked all area TV and FMs off-air for several days. Only KTRN, an AM station, remained on during the crisis thanks to an emergency auxiliary transmitter. Ironically, the last words broadcast over KFDX-3 just as they were knocked off the air, were those of the weatherman, who had just said, "take cover."

RCUND AND ROUND SHE GOES...An article in the June 1978 issue of Communications News, written by Dr. Matti Siukola of RCA's antenna engineering program, stated that circular antennas were being installed at WPBT-2 FL, WRAL-5 NC, WTTV-4 IN, XETV-6 BCN, and KBYU-11 UT. We can add to these WBTW-13, WESH-2, and perhaps others. Hopefully, we will be able to secure an accurate list of all stations either presently using CP, or switching in the near future.

ANYONE SPEAK LAKOTA? It might help in the near future, for Lakota is the language of the Sioux indians on the nation's second largest reservation, in Pine Ridge SD. The 14,000 residents there may get their own TV station, the first on an Indian reservation, if all the snags can be worked out. A \$100,000 grant from the U.S. Labor Department has been delayed due to paperwork problems, and the communications director recently quit the project. (Editor's note: I have no idea at this moment whether this is a CP yet or not; I don't even know what channel the application is for, but will try to find out for the next column!)

CANADIAN CCI. Residents of St. Brieux SK, where a new CEC French relay was built on Channel 7, are dismayed to find that the new transmitter is hindering their reception of CFQC-8 in Saskatoon, some 180 km away. Numerous complaints from residents within a 30-40 km radius of the Channel 7 transmitter have yielded no action. This is because they are outside of CFQC-8's normal coverage area.

FCC-TV NEWS JUNE 1979

AN INDIE FOR DES MOINES? Although no formal application has been made yet, owners of KPIR-11 St. Iouis plan to establish an independant TV station on Channel 17 in Des Moines IA. The station, hopefully with calls KREK, would be very similar in operation to KPIR-11, and could come on the air within a year if everything goes smoothly. KPIR-11's newscast ranks number one among all indies, and it is one of the most successful independant stations in the country.

IPBN. No, that's not something out of the SALT II talks—it stands for Iowa Public Broad-casting Network. Midwestern DXers should be on the watch for IPBN's growing translator system. In addition to K33AA Ottumwa, K38AB Ft. Madison, and K54AF Keosauqua, all of which are presently operating, look for K33AB Sibley and K25AA Rock Rapids, which will relay K5IN-27, and K44AB Keokuk, which will possibly relay K38AB. (To the best of my knowledge, these are all 1000-watters!)

IN MINNEAPOLIS, the news as of late has been of KSTP-5's defection to ABC after 30 years as an NBC affiliate. But WCCO-4 has made a move which should be of equal interest to the DXer. The station is now running CATV-like information on stocks, news, etc., between 0200 and 0600 local time. The information is run concurrently in different sections of the screen. This should make WCCO-4 an ideal MS target for those of you still lacking them in your logs!

NOTICIAS LATINAMERICANAS: Recent E-Skip to Mexico and the Carribbean here in Orlando have yielded some useful information. Mexico's Net-13 is apparently following Met-2's example of using seme local IDs. The IDs are keyed at irregular intervals during regular programming, as there is still no breaksway from the network, and may indeed be carried by all Televisa relays, as well as Net-2. Recent reception of Radiotelevision Dominicana on Ch. 4 (Santo Domingo) has confirmed this transmitter as generally running a minus (-) offset. And WIPM-3 Mayagues PR is now definitely linked to PBS via satellite-a fact they promoted extensively during breaks from a recent "live" Evening at Pops.

PES GOES COMMERCIAL? Well, not exactly. However, a proposal the FCC is seriously considering involves allowing PES stations to accept a limited amount of advertising to help their typical financial woes. The proposal calls for 3 European-style "clusters" of ads during the day, the total time of which may not exceed 3% of the station's total programming time. For a station broadcasting 15 hours a day, this would mean about 27 minutes total per day of advertising.

HERE IN SUNNY FLORIDA, much TV news is at hand. WESH-2 Daytona Beach has broken ground for its new 1740-ft. tower, replacing the old one at 1000-ft. The tower will be topped by a circularly-polarized antenna. The construction should be about one year and the move is estimated to reach 20,000 to 25,000 additional viewers.

Another new tower will be built by WTVX-34 Ft. Pierce-Vero Beach. The station was finally

Another new tower will be built by WIVE-JA Ft. Pierce-Vero Heach. The station was finally exempted from the county law which forbids buildings of more than 4 stories, with the arguement that since the tower has no roof, it is technically not a building. The tower will rise some 1500 feet, and their recent application to raise their power to a full 5 megawatts will make them an excellent DX target!

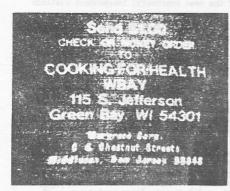
WTOC-44, carrying many Baseball games via satellite, has been extremely careful not to let any local IDs of the stations originating the telecasts slip through. They go so far as to keep the audio out after a break until the second play actually resumes. But often one of the announcers will be seen on camera at the end of the game with a "wrap-up"—and a jacket and microphone clearly labeled with the logo of WFHL-17, WCM-9, or whoever! As more stations carry these broadcasts, it could become very confusing to the DXer! And finally, WKID-51 in Ft. Lauderdale has decided to drop its evening religious programming and is reportedly planning to go to subsciption-TV service in the evening only, complete with scrambled signal. No formal request has yet been made to the FCC concerning this proposal.

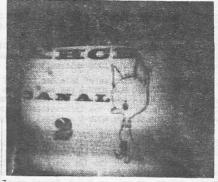
THE FROPOSED RE-WRITE of the Communications Act would keep the section concerning "private" services (i.e. SCA, satellite TV, etc.) virtually identical! I've been told that the section originally arose due to people intercepting ship-to-shore communications between investors and brokers, and using the information for monetary gain. However, this section, when applied to SCA, satellite TV, scanners, etc., could be quite repressive to the DKer or hobbyist. You can send your comments to Mr. Chuck Jackson, chief engineer of the House Communications Subcommittee, or write Robert Goodman, 5129 W. Rocsevelt Rd., Apt. E7, Cicero IL for more information. Comments could also be submitted to WTFDA's Mailbox, as many are interested in the subject.

PH TO-NEWS

Jim Alexander 4 Brook Court Parsippany, NJ 07054

June, 1979





WBAY- 2 Green Bay, WI 280 mile tropo (Gaines)

XHCH- 2 Chihuaha, CH Mexico 965 mile F-ship (Pizzi)



WYEA-38 Columbus, GA 340 mile tropo (Combs)

KPLR-11 St. Louis, MO 450 mile tropo (Gaines)



KBTX- 3 Bryan, TX E-skip (Simon)

Contributors:

Paul Gaines, Detroit MI

Jim Pizzi, Orcutt CA

John Combs, Orlando FL

Ken Simon, (photo taken at West Palm Beach FL)

73 and good DX, Jim

SPECIAL REPORT NOTES ON A LOGGING OF F₂ TV DX

WA5IYX San Antonio, TX

April 17, 1979

2010-2044 z

re: South American Ch A2 F2 reception



- -had antenna nw still as CA Ch 2 Es in less than 30 minutes prior and noticed the weird fade-in of another signal (very poor video with low contrast, only the outlines of the highest-contrast items at first); a short time later it looked as though a horizontal resolution test pattern was being run (i.e., sets of vertical bars of differeing size and spacing) (it later turned out that it was multi-path ghosting of the horizontal blanking period, the "side" frame of the video)
- -as the video improved it as realized it was a Latin American soap opera, still thought to be Es from Mexico at this point the audio was turned up ... no audio.
- -turned antenna s.e. and signal rose (though not as much as expected) and it finally got thru to me what was going on ... F2 from South America.
- (50-MHz had been exhibiting good F2 backscatter since 1930z or so and direct F2 signals there had come from a maritime-mobile at 87w 7s as well as Ecuador and Colombia, but things there didn't look that super like the March 8, 1970 magnetic storm that last brought in any Ch 2 F2 (that time with audio but 4 or 5 stations))
- -Ch 2 signal had very slow fading but the multi-path ghosting and smearing made the many high contrast Spanish words that showed up on video impossible to read; guess MUF into 57-58 MHz range but never even a trace of audio
- -around 2040z a definite fade trend set-in with the signal literally dissolving around 2044z
- -all the while this information was being announced on 28.885 MHz to see if anyone else was getting this, but apparently the information fell largely on unappreciative ears
- -best analogy to the ghosting here is what is noticed with local UHF Ch 41 when the antenna is moved away enabling many multi-path signals to appear
- -the TV is normally not run during the F2 periods as the 40-45 MHz unshielded i.f. radiates badly into my nearby SX-62, so perhaps other instances of this may have been missed recently (if not for the earlier Es the set would never had been on at that time).

73, Pot WASIYX

-p.s., obviously I'd like to hear about others who noticed this event (or similar ones at other times)

NORTHERN FM-DX

Ralph Strobel, editor 2510 E. McGalliard Rd. Muncie, Indiana 47303 (317) 288-5815

Deadline: the 10th

June 1979

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. All DX reporters from this area are encouraged to send me your FM DX loggings.

Roger Winsor - Box 463 - Hobart, IN. 46342

4/12 tr

0657 KFU0 99.1 MC Clayton c\$ 0800 WZZC 101.3 IL East Moline (ex-WEMO)
0700 KTJJ 98.5 MC Farmington mixing with
WACF/WXXQ IL Freeport "99-X"
0745 KSCF 97.1 MC Florissant WNIB nulled
WZEN Alton, IL. Locally on the Chicago scene: All stations seem to have gone back to full call letters, with no more non-ID's. WMET has changed to ACR like WLUP, although WLUP bangs and crashes a little more since new owner took over. WKQX is rock now - adult BS (I presume you mean "Beautiful Songs?"-RS) rock. Total: 774, with best states: IL-134 and IN-96. 73's Rog

Paul Mount - 35% West Columbus St. - Nelsonville, Ohio 45764 RX: Sanyo AM/FM Stereo M 9980

4/10 tr/GW 1815 CKLW 93.9 ON Windsor 4/23 0340 WGCL 98.5 OH Cleveland fair-weak 0350 WOKV 103.5 OH Hamilton "All Disco" 1817 WSAI 94.1 OH Cincinnati 0400 WWWM 105.7 OH Cleveland "M-105" p\$
0411 WXEZ 105.5 OH Sylvania "Z-105" r\$
0422 WVAF 99.9 WV Charleston"V-100" r\$ 1820 WZAK 93.1 OH Cleveland almost clear 1824 WNAP 93.1 IN Indy "FM-93" o/WZAK 1838 WOLK 96.1 IN Richmond 1840 WLGN 98.3 OH Logan - local-ugh! w/WWUD Dayton, OH 4/27 GW Reception from Nelsonville Cross, about 200 feet HAAT overlooking city: 1900 WVNO 106.1 OH Mansfield m\$ "springtime sound" 4/11 GW 0827 WBCQ 92.7 OH Bucyrus clear 0828 WMHE? 92.5 OH Toledo fuzzy 1905 WHAJ 104.5 WV Bluefield "\$-104" m\$
1908 WDJX 103.9 OH Xenia rj\$
1910 WCIR 103.7 WV Beckley "The Music 0829 WPTW 95.7 OH Piqua-Troy 0830 WNCO 101.3 OH Ashland WRIA/IN under 1918 WUGO?102.3 KY Grayson Trading Post, 474,286 tel. exchanges, "U-102" Rock, Reds Clinic 1924, "Sports 1905 WBCQ 92.7 OH Bucyrus in \$ 1st time 4/17 tr 0512 WZAK 93.1 OH Cleveland s/on active U-102", "UGO number one sports station" - spot for Grayson 0519 WNDU? 92.9 IN South Bend Drake TC 4/23 GW? 1st national bank, so assume ex-0330 WIOT 104.7 OH Toledo's Best Rock WGOH-FM. Calls correct? From the cross, stations are just audible on the Sanyo, while on the Scott
hooked up to the cable, stations are loud 1530 WSIP 98.9 KY Paintsville r\$ in stereo. Examples: WAMX-93.7, WKEE-100.5, & WVAF-99.9. No problem with local overload unlike the time I extended the Sanyo antenna in ax Manhattan line of sight to Empire state Bldg. and got distorted audio; that location also six blocks from WRVR-106.7. Thanks for letter Randall Clark. 73, Paul

3/1 tr 2230 KBRA 97.9 KS Wichita 3/25 tr 2330 KBEC 94.7 OK Oklahoma City 5/1 1230 KAAN 95.9 TA OK Oklahoma City 5/1 1230 KAAN 95.9 TA OK Oklahoma City MO Bethany

Fred Nordquist - 7945 Boxford Rd. - Clay, NY 13041
Equipment: Heathkit RX AJ-15, with JFD LPL 10A Antenna at 45 feet less several elements lost in 70 mph wind storm. New underlined. Dashed indicates relog, with new propagation mode. DX from 9/4/78 to 5/1/79:

```
9/4
      tr to west
                                                     12/20 Es cont'd:
0812 WCMU
             89.5 MI Mt. Pleasant
                                                    1757 KMEZ 100.3 TX Dallas "EZ-100"
0818 WHAD 90.7 WI Delafield c$/TC
0826 WEMU 89.1 MI Ypsilanti ID
                                                6151759 KVTT 91.7 TX Dallas g mono
                                                3851801 KESS 93.9 TX Ft. Worth SS mx
4651806 KETR 88.9 TX Commerce ETSU
0838 WBCH 100.1 MI Hastings r
0932 WMEF 97.3 IN Ft. Wayne "FM-97"
                                                4901808 KKAJ 95.7 OK Ardmore
0932 WMEF 97.5 IN Ft. wayne FR-7/1025 KIIK 103.7 IA Davenport (prev.Es)7403/5 tr
1025 KIIK 103.7 IA Davenport (prev.Es)7403/5 tr
1020 WMET 90.1 IL Chicago g$ 6001945 CFNG 99.3 ON London FFc-talk
                                                4/4, 4/27, 4/28, 5/1 Au cx
1204/28 Au
2145 WJFM 93.7 MI Grand Rapids nx/wx
2306 WKAD 100.1 PA Canton r
11/8 tr
2200 CBCO 105.9 ON Orillia CBC Radio
                                                    4/28 GW
                        (//CBCL)
                                           1802145 WYUT 92.7 NY Herkima "Y-93" Disco r
                                               4/30 GW
13202148 CFMX 103.1 ON Cobourg c mono, testing
12/20 Es to TX/OK MUF 103.7
1755 KERA 90.1 TX Dallas c
(Ed. note: Pete Sawatzky seemed to think the station in London, ON
                                                                                            73, Fred
at 99.3 was a repeater of CJBC. You have calls of CFNG. Will you let us know the actual call letters, as I have heard this station twice, but no calls on the hour.)
```

Greg Monti - 5 Hickory Road - Bayville, NY 11709
Equipment: Pioneer SX-525 RX, Channel Master Stereo Probe 9 625 ft. w/rotor

```
2/23 tr
2320 WQRCt 99.9 MA Barnstable m$ w/WEZN 0000 WKDN 106.9 NJ Camden g$,close//WFME
     tr 99.9 MD Ocean City r$ tech.dig0001 WIOQ 102.1 PA Philadelphia p$ to 0007 WAIV 95.1 NJ Atlantic City r
3/31 tr
2115 WPRB 103.3 NJ Princeton rs
                                                        95.1 NJ Atlantic City rs$
                                                  WFPG
                                                       96.9 NJ Atlantic City m$
2130 WSNI 104.5 PA Philadelphia km$
                                             0009 WJRZ 100.1 NJ Ship Bottom r$
                                            0025 WCRB 102.5 MA Waltham p$
2135 WADB 95.9 NJ Pt. Pleasant m$
                    thru local
                                             0032 WVBF 105.7 MA Framingham rs "F-105"
2140 WXCI 91.7 CT Danbury rp$,
                                             0035 WSRS 96.1 MA Worcester m$
                                            0040 WBGHt 89.7 MA Boston c$ very low mod.
                    new fax on?
2142 WPBH 90.5 CT Middlefield $ telethon 0057 WJIB 96.9 MA Boston m$ 2155 WSUB 105.5 CT Groton 0132 WEJT 94.1 RI Providence
                                                        94.1 RI Providence m$
2156 WHCN 105.9 CT Hartford rp$
                                             0133 WLVH 93.7 CT Hartford, semilocal
                    thru local
                                                              running OC all night!
2156 WCCCt106.9 CT Hartford
                                            0144 WWUH 91.3 CT Hartford p$
4/22 tr
0000 WPRB 103.3 NJ Princeton
                                            0202 WGCB 96.1 PA Red Lion mr mono, WLEV
                                                  popped off in middle of CBS News.
     WMGK 102.9 PA Philadelphia rm$
                                            0210 WLEV 96.1 PA Easton r# "WEST-WLEV"
     WWSH 106.1 PA Philadelphia m$
                                                                        ID's back on.
                    thru local
                                          new underlined, t=tentative.
```

Michael L. Hogan - 13910 Chippewa Ave. Apt. 1 - Burnham, IL. 60633

There has been no significant DX at this location since last summer on the FM dials. The few Es openings in January produced MUF's that nearly reached the FM educ. freq.'s; but no new loggings resulted. If any members have ideas about FM Apt. antennas for me, I would appreciate some suggestions. Total stations heard remain at 240. 73's and please report to the VUD often. Mike

From your Northern FM DX Editor: I couldn't believe my ears on the morning of 5/7/79. E-skip was bouncing in from TX, LA, and OK! St. Louis stations were in as strong as semi-locals. It will be interesting to see if others found this skip and tr opening also. If so, let me hear from you.

and tr opening also. If so, let me hear from you.

Tropo activity is noticeably improving as warmer weather approaches. I'll have a report of my own by next month. Until then, let's hope this summer is a great one for all of us.

73. Kalph 23

Danny Buntin 1020 S. Duncan Stillwater, OK 74074

DEADLINE: the 9th

A NEW SEASON OFF TO A SLOW START

April went by as another month of little or no DX for most FM DXers. Evidently, those atmospheric gremlins that led to last year's suppressed activity are still with us as we enter this year's peak period for DX. Only one sure instance of E-skip was reported during April and early May. (Don't strain yourself Mother Nature, hi.) Efforts at tr were more rewarding though, with one opening extending SOO+ miles, but tr that good was fer from widespread. Conditions have to improve soon if they're going to be any better than last year. Stay tuned.

Randall B. Clark, Rt. 5 Dutch Ridge, Parkersburg, W 26101 - Feb-May, 1979 EST up to 4/29

Hello!, FM conditions haven't been as I thought they would be for this time of year. As you could guess the F2 has practically disappeared from the "low" PSB freqs! I'm pleased to swing a new member of WTFDA from WV. He's Richard H. Miller, jr. (Dick) of Weirton, WV. (Way up north, HI!—about 35 miles west of Pittsburg, PA)

I revaluated my station totals and I found out I do have more stations than what I thought I did:...around 235 stations...16 states & Canada. That's not too bad for being into FM DX for a year & a half now. I hope to be at the WFDA convention this year—it will be a HLAST, I'm sure!! Here's to hoping that you snagg that ever so elusive DX! 73's, Randy. (New underlined and all stations are tr.)

4/3

2/6	
	SGS 101.1 KY Hazard
	GOH 102.3 KY Grayson
	OKV 103.5 OH Hamilton, "1034"
1832 W	MELA 104.3 OH E. Liverpool
2/13	· 加州市公司公司 對 工工工程数 4
1506 W	NUF 100.7 PA New Kensington
1526 W	CLW 105.3 OH Mansfield, "C-105". k
1600-2	2345 Most Columbus, OH stns in
(enham	med ex)
2/22	
	MGO 102.3, (ex WGOH w/new r format)
	HEZ, WOKV, WRKY CCing (HEZ's at 103.
	WQAW slopover!)
	HEZ IDs as "Easy-103".
	KWK IDs as "WK-FM"
4/2	
	RSA 98.3 PA Charleroi, CLASS A FREQ
2353 W	MOT 104.7 OH Toledo, w/WTUE

0020 WMUZ 103.5 MI Detroit (not bed!)

\[\frac{\lambda}{\lambda/11} \]

0135 MIMA 102.1 OH Lima

0127 WEEN 102.7 OH Cincinnati (morn. hrs has most Columbus, Cincinnati, Toungstown, Pitt.

FMs in quite strong, very good TR opening!)

\[\frac{\lambda/21}{\lambda} \]

0000-0230?observed WCLT-100.5 w/unmod carrièr, chacking out thier SCA???, failed to ID at 0100!

0225 WOMC 104.7 MI Detroit (FINALLY:)

2059 WMUZ & WIOT-2145 WMKY BOOMING IN1 2236 WRIF 101.1 MI Detroit, but w/CCI from WSRD 101.1 4/29

WZPR 100.3 (0123) hrd w/AM duplicate calls-WMGW (Ah!, here's my mysterious "M-1500" unid. MGW uses 1490Khs)

John F. Combs. 2485 Ivan Court. Orlando. FL 32807 - late March to 5/6/79 (EDT/EST)

Equipment: Scott Stereomaster 300-C tuner/amp(My perfectly functioning \$20 garage sale special!), Archer V-150 at 20 ft. on rotor; Elaupunkt portable AM/FM/SW used in car on car antenna cut to FM.

I'm finally getting into FM after about a year's of TV-DKing, which is still my first love. I find FM to be a challegne on tropo. It seems even more crowded than VHF-TV! I have a 10-el. FM yagi, but no place to mount it, so I'm using the TV antenna which is ostensibly for FM, too. 5/1,2 and 3 brought three days of Latin American Es, but only into FM on the second when I noted it on car FM. If anyone is hearing Es on FM into my area this summer, please call my phone no., let it ring once and hang up. (Only 8 am to 11pm please!!) 73, John

??? Tr (late March or early April)		4/8 tr	
0623 WSGF 95.5 GA Savannah	240	0743 WMPR 88.1 SC Sumter	375
0625 WHEV 98.7 SC Beaufort	290	0855 WPRN 88.9 SC Rock Hill	435
0639 WZAT 102.1 GA Savannah	240	0906 WHHR 106.3 SC Hilton Head Island	270
0642 WEZL?103.5 SC Charleston, tent.		(My farthest Class A tropo)	210
0648 WSCI 89.3 SC Charleston	310	5/2 Es (on car radio, times approximate	1
0800 WMPR 88,1 SC Sumter	375		1170
0800 WWDM 101.3 SC Sumter	375	1000+MOYE 94.1 PR Mayagues	1155
4/4 Es	101 6		1185
2150 KWGS? 89.5 OK Tulse, tent. (brief		The same of the sa	1.07

2150 KWGS? 89.5 OK Tulsa, tent. (brief, Beethoven's 9th)

-cont.-

SOUTHERN FM DX JUNE 1979

Rick Samford, 404 S. McNeill, Burnet, TX 78611 - April 4 to May 7, CST/CDT after 4/28

Equipment: Ken-ood KR-5400, 10 el. Archer FM at 24 ft.w/Alliance U-100 rotor.

4/5 (all tr)	1 5/3
	20 0047 KTXT 88.1 TX Lubbock, ID 290
along w/legal ID, in very weak \$, so	0044 WEZI 105.9 TN Memphis, ID 570
doubtful if still 10v.	0058 WVJC 89.1 IL Mt. Carmel, ID 800
20 pt 19 36 (to 19)	0059 WVUR 91.1 IN Vincennes, ID 820
0151 KOKI 95.3 LA Bayou Vista. ID 4	35 0114 WQNZ 95.1 MS Natches, ID. 420
	00 r. "2-95"
0214 WWL 101.9 LA New Orleans, ID	0159 WKMS 91.3 KY Murray, s/off 705
0216 WBYU 95.7 LA New Orleans, ID	. 0208 KLPQ 94.1 AR Little Rock, ID 445
0216 KZZQ 94.3 LA Golden Meadow 3	00 0223 KICT 95.1 KS Wichita, town ment., 475
0229 WOXY 100.7 LA Baton Rouge, ID 4	35 "T-95," album rock
0222 KTQQ 100.9 LA Sulphur, psa	0232 KXXY 96.1 OK Oklahoma City, 325
"The Country Boss, Q-101"	r, "96-X" w/legal ID
	0339 KSSH 95.7 AR Little Rock, k, ex-KXXA
0258 KRRV 100.3 LA Alexandria, ID 3	55 "96-Kissing"
0300 KSMB 94.5 LA Lafayette, "K-94,",	
4/8	(k, "W-3-D") 90 0400 KCEZ 94.9 MO Kansas City. ID 605
1117 XHPL 99.7 COA Ciedad Acuna 1	
The same base of the same	0539 KINB 107.3 OK Poteau, ad 360 local 107.1 on at 0600
4/16	
	85 0600 KLAZ 98.5 AR Little Rock, ID 445 70 0723 KWGS 89.5 OK Tulsa, wx. 390 390
0811 KHOM 104.1 LA Houma, ad 45	0729 KCFO 98.5 OK Tulsa, ID
	65 0731 KBKZ 92.9 OK Tulsa, vx, *FM-93"
1252 XHSP 99.7 ML Monterrey 3	0734 KTFX 103.3 OK Tulsa, #103 KTFX Super Por
1305 KHRK 95.7 ML Monterrey, Sp. ID,	0742 KRAV 96.5 OK Tulsa
U. S. r. mono & not 96.5 as in FM Atlas	
o. o. r. mono o me 30.3 as in th versa	

Danny Buntin, 1020 S. Duncan, Stillwater, OK 74074

My DX leaves much to be desired since I haven't caught a good opening since last June. Anyway, on Hay 6 at 6 to 9pm several of the Memphis, TW stations were coming in with \$, about 2 on the 5 meter. That's from 400 miles away, I searched beyond Memphis for more and looked for St. Leuis but to no avail. But that search bore some fruit when I caught a new station in OK "making equipment and performance tests" as they said with their ID. It was KQZT 105.9, Hobart, OK noted at 1859, coming in weakly from 140 mi. Probably heard them again the next evening but not any more since. I hope the dx picks up soon or the season will be even worse than last year's. Ifm not too worried about the outcome of the season though, since Es deesn't get going good here until early to mid June then, hopefully, it'll be hold onto your hats time.

It has come to my attention that a "strict nonider" is a station that only gives its legal ID at the top of the hour as required by law. I made an inappropriate response to reporter's question in the April VUD, according to Bruce Elving. Until next month, 73.

STATION BREAK

WTFDA Headquarters. Post Office Box 202 Whiting, IN 46394

WTFDA member ads only. 30 word or 3 line limit.

FOR SALE - Broadcasting Yearbook 1975, a bit beat up, but all pages there; as well as Canadian Broadcaster directory, 1978, both for \$3.00 shipped UPS (add \$2 for orders going to Canada). W/station addresses. Elving, Adolph MN 55701.

Your non-commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION ERRAK

WESTERN TV-DX

June 1979

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

Deadline: 5th

This month's reporters provide more loggings of European F2 and a report from Pat Dyer of South American ch 2 F2. Es also is on the rise and hopefully will be strong by the time this is printed. I have seen Es most of the last week, but often very weak. It is probably a little better than average for Fargo in early May. There was a brief burst of promising tropo here, but the continuing cold and rainy weather has not been very conducive to it.

New New Mode Tentative - t Unidentified - unid.

Pat Dyer, 5315 Silvertip Drive, San Antonio, TX 78228 CST 5 tr 0615 WMAU 17 MS 470 16 Es 1935-2035 unids - 2 April 1979 WAPTt16 MS 525 (possible link to TE) 4 Es 0830-17 F2 1410-1444 unid - 2 6 tr 0525 KLTV 7 TX 280 1200 unids - 2.3 Es 1830-(see description below) 2000-23 Es 0955-1010 unid - 2 ne 1900+ YSR 2 ES 1200 2210 unids - 2,4 1100-1115 unid - 2 (Es to S linked w/TE 2330-40 unids - 2 1135-45 unid - 2 n on 50 mHz) 5 Es 0000-45 unids - 2 tr 0520 KLTV 7 TX 280 7 Es 2010- unid - 2 sw KNOE 8 LA 440 2030 XEWOt 2 JA 6 24 TE?2040-2105 unid - 2 280 2030 XEWOt 2 JA 690 (very rapid fade, se) 26 Es 0855 unid = 2 0521 WJTV 12 MS 525 1331 KDIX 2 ND 1225 0915 unid - 2 0522 KSLA 12 LA 265 11 Es 1800-0935 WSJK 2 TW 1010 1005-1010 unid - 2 1040 unid - 2 0525 KTRE 9 TX 1920 unids 2-4 se 0527 WLOX 13 MS 570 1820 TGV t 3 GU 1120 0529 WAFB 9 LA 450 1828 YSR 2 ES 1200 1100 WTHS 2 FL 1150 0544 KLFY 10 LA 395 14 Es 1745-1115 WEDUL 3 FL 985 1140 WTVJt 4 FL 1150 1258 WESH 2 FL 1055 1900 unids 2-4 sw 0559 KBMT 12 TX 275 1832 XEWO 2 JA 690 0613 KFDM 6 TX 275 1950-1320 fade/outs 0615 WRBTt33 LA 450 2050 unids 2.4 WMAH 19 MS 570 GU-Guatemala ES-El Salvador

South American ch A2 F2 reception: at fade/in, poor video with low contrast, multi-path type ghosting; Latin American soap opera; antenna to s.e. 30 mHz had been exhibiting good F2 backscatter from 1330 or so and direct F2 signals there had come from a maritime-mobile at 87w 7s as well as Ecuador and Colombia, but things there didn't look that super - like the March 8, 1970 magnetic storm that last brought in any ch 2 F2 (that time with audio but 4 or 5 stations). Ch 2 signal had very slow fading, but the multi-path ghosting and smearing made the many high contrast Spanish words that showed up on video impossible to read; guess MUF into 57-58 mHz range but never even a trace of audio. Signal faded around

Some good trop during the period, but our trans-gulf results of by-gone years seem hard to come by now. Es off to a somewhat fast start until mid-month then a slump. High solar levels created situations where Es-TE linkage probable some evenings. Also, April 17 F2 event the first of its kind in 9 years. 73, WA5IYX

B.W. Battin, 4305 Pitt,	Duluth,	MN 55804		CST
March 1979	14 F2	1137 BBC1		April 1979
7 F2 1215 BBC1 1 NI 1215 BBC1 1 ?		1137 BBC1 1142 TF		17 tr 2338 WORF 39 IL 350
1230 TF 1 ?	15 F2	1045 BBC1 1103 TF	1 ?	(All Rockford U's in)

Finally, there will be DX again. Duluth's climate and geography being such as they are, there's about a six-month DX season and absolutely nothing the remaining half of the year. The season starts with Es in May, and as skip passes its peak, tropo starts, usually peaking in the fall. This year there was an exception though - F2. I heard French and British TV audio on several occasions during March. These stations, I discovered, pose some problems when it comes to figuring new loggings, and consequently, log totals. I was able to identify Northern Ireland as the source of one of the BBC transmissions, and because I received another station carrying another BBC program at the same time, I had two new loggings. But on subsequent occasions, who knows? Perhaps I received three of four BBC stations (or French stations); there's simply no way to tell. I incremed my totals by three, one for Northern Ireland, one for other BBC, and Fr.

Richard N. Allen, Route 1, Billings, OK 74630

CST

Receiver: Panasonic TR3000P 3" B&W. Sony KV1212 12" color. Bearcat 210
programmable scanner (used with 100' long-wire for F2 reception).

Aerial: Winegard 11 element log (VHF). Archer Musalement log (UHF)

Aerial : Winegard 11 element log (VHF). Archer 44-element log (UHF)
February 1979 17 F2 0838-1358 4 Es 1915 XEFB 3 NL

2316 XEW 2 DF 1150 8 Es 1158 KEYT 3 CA 1255 1224 KNXT 2 CA 1174 BBC1 41.5 10 F2 0810-1220 0913-1322 BBC1 41.5 TF1 41.25 (B-1 audio) 1016-1304 2049 unid 2 0908-1154 BBC1 45 (PBS not // WUNC TF1 41.25 1145 BBC1 41.5 possible WSJK?) (F-2 audio) Divis 2049 WFMY 2 NC 1007 0944 BBC1 45 WBTV 3 NC 957 18 F2 1013 BBC1 41.5 (B-1 video) 19 F2 0756 TF1 41.25 WUNC 4 NC 1050 11 F2 0845-1230 0913-1230 BBC1 41.5 BBC1 41.5 May 1979 0857-1241 1044 BBC1 45 TF1 41.25 2 Es 1925 XEW 2 DF 1150 20 F2 1118-1307 0927-1002 1933 XEZ 3 QR 1069 BBC1 41.5 unid 48.25 Crystal Palace (E-2 video) (QSL rec'd) 0929-1002 BBC-1 48.25 March 1979 (B-2 audio) 3 F2 1105 TF1 41.25 13 F2 1009 BBC1 41.5 14 F2 0903 BBC1 41.5 April 1979 15 F2 1000 BBC1 41.5 4 Es 1800 XEW 2 DF 1150 16 F2 1001 BBC1 41.5 1800 XEZ 3 QR 1069

I have read that the loggings of E-2 video signals in the southwestern USA may have been of a station in Rhodesia. I would be interested to know how one could possibly come to such a conclusion when there was simultaneous reception of BBC1 (B-2 audio) on the same frequency, 48.25 mHz. I have several recordings of the February F2 TV reception, including one of simultaneous E-2/B-2 reception on 2-11-79. The best F2 reception noted here was on 2-20-79. I noticed Es reception into the FM band on 2-10-79, but I misplaced my log for that date.

I was unable to do much monitoring on 5-2-79 due to a severe local thunder storm during the early evening. I had hoped the Es activity in early April was the start of a new season, but it did not continue. The small Panasonic receiver is an outstanding DX machine. It is battery powered with an electronic tuner and fantastic gain. Also, it has a built-in AM-FM radio receiver.

Until later, good DX -30-

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

CST/CD

April 1979

May 1979

4 Es 1120 unid w ch 2 5 Es 1330 unid NBC s ch 2

1929 KETS 2 AR 890

5 Es 1944 unid NBC ch 3 2000 WBRZ 2 LA 1185 8 Es 1945 unid ABC se ch2

Hopefully much more next month.

21 Tr 0959 KTTC 10 MW 310

STATION BREAK

WTFDA Headquarters Post Office Box 202 Whiting, IN 46394

WTFDA member ads only. 30 word or 3 line limit.

FOR SALE - Realistic TR100 (Cat. # 14-927) stereo music system. Asking price: \$175 or best offer--plus shipping costs (weighs approx. 40 lbs. uncrated). Albert S. Lobel, Post Office Box 26762, San Diego, CA 92126; (714) 566-0092.

WANTED - Am looking for Heath AJ15 or AJ1510 at a reasonable price!!! Write and describe: Ken Simon, 513 6th Ave. S., Lake Worth, FL 33405 or you can call between 5-8 pm: (305) 585-7415.

Your non commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK

EASTERN TV.DX

Bill Thompson 1907 Seneca Street Buffalo, NY 14210

June 1979

Deadline: 5th

Except in southern areas, April was largely without TV DX. You can see the exceptions to this in Michael Hollis' and John Combs' reports. The April 8th through 10th period was especially good, when John caught North Carolina UHF and may have had Cuba and the Bahamas on highband VHF as well. Michael's loggings of stations from southern Georgia on the 10th and 12th, and Iowa on the 12th, were among the best spring tropo reported so far-and take a look at his Louisiana and Texas catches in March!

E-skip seems to be making a fairly slow start as of early May.

Jeff Wolf 1131 University	Blvd.	. Apt. 701 Silver Spring, MD	20902 (EDT)
August 1978	22 Tr	959 WXII-12 NC? T 18 Tr 2137	unIDs 44, 48
1 Es 0026 unID-3 NBC		O11 CCI on W41AB October	
0155 unID-2 ABC		unID-44 w/CCI 5 Tr 0100	WPTF-28 NC
0155 unID=2 ABC 1210 unID=2		015 unID-13 10 2200	unIDs 44. 23
1553 MUF ch 4		thru WJZ-13 11 0930	unID-33 WJPM?
1600 WEAR-3 FL	23	907 WHRO-15 VA W/ 18 Es 2359	umID=2
1627 MUF ch 5			MUF ch 5
5 2153 unID-3 PBS		956 unID-23 WAKR? 1807	
7 1101 unID-3 CCI	24	646 unID=29 21 2102	
8 1145 WTHS-2 FL 900			unID-2
1234 MUF ch 4	26		CCI on 2
"Cuba-3"	29		unID-3 Cuba?
"vy, vy strong"			"fade out"
10 Tr 0001 WITF-33 PA			now EST
Hershey 90			WVPT-5T VA
Es 1240 CGI chs 2, 4			Staumton 145
11 1230 KFDX-3 TX 1183		648 WTVD-11 NC 31 0100	
KOET-3 OK? T			WREE-36 NC 324
1401 1001-2 10 1100			unID-12 WXII?
		900 WCTI-12 MC 269 1800	
		er 1811	
		030 WPTF-28 NC 235 1900	
		244 WIIN-7 NC 257 2210	

Channel 5 loggings are infrequent because of interference from local Channel 2 signal on August 14, 1978 at 0133 may have been meteor scatter.

I was using the monopole antenna that came with the set."

Michae	el P.	Hollis	7401	A Ga	rdner	Hill	B Pt.	Campl	bell,	Kentuc	cky 4	2223 (CST)	
Februs					29 Tr	0530	KHTV-3	TX		10 Tr	0530	WALB-10 GA	
22 Tr	0419	WHIS-6	WV 3	50			Houston	3	675			Albany	400
		WXII-12				0544	KTAL-6					WIVE-9 GA	325
		nston-Sa					Shreve		460			WYBA-38 GA	325
		WDBJ-7		00		0552	KTRK-1			12		KCRG-9 IA	
	0452	WOWE-13					Houston					WGEN-10 IL	
		Hunting					KRIV-2		675			WQAD-9 II.	
		WCHS-8					WAFB-9					KOLR-10 NO	
		WSLS-1					Baton R	ouge	490			KDUB-40 IA	
	0521	KTVO-3			April							KINTC-27 MO	
		Ottumwa					WMAZ-1		350		0700	WLS-7 IL	
	0534	WEIO-13	IA 4	80		0550	WCWB-4	1 GA				WGW-9 IL	350
	0541	KHQA-7	10 3	10			ma.con		350			WITE-11 IL	350
March												WFLD-32 IL	350

29 Tr 0529 KTBS-3 LA Shreveport 460

"I'm only reporting 300 mile + stations since stations less than 300 miles are too frequent to be considered DX. I caught a duct on the morning of 29 March into Houston, Texas. I took some super photos of KTRK's (13) & KHTV's (39) test patterns at 675 miles."

Paul L. Gaines 15920 Puritan Street Detroit, Michigan 48227 (EST) "Well this is what you were waiting for-hi! My DX report!:"

Warch

22 Tr 2256 CHEX-12 CN 270 7 Tr 0900 WILL-12 IL 305

"Hot weather here (800+) and more to follow, but hard to get even South Bend now. Saw Pittsburgh 22 good enough for photo & saw Buffalo 7 sign off one night. No DX again today (5-9)?!? What in hell is going on???"

28

## B 2110 KTVY-4 OK 1059 13 0744 WITV-7 SC 309 0840 WCFT-35 AL 483 2157 KTEW-2 OK? T 15 0655 WMBB-13 FL 265 0850 WGFT-45 AL 329 0850 WGFT-45 AL 32	John	F. Combs 2485	Ivan Court	Orlan	do, Florida	32807 (ES	T)
2116 KTVY-4 0K 1059 13 0741 WTTV-7 8C 309 2157 KTEW-2 0K? T 15 0655 WRBB-15 FL 265 2200 KENW-3 NM 1482 2200 KENW-3 NM 1482 6 TT 0650 WRBA-14 SC 320 7 1915 WTTV-7 8C? T 2220 WMBB-13 FL 263 WFSA-14 SC 320 8 WFSA-14 SC 320 8 WFSA-14 SC 320 8 WFSA-13 SC 290 WFSA-14 SC 320 8 WFSA-15 SC 320 8 WFSA-16 SC 320 8 WFSA-16 SC 320 8 WFSA-16 SC 320 8 WFSA-17 SC 373 8 WFSA-18 SC 320 8 WFSA-18 SC 324 8 WFSA-18			12 T	r 2228	WCES-20 GA 3	329 19 T	r 0838 WALB-10 GA 244
COET-3 OK 948 2200 KESW-3 NM 1482 WFSU-11 FL 274 26 2255 WABW-14 GA 244 246 27	4 Es		X 1059 13			309	
Tr 0650 WRBA-14 SC 320 WABW-14 GA 244 28 0625 WCBD-2 SC 306 WABW-14 SC 320 WABW-14 GA 244 28 0625 WCBD-2 SC 306 WABW-14 SC 320 WABW-14 GA 244 28 0625 WCBD-2 SC 306 WABW-14 SC 320 WABW-14 In 164 WTM-15 SC 320 WABW-14 SC 320 WABW-16 SC 320 WABW-14 GA 244 WABW			C? T 15	0655	WMBB-13 FL 2		
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7 1915 WITV-7 SC? T		2200 KENW-3 NM	1482				2315 WABW-14 GA 244
WEEA-14 SC 320							
WJWJ-16 SC 290 WRJA-27 SC 373 17 0710 W64AD-64 FL 164 2000 WJFM-35 SC 408 WETW-13 SC 408 WETW-13 SC 408 WRJX-19 SC 385 WLTX-19 SC 392 WNIJZ-16 SC 290 WLTX-19 SC 392 WNIJZ-16 SC 337 2208 WOLO-25 SC 380 WLTX-19 SC 387 WRJA-27 SC 377 WRJA-27 SC 387 WRJA-27 SC 387 WRJA-27 SC 387 WRJA-27 SC 387	7						
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2000 WJFM-33 SC 408 WBTW-13 SC 408 WBTW-14 SC 290 WBLX-35 SC 385 WLFX-19 SC 385 WLFX-19 SC 387 WBLX-19 SC 387 WBLX-19 SC 380 WBTW-35 SC 385 WBTW-37 SC 373 WBTS-36 SC 453 WBSC-30 SC 453 W				-111			by Tr, Es, and MS"
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WRIK-35 SC 385 WIITI-19 SC 392 WINT-19 SC 392 WINT-19 SC 392 WINT-19 SC 337 WINT-19 SC 332 WINT-19 SC 337 WINT-19 SC 392 WINT-19 SC 335 WINT-19 SC 337 WINT-19 SC 330 WINT-19 SC 330 WINT-19 SC 337 WINT-19 SC 373 WINT-19 SC 375 WINT-19 SC 375 WINT-19 SC 387 WINT-19 SC 385 WINT-19 SC 387 WINT-19 SC 385 WIN				2200			
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WRJA-27 SC 373 WPTF-28 NC 523 19 0740 WIS-10 SC 387 WNSC-30 SC 433 WJFM-33 SC 408 WREA-14 SC 320 WWWJ-16 SC 290 WRET-36 WC 465 WRET-36 WC 465 WRET-37 NC? T 0728 WRTW-37 NC? T 0728 WRTW-37 SC 408 0739 WRIK-35 SC 385 0807 WIS-10 SC 387 0830 WTW-29 SC 447 WABW-14 GA 244 WJSP-28 GA 361 WJSP-28 GA 362 WJSP-28 GA 362 WJSP-28 GA 362 WJSP-28 GA 361 WJSP-28							
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WERA-14 SC 320 WERA-14 SC 320 WERA-16 SC 290 WIPM-33 SC 408 WIPM-31 SC 408 WERT-36 MC 465 WETY-3 MC? T WOLO-25 SC 380 WIPM-35 SC 385 WIPM-35 SC 386 WIPM-36 SC 386 WIPM-37 SC 386 WERA-35 SC 386				0740			breatonery at Pe.
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		2228 WRDW-12 S	IC 337	3 1911		-	1848 I5 (YUC?)
Billion of Smoot 7 down of Mary homestate the state and the same of the same o							1905 "had to leave"

"The first 3 days of May brought the 'traditional' early May Latin openings to FL. The outstanding feature was on the 3rd, when at 1823 and again at 1856 EST our 'mystery' Met-13 relay on ch 4 keyed in their calls on the screen—HAO. So we now at least know the calls, if not the location. The ch 5 transmitter, which was being seem during the 2nd HAO ID, did not ID itself. So it now appears that both Met-2 and Met-13 (maybe others?) are using some local IDs, although not at predictable intervals. HAO had a plug for some festival or other in the estado of Puebla, but I doubt that Puebla is the location of the transmitter. Oh, yes, Met-13 is full color mow as noted on family set. (I have good HHO photos). Another note: WIPM-3 is now running 'live' via PES satellite for many programs, with slides promoting the fact often put on the satellite for many programs, with slides prometing the fact often put on the screen. The only other Es seen was the off-season opening on April 4. At the 2200 ID on ch 3 I had KOET, KENW, and WEDU all running parallel with 'live' FES and each slightly offset from the other! My eyes may never recover, hi! Tropo has been good, but not spectacular. The expected long-haul Gulf ducting didn't show up again this spring, and it's probably too late now for it to hap-

pen. Maybe this fall ... 73s to all"

Robert S. Ross Box 4373, Station C London, Ontario N5W 5J2 (RST) April 30 Tr ---- CBLFT relays May 28 Tr --- WNEM-5 MI 150 on 48, 68, 78 7 Tr WJRT-12 MI, OM U's Not listed are Detroit U's (120 mi). Equipment includes Toshiba 12" portable, rabbit ears, 6" UHF loop. Present log totals 57, 28 verified. "No Es here yet. Tropo has been average for the past month. All Ding done with indoor antennas from 9th floor apartment."

EASTERN TV-DX

June 1978

David Leibold Box 279 Blyth, Ontario NØM 1HO
"For Eastern TV-DX this report, here are my activities for last year. Not much Es, but whatever skip I saw added new entries into my 'log'--KATC-3 Lafayette, LA and WERZ-2 Baton Rouge, LA were received during the afternoon of August 11, 1978. I didn't see much else on E-skip last year, but a good tropo August 9th 1978. I didn't see much else on boship leaused thes stations to come in:

WRTV-6 Indianapolis IN

WTTV-4 Indianapolis IN

just before 2100 EDT (QSL) just before 2200 EDT just before 2300 EDT WHIO-7 Dayton OH

The rest was routine tropo (UHF stations within 300 km--about 200 mi.) which was mainly around September, when tropo could almost be seen to some extent was mainly around September, when tropo could almost be seen to some extent every night. I've become busy at a number of things, so I'm not DXing as often as I would like to. With postage at 17¢, I'm QSLing once in a blue moon—which such expensive postage—hi. The equipment I use consists of Channel Master, mainly. A 75 ohm downlead from an antenna at 42 feet goes into a 2-transistor Channel Master amp to 300 ohm wall plate to a Rogers Majestic Modular 4 colour TV. The log is now at 86 stations. 73—"

Steven P. Sprachman Rm 335 Hotel Wellington 136 State St. Albany. NY 12207 "The answer to the question "Where is Steve Sprachman this Semester?" is Albany. NY. Presently, I'm on an internship program through school where I work in an assemblyman's office (Assemblyman Murray Weinstein of Brooklyn). My work plus school work leaves me little time for DXing. Also the location of where I'm living despit helm. school work leaves me little time for DXing. Also the location of where I'm living doesn't help. And added to this, I have a roommate who watches TV constantly. What will he do when the trops are good and I'm flipping channels every few minutes? This past holiday week was spent in Toronto. I have many relatives. One, Neil Wolfish, is a familiar name to BCB DXers. He's also good friends with John Zondlo (hi to John). I explained a little about TV DXing to Neil, but he's sticking to AM. Some TV news before I give my basic report: GE in Schenectady is merging with Cox and GE is selling WRGB-6. Stations seen here: WKTV-2 Utica (most times); WCBS-2 New York City (rare); WFSB-3 Hartford CT (most times); WNBC-4 New York City (most times); WABC-7 New York City (rare); WTNH-8 New Haven CT (occasional) WWNP-22 Springfield MA-first time seen to-WINN-5 New haven GT (occasional) whin-22 Springileid MA-lirst time seen tonight (April 18th); WEDH-24 Hartford CT (rare); WNTE-25 New York City (rare);
WVER-28 Rutland VT (occasional); WVIT-30 New Eritain CT (rare); WNYC-31 New
York City (rare); WXTV-41 Paterson NJ (occasional); WNJU-47 Newark NJ (rare);
WEDW-49 Bridgeport CT (rare); WNJM-50 Montclair NJ (rare); WNJT-52 Trenton NJ
(tentative); WNJB-58 New Brunswick NJ (tentative); WTVG-68 Newark NJ (rare).
"That's it-for now. Hopefully the DX season will start soon and I will have
some better reports. Have a good DX season this year." Have a good DX season this year."

CONVENTION 1979

BALTIMORE. MARYLAND-AUGUST 3.4.5.

VAF UTILITY DX

5315 Silvertip Drive San Antonio, TX 78228 Deadline: 5th of month JUNE 1979

Pat Dyer

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Hank Holbrook, 7211 Chestnut Street, Chevy Chase, MD 20015 QSLed, GMT
 <u>2-21:</u>
1928 KMA750 43.38 Sacramento,CA(Pacific Telephone & Telegraph, mp)
 2-24:
1757 KMA628 39.82 Altadena, CA(300 w, cp) & 39.64 Lakewood
2-25:

2044 KME69 42.34 Stockton, CA(100 w, 2400' AMSL, sp)

2047 KMB34 "San Luis Obispo, CA(sp)
2-26:
2301 KMA801 42.12 Los Angeles, CA(sp) (100w)
                                                                       cp-sheriff
2-28:
2316 29D3 42.12 Santa Barbara Co.(sp)
                                                                       mp-mobile phone
                                                                       sp-state police
 1947 KIZ473 39.18 Prescott, AZ(110 w, cp)
2012 KMA400 43.38 Los Angeles, CA(Pacific T & T, mp)
3-11:
1816 KMD64 42.54 Monterey/Salinas, CA(100w, 700' ASL, sp)
3-14:
2326 KMA392 39.7- Santa Rosa, CA(250w, 100', cp)
3-16:
2007 KME600 42.34 Dunsmuir/Mount Shasta, CA(sp)
Michael W. Scheel, 3403 Jersey Ridge Rd. #224, Davenport, IA 52807
Bearcat 210 w/external indoor antenna; *Bearcat 250 w VHF Hi/UHF
ground plane antenna; CST ? April 12:
0559 KSC384 460.575 Springfield, IL-f*
0624 KT1589 155.340 " "-ho
0630 KSB213 42.66 " "-sp
                                                                       42.44 Pontiac, IL-sp
460.175 Chicago, "-p
153 325 " "-1g
                                                       0641 KSA776
                                                       0645
                                             m -sp
                                                       0646
                                                                        453.325
The first UHF from Chicago noted since August 1978.
Neil Dickerson, 426 State St., Sharptown, MD 21861 for low-band, Bearcat 12 for high-band; EST used
                                                                        Realistic PRO-1
2000 ----- 156.80 Norfolk, VA(USCG) 1400 KOA346 39.18 Mogales, AZ-p

KGF340 155.37 Doylestown, PA-p
2109 KIC443 154.19 Petersburg, VA-f
2200 KVF429 161.10 Franklin, VA-rr
2206 KCJ259 161.07 Norfolk " " 1422 KSN282 " Wilden " "
                                                                            ForrestLakes, ""
                 161.07 Norfolk,
                                                  1440 KRT822 39.90 Roswell, NM-p
2213 KIP640 160.59 Portsmouth,""
2200 KYU794 161.10 Suffolk, ""
                                                  4-3:
1815 ----- 156.80 Richmond, VA-map
3-24:
1249 KMB435 42.12 Bishop, CA-sp
1256 KME355 " Yuba City,""
1258 KQN976 " Glendale, ""
                                                  4-11:
2130 KXC840 155.28 Chesapeake,"-ho
                                                  4-13:
1920 KEG600 154.16 Merchantville,
                   11
1300 KMG428
                           Garberville,""
                                                                             NJ-f
                          Kellog,
       KFF493 42.08
                                                  1926 KIU628 155.28 Trenton, NJ-f
       KDE680 42.34
                          Exeter,
                                       11 11
                                                  2020 KYE994 154.37 NY,NY-f
2109 KTP975 154.28 Frederick,MD-f
1302 KME222
                                       11 11
                           Pulga,
                   11
1307 KJF557
                                       11 11
                          Tecata,
                                                  4-18:
0800 KDX246 155.28 Hagerstown, MD-1g
1311 KDG889
                   11
                          Gold Run," "
1316 KDE681 42.44
1321 KQY720 "
                          Bradley, " "
                                                  4-20: (310 mi
2330 KXM724 156.21 Duquesne, PA-p/
                                                                                       (310 mi)
                           Sonora,
                                       11 11
1322 KFB975 42.50
                          Fremont, " "
                                                  2350 KIC469
                                                                            Norfolk, VA-p
1330 KME362 42.12
3-28:
0847 ---- 156.80
                                                  4-21:
0015 KWX577 156.21 Richmond, VA-p
                         Arcata, " "
      ----- 156.80 Gloucester, NJ
                                                  2100 KBM912
                                                                       11
                                                                             Camden, NJ-p
                                                  2200 KWX517 155.28 Rocky Mt., NC-f 31
                         (USCG)
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(Dickerson, cont.)
                                                                        4-22:
                                                (rescue)
4-21:
2300 KIK817 155.28 Stantonsburg, NC 2302 KWM679 " Raleigh, "-ho
                                                                        0053 KS0871 155.22 Elizabeth, NJ-amb
                                                                        2000 KEF927 "
KEG320 "
                                      Raleigh, "-ho
                                                                                                              Yonkers, NY-ho
                                                                                                                   11 11
                                      Bessemer City,
NC-res. (400 mi)
2330 KAQ518
                                                                        2030 KCN683
                                                                                                    77
                                                                                                              NY, NY-?
                                                                        2130 KIS712 154.31 Thornhurst, PA-f
(amb-ambulance, f-fire, ho-hospital,
2337 KVG740 "
                                      Columbia, NC-ho
2345 KWQ694 155.22 Va.Beach, VA-ho
0000 KDZ481 155.28 Phila., PA-amb
0030 KVN732 155.22 Hopewell, VA-ho
KIU470 155.34 TomsRiver, NJ-ho
                                                                        lg-local government, map-marine p,
                                                                          p-police, rr-railroad, sp-state p)
 (over 50 other trop loggings in MD, DE, VA, &NJ under 100 miles were
  deleted - pjd)
Now, my loggings. Hallicrafters SX-62, Hammarlund SP-600-JX-10, Allied A-2586, Realistic Patrolman (c. 1967), 2 30' long wires at 12' runs nw-se, Be-sw; 49.6+ with Swan 250 + Ameco nuvistor preamplifier, 5-el Cushcraft horizontal Yagi at 23' with rotor; F2 unless noted (bs-back-catter)
scatter; * Es, ** 2Es), daily MUF peaks noted, new underlined, GMT
4-6:
1945-2045 50 bs TX,FL,NM,TN,AZ
2115 50.76 New Zealand (TV audio)
2215 LUIDAU 50.1+ B.A.,Argentina-a
                                                                        4-12:
0020 LU8AHW, 0025 LU1DAU
                                                                        0035 CX8BE (Es link F2)
1830 35 US ne
1840-1945 50 bs TX,LA
1950 50.075/.125 Colombia-a
4-7:
0015 CE4CP 50.1+ Talca, Chile-a
Santa Fe, Arg. -a
                                                                         2225 45.25 NZ
                                                                        4-13:

1950 KCC405 37.54 Bangor, ME-he

1956 KCA346 " Ellsworth, ""

2055 50.74/.75/.76 NZ to 2300+

2215 CX8BE, 2240 46.25 Aust.
 0103 LU7FSF 50 +
                                                                 111
                                                                 11
                                     B.A.,
                                                          99
                                     11
                                                                 11
                                                          75
 Oll7 LU3DCA "
                                                                 11
                             11
 0123 LU3EX
0154 CE3TS " Santiago, Chile-"
0245 LU3HFU " Cordoba, Arg.-"
0257 LU7DZ " B.A., " "
0315 f/out of Es link to TE
 0154 CE3TS "Santiago, Chile-" 2215 CX8BE, 2240 46.25 Aust.
0245 LU3HFU "Cordoba, Arg.-" 4-14:
0257 LU7DZ "B.A., "" 1505 hi-33 US, 1930 K4ERO/HCl
0315 f/out of Es link to TE 2125 50.75 NZ, 2210 45.25 NZ
1325 35 US ne, 1345 low-37 Canada 2345 50.76 "
1725-1755 50 bs TX, OK 4-15:
0259 LU8MBL 50.1+ Mendoza, Arg.-a
1802 LU8DIN 50.1+ M.delPlata, Arg-a
1804 050 bs CA, FL 0302 CX8BE (Es link TE?)
1852 K4ERO/HCl 50.1* Pifo, Ecuador-a 1259 KDC288 33.90 Hollis, NH-f
1303 50.75 NZ Wareham, MA-"
1301 KDR298 33.86 Sommerville, ""
                                                                        1300 KCA410 " Wareham, Ma-"
1301 KDR298 33.86 Sommerville,""
1410 KCD353 33.70 Lancaster, ""
  2103 50.75 NZ
2120 CX8BE 50.1+ Montevideo, Urg.-a
  2125 LU3EX
 2215 45.25 NZ (TV video)
2218 ZLIBPW 51+ Auckland, NZ-a
2325 ZLIBFA 52+ Whangarei," "
                                                                         1815 35 US
1840-2300 50 bs OK,TX,OH,NM,MD,MO,
                                                                                                         FL, CA
                                                                          1920 KAERO/HCl
  \frac{4-8}{0230} VK--- 50 Darwin, Australia
                                                                          2030 LUSAHW, 2035 LU3EX
2125 50.75 et al. NZ
2315 ZL3AQ 51 + Christchurch, NZ-a
2320 ZL3RW """
  1650 45+ Spanish
  2100 45.25 NZ, 2110 50.75/.76 NZ
  4-9:
1615 KOP303 35.46 Langley, WA-mp
1830 49.66 se, 2058 45.25 NZ
2202-0035 50.74/.75/.76 NZ
                                                                          2325 ZL3AAN "
2345 ZL3QK "
                                                                                                                                 11 11
                                                                                                                               11 11
                                                                                                                      11
                                                                          4-16:
                                                                          0030 45.25 NZ to 0200+
  4-10:
1915 49.920 se
2145 46.25 Australia (TV video)
                                                                          1930-2230 50 bs OK, TX, TN, CA, NM
2055 50.75 NZ, 2045 35 US
2120 LU3EX
  2225 45.25, 50.75 NZ
                                                                          2125 JEIPCX/MM2 50.1+(11°S,87°W)-a
2150 ZILLV 51.11 Dunedin,NZ-a
2202 45.25 NZ, 2215 51 bs AZ
2230 46.25 Aust.
  4-11:
   1845 low-33 US, 2230 46.25 Aust.
  2239 45.25 NZ
2325 LU9MA 50.1+ Mendoza, Arg.-a
                                                                          2255 ZL4LT 52.05 Dunedin, NZ-a
   2337 LUSEEM " B.A., "
```

(Dyer, cont.) 4-16: 2351 51.74 Wagga-Wagga, NSW, Aust. 4-17:
0045 50.74 NZ, 0100 50.76 NZ
0130 LU8BF 50.1+ B.A., Arg-a
LU3EX, LU9MA
0155 JEIPCX/MM2, 1705 10w-33 US
1858-2300 50 bs OK, MO, OH, TN, KY, AL,
1945 JEIPCX/MM2 (07°S, 87°W) 2010 K4ERO/HC1 50.075/.125 Colombia 2130 50.76 NZ, 2150 50.75 NZ 2230 51.74 Aust., 2225 50.74 NZ 2240 51.76 Melbourne, Vic., Aust. (see TV report also this date) (See TV report also this date) 4-18: 2110 50.74/.75/.76 NZ 2145 LUIDAU, LU3EX; 2150 LU7DZ 2205 LU8EEM 50.1+ Lincoln, Arg.-a 2245 hi-33 US, 2320 LU8AHW 2345 45.25 NZ 2345 45.27 M4 4-19: 0122 KLF527 35.22 Honolulu, HI-tp 2015-2135 50 bs TX, MO, OK, OH, TN 2020 K4ERO/HC1, 2112 LU3EX 2112 JEIPCX/MM2 (030S, 870W) 2135 LU2BG 50.1+ B.A., Arg-a 2155 LUIDAU, 2210 CE4CP 2220 LU8AHW, 2239 CE3TS 2245 CE3DZ 50.1+ Santiago, Chile-a 4-20: 4-20: 30-31 US, 1950 49.82 Spanish 2225 45.25 NZ 4-21: 1505 low-30 Canada 2200 45.25 NZ, 2215 46.25 Aust. 1955 49.995, 50 bs TX,0K 2035 46.25 Aus., 2055 45.25 NZ 2115 50.75 NZ, 2230 51.76 Aust. 4-23: 1820 hi-43 Spanish 4-24: 1520 low-30 Canada 1955 49.995 Spanish 2100 45.25 NZ, 2230 46.25 Aust. 2230 50.74 NZ, 2310 50.75 NZ 4-25: 0240 CE4CP (TE) (devastating magnetic storm) 4-26: (slow storm recovery) 2325 low-30 Canada 4-27: 0005 40.68

4-27: 1429 BBC 30.80 Ascension Is.-ha 1955 30-31 US 2000 30.475 Espinal, Colombia (5th ha) 2105 45.25 NZ, 2150 LU7DZ 4-28: 1845 LU3EX, LU7DZ 1850 LU8EEM, 1900 LU3DCA 4-29: 2225 45.25 NZ, 2240 35.22 Spanish 4-30: 1515 BBC 30.80, 1805 45.30 Span. 2105 45.25 NZ 7-1: 1815 KFL943 35.58 Las Vegas,NV-tp* 2120 36's Spanish, 2125 45.25 NZ \$1 11 W4UWH/KV4 " Virgin Is." " 2245 50 bs TX, 2305 50.75 NZ 2325 51.76 Aust. 5-3: 0003 KZ5NW 50.1+ Coco Solo, CZ-a ** 0015 CX8BE 0025 50.075/.125 Colombia ** 0030 LU8AHW; 0100 LU2BG, LU3EX OlO3 LU3DCA 0107 LU6DLB 50.1+ B.A., Arg.-a Oll6 LUlDAU 0130 LU4HFY 50.1+ Cordoba, Arg.-a 0235 f/outs 0225 OK City 35.58-vp * 2212 50.75 NZ, 2305 46.25 Aust. 2335 low-30 Canada 5035 LUSAHW, LULDAU, LU3DCA, LU3EX 0040 LU6DLB, 0110 LU4HFY 0115 LU6HFI 50.1+ Cordoba, Arg.-a 0130 CE3DZ 0150 CE30K 50.1+ Santiago, Chile-a 1258 D. Welle 30.30-ha (Carib.rly) 1440 35.58 Spanish 2135 50.74/.76 WZ, 2340 low-30 Can. 2344 KLF527 5-5: 0000 BBC 30.80, 1810 35's Spanish 2150-2230 50 bs CA, 2250 51 bs CA (a-amateur, f-fire, ha-harmonic, he-hydroelectric, mp-mobile phone, tp-tone pager, wp-voice pager)

April 10.7-cm solar flux average down to 175.4, with the smoothed number for last October at 162. Latest predictions put the maximum in November 1979 with a smoothed spot number 156 + or - 33 (flux 200 + or - 32).

Other 50-MHz news: Apr 24 0700z South African beacon into s.California. (long path); S.Africa to Hawaii; Cook Island to CA,FL,TX; Indonesia to Japan, Australia, Hawaii; Solomon Is. to CA and Nepal; Guam heard CA.

IN SHARUHOFD\$8

Donald L. Blevins 1715 Earhart Koad Baltimore, MD 21221 301-574-2714

IN SEARCH OF...County Radio Nets.... It has been my observation that in order to obtain information about some smaller townships, boroughs, and villages, one must research the county these agencies are located within. In order to illustrate my point, I will submit for your examination the county radio network of Delaware and Montgomery Counties in Pennsylvania as submitted by Craig Willard of Narbeth, Pennsylvania.

The most frequent implementation of this type of network can be observed in more rural communities where cost factors figure into an already strained budget, and where law enforcement is a cooperative effort of several small but dedicated law enforcement agencies.

DELAWARE COUNTY POLICE DEPARTMENTS KGA 905 KRR 992 KZI 389

F1 39.82--F2 39.90--F3 39.78--F4 39.50--F5 39.60

81

Aston

First 2 Numbers

46 Yeadon

Darby (Moro)

23	Eddystone	48	Colwyn	83	Bethel	*Last 2 Numbers
25	Parkside	51	County CID	84	Upper Chichester	*20 - 29 Cars
26	Upland	53	Sheriff	85	Marcus Hook	*41 - 49 Streets
27	Brookhaven		Court House	86	Trainer	* Sgts
61						+00 11 1
29	Chester Twp	61	Sharon Hill	88	Lower Chichester	*90 Headquarters
30	Norwood	63	Folcroft	91	Springfield	*************************************
41	Lansdowne	65	Collingdale	93	Morton	
					Swathmore	
43	Aldan	67	Darby Twp	95	2Marimora	
46	Clifton Hts.	71	Newtown Square	98	Media	
				, -	Water Desert James	
45	E. Lansdowne	75	Marple	99	Nether Providence	e de la companya del companya de la companya del companya de la co

MONTGOMERY COUNTY POLICE DEPARTMENTS KGA 243 45.26 45.34 45.46

Upper Providence

	20		T4-1-	76	Perkiomen
27	Bryn Athyn	53	Lansdale		
28	Springfield	54	Brideport	79	Marlborough, Green Lane
32	Whitemarsh	55	Hatfield Township	81	Red Hill
37	Hatboro	57	Hatfield Borough	82	Schwenksville
38	West Conshohocken	58	Valley Forge Park	83	Pennsburg, East Greenville
38 39	Horsham	59	Towamecin	84	Limerick
42	Conshohocken		Lower Salford	86	
43	Ambler	62	West Norriton	87	Upper Hanover
44	Plymouth	63	Franconia		Lower Pottsgrove
45	Lower Gwynedd		Souderton	89	
46	Whitpain		Lower Providence		
47	Montgomery	67	Telford	99	Spring City
48	East Norriton	68	Upper Providence		Code Zero Van
	North Wales	72	Collegeville	401	Code Zero Command Post
52	Norristown	73	Lower Fredrick		

Kevin Slater 1167 Ring Street NE Salem OR 97303 reports:

Salem Merchant Patrol: KSN 406 151.865 simplex
Marr's TV & Appliance: KDL 704 151.865
Silverton Fire Department Ambulance: KSW 931 155.16
Santiam Memorial Hospital (Slayton) 155.34 KXC 351; 155.295 KYG 725(primary working channel for ambulance to hospital)
Marion County Sheriff's Office 154.74 WBW 919 repeater F1; 155.64 F2 repeater input frequency and used for car to car; 155.73 KYV 220(no repeater)

(Note: local police juristrictions may operate on above frequencies or use thier own as follows: 154.04 Aumsville/Turner/Jefferson; 155.01 Mount Angel; 155.37 Slayton/Silverton)

TIDBITS..... News of great value from our contributors make this feature great!!!

Summit County, Ohio reader submits:

PD- Police Department SO- Sheriffs Office OSP- Ohio State Patrol LERRN- Law Enforcement

SO- Sheriffs Office LEERN- Law Enforcement Emergency Network

Police

39.62 Twinsburg PD KQG 401 Summit County SO Akron KQB 328 Summit County SO Post 1, Northfield KCI 519



39.84 Copley PD KSL 402 Fairlawn PD KTN 296 Bath PD KLK 535

44.74 OSP Post 77 Akron KQA 794(mobiles on 44.86)

45.02 Inter-Post OSP

45.10 OSP Post 77 Akron KQA 794(occasional use)

45.22 OSP Northfield (Hawthornden) KSL 845

154.935 Ohio LEERN

155.10 Barberton PD KDQ 330

155.145 Tallmadge PD/FD KDN 987

155.19 Stow PD KQJ 267 (COMM 9 Channel 1)

155.715 Hudson PD KBW 785

155.79 Turnpike Police - Boston KQE 579

155.85 Norton PD KDR 481

156.15 Akron PD Channel B KQA 784 (Detective Bureau)

156.21 Akron PD Channel A KQA 784

453.10 Akron Metropolitan Park PD KQY 676

460.05 Akron PD Channel 1 KQY 608 (Computer)

460.10 Summit County SO Post 1 Northfield KQY 598

460.175 Summit County SO Post 2 Springfield TWP KQY 601

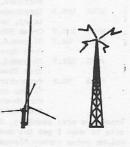
460.25 Summit County SO/Springfield TWP PD KuY 601

460.325 Akron PD Channel 2 KQY 608

460.375 Akron PD Channel 3 KQY 608 (same as 156.21)

460.425 Summit County SO Akron KQY 600





QSL CORNER

FM-OSL

Thomas J. Yingling, jr. 221 Pinewood Road Raltimore, MD 21222 Deadline: 10th Phone # 1-301-282-5649

FL	MIMC	103.1	Okeechobee, P.O. Box 1247, 33472. Letter in 40 days from Al Stokes, General Manager & Chief Engineer. Sawatzky
	WCCF	92.7	Punta Gorda, P. O. Box 1929, 33950. Letter from J. Reinart in 2 weeks
IA	KSAY	96.1	with coverage mans. Yingling Clinton, Rox 708, 52732, Letter from Hank Dihlmann, GM with a specific verie message. Zank
	KDMI	97.3	Des Moines, 2907 Merle Hay Rd, 50310. Letter, map, & 2 patchs from Jerry
IL	WBYS	98.3	L. Slegh, Asst. Gen. Mgr. in charge of Programming. Yingling Canton, P. O. Box 600, 61520. Letter & map from Charles E. Wright, Gen. Mgr. in 2 % weeks. Yingling
	WTAZ	102,3	Morton, Box 3498. Letter from Wayne R. Miller, SM. Eddie
	WGGI		Chicago, 6 N. Michigan Ave, 60602. Letter from Jack Layton, CE Eddie
	WXFM		Elmwood Park, 333 N. Michigan Ave, Chicago, 60611. Letter from from James P. Walsh, Operations Manager. Eddie
	WNIB	97.1	Chicago, 12 E. Delaware, 60611. Letter from Sonia Filouan, GM Eddie
KS	KTRO	98.9	Leaveworth, 335 Muncie Rd,66048, Letter from Richard R. Hagerman, Engineer. Zank
	KLRF	104.9	Emporia, Box 968, 66801. Letter from E.J. McKernan, 3rd, Mgr mentioned looking for a CE for AM/FM operations.
	KKKX	95.7	Ottawa, Box 16,66067. Form from John Collinson, CE, gives sales office of 2104 W. 25th, Lawrence, KS 66044. Zank
	KANS	96.7	Larned, 8th & Topeka, 67550. Letter from Chris Brickley, Program Dir. mentions that "We normally do not confirm DX report to the snowball
			effect. I have made an exception in your case due to the extreme distance."
			Heres one you have to look out for, the snowball effect. Yingling
МО	KAOL	101.1	Carrollton, Box 278, 801 N. Jefferson St, 64633. Letter from Dan Davis, Chief Engineer Eddie
	KLDN	Eldon	, 209 E. 2rd St, 65026. Letter from Jay Fisher, Asst. Mgr & PD Eddie
NH	WHEB	100.3	Portsmouth, Letter from Antonio Vaccaro in 2 weeks. He reports that my report is the first reception report in 12 years, Come on all you
			northerners you can do better then this. (I find it hard to belive that they received no reports in 12 years for the fm station, how bout you?-
		- CONT. 100	-All those who have WHEB-FM qsl'ed write to me & report, ok? Ed) Dalton
OH	WPTW		Piqua, 1625 Covington Ave, 45356. Lengthy letter from Donald J. Kuether, CE, & also enclosed coverage maps & rate card. Sawatzky
	WRKY	103.5	Steubenville, Broadcast Center, 320 Market St, 43952. Letter from William B, Chesson, General Manager Sawatzky
	WSRD	101.1	Youngstown, 401 N. Blaine Ave, 44505. Letter from Jerry Starr, Production Music Director in 8 days.
PA	WOSU	88.9	Selinsgrove, Susqueharna University, 17870. Letter from Larry D. Augustine, Gen. Mgr. with reply in 2 months. Yingling
	WTLR	89.9	State College, 315 S. Atherton St. 16801. Letter & coverage-map from Jack Van Sciver, CE W3ITE. "quite interested in vhf propagation pheomena." Sawatzky
VA	WEER	107.7	Warrenton, P. O. Box 817, 22186. Letter from James R. Thorman, CE. Yingling
***	WXRI	105.3	Portsmouth, P. O. Box 111, 1318 Spratley St, 23705, Letter from Randy Stafford, Bookkeeper for Michael Meredith, Operations Manager, Yingling
	WRAR	105.5	Tappahannock, 22560. Zeroxed letterhead paper letter qsl from Robert W. Lowry, no title, reply in 1 week. Yingling
	WSVS	104.7	Crewe 800 Melody Lane, 23930. Letter from C. E. Wilson, President. Yingling
	WRVQ		Richmond, P. O. Box 1394. 23212. Letter, card & a Q-94 T-shirt in 5 days from Harry Lone, CE. Sawatzky
	WEZS	103.7	Richmond, 5900 Midlothian Pike, 23225.Letter & WEZS coffee mug in 6 days from Thomas L. Mann, CE Sawztzky
	WPLZ	99.3	Petersburg, P. O. Box 231, 23803. Letter from Paul H. Bock, Jr. K4MSG, CE, "I was absolutely delighted a never before have we received a report on our fm station." also describes how he worked on 2-meter ham band with
Ren	orters	are. S	the incredible tropo that night 8-20-76. Sawatzky

Reporters are: Sawatzky, Zark, Eddie, Dalton, & ed-Yingling. This was all fm cals again for this is what I get the most reports on, but I do need new stuff soon to keep a full page column going strong. Please send in something so I will know you are a live. 73's Tom Yingling.



Michael L. Hogan 13910 Chippewa Avenue Apartment 1 Burnham, Illinois 60633 Deadline: the 10th Phone # 312-868-4392

DXer, Location	Total	UHF	Xltr	Es	MS	Au YB	As of
Bill Draeb, Kewaunee WI	724	326	65	181	113	1 53	5/8
Tom Yingling, Jr., Baltimore MD	425	135	18	181	30	0 69	4/27
Fred McCormack, Des Lacs ND	313	16	22	205	45	0 63	5/9
John Combs, Orlando FL	306	85	4	129	24	0 72	4/24
Jim White, Waukesha WI .	301	87	2	79	16	1 64	4/23
Mike Reid, Willowdale ON '	288	93	12	80	6	0 ??	5/6
Mike Hollis, Ft. Campbell KY	275	116	2	14	6	0 78	4/23
B.W. Battin, Duluth MN	251	109	0	68	3	0 76	4/24
Mike Scheel, Davenport IA	198	96	9	45	0	0 72	4/19
Jim Pizzi, Orcutt CA	197	48	23	113	5	0 63	4/30
Ed Brindle, Latrobe PA	169	53	0	53	1	0 75	5/8
William Hepburn, Niagara Falls ON	149	39	2	49	0	0 76	4/27
Fred McCormack, Fargo ND	145	16	3	78	0	2 74	5/7
Mike Hogan, Burnham IL	90	42	0	22	0	0 73	5/13
Robert Goodman, Cicero IL	88	53	0	18	0	0 76	5/1
Dave Hascall, Fortville IN	66	18	0	22	0	0 74	5/1
Robert Ross, London ON	51	21	8	5	0	0 77	4/24

Now, here are some comments about how this column is starting to shape up. I would like to thank the interested members of this club for their reports and also the interesting comments, about the column. I will keep, in mind all of your suggestions.

As for the above scoreboard: This month you see the DXers listed by total stations seen, the next time you see the scoreboard the DXers will be listed by Total Political Units and finally, the third way the DXers will be listed by will be a summary of average distances. I choose to do the listings this way so that the scoreboard will take a different look almost each time it is printed.

The next time this column appears I will list the distance records for the channels 2 thru 6. I may also list the distance records for channels 7-13 at that time. The deadline for all records for channels 2 thru 13 is July 10th. Also in store will be a special listing for F2 loggings. So if any of you were able to manage some F2 loggings please submit them to this column.

73's Michael



FM				
June 1979	91 MHZ	DISTANCE RE	CORDS]

Fred Nordquist 7945 Boxford Road -Clay, NY 13041 Deadline: the 10th

	212		/- IIII DECINIO	T IMPOILED	
FREQ	PROP	CALL	LOCATION	MILES	DXER, LOCATION
91.1	Es	WGGL	MI Houghton	1350	Glenn Hauser, Von Ormy TX
	Tr	WFAM	FL Jacksonville	1020	Glenn Hauser, Von Ormy TX
	MS	KSJN	MN New Brighton	1130	Glenn Hauser, Von Ormy TX
	Au	WVUB	IN Vincennes	745	Fred McCormack, Fargo ND
91.3	Es	WIPR	PR San Juan	1820	Carlon Howington, Uniontown OH
	Tr	WTHS	FL Miami	1155	Glenn Hauser, Von Ormy TX
	MS	WHHI	WI Highland	740	Larry Vogt, Springfield VA
	Au	WCNY	NY Syracuse	525	Russ Brown, St. Joseph MI
91.5	Es	WNYE	NY New York City	1445	Fred McCormack, Des Lacs ND
	Tr	WFSU	FL Tallahassee	840	Rick Sanford, Burnet TX
	MS	WHMD	WI Suring	1220	Glenn Hauser, Von Ormy TX
	Au	WRPI	NY Troy	505	Brank Merrill, Milan MI
		KANU	KS Lawrence	tie	Russ Brown, St. Joseph MI
91.7	Es	KRSW	MN Worthington	1435	Jim Pissi, Orcutt, CA
	Tr	KOSU	OK Stillwater	790	Bruce Elving, Adoph MN
	MS	KOSU	OK Stillwater	880	Fred McCormack, Des Lacs ND
	Au	KOSU	OK Stillwater	700	Russ Brown, St. Joseph MI
91.9	Es	WSIU	IL Carbondale	1725	Jim Pissi, Santa Maria CA
,	Tr	WSIU	IL Carbondale	810	Glenn Hauser, Von Ormy TX
	MS	WHRM	WI Rib Mountain	1005	Richard Wood, Baton Rouge LA
	Au	WSIU	IL Carbondale	750	Fred McCornack, Fargo ND
			92 MHZ DISTANO		
92.1	Es	XHFO	DF Mexico City	1710	Steven Wiseblood, Santa Maria CA
74.01	Tr	WRLS	WI Hayward	790	Robert Cooper, Oklahoma City OK
	MS	WFNY	WI Racine	715	Robert Cooper, Oklahoma City OK
	Au	WYXE	WI Sun Prairie	260	Andy Bolin, Charleston IL
92.15	Es	CMBC	Habana, Cuba	1330	Glenn Hauser, Enid OK
92.3	Es	WDBO	FL Orlando	1740	Fred McCormack, Des Lacs ND
74.)	Tr	WDBO	FL Orlando	1065	Glenn Hauser, Von Ormy TX
	MS	WKLH	AL Montgomery	1050	John Ebeling, Prosit MN
	Au	KLIQ	OR Portland	1030	Fred McCormack, Des Lacs ND
00 5	Es	WPAP	FL Panama City	1505	Fred McCormack, Des Lacs ND
92.5	Tr	KYND	TX Pasadena	985	Russ Brown, St. Joseph MI
	MS	WIFI	PA Philadelphia	1105	
					Richard Wood, Baton Rouge LA
	Au	WMHE	OH Toledo	750	Fred McCormack, Pargo ND
92.7	Es .	KJAZ	CA Alameda	2375 610	Michael Dalton, Clearwater FL
	Tr	CKSO	ON Sudbury		Dennis Moe, St. Ansgar IA
	MS	WDUX	WI Waupaca	430	Peter Sawatsky, Waterloo ON
	Au	KBRX	ME O'Neill	430	Fred McCormack, Des Lacs ND
92.9	Es	WSCD	MN Duluth	1640	John M. Jefferson, Concord CA
	Tr	WZGC	GA Atlanta	890	Glenn Hauser, Von Ormy TX
	MS	KITY	TX San Antonio	1235	Carlon Howington, Uniontown OH
200	Au	MAMA	VT Burlington	855	Andy Bolin, Charleston IL

Next time I will run 93 MHZ distance records. Later this summer I plan to run all new distance records only, for all frequencies. So if you have been holding back until your frequency records are printed, you need no longer wait. Send them in now.

Sta	to #-DXe	r +-Dier	Sta	te #-DIe:	DXer			r #-DIer	1Sta	to f-Dier	#-DXer	Prev. 4-Dier
AL	31-fm	30-je	IN	133-rs	44-dh	ME	21-je	15-fm/fn	SC	26-je	8-ps	AT 2-je
AK	none		IA	80-je	30-fm	MA	12-fm	3-je	SD	20-fm 1	15-je	BC none
AZ	22-fm	20-je	KS	39-db	28-fn	NH	16-rjs	6-mb	TN	28-2m 1	l8-fn	MB 3-je 1-fn/
AR	28-fn	25-db	KY	51-rs	23-fm	NJ	36-ef	35-sw	TX	189-rls 1	29- fm	WB none ps
CA	169-55	74-2m	LA	27-je	45-rls	194	26-fm	22-je	UT	15-rls	8-je	NF none
CO	17-je		MB	24-rjs	9-je	NY	144-In	129-js	VT	8-mb	8-rje	NS 1-ps 1-fn
CT	38-mb	38-rjs	MD	20-sw	14-mb	NC	53-je	16-fm	VA	36-je 2	20-fm	ON 49-In
DE	11-sw	4-mb	MA	71-rjs	58-ab	ND	17-fm	7-je	WA	7-fm	2-je	34-ps
FL	71-ps	67-fn	MI	87-rs	80-ps	OH	149-TS	91-ps	WV	22-TS 1	12-fm	PET none
GA	42-je	25-fn	MN	105-je	62-fm	OK	52-db	29-fn	MI	106-je 4	+0-ps	PQ 15-fn
HA	none		MS	28-fn	23-fm	OR	16-fm		WY	2-ps 1-	-je/fm	9-je
D	9-je	12-rls	MO	57-db	36-je	PA	89-fn	86-js				SA none
L	114-be	105-rs	MT	6-je	4-In	RI	8-r.1s	7-mb/1s	DC	13-sw 1	13-ja	

The Fred Nordquist NI; rs-Ralph Strobel IN; db-Danny Buntin OK; fm-F.McCormack ND; jj-J.Jefferson Caije-J. Ebeling MN; sw-S. West PA; be-B. Elving MN; mb-M. Bugaj CT; ef-E. Fader NI; rjs-R. Steinberger MA; dh-D. Hascall IN; ps-P. Sawatsky ON; js-J. Smith NI; rls-R. Samford TX Please send in your Scoreboard totals by July 10thl

73 - Fred

International Radio Club Amarica



Attention mediumwave DXers! The 1979 annual IRCA convention will be held at Peoria, Illinois on August 24, 25, and 26. This is the weekend prior to the NRC convention at St. Louis. Peoria is 170 miles north of St. Louis and 150 miles south west of Chicago. Peoria is the world headquarters of Caterpillar Tractor and the metro area has a population of over 200.000.

The site of this year's convention will be the Peoria Hilton at 501 Main St. in downtown Peoria. The Hilton is located 2 blocks from I-74.

There will be station tours of WXCL (AM) 1350, WZRO (FM) 104.9, and WMBD (AM) 1470, WKZW (FM), plus WMBD TV 31. A tour will also be made of WXCL/WZRO's transmitting site with Mr. Melvin Feldman, President and Chief Engineer of WXCL/WZRO showing us around the 4 tower site. There will be a banquet Saturday nite, Aug. 25, and an auction on Sunday. A picnic and softball game are also planned for Saturday. Registration fee: \$15.00 in advance, or \$17.00 at the door. For more info and registration form, contact:

John Clemmer, 2937 W. Gilbert, Peoria. Tilinois 61604 (309) 685-1880

Any DXer is welcome, regardless of club or interest!

Radio Communications Monitoring Association

P.O.Box 4563 / Anahelm, CA 92803

RADIO COMMUNICATIONS MONITORING ASSOCIATION (RCMA) is grateful to WTFDA for accept-

ing the proposal of exchanging half page ads in each other's publications.

RCMA was founded in May of 1975 and is a Full Member ANARC club. We have gone from a Southern California local club of six members to a nationwide club of about 700 members and presently are gaining new members at a higher rate than ever before.

RCMA specializes primarily in non-DX, non-skip reception of two way communications (VHF/UHF Utility, if you like) in the Public Service and Aircraft bands of 30-50, ll8-136, l48-174, 225-400, 406-420, and 450-512 MHz. By popular demand we have started a Low Band (30-50 MHz) Skip column with the May issue of the RCMA Newsletter.

The RCMA Newsletter is currently (May 1979) in transition from a one man editor to a multi-editor system with regional and special interest editors scattered across the country. Some of the columns for which we have editors are: "Aircraft", "Frequencies and Radio Systems", "Technical Topics", "Low Band Skip", "Marketplace", "Contact" (a column devoted to helping members contact other members who share similar listening interests or who live in a particular geographic area), "Military", "Federal Gov't" and

"Monitoring and the Law". Others are planned.

If you enjoy listening to the message content of the transmissions of some or all of the following, RCMA might be of interest to you: police, sheriff, highway patrol, state police, Federal law enforcement and other Federal agencies, fire and forestry departments, railroads, mobile telephone, hospitals-ambulances-paramedics, taxis, trucks, boats and ships along the coast and in other waterways, road and utility departments, private security guards, prisons, weather, disaster communications, a great variety of private business, military communications, satellites, private/commercial aircraft in communication with each other and airport control towers and radar controllers and ground stations offering weather information, and more.

Our dues are \$8.00 per year (subject to increase). Should you be interested, send a business size SASE to the above address for more information and an application form Should you be interested, send (an application form must accompany each new member dues payment to be processed). For a sample copy of the RCMA Newsletter send three 15¢ mint stamps with your request.

(No SASE for sample copy.)

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Association. WTFDA is a non-profit organization and a member club in the Association of North American Radio Clubs (ANARC).

Persons contributing their efforts for the Worldwide TV-FM DX Association

do so without any monetary compensation. Dues and all other revenue cover printing, postage, and other expenses.

The WTFDA is governed by a five-man board of directors, composed of Morrie Goldman, Mike Hogan, Pete Oprisko, Bill Thompson, and John Zondlo. ANARC representatives are Morrie Goldman, Pete Oprisko, and John Zondlo. EDITOR-IN-CHIEF......Bill Thompson COMPTROLLER......Gary Olson

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Station QSLFor requesting QSLs (verifications) from	50 sheets

All columns and feature articles to be printed in any VUD issue should be sent to editor Bill Thompson, 1907 Seneca Street, Buffalo, New York 14210. All information for VUD columns should be sent to the appropriate editors; all club business (supply orders, etc.) should be sent to HQ in Whiting.

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